COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
WATER QUALITY CONTROL COMMISSION

REGULATION NO. 61

COLORADO DISCHARGE PERMIT SYSTEM REGULATIONS

ADOPTED: November 17, 1981
EFFECTIVE: December 20, 1981
AMENDED: March 29, 1982
EFFECTIVE: April 29, 1982
AMENDED: September 13, 1983
EFFECTIVE: October 31, 1983
AMENDED: May 15, 1984
EFFECTIVE: June 30, 1984
AMENDED: April 14, 1986
EFFECTIVE: May 30, 1986
AMENDED: June 2, 1987
EFFECTIVE: July 31, 1988
AMENDED: May 2, 1988
EFFECTIVE: July 1, 1989
AMENDED: November 2, 1988
EFFECTIVE: December 30, 1988
AMENDED: July 10, 1989
EFFECTIVE: August 31, 1989
AMENDED: December 4, 1990
EFFECTIVE: January 30, 1990
AMENDED: January 8, 1991
EFFECTIVE: March 2, 1991
AMENDED: June 4, 1991
EFFECTIVE: July 1, 1991
AMENDED: November 4, 1991
EFFECTIVE: December 30, 1991
EMERGENCY AMENDED: January 6, 1992
EFFECTIVE: January 6, 1992
AMENDED: April 7, 1992
EFFECTIVE: July 1, 1993
AMENDED: June 2, 1992
EFFECTIVE: June 30, 1992
AMENDED: February 2, 1993
EFFECTIVE: March 30, 1993
AMENDED: August 2, 1993
EFFECTIVE: September 30, 1993
AMENDED: July 11, 1994
EFFECTIVE: August 30, 1994
EMERGENCY AMENDED: November 14, 1994
EFFECTIVE: November 14, 1994
AMENDED: December 12, 1994
EFFECTIVE: January 30, 1995
AMENDED: January 9, 1995
EFFECTIVE: March 2, 1995
AMENDED: November 13, 1995
EFFECTIVE: December 30, 1995
AMENDED: May 13, 1996
EFFECTIVE: June 30, 1996
AMENDED: July 14, 1997
EFFECTIVE: August 30, 1997
AMENDED: March 10, 1998
EFFECTIVE: April 30, 1998
AMENDED: February 9, 1999
EFFECTIVE: March 30, 1999
EMERGENCY AMENDED: March 9, 1999
EFFECTIVE: March 30, 1999
AMENDED: March 9, 1999
EFFECTIVE: April 30, 1999
AMENDED: January 8, 2001
EFFECTIVE: March 2, 2001
AMENDED: November 13, 2001
EFFECTIVE: December 30, 2001
AMENDED: March 11, 2003
EFFECTIVE: May 30, 2003
AMENDED: May 10, 2004
EFFECTIVE: June 30, 2004
AMENDED: April 12, 2005
EFFECTIVE: May 30, 2005
AMENDED: August 8, 2005
EFFECTIVE: December 31, 2005
AMENDED: October 11, 2005
EFFECTIVE: November 30, 2005
AMENDED: February 13, 2006
EFFECTIVE: March 30, 2006
AMENDED: October 10, 2006
EFFECTIVE: November 30, 2006
AMENDED: November 13, 2007
EFFECTIVE: December 30, 2007
AMENDED: March 11, 2008
EFFECTIVE: April 30, 2008
AMENDED: February 9, 2009
EFFECTIVE: March 30, 2009
AMENDED: August 10, 2009
EFFECTIVE: September 30, 2009
AMENDED: July 12, 2010
EFFECTIVE: August 30, 2010
AMENDED: August 8, 2011
EFFECTIVE: September 30, 2011
AMENDED: December 12, 2011
EFFECTIVE: January 30, 2012
AMENDED: December 8, 2014
EFFECTIVE: January 30, 2015
AMENDED: May 11, 2015
EFFECTIVE: June 30, 2015
AMENDED: August 8, 2016
EFFECTIVE: December 31, 2016
AMENDED: October 11, 2016
EFFECTIVE: December 31, 2016

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DEPARTMENT OF HEALTH AND ENVIRONMENT

Water Quality Control Commission

5 CCR 1002-61

COLORADO DISCHARGE PERMIT SYSTEM

61.0 COLORADO DISCHARGE PERMIT SYSTEM

61.1 GENERAL PROVISIONS

61.1(1) SCOPE AND PURPOSE

(a) These regulations are promulgated in implementation of the Colorado Water Quality Control Act as amended, and in particular sections 25-8-501 through 505, C.R.S., as amended and are designed to be in conformity with that act and the Federal Clean Water Act and regulations promulgated thereunder.

(b) These regulations apply to all operations discharging to waters of the State from a point source.

(c) Nothing in these regulations shall be construed to limit a local government's authority to impose land-use or zoning requirements or other limitations on the activities subject to these regulations

61.1(2) INCORPORATION BY REFERENCE

Throughout these regulations, standards and requirements promulgated by the U.S. Environmental Protection Agency have been adopted and incorporated by reference. The federal references cited herein include only those versions that were in effect as of June 14, 2016, and not later amendments to the incorporated material.

All material incorporated by reference is available at no cost in the online edition of the Code of Federal Regulations (CFR) hosted by the U.S. Government Printing Office. Requests for public inspection of materials incorporated by reference in this regulation should be made to the Permits Section, Water Quality Control Division, at the Department of Public Health and Environment, 4300 Cherry Creek Drive South, Denver, Colorado 80246-1530.

61.1(3) SEVERABILITY

The provisions of this regulation are severable, and if any provisions or the application of the provisions to any circumstances is held invalid, the application of such provision to other circumstances, and the remainder of this regulation shall not be affected thereby.

61.1(4) PERMIT DURATION

Discharge permits shall not be issued for a term that exceeds that allowed in the federal act and regulations. Where a permit, or class of permits, is not subject to the federal act or regulations, the permit shall be issued for a period of ten years unless the Division finds that a shorter or longer term is appropriate based on a conclusion that the impact of the permitted activity on the quality of the receiving waters is not likely to remain the same as the impact at the time of permit issuance. Where the Division determines that there is a risk of an increased impact to the receiving waters from the permitted activity, the Division will apply a permit term shorter than ten years.

61.1(5) RISK BASED PERMIT RENEWAL

For any permit, at the time of permit renewal, the Division shall use a risk-based approach applied to the receiving water(s) that considers the most recent water quality/quantity information, information in the renewal application, and any other relevant information, to determine whether the permit can be reissued with minimal or no change. The Division shall establish criteria by which this determination will be made and shall update those criteria at a minimum of every five years or as directed by the Commission.

61.2 DEFINITIONS

NOTE: Several terms used in this regulation that are not defined below are defined in the Colorado Water Quality Control Act, 25-8-103, C.R.S.

(1) "ACT" means the Colorado Water Quality Control Act as from time to time amended, section 25-8-101 et seq, C.R.S.

(2) "AGRONOMIC RATE OF APPLICATION" means the rate of application of nutrients to plants that is necessary to satisfy the plants' nutritional requirements while strictly minimizing the amount of nutrients that run off to surface waters or which pass below the root zone of the plants. For purposes of use under Section 61.13 (Housed Commercial Swine Feeding Operations) the agronomic rate of application shall be as specified by the most current published fertilizer suggestions of Colorado State University Cooperative Extension for the plants, or the most closely related plant type, to which the nutrients are to be applied.

(3) "AGRONOMIC ROOT ZONE" means the soil zone of land application sites that is sampled and analyzed for required constituents for monitoring purposes and for calculating the agronomic rate of application. The depth of the agronomic root zone is as specified by the most current published fertilizer suggestions of Colorado State University Cooperative Extension for the plants, or the most closely related plant type, to which plant nutrients are to be applied.

(4) “ANIMAL FEEDING OPERATION” (AFO) means a lot or facility (other than an aquatic animal production facility) where the following conditions are met:

(a) Animals (other than aquatic animals) have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period, and

(b) Crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.

(5) "AQUIFER" means a formation, group of formations, or part of a formation containing sufficient saturated permeable material that could yield a sufficient quantity of water that may be extracted and applied to a beneficial use.

(6) "BASIC STANDARDS" means the regulation entitled Basic Standards and Methodologies for Surface Waters, adopted by the Commission and published as 5 CCR 1002-31, Regulation No. 31.

(7) "BEST AVAILABLE TECHNOLOGY" (BAT) means Best Available Technology Economically Achievable (BATEA) pursuant to sections 301(b)(2)(A) and 304(b)(2) of the Federal Clean Water Act (CWA).

(8) "BEST CONVENTIONAL TECHNOLOGY" (BCT) means Best Conventional Pollutant Control Technology (BCPCT) pursuant to sections 301(b)(2)(E) and 304(b)(4) of the Federal Clean Water Act (CWA).

(9) "BEST MANAGEMENT PRACTICES" (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of "state waters". BMPs also include treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

(10) "BEST PRACTICAL TECHNOLOGY" means the Best Practical Control Technology currently available pursuant to sections 301(b)(1)(A) and 304(b)(4) of the Federal Clean Water Act (CWA).

(11) "BIOSOLIDS" means the accumulated treated residual product resulting from a domestic wastewater treatment works. Biosolids does not include grit or screenings from a wastewater treatment works, commercial or industrial sludges (regardless of whether the sludges are combined with domestic sewage), sludge generated during treatment of drinking water, or domestic or industrial septage.

(12) "BYPASS" means the intentional diversion of waste streams from any portion of a treatment facility.

(13) "COMMENCE CONSTRUCTION" includes execution of, and commencement of work under contracts for engineering design, plans and specifications for erection, building, alteration, remodeling, improvement of extension of treatment works and commitment to the completion of construction of such treatment works prior to exceeding permit effluent limitations based upon facility design and capacity, or execution of a contract for the construction thereof defined by section 25-8-501(5)(e), C.R.S. as amended.

(14) "COMPLETE APPLICATION" means application for point source discharge permits which have been determined by the Division to be complete in accordance with section 61.5(1).

(15) "CO-PERMITTEE" means a permittee to a permit that is only responsible for permit conditions relating to the discharge for which it is operator.

(16) "COMPLIANCE WELL" means a well which is placed at a point of compliance. The results of analyses of samples from compliance wells shall be used to establish compliance with permit limitations established for protection of state waters.

(17) “CONCENTRATED ANIMAL FEEDING OPERATION” (CAFO) means an animal feeding operation that is defined as a Large or Medium CAFO, or that is designated by the Division as a CAFO. Two or more animal feeding operations under common ownership are deemed to be a single AFO for the purposes of whether they qualify as a Large or Medium CAFO, if they are adjacent to each other or if they use a common area or system for land application of manure or process wastewater.

(18) "CONTAMINATION" means, for purposes of section 61.13 of this regulation, the addition of pollutants to soil or ground water that results in the impairment of water quality classifications or exceedance of water quality standards for any waters of the state, or a reasonable potential for any such impairment or exceedance.

(19) "CONTINUOUS DISCHARGE" means a "discharge" which occurs without interruption throughout the operating hours of the facility, except for infrequent shutdowns for maintenance, process changes, or other similar activities.

(20) "DESIGN CAPACITY" means the rated capacity (capability of a plant to meet existing effluent limitations). This rated capacity shall be given in millions of gallons per day and organic loading in pounds per day.

(21) "DETECTION WELL" means a monitoring well which is installed between a point of compliance and the point of discharge.

(22) "DISCHARGE" means the discharge of pollutants as defined in section 25-8-103(3) C.R.S., and also includes land application.

(23) "DIVISION" means the Water Quality Control Division of the Department of Public Health and Environment.

(24) "DRAFT PERMIT" means a document prepared under these regulations indicating the Division's decision to issue or deny, modify, revoke and reissue, terminate, or reissue a permit and includes the "Division's preliminary analysis." A notice of intent to terminate a permit, and a notice of intent to deny a permit, are types of draft permits. A denial of a request for modification, revocation and reissuance, or termination is not a draft permit.

(25) “DRY LOT FOR DUCKS” means a facility for growing ducks in confinement with a dry litter floor cover and no access to swimming areas.

(26) "EFFLUENT LIMITATION" means any restriction or prohibition established under this article or Federal law on quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources into state waters, including, but not limited to, standards of performance for new sources, toxic effluent standards and schedules of compliance.

(27) "EPA" means the United States Environmental Protection Agency.

(28) "EXISTING HOUSED COMMERCIAL SWINE FEEDING OPERATION” means a housed commercial swine feeding operation for which physical construction was commenced prior to March 30, 1999.

(29) "EXISTING IMPOUNDMENT" means any impoundment whose plans and specifications have been approved by the Division or for which construction has been commenced or completed, prior to July 1, 1993.

(30) “FECAL COLIFORM” means the bacterial count (Parameter 1) at 40 CFR 136.3 in Table 1A, which also cites the approved methods of analysis.

(31) "FEDERAL ACT" means the Federal Water Pollution Control Act, 33 U.S.C. section 1251 et seq., commonly referred to as the "Clean Water Act", and any of its subsequent amendments.

(32) "FEEDLOT" means a concentrated animal feeding operation as established in 40 CFR 412.11.

(33) "FORMS" means permits, applications, letters and reporting forms which shall be those established by the Division, but additional information may be required by the U.S. Environmental Protection Agency.

(34) “FREEBOARD” means the vertical distance measured from the liquid surface level (elevation) in an impoundment or tank to the top elevation of the impoundment or tank (for example, berm or wall).

(35) "GENERAL PERMITS" means a permit authorizing a category of discharges under the Clean Water Act designated category of activities within a geographical area, issued under section 61.9(2).

(36) "GENERAL PERMIT PROGRAM AREA" (hereinafter referred to as GPPA) means any area designated by the State Department of Public Health and Environment, Water Quality Control Division, in which owners and operators of a designated category of activities are subject to the same general permit, other than owners and operators to whom individual permits have been or will be issued.

(37) "GROUND WATER" means subsurface waters in a zone of saturation which are or can be brought to the surface of the ground or to surface waters through wells, springs, seeps, or other discharge areas.

(38) "GROUND WATER RECHARGE" means the entry into the saturated zone of water made available at the water table surface, together with the associated flow away from the water table within the saturated zone.

(39) "GROUND WATER STANDARD" means any standard promulgated in or pursuant to "The Basic Standards for Ground Water, Regulation No. 41 (5 CCR 1002-41)".

(40) "HOUSED COMMERCIAL SWINE FEEDING OPERATION" means a housed swine feeding operation that is capable of housing eight hundred thousand pounds or more of live animal weight of swine at any one time or is deemed a commercial operation under local zoning or land use regulations. "Capable of housing" means the combined maximum capacities of the individual housing units that are included in the operation. Unless the owner of the operation provides information about the specific operation to the Division which demonstrates that an alternative capacity calculation is appropriate for that operation, operations will be presumed capable of housing 800,000 pounds or more of live animal weight If they have the capacity to house:

(a) 11,500 weaned swine (70 pounds or less); or

(b) 3,020 feeder swine (more than 70 pounds, up to finish weight); or

(c) 2,000 breeding sows and/or boars.

Where more than one of the above-listed size categories of swine are present, operations will be deemed capable of housing 800,000 pounds or more of live animal weight if, by dividing the capacity for the number of each type of swine by the respective limit from (a), (b), and/or (c), above, the sum of the resulting numbers is one or greater.

Two or more housed swine feeding operations shall be considered to comprise a single housed commercial swine feeding operation if they are both:

(a) under common or affiliated ownership or management, and

(b)

(i) are adjacent to or utilize a common area or system for swine feeding process wastewater or residual solids disposal, or

(ii) are integrated in any way, or

(iii) are located or discharge within the same watershed or into watersheds that are hydrologically connected, or

(iv) are located on or discharge onto land overlying the same ground water aquifer.

For the purposes of this definition, the term "common or affiliated ownership or management" shall mean:

(a) operations owned by the same entity; or

(b) operations owned by entities related through majority ownership; or

(c) operations with structural, organizational, or contractual relationships that evidence actual or effective control of the management of the aspects of a housed commercial swine feeding operation related to swine production or swine feeding process wastewater conveyance, storage, treatment, or land application systems.

"Integrated in any way" shall mean separate operations that are related in a manner that creates a reasonable potential for the operations to result in a measurable negative cumulative impact on water quality or air quality at any one location.

"Watershed" shall mean a hydrologic unit no larger than an eight-digit unit as displayed on the USGS 1974 Hydrologic Unit Map for the State of Colorado. The phrase "watersheds that are hydrologically connected" shall mean watersheds that are contiguous and tributary to the same four-digit unit. Provided, that two or more housed swine feeding operations shall not be considered to be located in the same watershed or in watersheds that are hydrologically connected if the owner demonstrates that there is no reasonable potential for the operations to result in a measurable negative cumulative impact on water qualify at any one location.

(41) "HOUSED SWINE FEEDING OPERATION" means the practice of raising swine in buildings, or other enclosed structures wherein swine of any size are fed for forty-five days or longer in any twelve-month period, and crop or forage growth or production is not sustained in the area of confinement

(42) "ILLICIT DISCHARGE" means any discharge to a municipal separate storm sewer that is not composed entirely of stormwater except the following: discharges specifically authorized by a CDPS permit, and discharges resulting from fire fighting activities.

(43) "IMPOUNDMENT" means a facility or part of a facility which is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), which is used for the storage, treatment, evaporation or discharge of pollutant-containing waters, sludge or associated sediment.

(44) "INCORPORATED PLACE" means a city, town, township, or village that is incorporated under the laws of the State of Colorado.

(45) "INTERCEPTOR SEWER" a sewer line will be considered as an interceptor sewer if it performs one or more of the following functions as its primary purpose:

(a) It intercepts wastes from a final point in a collection system and conveys such waste directly to a treatment plant;

(b) It serves in place of a treatment plant and transports the collected wastes to an adjoining collection system or interceptor sewer for treatment;

(c) It transports the wastes from one or more municipal collection systems to another municipality or to a regional treatment plant; or

(d) It intercepts an existing major discharge of raw or inadequately treated wastewater for transport directly to another interceptor or to a treatment plant.

A sewer with a minor number of building or lateral connections may be considered an Interceptor sewer if it performs one or more of the functions listed above.

(46) "IRRIGATION RETURN FLOW" means tailwater, tile drainage, or surfaced groundwater flow from irrigated land.

(47) "ISSUE OR ISSUANCE" means the mailing to all parties of any order, permit, determination, or notice other than notice by publication, by certified mail to the last address furnished to the agency by the person subject thereto or personal service on such person, and the date of issuance of such order, permit, determination, or notice shall be the date of such mailing or service or such later date as is stated in the order, permit, determination, or notice.

(48) "LAND APPLICATION" is any discharge being applied directly to the land for land disposal or land treatment and does not include a discharge to surface waters even if such waters are subsequently diverted and applied to the land.

(49) "LAND DISPOSAL" is any discharge or pollutant-containing waters being applied to land for which no further treatment is intended.

(50) "LAND TREATMENT" is any discharge of pollutant-containing waters being applied to the land for the purpose of treatment.

(51) "LARGE CONCENTRATED ANIMAL FEEDING OPERATION" (Large CAFO) means an AFO that stables or confines as many as or more than the numbers of animals specified in any of the following categories:

(a) 700 mature dairy cows, whether milked or dry;

(b) 1,000 veal calves

(c) 1,000 cattle other than mature dairy cows or veal calves. Cattle includes but is not limited to heifers, steers, bulls, and cow/calf pairs;

(d) 2,500 swine each weighing 55 pounds or more;

(e) 10,000 swine each weighing less than 55 pounds;

(f) 500 horses;

(g) 10,000 sheep or lambs;

(h) 55,000 turkeys;

(i) 30,000 laying hens or broilers, if the AFO uses a liquid manure handling system;

(j) 125,000 chickens (other than laying hens), if the AFO uses other than a liquid manure handling system;

(k) 82,000 laying hens, if the AFO uses other than a liquid manure handling system;

(l) 30,000 ducks (if the AFO uses other than a liquid manure handling system); or

(m) 5,000 ducks (if the AFO uses a liquid manure handling system).

(52) "LARGE MUNICIPAL SEPARATE STORM SEWER SYSTEM" means all municipal separate storm sewers that are either:

(a) located in the City and County of Denver; or

(b) located in a municipality other than that described in (a) and meets the criteria of either (b)(i) or (b)(ii) below:

(i) in an incorporated place, other than that described in (a), and other than the City of Colorado Springs, with a population of 250,000 or more as determined by the 1990 Decennial Census by the Bureau of Census; or

(ii) in the unincorporated portions of a county that has areas designated as urbanized areas by the 1990 Decennial Census by the Bureau of Census and where the population of the urbanized areas exceeds 250,000 after the population in the incorporated places with in the urbanized areas is excluded, except municipal separate storm sewer systems that are located in the incorporated places within such counties; or

(c) owned or operated by a municipality other than those described in paragraphs (a) or (b) and that are designated by the Division as part of the large or medium municipal separate storm sewer system due to the interrelationship between the discharges of the designated storm sewer and the discharges from municipal separate storm sewers described under paragraphs (a) or (b). In making this determination the Division may consider the following factors:

(i) physical interconnections between the municipal separate storm sewers;

(ii) the location of discharges from the designated municipal separate storm sewer relative to discharges from municipal separate storm sewers described in subparagraph (a);

(iii) the quantity and nature of pollutants discharged to state waters;

(iv) the nature of the receiving waters; and

(v) other relevant factors; or

(d) The Division may, upon petition, designate as a large municipal separate storm sewer system, municipal separate storm sewers located within the boundaries of a region defined by a stormwater management regional authority based on a jurisdictional, watershed, or other appropriate basis that includes one or more of the systems described in paragraphs (a), (b) or (c).

(53) "LOAD ALLOCATION" means the portion of a receiving waters assimilative capacity that is attributed to either one of its existing of future nonpoint sources of pollution or to natural background sources.

(54) "MAJOR MUNICIPAL SEPARATE STORM SEWER OUTFALL" (or "MAJOR OUTFALL") means a municipal separate storm sewer outfall that discharges from a single pipe with an inside diameter of 36 inches or more or its equivalent (discharge from a single conveyance other than circular pipe which is associated with a drainage area of more than 50 acres); or for municipal separate storm sewers that receive stormwater from lands zoned for industrial activity (based on comprehensive zoning plans or the equivalent), an outfall that discharges from a single pipe with

an inside diameter of 12 inches or more or from its equivalent (discharge from other than a circular pipe associated with a drainage area of 2 acres or more).

(55) "MANURE" means feces, litter, and/or urine and materials, such as bedding, sludge, compost, feed waste, dry harvested forage, and any raw material used in or resulting from operation of an animal feeding operation, that have been commingled with feces, litter, and/or urine.

(56) "MASS BALANCE ANALYSIS" means the determination of mass limitations expressed in pounds of a pollutant.

(57) "MEDIUM CONCENTRATED ANIMAL FEEDING OPERATION" (Medium CAFO) means an AFO with the type and number of animals that fall within any of the ranges listed in (a) below and which has been defined or designated as a CAFO. An AFO is defined as a Medium CAFO if:

(a) The type and number of animals that it stables or confines falls within any of the following ranges:

(I) 200 to 699 mature dairy cows, whether milked or dry;

(II) 300 to 999 veal calves;

(III) 300 to 999 cattle other than mature dairy cows or veal calves. Cattle includes but is not limited to heifers, steers, bulls, and cow/calf pairs.

(IV) 750 to 2,499 swine each weighing 55 pounds or more;

(V) 3,000 to 9,999 swine each weighing less than 55 pounds;

(VI) 150 to 499 horses;

(VII) 3,000 to 9,999 sheep or lambs;

(VIII) 16,500 to 54,999 turkeys;

(IX) 9,000 to 29,999 laying hens or broilers, if the AFO uses a liquid manure handling system;

(X) 37,500 to 124,999 chickens (other than laying hens), if the AFO uses other than a liquid manure handling system;

(XI) 25,000 to 81,999 laying hens, if the AFO uses other than a liquid manure handling system;

(XII) 10,000 to 29,999 ducks (if the AFO uses other than a liquid manure handling system; or

(XIII) 1,500 to 4,999 ducks (if the AFO uses a liquid manure handling system; and

(b) Either one of the following conditions are met:

(I) Pollutants from the animal feeding operation are discharged into surface water through a man-made drainage system; or

(II) Pollutants are discharged directly into surface water which originate outside of and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.

(58) "MEDIUM MUNICIPAL SEPARATE STORM SEWER SYSTEM" means all municipal separate storm sewers that are either:

(a) located in the City of Aurora, City of Lakewood, or the City of Colorado Springs; or

(b) located in a municipality other than that described in (a) and meets the criteria of either (b)(i) or (b)(ii) below:

(i) in an incorporated place, other than that described in (a), with a population of 100,000 or more but less than 250,000, as determined by the 1990 Decennial Census by the Bureau of Census; or

(ii) in the unincorporated portions of a county that has areas designated as urbanized areas by the 1990 Decennial Census by the Bureau of Census and where the population of the urbanized areas exceeds 100,000 but less than 250,000, after the population in the incorporated places with in the urbanized areas is excluded, except municipal separate storm sewer systems that are located in the incorporated places within such counties; or

(c) owned or operated by a municipality other than those described in paragraphs (a) or (b) and that are designated by the Division as part of the large or medium municipal separate storm sewer system due to the interrelationship between the discharges of the designated storm sewer and the discharges from municipal separate storm sewers described under paragraphs (a) or (b). In making this determination the Division may consider the following factors:

(i) physical interconnections between the municipal separate storm sewers;

(ii) the location of discharges from the designated municipal separate storm sewer relative to discharges from municipal separate storm sewers described in subparagraph (a);

(iii) the quantity and nature of pollutants discharged to state waters;

(iv) the nature of the receiving waters; or

(v) other relevant factors; or

(d) the Division may, upon petition, designate as a medium municipal separate storm sewer system, municipal separate storm sewers located within the boundaries of a region defined by a stormwater management regional authority based on a jurisdictional, watershed, or other appropriate basis that includes one or more of the systems described in paragraphs (a), (b) or (c).

(59) "MS4" means a municipal separate storm sewer system.

(60) "MONITORING ZONE" means the soil zone of land application sites that is sampled and analyzed for required constituents for monitoring purposes. The depth of the monitoring zone is:

(a) Between four and six feet below the land surface for shallow-rooted crops, unless rooting depth restrictions exist at a shallower depth, as defined in (d) below.

(b) Between four and eight feet below the land surface for deep-rooted crops, unless rooting depth restrictions exist at a shallower depth, as defined in (d) below.

(c) Between four and eight feet below the land surface for land application sites that have been found to be predominantly composed of soils that are classified as sandy, sandy loam, or loamy sand in texture throughout the entire soil profile, unless rooting depth restrictions exist at a shallower depth, as defined in (d) below,

(d) The presence and depth of, or absence of, a root growth restrictive layer in the soil profile will be determined by a site-specific pedological soil analysis performed by a qualified soil scientist (i.e., Natural Resources Conservation Service soil scientist or equivalently trained individual).

(61) "MULTI-YEAR PHOSPHORUS APPLICATION" means phosphorus applied to a field in excess of the crop needs for that year. In multi-year phosphorus applications, no additional manure, residual solids, process wastewater, or swine feeding process wastewater is applied to the same land in subsequent years until the applied phosphorus has been removed from the field via harvest and crop removal.

(62) "MUNICIPAL SEPARATE STORM SEWER" means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

(a) owned or operated by a State, city, town, county, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or a designated and approved management agency under section 208 of the CWA that discharges to state waters;

(b) designed or used for collecting or conveying stormwater;

(c) which is not a combined sewer; and

(d) which is not part of a Publicly Owned Treatment Works (POTW).

(63) "MUNICIPALITY" means a city, town, county, district, association, or other public body created by or under State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes, or a designated and approved management agency under section 208 of CWA(1987).

(64) "MUNICIPAL STORMWATER OUTFALL" means a "point source", as defined in this section, at the point where a municipal separate storm sewer discharges to state waters and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other state waters and are used to convey state waters.

(65) "NEW DISCHARGER" means any building, structure, facility, or installation from which there is or may be a discharge of pollutants that did not commence at the particular site before August 13, 1979, that is not a new source, and that has never received a final effective permit for discharges at the site.

(66) "NEW HOUSED COMMERCIAL SWINE FEEDING OPERATION" means a housed commercial swine feeding operation for which physical construction was commenced on or after March 30, 1999.

(67) "NEW SOURCE" means any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced after the promulgation of standards of performance for the particular source, pursuant to section 306 of the Clean Water Act. The term also applies where a standard of performance has been proposed, provided that the standard is promulgated within 120 days of its proposal. Except as otherwise provided in an applicable new source performance standard, a source is a "new source" if it meets this definition of "new source", and:

(a) It is constructed at a site at which no other source is located; or

(b) It totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or

(c) Its processes are substantially independent of an existing source at the same site. In determining whether these processes are substantially independent, the Division shall consider such factors as the extent to which the new facility is integrated with the existing plant; and the extent to which the new facility is engaged in the same general type of activity as the existing source.

(68) "NON-LAND-APPLICATION FACILITY" means, for purposes of section 61.13 of this regulation, a housed commercial swine feeding operation that is capable of continuous operation without land application of swine feeding process wastewater or residual solids at any on-site or off-site location or the discharge of swine feeding process wastewater to surface waters.

(69) "NUMERICAL PROTECTION LEVELS" means ground water quality levels established on a site-specific basis by the Division pursuant to section 61.8(2)(b) of this regulation, which will be binding with respect to the activity in question unless and until site-specific ground water quality standards have been adopted by the Commission.

(70) "100-YEAR, 24-HOUR STORM" means a storm of a 24-hour duration which yields a total rainfall of a magnitude which has a probability of recurring once every one hundred years.

(71) "OVERBURDEN" means any material of any nature, consolidated or unconsolidated, that overlies a mineral deposit, excluding topsoil or similar naturally-occurring surface materials that are not disturbed by mining operations.

(72) "PERMIT" means a permit issued pursuant to these regulations and therefore includes Colorado Discharge Elimination System permits, including new permits, renewals, general permits, GPPA permits and temporary permits.

(73) "PERSON" means an individual, corporation, partnership, association, state or political subdivision thereof, federal agency, state agency, municipality, Commission, or interstate body.

(74) "POINT OF COMPLIANCE" means a vertical surface that is located at some specified distance hydrologically downgradient of the activity being monitored for compliance; provided that the Commission may establish a point of compliance other than a vertical surface on a site specific basis pursuant to section 41.6 of the "Basic Standards for Ground Water".

(75) "POINT SOURCE" means any discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. "Point Source" does not include irrigation return flow.

(76) "POLLUTANT" means dredged spoil, dirt, slurry, solid waste, incinerator residue, sewage, sewage sludge, garbage, trash, chemical waste, biological nutrient, biological material,

radioactive material, heat, wrecked or discarded equipment, rock, sand, or any industrial, municipal or agricultural waste.

(77) "POLLUTION" means man-made or man-induced, or natural alteration of the physical, chemical, biological, and radiological integrity of water.

(78) "PRACTICAL QUANTITATION LIMIT" (PQL) means the minimum concentration of an analyte (substance) that can be measured with a high degree of confidence that the analyte is present at or above that concentration.

(79) "PRETREATMENT REGULATIONS" means the regulations adopted by the Commission and published as 5 CCR 1002-63, Regulation No. 63.

(80) "PRIVATELY OWNED TREATMENT WORKS" means any device or system which is used to treat wastes of a liquid nature from other facilities and which is not a publicly owned treatment works.

(81) "PROCEDURAL REGULATIONS" means regulations entitled "Procedural Rules", adopted by the Commission and published as 5 CCR 1002-21, Regulation No. 21.

(82) "PROCESS WASTEWATER" means, for the purposes of all but sections 61.13 and 61.17 of this regulation, any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product. For the purposes of sections 61.13 and 61.17 of this regulation, process wastewater means water directly or indirectly used in the operation of the housed commercial swine feeding operation or CAFO for any or all of the following: spillage or overflow from animal or poultry watering systems; washing, cleaning, or flushing pens, barns, manure pits, or other CAFO facilities; direct contact swimming, washing, or spray cooling of animals; or dust control. Process wastewater also includes any water which comes into contact with any raw materials, products, or byproducts including manure, litter, feed, milk, eggs or bedding.

(83) "PRODUCTION AREA" means that part of an animal feeding operation that includes the animal confinement area, the manure and residual solids storage area, the raw materials storage area, and the waste containment areas. The animal confinement area includes but is not limited to open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milkrooms, milking centers, cowyards, barnyards, medication pens, walkers, animal walkways, and stables. The manure and residual solids storage area includes but is not limited to lagoons, runoff ponds, storage sheds, stockpiles, under house or pit storages, liquid impoundments and tanks, static piles, and composting piles. The raw materials storage area includes but is not limited to feed silos, silage bunkers, and bedding materials. The waste containment area includes but is not limited to settling basins, and areas within berms and diversions which separate uncontaminated storm water. Also included in the definition of production area is any egg washing or egg processing facility, and any area used in the storage, handling, treatment, or disposal of mortalities.

(84) "PROMULGATE" means and includes authority to adopt, and from time to time amend, repeal, modify, publish and put into effect.

(85) "PROPOSED PERMIT" means a permit prepared after the close of the public comment period which is sent to EPA for review before final issuance. A proposed permit is not a draft permit.

(86) "PUBLIC DRINKING WATER SYSTEM" means a system for the provision to the public of piped water for human consumption, if such system has at least fifteen (15) service connections or serves an average of at least 25 persons daily at least 60 days out of the year. A public drinking water system includes both community and non-community systems.

(87) "PUBLICLY OWNED TREATMENT WORKS" ("POTW") means a publicly owned domestic wastewater treatment facility. This includes any publicly owned devices and systems used in the storage, treatment, recycling or reclamation of municipal sewage or treatment of industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances if they are publicly owned or if they convey wastewater to a POTW treatment plant. The term also means the municipality, as defined in section 502(4) of the Clean Water Act, which has jurisdiction over the indirect discharges to and the discharge from such treatment works.

(88) "RECOMMENCING DISCHARGER" means a source which recommences discharge after terminating operations. Temporary shut down of operations for repair or maintenance does not constitute a termination of operations for purpose of this paragraph.

(89) "REGIONAL ADMINISTRATOR" means the Region VIII Administrator of the Federal Environmental Protection Agency.

(90) "REGULATED SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEM" means:

(a) a small MS4 located in an urbanized area as determined by the latest Decennial Census by the Bureau of the Census. (If the small MS4 is not located entirely within an urbanized area, only the portion that is within the urbanized area is regulated); or

(b) a small MS4 designated by the Division, including where the designation is pursuant to 61.3(2)(f)(v)(A)(lll), or based upon a petition under 61.3(2)(g)(iv).

(91) "RENEWAL PERMIT APPLICATION" means an application for a point source activity for which a permit has previously been issued by the Division.

(92) “RESIDUAL SOLIDS” means for purposes of section 61.13 of this regulation, manure, solids separated from swine feeding process wastewater, sludges derived from impoundments or tanks used to store or treat swine feeding process wastewater, solids derived from treatment of swine feeding process wastewater by means of other than impoundments or tanks, and composted solids.

(93) "RUNOFF COEFFICIENT" means the fraction of total rainfall that will appear at a conveyance as runoff.

(94) "SCHEDULE OF COMPLIANCE" means a schedule of remedial measures and times including an enforceable sequence of actions or operations leading to compliance with a control regulation or effluent limitation.

(95) "SECONDARY TREATMENT" means that level of wastewater treatment in domestic wastewater treatment works which obtains the effluent quality needed to achieve the effluent limitations specified in Regulation No. 62, section 2 of "Regulations for Effluent Limitations."

(96) “SETBACK” means a specified distance from surface waters, or potential conduits to surface waters, where manure, residual solids, process wastewater, and swine feeding process wastewater may not be land applied. Examples of conduits to surface waters include but are not limited to: open tile line intake structures, sinkholes, and agricultural well heads.

(97) "SIGNIFICANT MATERIALS" includes, but is not limited to raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101(14) of CERCLA as amended by SARA (1986); any chemical the facility is required to report pursuant to Section 313 of Title III of SARA (1986); fertilizers; pesticides; and waste products

such as ashes, slag and sludge that have the potential to be released with stormwater discharges.

(98) "SITE" means the land or water area where any facility or activity subject to this regulation is physically located or conducted, including adjacent land used in connection with the facility or activity.

(99) "SMALL CONCENTRATED ANIMAL FEEDING OPERATION" (Small CAFO) means an AFO that is designated by the Division as a CAFO, and is not a Medium CAFO.

(100) "SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEM" (small MS4) means any municipal separate storm sewer that is not defined as a "large" or "medium" municipal separate storm sewer system pursuant to paragraphs 42 and 45 of this section. This term includes publicly-owned systems similar to separate storm sewer systems in municipalities (i.e., non-standard MS4s), including, but not limited to, systems at military bases and large education, hospital or prison complexes, if they are designed for a maximum daily user population (residents and individuals who come there to work or use the MS4's facilities) of at least 1000.

(101) STANDARD INDUSTRIAL CLASSIFICATION ("SIC") CODE" means the statistical classification standard for industrial establishments developed by the Office of Management and Budget and published in the Standard Industrial Classification Manual, Executive Office of the President, Office of Management and Budget (1987).

(102) "STATE WATERS" means any and all surface and subsurface waters which are contained in or flow in or through this State, but does not include waters in sewage systems, waters in treatment works of disposal systems, waters in potable water distribution systems, and all water withdrawn for use until use and treatment have been completed.

(103) "STORMWATER" means stormwater runoff, snow melt runoff, and surface runoff and drainage.

(104) "SURFACE WATER" means, for the purposes of sections 61.13 and 61.17, all waters of the state that are also waters of the U.S.

(105) "SWINE FEEDING PROCESS WASTWATER" means any process wastewater directly or indirectly used in the operation of a housed commercial swine feeding operation, including that wastewater resulting from feeding, flushing, or washing operations; spillage or overflow from animal watering systems, direct contact swimming, washing, or spray cooling of swine; or dust control; and any water or precipitation that comes into contact with any residual solids, urine, raw materials, feed, bedding, or any other animal feeding by-product resulting from the production of swine.

(106) "TANK" means a stationary device, designed to contain an accumulation of pollutant-containing water, which is constructed primarily of non-earthen materials (e.g., wood, concrete, steel, plastic) which provide structural support.

(107) "THROUGHPUT" means the hydraulic and/or organic loading being measured prior to treatment at a domestic wastewater treatment works during a specified period of time (usually a 30-day period).

(108) "TOTAL COLIFORM" means all coliform bacteria.

(109) "TOTAL MAXIMUM DAILY LOAD" means the sum of the individual wasteload allocations for point sources and load allocations for nonpoint sources and natural background.

(110) "TOXIC POLLUTANT" means any pollutant listed as toxic under section 307(A)(1) of the Federal Clean Water Act.

(111) "TREATMENT CAPACITY" means the design capacity of the domestic wastewater treatment works to reduce pollutant concentrations to achieve the limitations set forth in the permit, as approved by the Division pursuant to 25-8-702.

(112) "25-YEAR, 24-HOUR STORM" means a storm of a 24-hour duration which yields a total rainfall of a magnitude which has a probability of recurring once every twenty-five years.

(113) "UNCONTROLLED SANITARY LANDFILL" means a landfill or open dump, whether in operation or closed, that does not meet the requirements for run-on or run-off controls established pursuant to subtitle D of the Solid Waste Disposal Act as amended by HSWA (1984).

(114) "UPSET" means an exceptional incident in which there is unintentional and temporary noncompliance with permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

(115) "VADOSE ZONE" means the zone between the land surface and the water table. It includes the root zone, intermediate zone, and capillary fringe. Saturated bodies, such as perched ground water, may exist in the vadose zone, also called zone of aeration and unsaturated zone.

(116) "VEGETATED BUFFER" means a narrow, permanent strip of dense perennial vegetation established parallel to the contours of and perpendicular to the dominant slope of the field for the purposes of slowing water runoff, enhancing water infiltration, and minimizing the risk of any potential nutrients or pollutants from leaving the field and reaching surface waters.

(117) "WASTELOAD ALLOCATION" means the portion of the receiving water's assimilative capacity that is allocated to one of its existing or future point sources of pollution. Wasteload allocations constitute a type of water quality-based effluent limitation.

(118) "WATER QUALITY IMPACTS" means the effect of a discharge upon state waters, including, but not limited to the exceedance of permit limitations and/or stream standards or ground water standards; the occurrence of fish or other aquatic organism kills; excessive growth of organisms that affects the taste and odor of a potable water supply source and/or aesthetic quality of a recreational area; and/or the occurrence of conditions resulting in detrimental public health affects.

(119) "WATER QUALITY STANDARD" means any standard promulgated pursuant to section 25-8-204 C.R.S.

(120) "WET LOT FOR DUCKS" means a confinement facility for raising ducks which is open to the environment, has a small number of sheltered areas, and with open water runs and swimming areas to which ducks have free access.

(121) "WHOLE EFFLUENT TOXICITY" Whole effluent toxicity (WET) is a biological activity effect by which effluents exhibit antagonism to the aquatic organisms used in biomonitoring tests in the form of acute or chronic toxicity. WET may be caused by a variety of specific compounds or by synergistic interaction among compounds.

61.3 APPLICABILITY

61.3(1) APPLICABILITY - GENERALLY

(a) No person shall discharge any pollutant into any state water from a point source without first having obtained a permit from the Division for such discharge except that activities such as diversion, carriage, and exchange of water from or into streams, lakes, reservoirs, or conveyance structures, or storage of water in or release of water from lakes, reservoirs, or conveyance structures, in the exercise of water rights shall not be considered to be point source discharges of pollution under this article. However, nothing in this subsection shall exempt any point source discharger which generates wastewater effluent from the requirement of obtaining a permit pursuant to these regulations.

(b) Neither the Commission nor the Division shall require any permit for any flow or return flow of irrigation water into state waters except as may be required by the Federal Act or regulations. The provisions of any permit that are so required shall not be any more stringent than, and shall not contain any condition for monitoring or reporting in excess of, the minimum required by the Federal Act or regulations.

(c) Neither the Commission nor the Division shall require any permit for animal or agricultural waste on farms and ranches except as may be required by the Federal Act or regulations or by section 25-8-501.1, C.R.S., of the state act which provides that permits shall be required for housed commercial swine feeding operations. The provisions of any permit that is so required for animal or agricultural waste on farms and ranches that are not housed commercial swine feeding operations shall not be any more stringent than, and shall not contain any condition for monitoring or reporting in excess of, the minimum required by the Federal Act or regulations.

61.3(2) <u>APPLICABILITY - STORMWATER</u>

(a) Except as noted in sections 61.3(2)(b) and (c), discharges of stormwater as set forth in 61.3(2) and 61.4(3) are point sources requiring a permit.

(b) Conveyances that discharge stormwater runoff combined with municipal sewage are point sources that must obtain a permit but are not subject to the provisions of sections 61.3(2), 61.4(3), 61.8(4) and 61.9(2).

(c) The Division may not require a permit for discharges of stormwater runoff from mining operations or oil and gas exploration, production, processing or treatment operations or transmission facilities, composed entirely of flows which are from conveyances or systems of conveyances (including but not limited to pipes, conduits, ditches, and channels) used for collecting and conveying precipitation runoff and which are not contaminated by contact with or that have not come into contact with, any overburden, raw material, intermediate products, finished product, byproduct or waste products located on the site of such operations. The term “oil and gas exploration, production, processing or treatment operations or transmission facilities” does not include construction activities associated with such operations or facilities.

(d) Whether a discharge from a municipal separate storm sewer is or is not subject to regulation under this section 61.3(2) shall have no bearing on whether the owner or operator of the discharge is eligible for funding under Title II, Title III or Title VI of the Clean Water Act.

(e) Stormwater Discharges for Which a Permit is Required - Phase I: The following discharges composed entirely of stormwater are required to obtain a permit.

(i) A discharge with respect to which a permit has been issued prior to February 4, 1987;

(ii) A stormwater discharge associated with industrial activity.

(A) "Stormwater discharge associated with industrial activity" means the discharge from any conveyance which is used for collecting and conveying stormwater and

which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. Except for the provision of 61.3(2)(c) that addresses construction activities associated with oil and gas operations or facilities, the term does not include discharges from facilities or activities excluded from the NPDES program under 40 CFR Part 122 or the CDPS program under Regulation No. 61.

(B) For the categories of industries identified in subparagraphs (iii)(A) through (K) of this subsection, the term "stormwater discharge associated with industrial activity" includes, but is not limited to, stormwater discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters; sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and final products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to stormwater.

(C) The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots, as long as the drainage from the excluded areas is not mixed with stormwater drained from the above described areas.

(D) Industrial facilities (including industrial facilities that are Federally, State, or municipally owned or operated that meet the description of the facilities listed in this paragraph (A)-(K)) include those facilities designated under the provisions of section 61.3(2)(e)(vii).

(iii) The following categories of facilities are considered to be engaging in "industrial activity" for purposes of this subsection:

(A) Facilities subject to stormwater effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under 40 CFR Subchapter N (except facilities with toxic pollutant effluent standards which are excluded under section 61.3(2)(h));

(B) Facilities classified as Standard Industrial Classifications 24 (except 2434), 26 (except 265 and 267), 28 (except 283 and 285) 29, 311, 32 (except 323), 33, 3441,373;

(C) Facilities classified as Standard Industrial Classifications 10 through 14 (mineral industry) including active or inactive mining operations (except for areas of coal mining operations no longer meeting the definition of a reclamation area under 40 CFR 434.11 (l) because the performance bond issued to the facility by the appropriate SMCRA authority has been released, or except for areas of non-coal mining operations which have been released from applicable State or Federal reclamation requirements after December 16, 1990) and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge stormwater contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations; (inactive mining operations are mining sites that are not being actively mined, but which have an identifiable owner/operator, inactive mining sites do not include sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined materials, nor sites where

minimal activities are undertaken for the sole purpose of maintaining a mining claim);

(D) Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under Subtitle C of RCRA as amended by HSWA (1984);

(E) Landfills, land application sites, and open dumps that receive or have received any industrial wastes (waste that is received from any of the facilities described under this subsection) including those that are subject to regulation under Subtitle D of RCRA as amended by HSWA (1984);

(F) Facilities involved in the recycling of materials, including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards, that are classified as Standard Industrial Classification 5015 or 5093;

(G) Steam electric power generating facilities, including coal handling sites;

(H) Transportation facilities classified as Standard Industrial Classifications 40, 41, 42 (except 4221 - 4225), 43, 44, 45, and 5171 which have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, airport deicing operations, or which are otherwise identified under paragraphs (A)-(G) or (I)-(K) of this subsection are associated with industrial activity;

(I) Treatment works treating domestic sewage or any other biosolids or wastewater treatment device or system, used in the storage treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of biosolids that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program under 40 CFR 403 or 5 CCR 1002-63, Regulation No. 63. Not included are farm lands, domestic gardens or lands used for biosolids management where biosolids is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with Section 405 of the CWA;

(J) Construction activity, including clearing, grading and excavation, that results in the disturbance of five or more acres of total land area. Construction activity also includes the disturbance of less than five acres of total land area that is a part of a larger common plan of development or sale, if the larger common plan will ultimately disturb five acres or more; and

(K) Facilities under Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 (except 311), 323, 34 (except 3441), 35, 36, 37 (except 373), 38, 39, and 4221-4225 (and which are not otherwise included within categories (B)-(J)).

(iv) Any stormwater discharge associated with industrial activity from an airport, powerplant or uncontrolled sanitary landfill owned or operated by a municipality with a population of less than 100,000 is required to obtain a permit during Phase I. A stormwater discharge associated with industrial activity from any other facility described in section 61.3(2)(e)(iii) that is owned or operated by such municipalities, need not obtain a permit during Phase I.

(v) A discharge associated with industrial activity from point sources which discharge through a non-municipal or non-publicly owned separate storm sewer system. The Division may issue: a single permit, with each discharger a co-permittee to a permit issued to the operator of the portion of the system that discharges into state waters; or, individual permits to each discharger of stormwater associated with industrial activity through the non-municipal conveyance system.

(A) All stormwater discharges associated with industrial activity that discharge through a stormwater discharge system that is not a municipal separate storm sewer must be covered by an individual permit, or a permit issued to the operator of the portion of the system that discharges to state waters, with each discharger to the non-municipal conveyance a co-permittee to that permit.

(B) Where there is more than one operator of a single system of such conveyances, all operators of stormwater discharges associated with industrial activity must submit applications.

(C) Any permit covering more than one operator shall identify the effluent limitations, or other permit conditions, if any, that apply to each operator.

(vi) A discharge from a large or medium municipal separate storm sewer system.

(A) The Division may either issue one system-wide permit covering all discharges from municipal separate storm sewers within a large or medium municipal storm sewer system or issue distinct permits for appropriate categories of discharges within a large or medium municipal separate storm sewer system including, but not limited to: all discharges owned or operated by the same municipality; located within the same jurisdiction; all discharges within a system that discharge to the same watershed; discharges within a system that are similar in nature; or for individual discharges from municipal separate storm sewers within the system.

(B) The operator of a discharge from a municipal separate storm sewer which is part of a large or medium municipal separate storm sewer system must either

(I) participate in a permit application (to be a permittee or a co-permittee) with one or more other operators of discharges from the large or medium municipal storm sewer system which covers all, or a portion of all, discharges from the municipal separate storm sewer system;

(II) submit a distinct permit application which only covers discharges from the municipal separate storm sewers for which the operator is responsible; or

(III) a regional authority may be responsible for submitting a permit application under the following guidelines:

(a) the regional authority together with co-applicants shall have authority over a stormwater management program that is in existence, or shall be in existence at the time Part l of the application is due;

(b) the permit applicant or co-applicants shall establish their ability to make a timely submission of Part l and Part 2 of the municipal application;

(c) each of the operators of large or medium municipal separate storm sewers that are under the purview of the designated regional authority, shall comply with the application requirements of section 61.4(3)(c).

(C) One permit application may be submitted for all or a portion of all municipal separate storm sewers within adjacent or interconnected large or medium municipal separate storm sewer systems. The Division may issue one system-wide permit covering all, or a portion of all municipal separate storm sewers in adjacent or interconnected large or medium municipal separate storm sewer systems.

(D) Permits for all or a portion of all discharges from large or medium municipal separate storm sewer systems that are issued on a system-wide, jurisdiction-wide, watershed or other basis may specify different conditions relating to different discharges covered by the permit, including different management programs for different drainage areas which contribute stormwater to the system.

(E) Co-permittees need only comply with permit conditions relating to discharges from the municipal separate storm sewer for which they are operators.

(vii) A discharge which either the Division or the EPA Regional Administrator determines to contribute to a violation of a water quality standard or is a significant contributor of pollutants to state waters. This designation may include a discharge from any conveyance or system of conveyances used for collecting and conveying stormwater runoff or a system of discharges from municipal separate storm sewers, except for those discharges from conveyances which do not require a permit under paragraph section 61.3(2)(c) or irrigation return flow which is exempted from the definition of point source in this regulation.

The Division may designate discharges from municipal separate storm sewers on a system-wide or jurisdiction-wide basis. In making this determination the Division may consider the following factors:

(A) The location of the discharge with respect to state waters;

(B) The size of the discharge;

(C) The quantity and nature of the pollutants discharged to state waters; and

(D) Other relevant factors.

The Division may issue permits for designated municipal separate storm sewers that are on a system-wide basis, jurisdiction-wide basis, watershed basis or other appropriate basis, or may issue permits for individual discharges. The Division may designate discharges from municipal separate storm sewers where the Division determines that stormwater controls are needed for the discharge based on wasteload allocations that are part of total maximum daily loads (TMDLs) that address the pollutants of concern.

(f) Stormwater Discharges for Which a Permit is Required - Phase II. The following discharges composed entirely of stormwater are required to be covered under a permit.

(i) A stormwater discharge associated with industrial activity from a facility that is not authorized by a general or individual permit, that is owned or operated by a municipality with a population of less than 100,000 (based on the 1990 census).

(ii) A stormwater discharge associated with small construction activity.

(A) Stormwater discharge associated with small construction activity means the discharge of stormwater from construction activities, including clearing, grading, and excavating, that result in land disturbance of equal to or greater than one acre and less than five acres. Small construction activity also includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale, if the larger common plan will ultimately disturb equal to or greater than one and less than five acres. Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility.

(B) The Division may waive the otherwise applicable requirements in a general permit for a stormwater discharge from a small construction activity that disturbs less than five acres where the value of the rainfall erosivity factor ('R' in the Revised Universal Soil Loss Equation) is less than five during the period of construction activity. The rainfall erosivity factor must be determined using a State Approved method. The operator or owner must certify to the Division that the construction activity will only take place during a period when the value of the rainfall erosivity factor is less than five. If unforeseeable conditions occur that are outside of the control of the applicant for a waiver, and that will extend the construction activity beyond the dates initially applied for, the owner or operator must reapply for the waiver or obtain coverage under a general permit for stormwater discharges. The waiver reapplication or permit application must be submitted within two business days after the unforeseeable condition becomes known. This waiver does not relieve the operator or owner from complying with the requirements of local agencies.

(iii) A stormwater discharge that the Division determines contributes to a violation of a water quality standard or is a significant contributor of pollutants to state waters. This designation may include a discharge from any conveyance or system of conveyances used for collecting and conveying stormwater runoff or a system of discharges from municipal separate storm sewers, except for those discharges from conveyances which do not require a permit under paragraph 61.3(2)(c) or irrigation return flow which is exempted from the definition of point source in this regulation.

The Division may designate discharges from municipal separate storm sewers on a system-wide or jurisdiction-wide basis. In making this determination the Division may consider the following factors:

(A) The location of the discharge with respect to state waters;

(B) The size of the discharge;

(C) The quantity and nature of the pollutants discharged to state waters; and

(D) Other relevant factors.

The Division may issue permits for designated municipal separate storm sewers that are on a system-wide basis, jurisdiction-wide basis, watershed basis or other appropriate basis, or may issue permits for individual discharges. The Division may designate discharges from municipal separate storm sewers where the Division determines that stormwater controls are needed for the discharge based on wasteload allocations that are part of total maximum daily loads (TMDLs) that address the pollutants of concern.

(iv) Any construction activity designated by the Division, based on the potential for contribution to a violation of a water quality standard or for significant contribution of pollutants to State waters.

(v) A discharge from a regulated small municipal separate storm sewer system (MS4).

(A) Regulated small MS4s include:

(I) Small MS4s located in an urbanized area as determined by the latest Decennial Census by the Bureau of the Census. (If the small MS4 is not located entirely within an urbanized area, only the portion that is within the urbanized area is regulated).

(II) Publicly-owned systems similar to separate storm sewer systems in municipalities, such as systems at military bases, and large education, hospital or prison complexes, if they are designed for a maximum daily user population (residents and individuals who come there to work or use the MS4's facilities) of at least 1000, and are located in an urbanized area.

(III) Small MS4s designated by the Division, where the designation is pursuant to the following:

(a) The Division shall evaluate, at a minimum, any small MS4 located outside of an urbanized area serving a jurisdiction with a population density of at least 1,000 people per square mile and a population of at least 10,000 (based on the latest Decennial Census by the Bureau of the Census), to determine whether or not stormwater discharges from the MS4 result in or have the potential to result in exceedances of water quality standards, including impairment of designated uses, or other significant water quality impacts, including habitat and biological impacts. The evaluation shall use the following elements, at a minimum: discharge to sensitive waters; high growth or growth potential; size of population and population density; contiguity to an urbanized area; and significant contribution of pollutants to state waters. Sensitive waters, for the purposes of this section, are defined as those receiving waters that are classified by the Commission as either Aquatic Life Class 1, a Drinking Water supply, or are on the Division's most current 303(d) list (i.e., need a TMDL).

Based on this evaluation, if the Division determines that stormwater discharges from the MS4 result in or have the potential to result in exceedances of water quality standards, including impairment of designated uses, or other significant water quality impacts, including habitat and biological impacts, the Division shall designate the MS4 as a regulated small MS4 to be covered under a CDPS stormwater discharge permit. However, the MS4 may provide information to the Division on its existing stormwater quality control programs, including any that are analogous to the six minimum control measures under section 61.8(11)(a)(ii). If the Division determines that the MS4 has adequate controls for its stormwater discharges, (i.e., is already implementing the applicable portions of the six minimum

measures), it will not be designated as a regulated small MS4 at that time.

Any existing small MS4 located outside of an urbanized area, serving a jurisdiction with a population density of at least 1,000 people per square mile and a population of at least 10,000, that the Division determines must be covered under a CDPS stormwater discharge permit, must have been designated by the Division prior to December 9, 2002. Population values shall be based on the most recent Decennial Bureau of the Census information available to the Division at the time that it makes such permit coverage determinations.

(b) The Division may evaluate any other small MS4s other than those described in subsections (a) and (c) of this section, in order to determine whether or not stormwater discharges from a small MS4 result in or have the potential to result in exceedances of water quality standards, including impairment of designated uses, or other significant water quality impacts, including habitat and biological impacts. The Division will place a high priority on evaluating small MS4s with a combined permanent and seasonal population (as determined by the official Census population plus the number of commercially advertised bed accommodations that will allow for an overnight stay, as listed through the chamber of commerce, or any local resort or property management companies) of over 10,000. Based on this evaluation, the Division may designate the small MS4 as a regulated small MS4 to be covered under the CDPS stormwater discharge control program at any time, as appropriate, using the elements shown in subsection (a) above.

(c) The Division shall designate any small MS4 that contributes substantially to the pollutant loadings of a physically interconnected municipal separate storm sewer that is regulated by the CDPS stormwater program as a regulated small MS4 to be covered under the CDPS stormwater discharge control program.

(d) Small MS4s may be designated by the Division based upon a petition under section 61.3(2)(g)(iv).

(e) Small MS4s may be designated by the Division based upon section 61.3(2)(f)(iii).

(f) For any small MS4 that has been evaluated as per subsections (a) or (b) above, the Division reserves the right to re-evaluate the MS4 if circumstances change or new information becomes available.

(B) The Division may waive permit coverage for a small MS4 with a population under 1,000 within the urbanized area where both of the following criteria have been met:

(I) Its discharges are not contributing substantially to the pollutant loadings of a physically interconnected regulated MS4 (see section 61.3(2)(f)(v)(A)(lll)(c)); and

(II) If the small MS4 discharges any pollutant(s) that has been identified as a cause of impairment of any water body to which it discharges, stormwater controls are not needed based on wasteload allocations that are part of an EPA approved or established "total maximum daily load" (TMDL) that addresses the pollutant(s) of concern.

A small MS4 waived under this section may be designated if circumstances change or new information becomes available. The Division shall review any such waivers at least once every five years, to determine whether any of the information used for granting the waiver has changed.

(g) Petitions for Permits.

(i) Any operator of a municipal separate storm sewer system may petition the Division to require a separate permit for any discharge into the municipal separate storm sewer system.

(ii) Any person may petition the Division to require a permit for a discharge which is composed entirely of stormwater which contributes to a violation of a water quality standard or is a significant contributor of pollutants to state waters.

(iii) The owner or operator of a municipal separate storm sewer system may petition the Division to reduce the Census estimates of the population served by such separate system to account for stormwater discharged to combined sewers as defined by 40 CFR 35.2005(b)(11) that is treated in a publicly owned treatment works. In municipalities in which combined sewers are operated, the Census estimates of population may be reduced proportional to the fraction, based on estimated lengths, of the length of combined sewers over the sum of the length of combined sewers and municipal separate storm sewers where an applicant has submitted the permit number associated with each discharge point and a map indicating areas served by combined sewers and the location of any combined sewer overflow discharge point.

(iv) Any person may petition the Division for the designation of a large, medium or small municipal separate storm sewer system as defined in section 61.2.

(v) The Division shall make a final determination on any petition received under this section within 90 days after receiving the petition, with the exception of petitions to designate a small MS4, in which case the Division shall make a final determination on the petition within 180 days after its receipt.

(h) Discharges composed entirely of stormwater are conditionally excluded from stormwater permitting by way of not meeting the definition of "stormwater discharges associated with industrial activity" if there is "no exposure" of industrial materials and/or activities to precipitation, snowmelt and/or runoff, and the discharger satisfies the conditions in paragraphs (h)(i) through (h)(iv) of this section. "No exposure" means that all industrial materials and activities are protected by a storm resistant shelter to prevent exposure to precipitation, snowmelt, and/or runoff. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product or waste product.

(i) To qualify for this exclusion, the discharger must:

(A) Provide a storm resistant shelter to protect industrial materials and activities from exposure to precipitation, snow melt, and runoff;

(B) Complete and sign (according to section 61.4(1)(e)) a certification that there are no discharges of stormwater contaminated by exposure to industrial materials and activities from the entire facility, except as provided in section 61.3(2)(h)(ii);

(C) Submit the signed, updated certification to the Division once every five years;

(D) Allow the Director of the Division, the EPA Administrator, and/or their authorized representatives, upon the presentation of credentials, to inspect the facility to determine compliance with the "no exposure" conditions;

(E) Allow the Division to make any "no exposure" inspection reports available to the public upon request;

(F) For facilities that discharge through an MS4, submit a copy of the certification of "no exposure" to the MS4 operator, as well as allow inspection and public reporting by the MS4 operator, upon request; and

(G) Have adequate protection in place to assure that stormwater discharges associated with industrial activity do not occur from areas with secondary containment or that drain to a sanitary sewer.

(ii) To qualify for this exclusion, storm resistant shelter is not required for:

(A) Drums, barrels, tanks, and similar containers intended for the outdoor storage of the contained material, that are tightly sealed, provided those containers are not deteriorated and do not leak ("sealed" means banded or otherwise secured and without operational taps or valves), and are not otherwise a source of industrial pollutants;

(B) Adequately maintained vehicles used in material handling, that are not otherwise a source of industrial pollutants; and

(C) Final products, other than products that would be mobilized in stormwater discharge (e.g., rock salt).

(iii) The exclusion is subject to the following limitations:

(A) Stormwater discharges from construction activities identified in sections 61.3(2)(e)(iii)(J) and 61.3(2)(f)(ii)(A) are not eligible for this conditional exclusion.

(B) This conditional exclusion from the requirement for a CDPS permit is available on a facility-wide basis only, not for individual outfalls.

(C) If circumstances change and industrial materials or activities become exposed to precipitation, snow melt, and/or runoff, the conditions for this exclusion no longer apply. In such cases, the discharge becomes subject to enforcement for un-permitted discharge. Any conditionally excluded discharger who anticipates such a change in circumstances must apply for and obtain permit authorization prior to the change of circumstances.

(D) Notwithstanding the provisions of this paragraph, the Division retains the authority to require permit authorization (and deny this exclusion) upon making a

determination that the discharge causes, has a reasonable potential to cause, or contributes to an instream excursion above an applicable water quality standard, including designated uses.

(iv) Certification. The no exposure certification requires the submission of the following information, at a minimum, to aid the Division in determining if the facility qualifies for the no exposure exclusion:

(A) The legal name, address and phone number of the discharger;

(B) The facility name and address, the county name and the latitude and longitude where the facility is located;

(C) The certification must indicate that none of the following materials or activities are, or will be in the foreseeable future, exposed to precipitation, snow melt, and/or runoff:

(I) Using, storing or cleaning industrial machinery or equipment, and areas where residuals from using, storing or cleaning industrial machinery or equipment remain and are exposed to stormwater;

(II) Materials or residuals on the ground or in stormwater inlets from spills/leaks;

(III) Materials or products from past industrial activity;

(IV) Material handling equipment (except adequately maintained vehicles);

(V) Materials or products during loading/unloading or transporting activities;

(VI) Materials or products stored outdoors (except final products intended for outside use, e.g., new cars, where exposure to stormwater does not result in the discharge of pollutants);

(VII) Materials contained in open, deteriorated or leaking storage drums, barrels, tanks, and similar containers;

(VIII) Materials or products handled/stored on roads or railways owned or maintained by the discharger;

(IX) Waste material (except waste in covered, non-leaking containers, e.g., dumpsters);

(X) Application or disposal of process wastewater (unless otherwise permitted); and

(XI) Particulate matter or visible deposits of residuals from roof stacks/vents not otherwise regulated, i.e., under an air quality control permit, and evident in the stormwater outflow;

(D) All "no exposure" certifications must include the following certification statement, and be signed in accordance with the signatory requirements of section 61.4(1)(e): "I certify under penalty of law that I have read and understand the eligibility requirements for claiming a condition of "no exposure" and obtaining an exclusion from CDPS stormwater permitting; and that there are no discharges of

stormwater contaminated by exposure to industrial activities or materials from the industrial facility identified in this document (except as allowed under paragraph (h)(ii)) of this section. I understand that I am obligated to submit a no exposure certification form once every five years to the Division and, if requested, to the operator of the local MS4 into which this facility discharges (where applicable). I understand that I must allow the Division, or MS4 operator where the discharge is into the local MS4, to perform inspections to confirm the condition of no exposure and to make such inspection reports publicly available upon request. I understand that I must obtain coverage under a CDPS permit prior to any point source discharge of stormwater from the facility. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly involved in gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

61.3(3) APPLICABILITY - CONCENTRATED AQUATIC ANIMAL PRODUCTION FACILITIES

(a) Concentrated aquatic animal production facilities, as defined in this section, are point sources subject to these regulations.

(b) A concentrated aquatic animal production facility for purposes of this section is a hatchery, fish farm, or other facility which meets the criteria in Appendix C of Part 122, 40 CFR, or which the Division designates under paragraph (c) of this section.

(c) The Division may designate any warm or cold water aquatic animal production facility as a concentrated aquatic animal production facility upon determining that it is a significant contributor of pollution to state waters. In making such designation, the Division shall consider the location and quality of the receiving state waters; the holding, feeding, and production capacities of the facility; the quantity and nature of the pollutants reaching state waters; and any other relevant factors.

(d) A permit application shall not be required from a concentrated aquatic animal production facility designated under paragraph (c) of this section until the Division has conducted an on-site inspection of the facility and has determined that the facility should and could be regulated under these regulations.

61.3(4) APPLICABILITY - AQUACULTURE PROJECTS

(a) Discharges into aquaculture projects, as defined in this section are subject to these regulations in accordance with section 318 of the Clean Water Act and in accordance with 40 CFR Part 125, Subpart B.

(b) Aquaculture project means a defined managed water area which uses discharges of pollutants into that designated area for the maintenance or production of harvestable freshwater, estuarine, or marine plants or animals.

(c) A designated project area, for purposes of paragraph (b) of this section, is the portion of the state waters within which the permittee or permit applicant plans to confine the cultivated species, using a method or plan of operation (including but not limited to physical confinement) which, on the basis of reliable scientific evidence, is expected to ensure that specific individual organisms

comprising an aquaculture crop will enjoy increased growth attributable to the discharge of pollutants, and be harvested within a defined geographic area.

61.3(5) APPLICABILITY - SILVICULTURAL ACTIVITIES

(a) Silvicultural point sources, as defined in this section, are point sources subject to these regulations.

(b) A silvicultural point source is any discernible, confined and discrete conveyance related to rock crushing, gravel washing, log sorting, or log storage facilities which are operated in connection with silvicultural activities and from which pollutants are discharged into state waters. The term does not include nonpoint source silvicultural activities such as nursery operations, site preparation, reforestation and subsequent cultural treatment, thinning, prescribed burning, pest and fire control, harvesting operations, surface drainage, or road construction and maintenance from which there is natural runoff. However, some of these activities may involve point source discharges of dredged or fill material which may require a permit under Section 404 of the Clean Water Act.

(c) Rock crushing and gravel washing facilities, for purposes of paragraph (b) of this section, are facilities which process crushed and broken stone, gravel, and riprap.

(d) Log sorting and log storage facilities, for purposes of paragraph (b) of this section, are facilities whose discharges result from the holding of unprocessed wood, for example, logs or roundwood with bark or after removal of bark, held in self-contained bodies of water (mill ponds or log ponds) or stored on land where water is applied intentionally on the logs.

61.4 APPLICATION FOR A PERMIT

61.4(1) APPLICATION REQUIREMENTS - GENERALLY

(a) Should Federal or State law or regulation require a discharge permit for a discharge not currently requiring a permit, the discharger shall apply for a permit within 60 days of being officially notified or of an official published notice that such a permit is required.

(b) An applicant for a permit or renewal permit shall secure the required application form from the Division and file the completed form with the Division. When a facility or activity is owned by one person but operated by another person, both the owner and the operator shall sign the permit application and the permit may be issued to both parties as co-permittees. When a facility or activity is owned by one person but operated by another person, and the discharge is short-term or intermittent, the Division shall have the authority to waive the requirement that the owner sign the permit application. In all cases the operator shall sign the permit application.

(c) An applicant shall apply for a new permit, other than a general permit, at least one hundred eighty (180) days prior to discharge; if a person contemplates some form of construction which, in itself, will require a discharge permit, the person may apply for the permit in accordance with the provisions of these regulations and with the approval of the Division, transfer a permit to a contractor. Where the application is for a discharge from a domestic wastewater treatment works, then the application for a discharge permit shall be preceded by an application for site approval pursuant to regulations for site applications for domestic wastewater treatment works. Applications to be covered under a general permit shall be filed within the deadlines specified in the general permit.

(d) A permittee with a currently effective permit shall submit a new permit application consistent with this section and with section 61.10, at least 180 days before the existing permit expires, unless

permission for a later date is granted by the Division. Applications submitted later than the expiration date of the existing permit will be treated in all respects as applications for new permits.

(e) The application form shall be signed as follows:

(i) In the case of corporations, by a responsible corporate officer. For purposes of this section, the responsible corporate officer is responsible for the overall operation of the facility from which the discharge described in the form originates;

(ii) In the case of partnership, by a general partner;

(iii) In the case of a sole proprietorship, by the proprietor;

(iv) In the case of a municipal, state, or other public facility, by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer has responsibility for the overall operation of the facility from which the discharge originates.

(f) All reports required by permits, and other information requested by the Division shall be signed by a person described in section 61.4(1)(e) or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(i) The authorization is made in writing by a person described in paragraph 61.4(1)(e);

(ii) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and,

(iii) The written authorization is submitted to the Division.

(g) If an authorization under paragraph (f) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (e) of this section must be submitted to the Division prior to or together with any reports, information, or applications to be signed by an authorized representative.

(h) Any person signing a document under section 61.4 shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

(i) Reserved.

(j) Unless the Division determines that certain item(s) are unnecessary, a complete application, must contain as a minimum:

(i) Description of the activities conducted by the applicant which require it to obtain a permit;

(ii) Identification of the facility name; location; and telephone number;

(iii) The owner(s) and the operator(s) name, mailing address and telephone number;

(iv) Up to four SIC codes which best reflect the principal products or services provided by the facility;

(v) General legal description, map location, and site diagram of the treatment facility and discharge locations;

(vi) A topographic map (or other map if a topographic map is unavailable) extending one mile beyond the property boundaries of the source, depicting the facility and each of its intake and discharge structures; each of its hazardous waste treatment, storage, or disposal facilities; each well where fluids from the facility are injected underground; and those wells, springs, other surface water bodies, and drinking water wells listed in public records or otherwise known to the applicant in the map area.

(vii) Identification of the type of discharge, and the receiving waters for each discharge point;

(viii) A listing of all active permits or construction approvals received or applied for the site under any of the following programs:

(A) Hazardous Waste Management program under RCRA.

(B) UIC program under SDWA.

(C) NPDES program under CWA.

(D) Prevention of Significant Deterioration (PSD) program under the Clean Air Act.

(E) Nonattainment program under the Clean Air Act.

(F) National Emission Standards for Hazardous Pollutants (NESHAPS) under the Clean Air Act.

(G) Dredge or fill permits under Section 404 of CWA.

(H) Other relevant environmental permits, including state permits,

(ix) For domestic wastewater treatment works, the following additional information;

(A) Raw and effluent wastewater flow and quality characteristics to and from the treatment works related to each discharge proposed for the duration of the permit;

(B) Description of unit processes and activities related to treatment, including assessments of contributions of both pretreated and untreated industrial wastewater, land application plans and/or practices, biosolids treatment and handling, flow measurement, and underground percolation and/or injection;

(C) Design documents and engineering analysis detailing hydraulic and organic treatment capacity, interceptor capacity;

(D) Map(s) and description delineating service area and interceptor location(s), including a description of the population to be served;

(E) Copies of sewer and other ordinances governing discharges to the sewer system.

(x) For all facilities, whether the facility is located in Indian lands.

(k) The Division may request such additional information as is reasonably necessary in order for it to evaluate the discharge, including but not limited to the following:

(i) For domestic wastewater treatment works, operating agreements with connector district(s), county(s), city(s), or any other agencies or person(s) within the defined service area shall be provided.

(ii) For industrial wastewater treatment facilities some or all of the following specific information may be necessary:

(A) Quantitative and qualitative characteristics of the influent to the final wastewater treatment plant;

(B) Quantitative and qualitative characteristics for each discharge proposed for the duration of the permit;

(C) Levels of production, to the extent needed to calculate effluent limitations; including seasonal variations;

(D) General information related to hydraulic and pollutant removal capacity of the final treatment plant and land treatment system, if applicable, with related monitoring practices used to document the capability of such treatment plant to remove pollutants, including residual solids treatment, handling and disposal practices;

(E) Quantitative and qualitative characteristics of raw water intake in order to evaluate net limitations; and

(F) Description of "best management practices" in existence at the site.

(G) All pertinent plans and specifications for the facility, process, or activity which is the source of the water discharge, including any wastewater treatment or control facility.

(iii) The Division may require the submission of reasonably available existing groundwater information and data which will indicate possible water quality impacts.

(iv) Details of time schedules and procedures for compliance regarding construction of a new facility, modification, and/or expansion of an existing facility. A description of the proposed improvements should be included.

(v) Reasonably available existing water quality data of the affected waters.

(vi) For domestic wastewater treatment works available economic information associated with the costs of meeting secondary treatment, higher levels of treatment if greater than secondary treatment is required, and any other alternatives pertinent to evaluating the economic effects of meeting additional treatment requirements.

(vii) For discharge from an impoundment or a land treatment system:

(A) Identification of the impoundment or land treatment system; owner(s); operator of the facility; mailing address; and telephone number;

(B) Any information which the applicant wishes to provide to establish the fate of pollutants in the vadose zone, and beyond that, in the ground water up to the anticipated point of compliance.

(viii) Requirements for consideration as a land disposal system;

(A) The applicant must furnish sufficient information for the Division to determine the appropriateness of classifying the discharge as a land disposal system in accordance with sections 61.2 and 61.14(7)(a).

(ix) Any currently available information regarding the impact from surface waters, to which the treatment facility discharges, on aquifers which may be recharged by such surface waters.

(l) The applicant shall submit any information which it desires the Division to review regarding the economic reasonableness of possible permit conditions as it applies to the applicant. If such information is submitted after the application has been submitted, the applicant must waive or extend the deadline for final issuance of the permit to provide the Division with sufficient opportunity to review the additional data. If the applicant fails to submit information, the Division will base its decision on information reasonably available to it.

(m) For any discharge to a ditch or other man-made conveyance structure, unless otherwise determined by the Division the following information must be submitted for the application to be complete:

(i) Evidence of actual notice to the receiving structures' primary operator, manager or owner that an application is being filed requesting a permit for the proposed discharge;

(ii) Identification of the receiving ditch or other man-made conveyance structure, its carrying capacity, flow regime, and any legal restrictions or limitations of which the applicant is aware which might affect the ability of the applicant to discharge to the structure;

(iii) Identification of the water uses decreed and the water uses in existence for the receiving structure; and

(iv) For existing discharges, a description of the date and nature (including quantity and quality characteristics) of the original discharge and a description of the date and nature of any substantial changes in the discharge in sufficient detail to determine the nature of any discharge that the applicant claims preceded any decreed and existing uses.

(n) Applicants shall keep records of all data used to complete permit applications for a period of at least three (3) years from the date the application is signed.

61.4(2) APPLICATION REQUIREMENTS - EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURE DISCHARGES

Existing manufacturing, commercial, mining, and silviculture discharges applying for permits, except for those facilities which discharge only non-process wastewater, shall provide the following information to the Division, using the application forms provided by the Division.

(a) Outfall location. The latitude and longitude to the nearest 15 seconds and the name of the receiving water.

(b) A line drawing of the water flow through the facility with a water balance, showing operations contributing wastewater to the effluent and treatment units. Similar processes, operations, or production areas may be indicated as a single unit, labeled to correspond to the more detailed identification under paragraph (c) of this section. The water balance must show approximate average flows at intake and discharge points and between units, including treatment units. If a water balance cannot be determined (for example, for certain mining activities), the applicant may provide instead a pictorial description of the nature and amount of any sources of water and any collection and treatment measures.

(c) Average flows and treatment. A narrative identification of each type of process, operation, or production area which contributes wastewater to the effluent for each outfall, including process wastewater, cooling water, and storm-water runoff; the average flow which each process contributes; and a description of the treatment the wastewater receives, including the ultimate disposal of any solid or fluid wastes other than by discharge. Processes, operations, or production areas may be described in general terms (for example, "dye-making reactor," "distillation tower." For a privately owned treatment works, this information shall include the identity of each user of the treatment works. The average flow of point sources composed of stormwater may be estimated. The basis for the rainfall event and the method of estimation must be indicated.

(d) Intermittent flows. If any of the discharges described in paragraph (c) of this section are intermittent or seasonal, a description of the frequency, duration and flow rate of each discharge occurrence (except for stormwater runoff, spillage or leaks).

(e) Maximum production. If an effluent guideline promulgated under Section 304 of the Federal Act applies to the applicant and is expressed in terms of production (or other measure of operation), a reasonable measure of the applicant's actual production reported in the units used in the applicant effluent limitation. The reported measure must reflect the actual production of the facility.

(f) Improvements. If the applicant is subject to any present requirements or compliance schedules for construction, upgrading or operation of waste treatment equipment, an identification of the abatement requirement, a description of the abatement project and projected final compliance dates.

(g) At a minimum, the applicant shall submit quantitative data for pollutants in the discharge as provided in this paragraph and in paragraph (h). For purposes of this paragraph, an applicant is expected to "know or have reason to believe" that a pollutant is present in an effluent based on an evaluation of the expected use, production, or storage of the pollutant, or on any previous analyses for the pollutant.

(i)

(A) Every applicant must report quantitative data for every outfall for the following pollutants:

Biochemical Oxygen Demand (BOD)

Chemical Oxygen Demand (COD)

Total Organic Carbon (TOC)

Total Suspended Solids (TSS)

Ammonia (as N)

Temperature (both winter and summer)

pH

(B) The Division may waive the reporting requirements for individual point sources or for a particular industry category for one or more of the pollutants listed in section 61.4(2)(g)(i)(A) if the applicant has demonstrated that such a waiver is appropriate because information adequate to support issuance of a permit can be obtained with less stringent requirements.

(ii) Each applicant with processes in one or more primary industry category (see Appendix A to 40 CFR Part 122) contributing to a discharge must report quantitative data for the following pollutants in each outfall containing process wastewater:

(A) The organic toxic pollutants in the fractions designated in 40 CFR Part 122, Table I of Appendix D for the applicants industrial category or categories. Table II of appendix D lists the organic toxic pollutants in each fraction. The fractions result from the sample preparation required by the analytical procedure which uses gas chromatography/mass spectrometry. A determination that an applicant falls within a particular industrial category for the purposes of selecting fractions for testing is not conclusive as to the applicant's inclusion in that category for any other purposes.

(B) The pollutants listed in Table III of Appendix D of 40 C.F. R. Part 122, Table III of Appendix D (the toxic metals, cyanide, and total phenols).

(iii)

(A) Each applicant must indicate whether it knows or has reason to believe that any of the pollutants in Table IV of Appendix D of 40 CFR Part 122 (certain conventional and non-conventional pollutants) is discharged from each outfall. If an applicable effluent limitations guideline either directly limits the pollutant or, by its express terms, indirectly limits the pollutant through limitations on an indicator, the applicant must report quantitative data. For every pollutant discharged which is not so limited in an effluent limitations guideline, the applicant must either report quantitative data or briefly describe the reasons the pollutant is expected to be discharged.

(B) Each applicant must indicate whether it knows or has reason to believe that any of the pollutants listed in Table II or Table III of Appendix D of 40 CFR Part 122 (the toxic pollutants and total phenols) for which quantitative data are not otherwise required under section 61.4(2)(g)(ii), is discharged from each outfall. For every pollutant expected to be discharged in concentrations of 10 ppb or greater the applicant must report quantitative data. For acrolein, acrylonitrile, 2,4 dinitrophenol, and 2-methyl-4,6 dinitrophenol, where any of these four pollutants are expected to be discharged in concentrations of 100 ppb or greater the applicant must report qualitative data. For every pollutant expected to be discharged in concentrations less than 10 ppb, or in the case of acrolein, acrylonitrile, 2,4 dinitrophenol, and 2-methyl-4,6 dinitrophenol, in concentrations less than 100 ppb, the applicant must either submit quantitative data or briefly describe the reasons the pollutant is expected to be discharged.

(iv) Each applicant must indicate whether it knows or has reason to believe that any of the pollutants in Table V of Appendix D of 40 CFR Part 122 (certain hazardous substances and asbestos) are discharged from each outfall. For every pollutant expected to be

discharged, the applicant must briefly describe the reasons the pollutant is expected to be discharged, and report any quantitative data it has for any pollutant.

(v) For purposes of subsections (iii) and (iv), above, the applicant need not provide quantitative data if the pollutant is present in the discharge solely as a result of the presence in intake water. However, the applicant must report such pollutant as present.

(vi) Each applicant must report qualitative data, generated using a screening procedure not calibrated with analytical standards, for 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) if it:

(A) Uses or manufactures 2,4,5-trichlorophenoxy acetic acid (2,4,5,-T); 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5,-TP); 2-(2,4,5-trichlorophenoxy) ethyl, 2,2-dichloropropionate (Erbon); O,O-dimethyl O-(2,4,5-trichlorphenyl) phosphorothioate (Ronnel); 2,4,5-trichlorophenol (TCP); or hexachlorophene (HCP); or

(B) Knows or has reason to believe that TCDD is or may be present in an effluent.

(h) When quantitative data for a pollutant are required, the applicant must collect a sample of effluent and analyze it for the pollutant in accordance with analytical methods approved under 40 CFR Part 136. When no analytical method is approved the applicant may use any suitable method but must provide a description of the method.

(i) When an applicant has two or more outfalls with substantially identical effluents, the Division may allow the applicant to test only one outfall and report that the quantitative data also apply to the substantially identical outfalls.

(ii) Grab samples must be used for pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform, E. coli and fecal streptococcus.

(iii) For all other pollutants, 24-hour composite samples must be used. However, a minimum of one grab sample may be taken for effluents from holding ponds or other impoundments with a retention period greater than 24 hours. In addition, for discharges other than stormwater discharges, the Division may waive composite sampling for any outfall for which the applicant demonstrates that the use of an automatic sampler is infeasible and that the minimum of four (4) grab samples will be a representative sample of the effluent being discharged.

(iv) For stormwater discharges, all samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches and at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where feasible, the variance in the duration of the event and the total rainfall of the event should not exceed 50 percent from the average or median rainfall event in that area.

(v) A flow-weighted composite shall be taken for either the entire discharge or for the first three hours of the discharge.

(vi) For a stormwater discharge, the flow-weighted composite sample may be taken with a continuous sampler or as a combination of a minimum of three sample aliquots taken in each hour of discharge for the entire discharge or for the first three hours of the discharge, with each aliquot being separated by a minimum period of fifteen minutes (applicants submitting permit applications for stormwater discharges under 61.4(3)(c) may collect flow weighted composite samples using different protocols with respect to the time duration between the collection of sample aliquots, subject to the approval of the Division). However, a minimum of one grab sample may be taken for stormwater

discharges from holding ponds or other impoundments with a retention period greater than 24 hours. For a flow-weighted composite sample, only one analysis of the composite of aliquots is required. For stormwater discharge samples taken from discharges associated with industrial activities, quantitative data must be reported for the grab sample taken during the first thirty minutes (or as soon thereafter as practicable) of the discharge for all pollutants specified in 61.4(3)(b)(i). For all stormwater permit applicants taking flow-weighted composites, quantitative data must be reported for all pollutants specified in 61.3(2) and 61.4(3), except pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform, E. coli and fecal streptococcus.

(vii) The Division may allow or establish appropriate site-specific sampling procedures or requirements, including sampling locations, the season in which the sampling takes place, the minimum duration between the previous measurable storm event and the storm event sampled, the minimum or maximum level of precipitation required for an appropriate storm event, the form of precipitation sampled (snow melt or rain fall), protocols for collecting samples under 40 CFR Part 136, and additional time for submitting data on a case-by-case basis.

(i) Reserved.

(j) Used or manufactured toxics. A listing of any toxic pollutant which the applicant currently uses or manufactures as an intermediate or final product or byproduct. The Division may waive or modify this requirement for any applicant demonstrates that it would be unduly burdensome to identify each toxic pollutant and the Division has adequate information to issue the permit.

(k) Reserved.

(l) An identification of any whole effluent toxicity tests which the applicant knows or has reason to believe have been made within the last 3 years on any of the applicants discharges or on a receiving water in relation to a discharge.

(m) Reserved.

(n) Contract Analyses. If a contract laboratory or consulting firm performed any of the analyses required in paragraphs (g) or (h) of this section, the applicant shall identify each laboratory or firm and the analyses performed.

(o) Small Business Exemption. An applicant which qualifies as a small business under one of the following criteria is exempt from the requirements in sections 61.4(1)(g)(ii)(A) to submit quantitative data for the pollutants listed in Table II of Appendix D of 40 CFR Part 122 (the organic pollutants):

(i) For coal mines, the probable total annual production is less than 100,000 tons per year.

(ii) For all other applicants, the gross total annual sales average less than $100,000 per year (in second quarter 1980 dollars).

61.4(3) APPLICATION REQUIREMENTS FOR STORMWATER DISCHARGES

(a) Time to Apply.

(i) Facilities proposing a new discharge of stormwater associated with industrial activity shall submit an application 180 days before that facility commences industrial activity which may result in a discharge of stormwater associated with that industrial activity. Facilities described under sections 61.3(2)(e)(iii)(J) and 61.3(2)(f)(ii)(A) shall submit applications at

least 90 days before the date on which construction is to commence. Different submittal dates may be required under the terms of applicable general permits.

(ii) For any existing discharge from a large municipal separate storm sewer system for which a stormwater permit application previously has not been submitted as required under federal law or regulation;

(A) Part 1 of the application shall be submitted to the Division within 18 months of notification by the Division that it is a large municipal separate storm sewer system;

(B) Based on information received in the Part 1 application the Division will approve or deny a sampling plan under section 61.4(3)(c)(i)(D)(V) within 90 days after receiving the Part 1 application;

(C) Part 2 of the application shall be submitted to the Division within 30 months of notification by the Division that it is a large municipal separate storm sewer system.

(iii) For any existing discharge from a medium municipal separate storm sewer system for which a stormwater permit application previously has not been submitted as required under federal law or regulation;

(A) Part 1 of the application shall be submitted to the Division within 18 months of notification by the Division that it is a medium municipal separate storm sewer system.

(B) Based on information received in the Part 1 application the Division will approve or deny a sampling plan under section 61.4(3)(c)(i)(D)(V) within 90 days after receiving the Part 1 application.

(C) Part 2 of the application shall be submitted to the Division within 30 months of notification by the Division that it is a medium municipal separate storm sewer system.

(iv) A permit application shall be submitted to the Division within 60 days of notice, unless permission for a later date is granted by the Division, for:

(A) a stormwater discharge which the Division or the EPA Regional Administrator determines contributes to a violation of a water quality standard or is a significant contributor of pollutants to state waters;

(B) a stormwater discharge subject to section 61.4(3)(b)(i) (E).

(v) Notwithstanding subsection (iv) above, a permit application shall be submitted to the Division within 180 days of notice, unless permission for a later date is granted by the Division, for a stormwater discharge from an MS4 designated by the Division under sections 61.3(2)(e)(vii), 61.3(2)(f)(iii) or 61.3(2)(f)(v)(A)(lll).

(vi) Facilities with existing permits for stormwater discharges associated with industrial activity shall maintain existing permits. New applications shall be submitted in accordance with the requirements of section 61.4(3)(b) 180 days before the expiration of such permits. Facilities with expired permits or permits due to expire before August 30, 1994 shall submit applications in accordance with the deadline set forth under section 61.4(3)(a)(ii).

(vii) For any existing stormwater discharge associated with industrial activity or small construction activity from a facility that is owned or operated by a municipality with a population of less than 100,000 (based on the 1990 census) that is not authorized by a general or individual permit, other than an airport, powerplant, or uncontrolled sanitary landfill, the permit application must be submitted to the Division by March 10, 2003.

(viii) For any new stormwater discharge (beginning on or after March 10, 2003) associated with industrial activity or small construction activity from a facility that is owned or operated by a municipality with a population of less than 100,000 (based on the 1990 census) that is not authorized by a general or individual permit, see section 61.4(3)(a)(i).

(ix) For any existing stormwater discharge associated with small construction activity, unless waived under section 61.3(2)(f)(ii)(B), the permit application must be submitted to the Division by July 1, 2002. This deadline does not apply to any small construction activity described in paragraph (ix), above.

(x) For any new stormwater discharge (beginning on or after July 1, 2002) associated with small construction activity, see section 61.4(3)(a)(i). This deadline does not apply to any small construction activity described in paragraphs (ix) or (x), above.

(xi) For any existing stormwater discharge from a regulated small MS4 for which a stormwater permit application previously has not been submitted as required under federal law or regulation, the permit application made under section 61.4(3)(d) must be submitted to the Division:

(A) By March 10, 2003 if designated under section 61.3(2)(f)(v)(A)(I); or

(B) Within 180 days of notice, unless the Division grants a later date, if designated under sections 61.3(2)(f)(v)(A)(II) or (III).

(xii) For any new stormwater discharge (beginning on or after March 10, 2003) from a regulated small MS4 for which a stormwater permit application previously has not been submitted as required under federal law or regulation; the permit application made under 61.4(3)(d) must be submitted to the Division:

(A) Within 180 days of notice, unless the Division grants a later date, if designated under sections 61.3(2)(f)(v)(A)(I), (II) or (III).

(xiii) The permit application deadlines set forth in this section 61.4(3)(a) notwithstanding, permit applications for stormwater discharges associated with small construction activity at oil and gas exploration, production, processing, and treatment operations or transmission facilities need not be submitted until June 30, 2005.

(b) Application requirements for stormwater discharges associated with industrial activity.

(i) Individual application. Dischargers of stormwater associated with industrial activity are required to apply for an individual permit or seek coverage under a stormwater general permit.

(A) Except as provided in sections 61.4(3)(b)(i)(B)-(D), the operator of a stormwater discharge associated with industrial activity subject to this section shall provide:

(I) a site map showing topography (or indicating the outline of drainage areas served by the outfall(s) covered in the application if a topographic map is unavailable) of the facility including: each of its drainage and

discharge structures; the drainage area of each stormwater outfall; paved areas and buildings within the drainage area of each stormwater outfall, each past or present area used for outdoor storage or disposal of significant materials, each existing structural control measure to reduce pollutants in stormwater runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied, each of its hazardous waste treatment, storage or disposal facilities (including each area not required to have a RCRA permit which is used for accumulating hazardous waste under 40 CFR 262.34 and 6 CCR 1007-3, Section 262.34(4-90)); each well where fluids from the facility are injected underground; springs, and other surface water bodies which receive stormwater discharges from the facility;

(II) an estimate of the area of impervious surfaces (including paved areas and building roofs) and the total area drained by each outfall and a narrative description of the following: significant materials that in the three years prior to the submittal of this application have been treated, stored or disposed in a manner to allow exposure to stormwater; method of treatment, storage or disposal of such materials; materials management practices employed, in the three years prior to the submittal of this application, to minimize contact by these materials with stormwater runoff; materials loading and access areas; the location, manner and frequency in which pesticides, herbicides, soil conditioners and fertilizers are applied; the location and a description of existing structural and non-structural control measures to reduce pollutants in stormwater runoff; and a description of the treatment the stormwater receives, including the ultimate disposal of any solid or fluid wastes other than by discharge;

(III) a certification that all outfalls that should contain stormwater discharges associated with industrial activity have been tested or evaluated for the presence of non-stormwater discharges which are not covered by a permit; tests for such non-stormwater discharges may include smoke tests, fluorometric dye tests, analysis of accurate schematics, as well as other appropriate tests. The certification shall include a description of the method used, the date of any testing, and the on-site drainage points that were directly observed during a test;

(IV) existing information regarding significant leaks or spills of toxic or hazardous pollutants at the facility that have taken place within the three years prior to the submittal of this application;

(V) quantitative data based on samples collected during storm events collected in accordance with section 61.4(2) from all outfalls containing a stormwater discharge associated with industrial activity for the following parameters:

(a) Any pollutant limited in an effluent guideline to which the facility is subject;

(b) Any pollutant listed in the facility's permit for its process wastewater (if the facility is operating under an existing permit);

(c) Oil and grease, pH, BOD_5, COD, TSS, total phosphorus, total Kjeldahl nitrogen, and nitrate plus nitrite nitrogen;

(d) Any information on the discharge required under 61.4(2)(g)(iii)and(iv);

(e) Flow measurements or estimates of the flow rate, and the total amount of discharge for the storm event(s) sampled, and the method of flow measurement or estimation; and

(f) The date and duration (in hours) of the storm event(s) sampled, rainfall measurements or estimates of the storm event (in inches) which generated the sampled runoff and the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event (in hours);

(VI) Operators of a discharge which is composed entirely of stormwater are exempt from the requirements of sections 61.4(2)(c) and 61.4(2)(g)(i), (ii) & (vi); and

(VII) Operators of New Sources or New Discharges which are composed in part or entirely of stormwater must include estimates for the pollutants or parameters listed in subparagraph (V) of this paragraph instead of actual sampling data, along with the source of each estimate. Operators of new sources or new discharges composed in part or entirely of stormwater must provide quantitative data for the parameters listed in subparagraph (V) of this paragraph within two years after commencement of discharge, unless such data has already been reported under the monitoring requirements of the permit for the discharge.

(B) The operator of an existing or new stormwater discharge that is associated with industrial activity solely under section 61.3(2)(e)(iii)(J) or small construction activity under 61.3(2)(f)(ii)(A) is exempt from the requirements of sections 61.4(2) and 61.4(3)(b)(i)(A). Such operator shall provide a narrative description of:

(I) the location (including a map) and the nature of the construction activity;

(II) the total area of the site and the area of the site that is expected to undergo excavation during the life of the permit;

(III) proposed measures, including best management practices, to control pollutants in stormwater discharges during construction, including a brief description of applicable State and local erosion and sediment control requirements;

(IV) proposed measures to control pollutants in stormwater discharges that will occur after construction operations have been completed, including a brief description of applicable State or local erosion and sediment control requirements;

(V) an estimate of the runoff coefficient of the site and the increase in impervious area after the construction addressed in the permit application is completed, the nature of fill material and existing data describing the soil or the quality of the discharge; and

(VI) the name of the receiving water.

(C) The operator of an existing or new discharge composed entirely of stormwater from an oil or gas exploration, production, processing, or treatment operation, or transmission facility is not required to submit a permit application in accordance with section 61.4(3)(b)(i)(A), unless the facility:

(I) has had a discharge of stormwater resulting in the discharge of a reportable quantity for which notification is or was required pursuant to 40 CFR 117.21 or 40 CFR 302.6 at anytime since November 16, 1987; or

(II) has had a discharge of stormwater resulting in the discharge of a reportable quantity for which notification is or was required pursuant to 40 CFR 110.6 at any time since November 16, 1987; or

(III) contributes to a violation of a water quality standard.

(D) The operator of an existing or new discharge composed entirely of stormwater from a mining operation is not required to submit a permit application unless the discharge has come into contact with, any overburden, raw material, intermediate products, finished product, byproduct or waste products located on the site of such operations.

(E) Applicants shall provide such other information the Division may reasonably require to determine whether to issue a permit and may require any facility subject to section 61.4(3)(b)(i)(B) to comply with section 61.4(3)(b)(i)(A).

(ii) Discharges through large and medium municipal separate storm sewer systems.

In addition to meeting the requirements of sections 61.4(3)(b)(i) and (ii), an operator of a stormwater discharge associated with industrial activity which discharges through a large or medium municipal separate storm sewer system shall submit, to the operator of the municipal separate storm sewer system receiving the discharge no later than August 30, 1994, or 180 days prior to commencing such discharge: the name of the facility; a contact person and phone number; the location of the discharge; a description, including Standard Industrial Classification, which best reflects the principal products or services provided by each facility; and any existing permit number.

(c) Application requirements for large and medium municipal separate storm sewer discharges.

The operator of a discharge from a large or medium municipal separate storm sewer or a municipal separate storm sewer that is designated by the Division under section 61.3(2)(e)(vii), may submit a jurisdiction-wide or system-wide permit application. Where more than one public entity owns or operates a municipal separate storm sewer within a geographic area (including adjacent or interconnected municipal separate storm sewer systems), such operators may be a co-applicant to the same application. Permit applications for discharges from large and medium municipal storm sewers or municipal storm sewers designated under section 61.3(2)(e)(vii) shall include the following;

(i) Part 1. Part 1 of the application shall consist of:

(A) General Information. The applicants' name, address, telephone number of contact person, ownership status and status as a State or local government entity.

(B) Legal Authority. A description of existing legal authority to control discharges to the municipal separate storm sewer system. When existing legal authority is not sufficient to meet the criteria provided in section 61.4(3)(c)(ii)(A), the description shall list additional authorities as will be necessary to meet the criteria and shall include a schedule and commitment to seek such additional authority that will be needed to meet the criteria.

(C) Source Identification.

(I) A description of the historic use of ordinances, guidance or other controls which limited the discharge of non-stormwater discharges to any Publicly Owned Treatment Works serving the same area as the municipal separate storm sewer system.

(II) A USGS 7.5 minute topographic map (or equivalent topographic map with a scale between 1:10,000 and 1:24,000 if cost-effective) extending one mile beyond the service boundaries of the municipal storm sewer system covered by the permit application. The following information shall be provided:

(a) the location of known municipal storm sewer system outfalls discharging to state waters;

(b) a description of the land use activities (e.g. divisions indicating undeveloped, residential, commercial, agricultural and industrial uses) accompanied by estimates of population densities and projected growth for a ten year period within the drainage area served by the separate storm sewer. For each land use type, an estimate of an average runoff coefficient shall be provided;

(c) the location and a description of the activities of the facility of each currently operating or closed municipal landfill or other treatment, storage or disposal facility for municipal waste;

(d) the location and the permit number of any known discharge to the municipal storm sewer that has been issued a permit;

(e) the location of major structural controls for stormwater discharge (retention basins, detention basins, major infiltration devices, etc.); and

(f) the identification of publicly owned parks, recreational areas, and other open lands.

(D) Discharge Characterization.

(I) Monthly mean rain and snow fall estimates (or summary of weather bureau data) and the monthly average number of storm events.

(II) Existing quantitative data describing the volume and quality of discharges from the municipal storm sewer, including a description of the outfalls sampled, sampling procedures and analytical methods used.

(III) A list of water bodies that receive discharges from the municipal separate storm sewer system, including downstream segments, lakes

and reservoirs, where pollutants from the system discharges may accumulate and cause water degradation and a brief description of known water quality impacts. At a minimum, the description of impacts shall include a description of whether the water bodies receiving such discharges have been:

(a) assessed and reported in Section 305(b) reports submitted by the State, the basis for the assessment (evaluated or monitored), a summary of designated use support and attainment of Clean Water Act (CWA) goals (fishable and swimmable waters), and causes of nonsupport of designated uses;

(b) listed under Sections 304(l)(1)(A)(i), 304(l)(1)(A)(ii), or 304(l)(1)(B) of the Clean Water Act (1987) that is not expected to meet water quality standards or water quality goals;

(c) listed in State Nonpoint Source Assessments required by Section 319(a) of the Clean Water Act (1987) that, without additional action to control nonpoint sources of pollution, cannot reasonably be expected to attain or maintain water quality standards due to storm sewers, construction, highway maintenance and runoff from municipal landfills and municipal sludge adding significant pollution (or contributing to a violation of water quality standards);

(d) identified and classified according to eutrophic condition of publicly owned lakes and reservoirs listed in State reports required under Section 314(a) of the Clean Water Act (1987) (include the following: a description of those publicly owned lakes and reservoirs for which uses are known to be impaired; a description of procedures, processes and methods to control the discharge of pollutants from municipal separate storm sewers into such lakes and reservoirs; and a description of methods and procedures to restore the quality of such lakes and reservoirs);

(e) recognized by the applicant as highly valued or sensitive waters;

(f) defined by the State or U.S. Fish and Wildlife Service's National Wetlands Inventory as wetlands; and

(g) found to have pollutants in bottom sediments, fish tissue or biosurvey data.

(IV) Field screening. Results of a field screening analysis for illicit connections and illegal dumping for either selected field screening points or major outfalls covered in the permit application. At a minimum, a screening analysis shall include a narrative description, for either each field screening point or major outfall, of visual observations made during dry weather periods. If any flow is observed, two grab samples shall be collected during a 24 hour period with a minimum period of four hours between samples. For all such samples, a narrative description of the color, odor, turbidity, the presence of an oil sheen or surface scum as well as any other relevant observations regarding the potential presence of non-stormwater discharges or illegal dumping shall be provided. In addition, a narrative description of the results of a field analysis using suitable methods to estimate pH, total chlorine, total copper, total phenol,

and detergents (or surfactants) shall be provided along with a description of the flow rate. Where the field analysis does not involve analytical methods approved under 40 CFR Part 136, the applicant shall provide a description of the method used including the name of the manufacturer of the test method along with the range and accuracy of the test. Field screening points shall be either major outfalls or other outfall points (or any other point of access such as manholes) randomly located throughout the storm sewer system by placing a grid over a drainage system map and identifying those cells of the grid which contain a segment of the storm sewer system or major outfall. The field screening points shall be established using the following guidelines and criteria:

(a) a grid system consisting of perpendicular north-south and east-west lines spaced 1/4 mile apart shall be overlayed on a map of the municipal storm sewer system, creating a series of cells;

(b) all cells that contain a segment of the storm sewer system shall be identified; one field screening point shall be selected in each cell; major outfalls may be used as field screening points;

(c) field screening points should be located downstream of any sources of suspected illegal or illicit activity;

(d) field screening points shall be located to the degree practicable at the farthest manhole or other accessible location downstream in the system, within each cell; however, safety of personnel and accessibility of the location should be considered in making this determination;

(e) hydrological conditions; total drainage area of the site; population density of the site; traffic density; age of the structures or buildings in the area; history of the area; and land use types;

(f) for medium municipal separate storm sewer systems, no more than 250 cells need to have identified field screening points; in large municipal separate storm sewer systems, no more than 500 cells need to have identified field screening points; cells established by the grid that contain no storm sewer segments will be eliminated from consideration; if fewer than 250 cells in medium municipal sewers are created, and fewer than 500 in large systems are created by the overlay on the municipal sewer map, then all those cells which contain a segment of the sewer system shall be subject to field screening (unless access to the separate storm sewer system is impossible); and

(g) large or medium municipal separate storm sewer systems which are unable to utilize the procedures described in paragraphs (1) through (6) of this subsection, because a sufficiently detailed map of the separate storm sewer systems is unavailable, shall field screen no more than 500 or 250 major outfalls respectively (or all major outfalls in the system, if less); in such circumstances, the applicant shall establish a grid system consisting of north-south and east-west lines spaced 1/4 mile apart as an overlay to the boundaries of the municipal storm sewer system, thereby creating a series of cells; the applicant will then select major outfalls in as many cells as possible until at

least 500 major outfalls (large municipalities) or 250 major outfalls (medium municipalities) are selected; a field screening analysis shall be undertaken at these major outfalls.

(V) Characterization plan. Information and a proposed program to meet the requirements of section 61.4(3)(c)(ii)(C). Such description shall include: the location of outfalls or field screening points appropriate for representative data collection under section 61.4(3)(c)(ii)(C)(I), a description of why the outfall or field screening point is representative, the seasons during which sampling is intended, a description of the sampling equipment. The proposed location of outfalls or field screening points for such sampling should reflect water quality concerns (see section 61.4(3)(c)(i)(F)(III) to the extent practicable.

(E) Management Programs.

(I) A description of the existing management programs to control pollutants from the municipal separate storm sewer system. The description shall provide information on existing structural and source controls, including operation and maintenance measures for structural controls, that are currently being implemented. Such controls may include, but are not limited to: procedures to control pollution resulting from construction activities; floodplain management controls; wetland protection measures; best management practices for new subdivisions; and emergency spill response programs. The description may address controls established under State law as well as local requirements.

(II) A description of the existing program to identify illicit connections to the municipal storm sewer system. The description should include inspection procedures and methods for detecting and preventing illicit discharges, and describe areas where this program has been implemented.

(F) Fiscal Resources.

(I) A description of the financial resources currently available to the municipality to complete Part 2 of the permit application. A description of the municipality's budget for existing stormwater programs, including an overview of the municipality's financial resources and budget, including overall indebtedness and assets, and sources of funds for stormwater programs.

(ii) Part 2. Part 2 of the application shall consist of:

(A) Adequate Legal Authority. A demonstration that the applicant can operate pursuant to legal authority established by statute, ordinance or series of contracts which authorizes or enables the applicant at a minimum to:

(I) control through ordinance, permit, contract, order or similar means, the contribution of pollutants to the municipal storm sewer by stormwater discharges associated with industrial activity and the quality of stormwater discharged from sites of industrial activity;

(II) prohibit through ordinance, order or similar means, illicit discharges to the municipal separate storm sewer;

(III) control through ordinance, order or similar means the discharge to a municipal separate storm sewer of spills, dumping or disposal of materials other than stormwater;

(IV) control through interagency agreements among co-applicants the contribution of pollutants from one portion of the municipal system to another portion of the municipal system;

(V) require compliance with conditions in ordinances, permits, contracts or orders; and

(VI) carry out all inspection, surveillance and monitoring procedures necessary to determine compliance and noncompliance with permit conditions including the prohibition on illicit discharges to the municipal separate storm sewer.

(B) Source Identification. The location of any major outfall that discharges to state waters that was not reported under section 61.4(3)(c)(i)(C)(ll)(a). Provide an inventory, organized by watershed of the name and address, and a description (such as SIC codes) which best reflects the principal products or services provided by each facility which may discharge, to the municipal separate storm sewer, stormwater associated with industrial activity;

(C) Characterization data. When "quantitative data" for a pollutant are required under section 61.4(3)(c)(ii)(C)(l)(c), the applicant must collect a sample of effluent in accordance with sections 61.4(2)(g) and (h) and analyze it for the pollutant in accordance with analytical methods approved under 40 CFR Part 136. When no analytical method is approved the applicant may use any suitable method but must provide a description of the method. The applicant must provide information characterizing the quality and quantity of discharges covered in the permit application, including:

(I) quantitative data from representative outfalls designated by the Division (based on information received in Part 1 of the application, the Division shall designate between five and ten outfalls or field screening points as representative of the commercial, residential and industrial land use activities of the drainage area contributing to the system or, where there are less than five outfalls covered in the application, the Division shall designate all outfalls) developed as follows:

(a) for each outfall or field screening point designated under this subparagraph, samples shall be collected of stormwater discharges from three storm events occurring at least one month apart in accordance with the requirements at sections 61.4(2)(g) and (h) (the Division may allow exemptions to sampling three storm events when climatic conditions create good cause for such exemptions);

(b) a narrative description shall be provided of the date and duration of the storm event(s) sampled, rainfall estimates of the storm event which generated the sampled discharge and the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event;

(c) for samples collected and described under sections 61.4(3)(c)(ii)(C)(l)(a) and (1)(b) of this paragraph, quantitative data shall be provided for: the organic pollutants listed in Table II; the pollutants listed in Table III (toxic metals, cyanide, and total phenols) of Appendix D of 40 CFR Part 122, and for the following pollutants:

total suspended solids (TSS)

total dissolved solids (TDS)

COD

BOD_5

oil and grease

fecal coliform

E. coli

fecal streptococcus

pH

total Kjeldahl nitrogen

nitrate plus nitrite

dissolved phosphorus

total ammonia plus organic nitrogen

total phosphorus

(d) additional limited quantitative data required by the Division for determining permit conditions (the Division may require that quantitative data shall be provided for additional parameters, and may establish sampling conditions such as the location, season of sample collection, form of precipitation (snow melt, rainfall) and other parameters necessary to insure representativeness);

(II) estimates of the annual pollutant load of the cumulative discharges to state waters from all identified municipal outfalls and the event mean concentration of the cumulative discharges to state waters from all identified municipal outfalls during a storm event for BOD_5, COD, TSS, dissolved solids, total nitrogen, total ammonia plus organic nitrogen, total phosphorus, dissolved phosphorus, cadmium, copper, lead, and zinc. Estimates shall be accompanied by a description of the procedures for estimating constituent loads and concentrations, including any modeling, data analysis, and calculation methods;

(III) a proposed schedule to provide estimates for each major outfall identified in either section 61.4(3)(c)(ii)(B) or section 61.4(3)(c)(i)(C)(ll)(a) of the seasonal pollutant load and of the event mean concentration of a

representative storm for any constituent detected in any sample required under section 61.4(3)(c)(ii)(C)(I); and

(IV) a proposed monitoring program for representative data collection for the term of the permit that describes the location of outfalls or field screening points to be sampled (or the location of instream stations), why the location is representative, the frequency of sampling, parameters to be sampled, and a description of sampling equipment.

(D) Proposed Management Program. A proposed management program covers the duration of the permit. It shall include a comprehensive planning process which involves public participation and where necessary intergovernmental coordination, to reduce the discharge of pollutants to the maximum extent practicable using management practices, control techniques and system, design and engineering methods, and such other provisions which are appropriate. The program shall also include a description of staff and equipment available to implement the program. Separate proposed programs may be submitted by each co-applicant. Proposed programs may impose controls on a system-wide basis, a watershed basis, a jurisdiction basis, or on individual outfalls. Proposed programs will be considered by the Division when developing permit conditions to reduce pollutants in discharges to the maximum extent practicable. Proposed management programs shall describe priorities for implementing controls. Such programs shall be based on:

(I) a description of structural and source control measures to reduce pollutants from runoff from commercial and residential areas that are discharged from the municipal storm sewer system that are to be implemented during the life of the permit, accompanied with an estimate of the expected reduction of pollutant loads and a proposed schedule for implementing such controls. At a minimum, the description shall include:

(a) a description of maintenance activities and a maintenance schedule for structural controls to reduce pollutants (including floatables) in discharges from municipal separate storm sewers;

(b) a description of planning procedures including a comprehensive master plan to develop, implement and enforce controls to reduce the discharge of pollutants from municipal separate storm sewers which receive discharges from areas of new development and significant redevelopment. Such plan shall address controls to reduce pollutants in discharges from municipal separate storm sewers after construction is completed. (Controls to reduce pollutants in discharges from municipal separate storm sewers containing construction site runoff are addressed in section 61.4(3)(c)(ii)(D)(IV));

(c) a description of practices for operating and maintaining public streets, roads and highways and procedures for reducing the impact on receiving waters of discharges from municipal storm sewer systems, including pollutants discharged as a result of de-icing activities;

(d) a description of procedures to assure that flood management projects assess the impacts on the water quality of receiving water bodies and that existing structural flood control devices

have been evaluated to determine if retrofitting the device to provide additional pollutant removal from stormwater is feasible;

(e) a description of a program to monitor pollutants in runoff from operating or closed municipal landfills or other treatment, storage or disposal facilities for municipal waste, which shall identify priorities and procedures for inspections and establishing and implementing control measures for such discharges (this program can be coordinated with the program developed under section 61.4(3)(c)(ii)(D)(lll)); and

(f) a description of a program to reduce to the maximum extent practicable, pollutants in discharges from municipal separate storm sewers associated with the application of pesticides, herbicides and fertilizer which will include, as appropriate, controls such as educational activities, permits, certifications and other measures for commercial applicators and distributors, and controls for application in public right-of-ways and at municipal facilities.

(II) a description of a program, including a schedule, to detect and remove (or require the discharger to the municipal separate storm sewer to obtain a separate permit for) illicit discharges and improper disposal into the storm sewer. The proposed program shall include:

(a) a description of a program, including inspections, to implement and enforce an ordinance, orders or similar means to prevent illicit discharges to the municipal separate storm sewer system; this program description shall address all types of illicit discharges, however the following category of non-stormwater discharges or flows shall be addressed where such discharges are identified by the municipality as sources of pollutants to state waters: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)) to separate storm sewers, uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water (program descriptions shall address discharges or flows from fire fighting only where such discharges or flows are identified as significant sources of pollutants to state waters);

(b) a description of procedures to conduct on-going field screening activities during the life of the permit, including areas or locations that will be evaluated by such field screens;

(c) a description of procedures to be followed to investigate portions of the separate storm sewer system that, based on the results of the field screen, or other appropriate information, indicate a reasonable potential of containing illicit discharges or other sources of non-stormwater (such procedures may include: sampling procedures for constituents such as fecal coliform, E. coli, fecal streptococcus, surfactants (MBAS), residual chlorine,

fluorides and potassium; testing with fluorometric dyes; or conducting in storm sewer inspections where safety and other considerations allow. Such description shall include the location of storm sewers that have been identified for such evaluation);

(d) a description of procedures to prevent, contain, and respond to spills that may discharge into the municipal separate storm sewer;

(e) a description of a program to promote, publicize, and facilitate public reporting of the presence of illicit discharges or water quality impacts associated with discharges from municipal separate storm sewers;

(f) a description of educational activities, public information activities, and other appropriate activities to facilitate the proper management and disposal of used oil and toxic materials; and

(g) a description of controls to limit infiltration of seepage from municipal sanitary sewers to municipal separate storm sewer systems where necessary;

(III) a description of a program to monitor and control pollutants in stormwater discharges to municipal systems from municipal landfills, hazardous waste treatment, disposal and recovery facilities, industrial facilities that are subject to Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA), and industrial facilities that the municipal permit applicant determines are contributing a substantial pollutant loading to the municipal storm sewer system. The program shall:

(a) identify priorities and procedures for inspections and establishing and implementing control measures for such discharges;

(b) describe a monitoring program for stormwater discharges associated with the industrial facilities identified in section 61.4(3)(c)(ii)(D)(lll), to be implemented during the term of the permit, including the submission of quantitative data on the following constituents: any pollutants limited in effluent guidelines subcategories, where applicable; any pollutant listed in an existing permit for a facility; oil and grease, COD, pH, BOD_5, TSS, total phosphorus, total Kjeldahl nitrogen, nitrate plus nitrite nitrogen, and any information on discharges required under sections 61.4(2)(g)(iii) and (iv).

(IV) a description of a program to implement and maintain structural and non-structural best management practices to reduce pollutants in stormwater runoff from construction sites to the municipal storm sewer system, which shall include:

(a) a description of procedures for site planning which incorporate consideration of potential water quality impacts;

(b) a description of requirements for nonstructural and structural best management practices;

(c) a description of procedures for identifying priorities for inspecting sites and enforcing control measures which consider the nature of the construction activity, topography, and the characteristics of soils and receiving water quality; and

(d) a description of appropriate educational and training measures for construction site operators.

(E) Assessment of Controls Estimated. Reductions in loadings of pollutants from discharges of municipal storm sewer constituents from municipal storm sewer systems expected as the result of the municipal stormwater quality management program. The assessment shall also identify known impacts of stormwater controls on ground water.

(F) Fiscal Analysis. For each fiscal year to be covered by the permit, a fiscal analysis of the necessary capital and operation and maintenance expenditures necessary to accomplish the activities of the programs under sections 61.4(3)(c)(ii)(C) and (D). Such analysis shall include a description of the source of funds that are proposed to meet the necessary expenditures, including legal restrictions on the use of such funds.

(G) Where more than one legal entity submits an application, the application shall contain a description of the roles and responsibilities of each legal entity and procedures to ensure effective coordination.

(H) Where requirements under sections 61.4(3)(c)(i)(D)(V), 61.4(3)(c)(ii)(B), (C), and (D) are not practicable or are not applicable, the Division may exclude any operator of a discharge from a municipal separate storm sewer which is designated under sections 61.3(2)(e)(vii), or 61.2, definitions for Large Municipal Separate Storm Sewer System, sub-paragraph (c), or Medium Municipal Separate Storm Sewer System, sub-paragraph (c), from such requirements. The Division shall not exclude the operator of a discharge from a municipal separate storm sewer identified in section 61.2, definitions for Large Municipal Separate Storm Sewer System or Medium Municipal Separate Storm Sewer System, from any of the permit application requirements under this paragraph except where authorized under sections 61.3(2) or 61.4(3).

(d) Application requirements for regulated small municipal separate storm sewer discharges.

(i) The permit application (either for coverage under a general permit or an individual permit application) must include the following information, at a minimum:

(A) A general description of the program elements that the permittee or another entity will implement for each of the stormwater minimum control measures at section 61.8(11)(a)(ii);

(B) The measurable goals for each of the minimum control measure components including, as appropriate, the months and years in which the permittee will undertake required actions, including interim milestones and the frequency of the action;

(C) The person or persons responsible for implementing or coordinating the permittee's stormwater management program;

(D) Information as described in sections 61.4(1) and 61.9(2)(b)(ii), as applicable; and

(E) Other information the Division may reasonably require to determine whether to issue a permit.

(ii) The permittee may file a separate application for coverage under a general permit, or may jointly submit an application with other municipalities or governmental entities. If the permittee wants to share responsibilities for meeting the minimum control measures with other municipalities or governmental entities, the application (whether separate or joint) must describe which minimum control measures the permittee will implement and identify the entities that will implement the other minimum control measures within the area served by the permittee's MS4.

(iii) If authorized by the Division, the permittee may file a separate application for coverage under an individual permit. The application must include the information required under section 61.4(3)(d)(i), an estimate of square mileage served by the small MS4, and any additional information that the Division requests. The Division's authorization will be contingent upon the regulated entity providing adequate justification for the need for an individual permit.

(iv) If authorized by the Division, two or more regulated entities may jointly apply under paragraph (iii) of this section to be co-permittees under an individual permit. The Division’s authorization will be contingent upon the regulated entities providing adequate justification for the need for an individual permit.

(v) If a regulated small MS4 is in the same urbanized area as a medium or large MS4 with a municipal stormwater permit under Phase I, and that other MS4 is willing to have the small MS4 participate in its stormwater program, both MS4s may jointly seek a modification of the other MS4 permit to include the small MS4 as a limited co-permittee, and thus subject to the Phase I MS4 municipal stormwater permit conditions. As a limited co-permittee, the small MS4 will be responsible for compliance with the permits conditions applicable to its jurisdiction. The small MS4 will need to comply with the permit application requirements of section 61.4(3)(c), rather than the requirements of section 61.4(3)(d)(i), except for the specific application requirements of sections 61.4(3)(c)(i)(C) and (D) and 61.4(3)(c)(ii)(C). The small MS4 may satisfy the requirements in sections 61.4(3)(c)(i)(E) and 61.4(3)(c)(ii)(F) by referring to the other MS4's stormwater management program, if applicable.

61.4(4) APPLICATION REQUIREMENTS FOR, MANUFACTURING, COMMERCIAL MINING AND SILVICULTURAL FACILITIES WHICH DISCHARGE ONLY NON-PROCESS WASTEWATER

Except for stormwater discharges, all manufacturing, commercial, mining, and silvicultural dischargers applying for permits which discharge only non-process wastewater not regulated by an effluent limitations guideline or new source performance standard shall provide the following information to the Division, using application forms provided by the Division.

(a) Outfall location. Outfall number, latitude and longitude to the nearest 15 seconds, and the name of the receiving water.

(b) Discharge date (for new dischargers). Date of expected commencement of discharge.

(c) Type of waste. An identification of the general type of waste discharged, or expected to be discharged upon commencement of operations, including sanitary wastes, restaurant or cafeteria wastes, or noncontact cooling water. An identification of cooling water additives (if any) that are used or expected to be used upon commencement of operations, along with their composition if existing composition is available.

(d) Effluent characteristics.

(i) Quantitative data for the pollutants or parameters listed below, unless testing is waived by the Division. The quantitative data may be data collected over the past 365 days, if they remain representative of current operations, and must include maximum daily value, average daily value, and number of measurements taken. The applicant must collect and analyze samples in accordance with 40 CFR part 136. Grab samples must be used for pH, temperature, oil and grease, total residual chlorine, E. coli and fecal coliform. For all other pollutants, 24-hour composite samples must be used. New dischargers must include estimates for the pollutants or parameters listed below instead of actual sampling data, along with the source of each estimate. All levels must be reported or estimated as concentration and as total mass, except for flow, pH, and temperature.

(A) Biochemical Oxygen Demand (BOD_5),

(B) Total Suspended Solids (TSS),

(C) Fecal Coliform and E. coli (if believed present or if domestic wastewater is or will be discharged),

(D) Total Residual Chlorine (if chlorine is used),

(E) Oil and Grease,

(F) Chemical Oxygen Demand (COD)(if non-contact cooling water is or will be discharged),

(G) Ammonia (as N),

(H) Discharge Flow,

(I) pH,

(J) Temperature (Winter and Summer),

(K) Total Organic Carbon (TOC) if non-contact cooling water is or will be discharged.

(ii) The Division may waive the testing and reporting requirements for any of the pollutants or flow listed in paragraph (4)(a) this section if the applicant submits a request for such a waiver before or with the permit application which demonstrates that information adequate to support issuance of a permit can be obtained through less stringent requirements.

(iii) If the applicant is a new discharger, the applicant must provide quantitative data in accordance with subsection (4) no later than two years after commencement of discharge. However, the applicant need not perform tests which ho has already performed and reported under the discharge monitoring requirements of the applicant's permit.

(iv) The requirements of subsections (a) and (c) do not apply for pollutants present in a discharge solely as a result of their presence in intake water. However, an applicant must report such pollutants as present Net credit may be provided for the presence of pollutants in intake water if the requirements are met.

(e) Flow. A description of the frequency of flow and duration of any seasonal or intermittent discharge (except for stormwater runoff, leaks, or spills).

(f) Treatment system. A brief description of any system used or to be used

(g) Optional information. Any additional information the applicant wishes to be considered, such as influent data for the purpose of obtaining "net" credits pursuant to section 61.8(2)(d).

61.4(5) APPLICATION REQUIREMENTS FOR NEW AND EXISTING AQUATIC ANIMAL PRODUCTION FACILITIES

New and existing concentrated aquatic animal production facilities shall provide the following information to the Division, using the application form provided by the Division.

(a) The maximum daily and average monthly flow from each outfall.

(b) The number of ponds, raceways, and similar structures.

(c) The name of the receiving water and the source of intake water.

(d) For each species of aquatic animals, the total yearly and maximum harvestable weight.

(e) The calendar month of maximum feeding and the total mass of food fed during that month.

61.4(6) APPLICATION REQUIREMENTS FOR NEW AND EXISTING POTWS

(a) All POTW applicants must provide an identification of any whole effluent toxicity tests conducted during the four and one-half years prior to the date of the application on any of the applicant's discharges or on any receiving water near the discharge.

(b) As provided in subsections (c) – (j) of this Section, the following applicants must submit to the Division the results of valid whole effluent toxicity tests for acute or chronic toxicity for samples taken from each outfall through which effluent is discharged to surface waters, except for combined sewer overflows:

(i) All POTWs with design flow rates greater than or equal to one million gallons per day;

(ii) All POTWs with approved pretreatment programs or POTWs required to develop a pretreatment program;

(iii) Other POTWs, as required by the Division, based on consideration of the following factors:

(A) The variability of the pollutants or pollutant parameters in the POTW effluent (based on chemical-specific information, the type of treatment plant, and types of industrial contributors);

(B) The ratio of effluent flow to receiving stream flow;

(C) Existing controls on point or non-point sources, including total maximum daily load calculations for the receiving stream segment and the relative contribution of the POTW;

(D) Receiving stream characteristics, including possible or known water quality impairment, and whether the POTW discharges to a water designated as outstanding waters; or

(E) Other considerations (including, but not limited to, the history of toxic impacts and compliance problems at the POTW) that the Division determines could cause or contribute to adverse water quality impacts.

(c) Where the POTW has two or more outfalls with substantially identical effluent discharging to the same receiving stream segment, the Division may allow applicants to submit whole effluent toxicity data for only one outfall on a case-by-case basis. The Division may also allow applicants to composite samples from one or more outfalls that discharge into the same mixing zone.

(d) Each applicant required to perform whole effluent toxicity testing pursuant to paragraph (b) of this section must provide:

(i) Results of a minimum of four quarterly tests for a year, from the year preceding the permit application; or

(ii) Results from four tests performed at least annually in the four and one half year period prior to the application, provided the results show no appreciable toxicityusing a safety factor determined by the permitting authority.

(e) Applicants must conduct tests with multiple species (no less than two species; e.g., fish, invertebrate, plant), and test for acute or chronic toxicity, depending on the range of receiving water dilution.

(f) Each applicant required to perform whole effluent toxicity testing pursuant to paragraph (b) of this Section must provide the number of chronic or acute whole effluent toxicity tests that have been conducted since the last permit reissuance.

(g) Applicants must provide the results using the form provided by the Division, or test summaries if available and comprehensive, for each whole effluent toxicity test conducted pursuant to paragraph (b) of this Section for which such information has not been reported previously to the Division.

(h) Whole effluent toxicity testing conducted pursuant to paragraph (b) of this Section must be conducted using methods approved in accordance with Section 61.8(4)(j).

(i) For whole effluent toxicity data submitted to the Division within four and one-half years prior to the date of the application, applicants must provide the dates on which the data were submitted and a summary of the results.

(j) Each POTW required to perform whole effluent toxicity testing pursuant to paragraph (b) of this Section must provide any information on the cause of toxicity and written details of any toxicity reduction evaluation conducted, if any whole effluent toxicity test conducted within the past four and one-half years revealed toxicity.

(k) All POTWs with an approved pretreatment program shall provide to the Division a written technical evaluation of the need to revise local limits under section 63.12 of Regulation No. 63, 5 CCR 1002-63.

61.4(7) <u>APPLICATION REQUIREMENTS FOR NEW SOURCES AND NEW DISCHARGES</u>

61.4(7) APPLICATION REQUIREMENTS FOR NEW SOURCES AND NEW DISCHARGES

New manufacturing, commercial, mining and silvicultural dischargers applying for permits (except for new discharges of facilities subject to the requirements of section 61.4(4) or new discharges of stormwater associated with industrial activity subject to the requirements of 40 CFR 122.26(c)(1)), shall provide the following information to the Division, using the application forms provided by the Division.

(a) Expected outfall location. The latitude and longitude to the nearest 15 seconds and the name of the receiving water.

(b) Discharge dates. The expected date of commencement of discharge.

(c) Flows, sources of pollution, and treatment technologies

(i) Expected treatment of wastewater. Description of the treatment that the wastewater will receive, along with all operations contributing wastewater to the effluent, average flow contributed by each operation, and the ultimate disposal of any solid or liquid wastes not discharges.

(ii) Line drawing. A line drawing of the water flow through the facility with a water balance as described in section 61.4(2)(b).

(iii) Intermittent flows. If any of the expected discharges will be intermittent or seasonal, a description of the frequency, duration and maximum daily flow rate of each discharge occurrence (except for stormwater runoff, spillage, or leaks.)

(d) Production. If a new source performance standard promulgated under Section 306 of the Federal Act or an effluent limitation guideline applies to the applicant and is expressed in terms of production (or other measure of operation), a reasonable measure of the applicant's expected actual production reported in the units used in the applicable effluent guideline or new source performance standard for each of the first three years. Alternative estimates may also be submitted if production is likely to vary.

(e) Effluent characteristic.

(i) Each applicant must report estimated daily maximum, daily average, and source of information for each outfall for the following pollutants or parameters. The Division may waive the reporting requirements for any of these pollutants and parameters if the applicant submits a request for such a waiver before or with the application which demonstrates that information adequate to support issuance of the permit can be obtained through less stringent reporting requirements.

(A) Biochemical Oxygen Demand (BOD)

(B) Chemical Oxygen Demand (COD)

(C) Total Suspended Solids (TSS)

(D) Flow

(E) Ammonia (as N)

(F) Temperature (winter and summer)

(G) pH

(H) Total Organic Carbon (TOC).

(ii) Each applicant must report estimated daily maximum, daily average, and source of information for each outfall for the following pollutants. If the applicant knows or has reason to believe they will be present or if they are limited by an effluent limitation guideline or new source performance standard either directly or indirectly through limitations on an indicator pollutant: all pollutants in Table IV of Appendix D of 40 CFR of Part 122 (certain conventional and nonconventional pollutants).

(iii) Each applicant must report estimated daily maximum, daily average and source of information for the following pollutants if he knows or has reason to believe that they will be present in the discharges from any outfall:

(A) The pollutants listed in Table III of Appendix D of 40 CFR Part 122 (the toxic metals, in the discharge from any outfall; total cyanide, and total phenols);

(B) The organic toxic pollutants in Table II of Appendix O (except bis (chloromethyl) ether, dichlorofluoromethane and trichlorofluoromethane) of 40 CRF Part 122. This requirement is waived for applicants with expected gross sales of less than $100,000 per year for the next three years, and for coal mines with expected average production of less than 100,000 tons of coal per year.

(iv) The applicant is required to report that 2,3,7,8 Tetrachlorodibenzo-P-Dioxin (TCDD) may be discharged if he uses or manufactures one of the following compounds, or if he knows or has reason to believe that TCDD will or may be present in an effluent:

(A) 2,4,5-trichlorophenoxy acetic acid (2, 5-T)(CAS #93-76-5);

(B) 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5-TI #93-72-1);

(C) 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate (Erbon)(CAS #136-25-4);

(D) O-O-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel)(CAS #299-84-3);

(E) 2,4,5-trichlorophenol (TCP)(CAS #95-95-4); or

(F) Hexachlorophene (HCP)(CAS #70-30-4);

(v) Each applicant must report any pollutants listed in Table V of Appendix D of 40 CFR Part 122 (certain hazardous substances) if he believes they will be present in any outfall (no quantitative estimates are required unless they are already available).

(vi) No later than two (2) years after the commencement of the discharge from a proposed facility, the applicant must submit analytical results which characterize the actual effluent discharged. The applicant need not submit this information to the extent the analytical results are reported by the applicant under the discharge monitoring requirements of the applicant's permit.

(f) Engineering Report. Each applicant must report the existence of any technical evaluation concerning the applicant's wastewater treatment, along with the name and location of similar plants of which the applicant has knowledge.

(g) Other Information. Any optional information the permittee wishes to have considered.

61.4(8) <u>APPLICATION REQUIREMENTS FOR HOUSED COMMERCIAL SWINE FEEDING OPERATIONS</u>

Housed commercial swine feeding operations shall meet the permit application requirements found at subsection 61.13(3).

61.4(9) APPLICATION REQUIREMENTS FOR CONCENTRATED ANIMAL FEEDING OPERATIONS

Concentrated Animal Feeding Operations shall meet the permit application requirements found at subsection 61.17(5).

61.5 REVIEW, DETERMINATION, NOTICE and PUBLIC PARTICIPATION

61.5(1) REVIEW OF AN APPLICATION

(a) These regulations apply to all permit applications and renewals regardless of the date of receipt by the Division.

(b) Applicants for a permit to discharge are strongly encouraged to schedule a pre-application conference and site inspection with the Division in order for the Division to evaluate the proposed discharges for which an application is required or to determine the applicability of these regulations. The Division's site visit in conjunction with the pre-application conference will be used to identify needed background information required for a complete application.

(c) The Division shall begin the review of an application within forty-five days after the receipt of the application and shall notify the applicant within ninety days after receipt of the application whether the application is complete. If the Division determines the application is incomplete, the Division may request that the applicant submit additional information. If additional information is requested by the Division and submitted by the applicant, the Division shall have fifteen days after the date additional information is submitted to determine whether the additional information satisfies the request and to advise the applicant if, and in what respects, the additional information does not satisfy the request. A final decision that an application is not complete shall be considered a final agency action upon issuance of such decision to the applicant and shall be subject to judicial review. The Division shall not issue a permit until the application is deemed complete. The one hundred eighty day deadline for the Division to issue the permit shall be extended by the number of days that an applicant takes to submit additional information requested by the Division, plus the fifteen days provided to the Division to evaluate such additional information.

(d) The Division shall evaluate complete permit applications to determine whether the proposed discharge will comply with all applicable federal and state statutory and regulatory requirements.

(e) When the Division determines that a site visit(s) is necessary to evaluate the discharge to which an application pertains, the Division shall specify the date of notification by which time the applicant shall make arrangements for the date of the site visit. In the event that satisfactory response is not received, the permit application shall be denied by the Division and the applicant so notified.

61.5(2) PUBLIC NOTICE AND COMMENT - DRAFT PERMITS

(a) The Division shall prepare a preliminary analysis and tentative determination to issue or deny the permit and advise the applicant of that analysis.

(b) If the analysis is to issue a permit, the Division shall prepare a draft permit with terms and conditions. Public notice of the Division's draft permit shall be given as provided in paragraph (e) of this section. Such draft permit and permit rationale shall be available to the public for inspection and copying and shall include at least the following:

(i) Proposed effluent limitations for each discharge point for those pollutants proposed to be limited;

(ii) Delineation of the service area based on population and design capacity of the treatment and sewer system for domestic permits and delineation of the maximum expected production rate for industrial permits;

(iii) A proposed schedule of compliance, including interim dates and requirements, for meeting the proposed effluent limitations if the permittee is not presently doing so;

(iv) All monitoring requirements under section 61.8(4);

(v) All terms and conditions under sections 61.8 through 61.8(10) of these regulations; and all applicable terms and conditions under sections 61.8(11) and 61.8(12) of these regulations; and

(vi) For major facilities, any additional information which may be required pursuant to 40 CFR 124.8 or 40 CFR 124.56.

(c) If the Division proposes to deny the permit, the Division shall inform the applicant of the reasons for the proposed denial. The decision to deny a permit shall be given by notice as provided in paragraph (e) of this section.

(d) Interested persons may submit written comments to the Division on the draft permit, and may request a public meeting pursuant to section 61.5(3). The period for public comment shall close thirty (30) days from the date of notice of the permit application and the Division's draft permit, except that, if a public meeting is held on the application and draft permit, the period for public comment shall close sixty (60) days from the date of notice.

(e) Public Notice of every complete application for a discharge permit, and of every draft permit and, where applicable, of the Division's preliminary antidegradation determination pursuant to the Procedural Rules, Regulation No. 21, section 16, shall be transmitted to the applicant and circulated in a manner designed to inform interested and potentially interested persons of the proposed discharge and of the draft permit. Procedures for the circulation of public notice shall include at least the following:

(i) Notice shall be circulated in a newspaper which is distributed within the geographic area of the proposed discharge. The Division may also circulate a press release that is accessible to media throughout the state;

(ii) The Division shall transmit notice to any other state whose waters may be affected by the issuance of the proposed permit, with the request that the State submit recommendations to the Division concerning the proposed permit within a specified time period. The Division shall either adopt the recommendations or respond in writing and explain why the recommendations are not accepted;

(iii) The Division shall transmit notice to any interstate agency which may have an official interest in such permit, with request for comment within a specified time period. The Division shall either adopt the recommendations or respond in writing and explain why the recommendations are not accepted;

(iv) The Division shall transmit a notice to all other appropriate government agencies and shall provide such agencies an opportunity to submit their views and recommendations. Such agencies shall include, among others, any agency responsible for the preparation

of any approved water management plan under Section 208(b) of the Federal Act and appropriate public health agencies;

(v) The Division shall add the name of any person or group upon request to the mailing list to receive copies of notices for all discharge applications within the State or within a certain geographical area, and shall charge for such service;

(vi) The Division shall also, during the period from the date of the initial public notice of the application and draft permit to the close of the public comment period, maintain in the office of the county clerk and recorder of the county in which the proposed discharge, or a part thereof, is to occur a copy of its draft permit and a copy of the permit application and, where applicable, a copy of the Division's preliminary antidegradation determination with all accompanying data for public inspection.

(f) The contents of the public notice required by paragraph (e) of this section shall include at least the following:

(i) Name, address, and phone number of the Division;

(ii) Name and address of each applicant and, if different, of the facility or activity regulated by the permit;

(iii) Brief description of each applicant's activities or operations which result in the discharge described in the permit application or the draft permit (e.g., municipal waste treatment plant, steel manufacturing, drainage from mining activities);

(iv) Name of waterway to which each discharge is made and a short description of the location of each discharge on the waterway indicating whether such discharge is a new or an existing discharge;

(v) A statement of intent to issue or deny a permit;

(vi) A brief description of the procedures for the formulation of the final permit, including the thirty (30) day period during which public and official comments are invited;

(vii) Address and phone number of State or interstate agency premises at which interested persons may obtain further information, request a copy of the application, the preliminary analyses and the draft permit, and inspect and copy permit forms and related documents;

(viii) Name, address, and telephone number of the Water Quality Control District Engineer of the Division, in whose area the discharge is located; and

(ix) A description of the comments and hearing request procedures provided in sections 61.5(2) and (3).

(g) If the Division proposes to grant a variance to a permit during the public notice period or prior to issuing the final permit, the Division must re-submit the permit to public notice in draft form with a clear statement of the proposed variance. The time period for public comment cited in subsection (d) of this section shall apply to the variance review.

(h) If the Division grants a variance after the final permit is issued, the variance must be published as a permit modification and is subject to public notice. The period of time for public comment cited in subsection (d) of this section shall apply to the permit modification review.

61.5(3) <u>PUBLIC MEETINGS ON DRAFT PERMITS</u>

(a) The Division shall provide an opportunity for the applicant, any affected State, any affected interstate agency, the Regional Administrator, or any interested agency, person, or group of persons to request or petition for a public meeting with respect to the draft permit. Any such request or petition for public meeting shall be filed within thirty (30) days of the public notice provided under section 61.5(2), and shall indicate the interest of the party filing such request and the reasons why a meeting is warranted. The Division shall hold a meeting if there is a significant degree of public interest. Instances of doubt should be resolved in favor of holding a meeting. Any such meeting shall be held no more than sixty (60) days after the public notice provided under section 61.5(2), in the geographical area of the proposed discharge or other appropriate area at the discretion of the Division. If appropriate, related groups of permit applications may be considered in one public meeting.

(b) Public notice of any meeting shall be circulated at least as widely as was the original public notice of the application. Procedures for circulation of public notice of a public meeting shall conform to the procedures contained in section 61.5(2) of these regulations. As a minimum, such notice shall be provided to at least one newspaper of general circulation within the geographical area of the discharge. Notice shall be given at least thirty (30) days in advance of the meeting.

(c) The contents of public notice of any meeting shall include the following:

(i) Name, address, and phone number of the agency holding the public meeting;

(ii) Name and address of each applicant whose application will be considered at the meeting;

(iii) Name of waterway to which each discharge is made and a short description of the location of each discharge on the waterway;

(iv) A brief reference to the public notice issued for each tentative permit determination, including identification number and date of issuance;

(v) Information regarding the time and location for the meeting;

(vi) The purpose of the meeting;

(vii) A concise statement of the issues raised by the persons requesting the meeting;

(viii) Address and phone number of premises at which interested persons may obtain further information, and inspect and copy permit forms and related documents; and

(ix) A brief description of the nature of the meeting, including the rules and procedures to be followed.

(d) Whether or not the applicant requests a public meeting, he or she has not waived his or her right to an adjudicatory hearing upon final determination by the Division to issue the permit, with conditions therein, or to deny the permit.

(e) Any person shall be permitted to submit oral or written statements and data concerning the proposed permit. The person conducting the meeting shall have discretion to fix reasonable limits upon the time allowed for oral statements, and may require the submission of statements in writing.

61.5(4) <u>PUBLIC ACCESS TO INFORMATION</u>

(a) In general, permit applications, draft permits, correspondence between the Division and the applicant, the Regional Administrator, and the District Engineer of the Corps of Engineers are public information and shall be available to the public for inspection and copying.

(b) Any information relating to any secret process, method of manufacture or production, or sales or marketing data, which may be acquired, ascertained, or discovered, whether in any sampling investigation, emergency investigation, or otherwise, shall not be publicly disclosed by any member, officer, or employee of the Commission or the Division, but shall be kept confidential. Any person seeking to invoke the protection of this subsection (b) shall bear the burden of proving its applicability. This section shall never be interpreted as preventing full disclosure of the name and address of any permit applicant or permittee, permit applications, permits, or effluent data.

(c) The Division shall provide facilities for the inspection of information relating to discharge permits and their applications and shall insure to the best of its ability that State employees act on a request for such inspection promptly without undue requirements or restrictions.

(d) The Division shall either ensure that a machine or device for copying of papers and documents is available for a reasonable fee or otherwise provide for coordination with copying facilities or services such that the request for copies of non-confidential documents may be honored within a reasonable period of time.

61.6 ISSUED PERMITS

(a) Following the close of public comment pursuant to section 61.5(2)(d), the Division may make such modifications in the terms and conditions of permits as may be appropriate, and shall transmit copies of the proposed permit to the Regional Administrator. Following the period for EPA's review of the permit specified in the Memorandum of Agreement between EPA and the Division, the Division shall issue or deny the permit.

(b) If a permit is issued, it shall be issued to the applicant who shall be responsible for compliance with conditions of the permit.

(c) The Division shall provide a notice of such issuance or denial to the applicant, to any person who participated in the public meeting and to appropriate persons on the mailing list established under sections 61.5(2) and (3). Such notice shall briefly indicate any significant changes which have been made from terms and conditions set forth in the draft permit.

(d) Any permit issued shall become effective and final thirty (30) days after the permit is issued by the Division, or on such later date as specified by the Division, except as allowed in section 61.7. Until the permit becomes effective, operation per the conditions of the issued permit is unauthorized.

(e) Except as provided in this subsection, if the Division has not issued or denied a permit within one hundred eighty (180) days after receipt of the permit application, unless this time limit has been waived or extended by the applicant, a temporary permit shall be issued or, in the case of a renewal permit, the previous permit shall be extended pursuant to section 61.8(3)(o) of these regulations.

(f) The deadlines established pursuant to paragraph (e) of this section shall be extended by:

(i) The number of days which an applicant takes to submit information requested by the Division pursuant to section 61.5(1)(c) plus the fifteen (15) days provided for the Division to evaluate each additional information submittal; and

(ii) Thirty (30) days, for a public meeting which is held pursuant to section 61.5(3).

61.7 PERMIT ADJUDICATORY HEARINGS

(a) The application or any other person, affected or aggrieved by the Division's final determination may demand an adjudicatory hearing within thirty (30) days of the issuance of the final permit determination.

(b) Such hearing shall be conducted pursuant to the requirements of sections 24-4-105 and 25-8-401, et seq, C.R.S.

(c) Only issues of law or fact raised by the applicant or other person prior to an adjudicatory hearing may be raised at the adjudicatory hearing. The permit will become effective in its entirety thirty (30) days after issuance, or on such later date as specified by the Division, unless a stay is granted in accordance with section 25-8-404 (3) and (4) or section 25-8-406 of the Colorado Water Quality Control Act or the provisions of the State Administrative Procedures Act, whichever is applicable.

(d) The person requesting the adjudicatory hearing shall have the burden of proof in all hearings held pursuant to this section, except that the Division shall have the burden of proof under the following circumstances:

(i) Where the Division initiated the permit revocation or modification; and

(ii) Where the Division denies renewal of a permit or changes the terms of a renewed permit and that denial or change is not based either upon significant changes in the facts relevant to water quality considerations or upon changes in the applicable statues of regulations.

(e) The Colorado Water Quality Control Act, the Procedural Rules for all proceedings before the Water Quality Control Commission and the Water Quality Control Division and the State Administrative Procedures Act shall be applicable to all hearings held pursuant to this section.

61.7(1) ADMINISTRATIVE STAYS - RENEWAL PERMITS

(a) Any applicant for a renewal permit may appeal the action of the Division on such application in accordance with section 24-4-105, C.R.S. The resultant hearing shall be presided over by a hearing officer. Upon such an appeal and within 30 days of issuance of the final permit, the applicant may also request that the Division stay the contested terms and conditions of the renewal permit. Said permit becomes effective in its entirety unless a stay is granted by the Division pursuant to section 25-8-406 C.R.S. The Division may stay any contested terms and conditions for good cause shown.

(b) Request for an administrative stay of the terms or conditions of a renewal permit must be submitted in writing to the Division along with the request for an appeal within thirty (30) days of issuance of the final permit.

(c) The Division shall make a determination on a request for an administrative stay of permit terms and/or conditions within ten (10) days of receipt thereof, and shall grant the request if it reasonably appears that serious harm would otherwise result and either

(i) refusal would not provide corresponding public benefit; or

(ii) the alleged violation or activity to which the order or determination applies will not continue, or if it does continue, any harmful effects on state waters will be alleviated promptly after cessation of the violation or activity.

(d) The Division shall notify the applicant in writing of the decision to grant or deny the request In the event of denial, the Division shall cite the reasons in the notification letter.

(e) Any stay granted under this subsection shall expire when a final determination is made after the conclusion of the hearing held pursuant to section 24-4-105, C.R.S. During the period of any such stay, the corresponding terms and conditions of the prior permit shall remain in effect and are enforceable.

(f) Any decision to grant or deny a request for an administrative stay of a permit shall be subject to the provisions of section 25-8-502, C.R.S., and shall be final action subject to de novo determination pursuant to section 25-8-404, C.R.S.

61.8 TERMS AND CONDITIONS OF PERMITS

Terms and conditions consistent with those specified in this regulation, including but not limited to, the terms and conditions specified in sections 61.4(1), 61.8(2), 61.8(3), 61.8(4), 61.8(5), 61.8(6), 61.8(7), 61.8(8), 61.8(9) and 61.8(10), shall be incorporated into the Division's permits, either expressly or by reference to this regulation. If incorporated by reference, a specific citation to this Regulation shall be given in the permit. Terms and conditions consistent with sections 61.8(11) and 61.8(12) shall be incorporated into the Division's permits as applicable.

A permittee must comply with all the terms and conditions of the permit. Violation of the terms and conditions specified in this permit may be subject to civil and criminal liability pursuant to sections 25-8-601 through 612, C.R.S., and the Federal Act. Upon a finding and determination, after hearing, that a violation of a permit provision has occurred, the Division may suspend, modify, or revoke the pertinent permit or take such other action with respect to the violation.

61.8(1) PROHIBITIONS

(a) The Division shall issue a permit in accordance with these regulations when the Division has determined that the provisions of these regulations and the Federal Act and regulations thereunder have been met with respect to both the application and proposed permit.

(b) The Division shall not issue a permit under the following circumstances:

(i) When the Regional Administrator has objected to the issuance of a permit, provided the Regional Administrator complies with the procedures of 40 CFR Section 123.44 and his or her objections are based on the grounds set forth therein.

(ii) When, in the judgment of the Secretary of the Army, anchorage and navigation in or on any of the waters of the United States would be substantially impaired by the discharge;

(iii) When the imposition of conditions cannot ensure compliance with the applicable water quality requirements of all affected States.

(iv) To a new source or a new discharger, if the discharge from its construction or operation will cause or contribute to the violation of water quality standards. The owner or operator of the new source or new discharger proposing to discharge into a water segment which does not meet applicable water quality standards or is not expected to meet those standards even after application of technology-based effluent limitations, and for which

the Division has performed a total maximum daily load for the pollutant to be discharged, must demonstrate, before the close of the public comment period, that:

(A) There are sufficient remaining load allocations to allow for the discharge; and

(B) The existing dischargers into that segment are subject to compliance schedules designed to bring the segment into compliance with applicable water quality standards.

(c) No permit shall be issued which is inconsistent with any duly promulgated and controlling state, regional, or local land use plan or any portion of an approved regional wastewater management plan which has been adopted as a regulation unless all other requirements and conditions of this act have been met or will be met pursuant to a schedule of compliance or a variance specifying treatment requirements as determined by the Division.

(d) No permit shall be issued which allows a violation of a control regulation unless the waste discharge permit contains effluent limitations and a schedule of compliance or a variance specifying treatment requirements as determined by the Division.

(e) No permit shall be issued which allows a discharge that by itself or in combination with other pollution will result in pollution of the receiving waters in excess of the pollution permitted by an applicable water quality standard or applicable antidegradation requirement unless the permit contains effluent limitations and a schedule of compliance specifying treatment requirements or the Division has granted a variance from the water quality standard.

(f) No permit shall be issued which allows the discharge of any radiological, chemical, or biological warfare agent or high-level radioactive waste.

61.8(2) <u>DEFINITION OF EFFLUENT LIMITATIONS</u>

Effluent limitations for each permit will, as a minimum, include the following effluent limitations and standards. Effluent limitations for land disposal systems shall, as a minimum, meet the applicable provisions of the "Regulations for Effluent Limitations" (Regulation 62, 5 CCR 1002-62) except that the limitation for residual chlorine at section 4(d) shall not apply.

(a) Technology Based Effluent Limitations

(i) All applicable state effluent limitations adopted in 5 CCR 1002-62, Regulation No. 62, et. seq.;

(ii) All applicable effluent limitations for categorical industries adopted by EPA and incorporated in this regulation by reference. The following effluent limitations for categorical industries are hereby incorporated by reference:

40 CFR Parts 405, 406, 407,408, 409, 410, 411, 412, 413, 414, 415, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 439, 440, 443, 446, 447, 454, 455, 457, 458, 459, 460, 461, 463, 464, 465, 466, 467, 468, 469, and 471;

(iii) All applicable standards and criteria adopted by EPA in 40 CFR Part 125; and

(iv) All applicable toxic pollutant standards adopted by EPA in 40 CFR Part 129.

(v) When necessary for compliance with the Federal Act for the achievement of technology-based effluent limitations, the Division may exercise best professional judgment (BPJ) in

establishing effluent limitations on a case-by-case basis for individual permits granted pursuant to section 25-8-503(1), C.R.S. Technology-based effluent limitations based on best professional judgment (BPJ) shall be made only for good cause and in the absence of Federally promulgated effluent guidelines or effluent limitation regulations promulgated by the Commission and shall be subject to review as provided for in paragraph (v)(B) of this subsection and in section 4(A)(3)(b) of the Procedural Regulations, Regulation No. 21.

(A) Effluent limitations established through the exercise of best professional judgment (BPJ) shall be made after considering the availability of appropriate technology, its economic reasonableness, the age of equipment and facilities involved, the process employed, and any increase in water or energy consumption.

(B) Review by a hearing officer of technology-based effluent limitations based on best professional judgment shall be on request of the permit applicant or permittee or any aggrieved person and shall take place in an adjudicatory hearing to be held pursuant to section 24-4-105, C.R.S., the necessity of effluent limitations based on best professional judgment, as well as the reasonableness of the effluent limitation must be supported by substantial evidence. If such hearing is requested, it shall be held as part of a hearing requested to challenge the conditions of the permit

(b) Water Quality Standards-Based Effluent Limitations

(i) Where the effluent limitations, as required by paragraph (1) of this section will not provide sufficient treatment to meet water quality standards, including narrative standards, for the receiving waters, the Division will define more stringent effluent limitations based upon water quality standards in accordance with The Basic Standards and Methodologies for Surface Water, Regulation No. 31 et. seq (5 CCR 1002-31) and "The Basic Standards for Groundwater", (5 CCR 1002-41). Effluent limitations designed to meet water quality standards shall be based on application of appropriate physical, chemical, and biological factors reasonably necessary to achieve the levels of protection required by the standards. Such determination shall be made on a case-by-case basis.

(A) Limitations must control all pollutants or pollutant parameters which the Division determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or measurably contribute to an excursion above any water quality standard, including narrative standards for water quality.

(B) When determining whether a discharge causes, has the reasonable potential to cause, or measurably contributes to an in-stream excursion above a narrative or numeric water quality standard, the Division shall use procedures, including appropriate water quality modeling, which account for existing controls on point and nonpoint sources of pollution, the variability of the pollutant or pollutant parameter in the effluent, the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity), and where appropriate, the dilution of the effluent in the receiving water.

(C) When the Division determines, using the procedures in subsection (b)(i)(B) of this section, that a discharge causes, has the reasonable potential to cause, or measurably contributes to an in-stream excursion above the allowable ambient concentration of a numeric water quality standard for an individual pollutant, the permit must contain effluent limits for that pollutant.

(D) When the Division determines, using the procedures in subsection (b)(i)(B) of this section, that a discharge causes, has the reasonable potential to cause, or measurably contributes to an in-stream excursion above the numeric standard for whole effluent toxicity, if any such criterion has been adopted, the permit must contain effluent limits for whole effluent toxicity.

(E) Except as provided in this subparagraph, when the Division determines, using the procedures in subsection (b)(i)(B) of this section, toxicity testing data, or other information, that a discharge causes, has the reasonable potential to cause, or measurably contributes to an in-stream excursion above a narrative water quality standard, the permit must contain limitations, which include effluent limits, for whole effluent toxicity. Such limitations to be derived by the Division are based upon the Division's determination of what constitutes an acceptable level of whole effluent toxicity. Limits on whole effluent toxicity are not necessary where the Division demonstrates in the rationale of the permit, using the procedures in subsection (b)(i)(B) of this section, that chemical-specific limits for the effluent are sufficient to attain and maintain applicable numeric and narrative water quality standards.

(F) Where a water quality standard has not been established for a specific chemical pollutant that is present in an effluent at a concentration that causes, has the reasonable potential to cause, or measurably contributes to an excursion above a narrative water quality standard, the Division must establish effluent limits using one or more of the following options:

(I) Establish effluent limits in a manner consistent with the commission's methodology for establishing numeric water quality standards and, if applicable, such limits shall be consistent with the criteria contained in Tables I, II and III of the Basic Standards, Regulation No. 31; or

(II) Establish effluent limits on an indicator parameter for the pollutant of concern, provided:

(a) The permit identifies which pollutants are intended to be controlled by the use of the effluent limit;

(b) The permit rationale sets forth the basis for the limit, including a finding that compliance with the effluent limit on the indicator parameter will result in controls on the pollutant of concern which are sufficient to attain and maintain applicable water quality standards;

(c) The permit requires all effluent and ambient monitoring necessary to show that during the term of the permit the limit on the indicator parameter continues to attain and maintain applicable water quality standards; and

(d) The permit contains a reopener clause allowing the Division to modify or revoke and reissue the permit if the limits on the indicator parameter no longer attain and maintain applicable water quality standards.

(G) When developing water quality-based effluent limits under this paragraph, the Division shall ensure that

(I) The level of water quality to be achieved by limits on point sources established under this paragraph is derived from, and complies with all applicable water quality standards; and

(II) Effluent limits developed to protect a narrative water quality standard, a numeric water quality standard, or both, are consistent with the assumptions and requirements of any available wasteload allocation for the discharge prepared by the Division.

(ii) For discharges potentially impacting ground water, where site-specific ground water standards have not been promulgated in the area of the discharge, or in the area of recharge from surface waters, the Division will establish numerical protection levels based on the following procedure:

(A) The Division will consider the existing and any reasonable probable future beneficial uses of ground water that need to be protected in the vicinity of the discharge, and establish the appropriate corresponding numerical protection levels for specific contaminants, based on those beneficial uses, as outlined in Regulation No. 41, section 41.5(b) of "The Basic Standards for Ground Water". The Division will take into account reasonably available information, including any information required of or provided by the applicant.

(B) A determination made by the Division in accordance with paragraph A., above, will not be deemed to constitute a ground water quality classification or standard, and will not be binding on any persons other than the applicant in question.

(C) If an applicant, or any other interested person, disagrees with the determination made by the Division in accordance with paragraph A., above, it may petition the Commission to adopt site-specific classification and standards. Any determination made by the Commission during the hearing process would then become binding on the Division and the applicant. At the request of the applicant or interested person, the Commission will consider such a hearing to be mandatory and de novo.

(iii) For discharges potentially impacting ground water:

(A) The Division, except as provided in (B) below, will establish effluent limitations at the point of compliance taking into account applicable ground water standards or numerical protection levels. When compliance with effluent limitations is predicated on attenuation of pollutant concentrations in the surface water, in the vadose zone and/or along the flow path in the ground water, the Division may deny the permit unless information substantiating such attenuation is provided. If substantiating information is provided, the Division may require verification monitoring and development and implementation of a control plan pursuant to sections 61.14(5) and (6).

(B) Where the applicant has requested, and available information provides a reasonable basis for the Division to do so, effluent limitations may be established at the point of discharge or at another point prior to the point of compliance.

(iv) Where subsection (b) is applicable, the permit shall be written with effluent limitations that respect the methods by which water quality standards were derived, and the degree of variation of water quality that exists in the relevant stream segment or ground water on a seasonal basis or otherwise. The existence of water quality standards, particularly where based on ambient stream data, does not necessarily prohibit at all times discharges that

may result in pollution of the receiving waters in excess of the applicable water quality standards.

(v) Utilizing its best engineering judgement, where subsection (b) is applicable, the Division will use a mass-balance analysis to define the effluent limitations for discharges to surface waters such that the combined concentrations of pollutants contributed by the discharger and the receiving waters upstream from the point of discharge do not exceed the water quality standards for the receiving waters, downstream of any mixing zone established by the Division for each pollutant.

(vi) For most pollutants the Division will assign the effluent limitations defined from the mass-balance analysis described in subsection (b)(v) above as the thirty-day average value in the permit. Where the pollutant has a relatively acute toxic effect, the results of the mass-balance analysis will be assigned to a shorter-term average value, such as a seven-day average or a daily maximum or minimum limitations.

(vii) Effluent monitoring to determine compliance with metals limitations based on dissolved metals standards shall utilize the potentially dissolved method, except that if it can be demonstrated that there is no statistically significant difference at a 95 percent confidence interval between potentially dissolved and dissolved methodologies using paired samples, the Division shall allow the use of the dissolved analytical methodology to measure compliance with such limitations. Monitoring to determine compliance shall be by total recoverable methodology where translation of a dissolved standard is requested by the permittee and the permittee can demonstrate to the satisfaction of the Division the instream relationship between dissolved and total recoverable metals. Otherwise, the potentially dissolved methodology shall be used assuming a 1:1 ratio between the dissolved standard and the potentially dissolved effluent limitation. In addition, if requested by a discharger, the Division will allow the total recoverable analytical procedure for metals to be used in lieu of the potentially dissolved procedures without adjustment of the required effluent levels.

(viii) For discharges which contain ammonia or metals (see table II and III, Basic Standards Regulation) in sufficient quantities to potentially cause exceedance of the assigned water quality standard, the Division shall assign limitations which protect both the acute and chronic water quality standards. Such limitations shall be derived utilizing the stream low flow as defined in Regulation No. 31, section 31.9(1) of the Basic Standards.

(ix) Except as provided for in 61.8(2)(g)(ii) and for whole effluent toxicity requirements, the Division shall determine compliance with an acute water quality standard-based effluent limitation through determination of a daily average concentration of the particular pollutant, and shall determine compliance with a chronic water quality standard-based effluent limitation through determination of a thirty-day average concentration, unless the standard specifies a different duration. Limitations for the protection of both acute and chronic water quality standards shall be designed to not exceed those standards more frequently than once every three years on the average.

(c) Wasteload Allocation and Trading

(i) Where multiple discharges within a given segment of receiving waters require the definition of maximum loading and waste load allocations for that segment, the Division is responsible for defining the waste load allocations among the permittees affected, but such allocations will be made in cooperation and with collective assistance of these permittees.

(ii) Trading of existing wasteload allocations or reductions in load allocations among point and/or non-point sources may be used to set effluent limits based on duly promulgated

control regulations. In the establishment of effluent limits the Division may also take into account watershed-based water quality plans, federal lands use plans, or other enforceable measures allowed under state or federal requirements and impacting pollutant loadings.

(iii) Where the discharge contains a pollutant for which the receiving waters are impaired and a TMDL is required, a permit may be extended with the permittee's concurrence based on the imminent completion of the TMDL and/or other factors deemed relevant by the Division. If, in the Division's judgment, an extension is not appropriate, a renewal permit may be issued that allows the discharge to continue at a level up to the existing permitted point source load. Where the Commission has adopted a temporary modification for a parameter for which the segment receiving the discharge is impaired, effluent limits shall be set in accordance with the provisions of Regulation No. 31.

Within a reasonable time of EPA's approval of the TMDL, the Division shall reopen or reissue the permit and incorporate effluent limits consistent with the wasteload allocation established under the TMDL. Where necessary, the Division shall also include interim limits and a schedule of compliance to attain such limits.

(d) Intake Credits

(i) Upon request of the discharger, where appropriate and consistent with federal requirements, effluent limitations or standards shall be adjusted to reflect credit for pollutants in the discharger's intake water if:

(A) The applicable effluent limitations and standards specifically provide that they shall be applied on a net basis; or

(B) The discharger demonstrates that the control system it proposes or uses to meet applicable limitations and standards would, if properly installed and operated, meet the limitations and standards in the absence of pollutants in the intake waters.

(ii) Credit for conventional pollutants such as biochemical oxygen demand (BOD) or total suspended solids (TSS) should not be granted unless the permittee demonstrates that the constituents of the conventional measure in the effluent are substantially similar to the constituents of the conventional measure in the intake water or unless appropriate additional limits are placed on process water pollutants either at the outfall or elsewhere.

(iii) Credit shall be granted only to the extent necessary to meet the applicable limitation or standard, up to a maximum value equal to the influent value. Additional monitoring may be necessary to determine eligibility for credits and compliance with permit limits.

(iv) Credit shall be granted only if the discharger demonstrates that the intake water is drawn from the same body of water into which the discharge is made. The Director may waive this requirement if he finds that no environmental degradation will result.

(v) This section does not apply to the discharge of raw water clarifier sludge generated from the treatment of intake water.

(e) All permit effluent limitations, standards and prohibitions shall be established for each outfall or discharge point of the permitted facility, except as otherwise provided under section 61.8(3)(r) (the permit includes BMPs because effluent limitations are infeasible) or under paragraph (f) of this section (limitations on internal waste streams).

(f) Production-based limitations.

(i) In the case of POTWs, permit effluent limitations, standards, or prohibitions shall be calculated based on design flow. Where the facility design flow and actual flow are significantly different, the Division may implement a tiered approach to setting water-quality-standard-based effluent limitations, provided that one of the sets of effluent limitations reflects the design flow and the permittee demonstrates the ability to meet effluent limitations at the design flow rate. Where such demonstration cannot be made, the permit shall contain a compliance schedule to allow such demonstration within a reasonable time not to exceed the life of the permit (i.e., five years).

(ii) Other permitted discharges:

(A) Except in the case of POTWs or as provided in paragraph (ii)(B) below, calculation of any permit limitations, standards, or prohibitions which are based on production (or other measure of operation) shall be based not upon the designed production capacity but rather upon a reasonable measure of actual production of the facility. For new sources or new dischargers, actual production shall be estimated using projected production. The time period of the measure of production shall correspond to the time period of the calculated permit limitations; for example, monthly production shall be used to calculate average monthly discharge limitations.

(B) The Division may include a condition establishing alternate permit limitations, standards, or prohibitions based upon anticipated increased (not to exceed maximum production capability) or decreased production levels.

(C) If the Division establishes permit conditions under paragraph (ii)(B) of this section:

(I) The permit shall require the permittee to notify the Division at least two business days prior to a month in which the permittee expects to operate at a level higher than the lowest production level identified in the permit. The notice shall specify the anticipated level and the period during which the permittee expects to operate at the alternate level. If the notice covers more than one month, the notice shall specify the reasons for the anticipated production level increase. New notice of discharge at alternate levels is required to cover a period or production level not covered by prior notice or, if during two consecutive months otherwise covered by a notice, the production level at the permitted facility does not in fact meet the higher level designated in the notice.

(II) The permittee shall comply with the limitations, standards, or prohibitions that correspond to the lowest level of production specified in the permit, unless the permittee has notified the Division under paragraph (C)(I) above, in which case the permittee shall comply with the lower of the actual level of production during each month or the level specified in the notice.

(III) The permittee shall submit with the reports required under 61.8(4), the level of production that actually occurred during each month and the limitations, standards, or prohibitions applicable to that level of production.

(g) For continuous discharges all permit effluent limitations, standards, and prohibitions, including those necessary to achieve water quality standards, shall unless impracticable be stated as:

(i) Maximum daily and average monthly discharge limitations for all dischargers other than POTWs; and

(ii) Average weekly and average monthly discharge limitations for POTWs.

(h) Discharges which are not continuous shall be particularly described and limited, considering the following factors, as appropriate:

(i) Frequency (for example, a batch discharge shall not occur more than once every 3 weeks);

(ii) Total mass (for example, not to exceed 100 kilograms of zinc and 200 kilograms of chromium per batch discharge);

(iii) Maximum rate of discharge of pollutants during the discharge (for example, not to exceed 2 kilograms of zinc per minute); and

(iv) Prohibition or limitation of specified pollutants by mass, concentration, or other appropriate measure (for example, shall not contain at any time more than 0.1 mg/l zinc or more than 250 grams (1/4 kilogram) of zinc in any discharge).

(i) Mass limitations:

(i) All pollutants limited in permits shall have limitations, standards or prohibitions expressed in terms of concentration and mass or concentration and flow except:

(A) For pH, temperature, radiation, or other pollutants which cannot appropriately be expressed by mass;

(B) When applicable standards and limitations are expressed in terms of other units of measurements; or

(C) If in establishing permit limitations on a case-by-case basis under 61.8(2)(a)(iv) limitations expressed in terms of mass are infeasible because the mass of the pollutant discharged cannot be related to a measure of operation (for example, discharges of TSS from certain mining operations), and permit conditions ensure that dilution will not be used as a substitute for treatment.

(ii) Pollutants limited in terms of mass additionally may be limited in terms of other units of measurement, and the permit shall require the permittee to comply with both limitations.

(j) Internal waste streams:

(i) When permit effluent limitations or standards imposed at the point of discharge are impractical or infeasible, effluent limitations or standards for discharges of pollutants may be imposed on internal waste streams before mixing with other waste streams or cooling water streams. In those instances, monitoring requirements pursuant to this regulation shall also be applied to the internal waste streams,

(ii) Limits on internal waste streams will be imposed only when the permit rationale sets forth the exceptional circumstances which make such limitations necessary, such as when the final discharge point is inaccessible (for example, under 10 meters of water), the wastes

at the point of discharge are so diluted as to make monitoring impracticable, or the interferences among pollutants at the point of discharge would make detection or analysis impracticable.

(k) Permit limitations and standards, when part of the permittee's process wastewater is not being discharged into state waters but into a well, POTW or by land application, shall be calculated as provided in 40 CFR 122.50.

(l) The "Colorado River Salinity Standards" state that "the objective for discharges shall be a no-salt return policy whenever practicable." This is the policy that shall be followed in issuing CDPS permits for all new discharges, and upon reissuance of permits for all existing discharges. All CDPS permits for discharges to surface waters within the Colorado River Basin shall contain limitations and monitoring conditions consistent with those specified below.

(i) Industrial Sources

(A) The no-salt discharge requirement, and the requisite demonstration that it is not practicable to prevent the discharge of all salt, may be waived in those cases where the salt load reaching the mainstem of the Colorado River is less than one ton per day or 350 tons per year, whichever is more appropriate. Evaluation will be made on a case-by-case basis. The following addresses those cases where no-discharge of salt from industrial discharges may be deemed not to be practicable. The maximum TDS concentration considered to be fresh water is 500 mg/l for discharges into the Colorado River within the state of Colorado.

(I) The Division may permit the discharge of salt upon a satisfactory demonstration by the permittee that it is not practicable to prevent the discharge of all salt. The demonstration by the applicant for a new permit must include the following information relating to the potential discharge. Applicants for reissuance of a permit shall either submit a statement that their previous demonstration is still applicable or submit new information consistent with the following list describing any changed circumstances.

(a) Existing annual tonnage of salt discharged and seasonal effluent discharge flowrates.

(b) Cost of modifying an industrial wastewater treatment plant, if any, to provide for no salt discharge.

(c) Cost of salt minimization.

(d) Description of the quantity and salinity of the water supply.

(e) Description of water rights, including diversion and consumptive use quantities and the compatibility of Colorado water laws with either the complete elimination of a salt discharge or any plan for minimizing a salt discharge.

(f) Alternative plans that could reduce or eliminate salt discharge. Alternative plans shall include:

(i) Description of alternative water supplies, including provisions for water reuse, if any.

(ii) Description of the quantity and the quality of the proposed discharge.

(iii) Description of how salts removed from discharges shall be disposed of to prevent such salts from entering surface waters or ground water aquifers.

(iv) Costs of alternative plans in dollars per ton of salt removed.

(v) Unless the permitting authority has previously determined through prior permitting or permit renewal actions that it is not practicable to prevent the discharge of all salt the applicant must include information on project options that would offset all or part of the salt loading to the Colorado River associated with the proposed discharge or that would contribute to state or interstate salinity control projects or salt banking programs.

(g) Of the alternatives, a statement as to the one plan for reduction of salt discharge that the applicant recommends be adopted.

(h) Such other information pertinent to demonstration of non-practicability as the Division may deem necessary.

(II) In determining what permit conditions shall be required, where no discharge is determined to be impracticable, the Division shall consider the items as follows:

(a) The impact of the total proposed salt discharge of each alternative on the lower mainstem in terms of both tons per year and concentration load.

(b) Costs per ton of salt removed from the discharge for each plan alternative.

(c) Capability of minimizing the discharge of salt.

(d) The annual cost of plant modification in terms of dollars per ton of salt removed for:

(i) No salt return

(ii) Minimizing salt return

(III) Analysis for salinity shall be required in all industrial permits that discharge in the Colorado River Basin. Salinity may be determined as total dissolved solids (TDS) or by electrical conductivity where a satisfactory correlation with TDS has been established. The correlation should be based on a minimum of five different samples.

(ii) Discharges of Salinity from a New Industrial Source with Operations and Discharging Facilities at Multiple Locations

(A) The objective for discharges to surface waters from a new industrial source with operations and discharging facilities at multiple locations shall be to assure that such operations will have no adverse effect on achieving the adopted numeric salinity standards for the Colorado River.

(B) NPDES permit requirements for a new industrial source with operations and discharging facilities at multiple locations shall be defined, for purposes of establishing effluent limitations for salinity, as a single industrial source if these facilities meet the following criteria:

(I) The discharging facilities, which commenced construction on a pilot, development or production scale on or after November 1,2002, are interrelated or integrated in any way including being engaged in a primary activity or the production of a principle product; and,

(II) The discharging facilities are located on contiguous or adjacent properties or are within a single production area (i.e. geologic basin, geohydrologic basin, coal field or 8 digit hydrologic unit watershed area; and

(III) The discharging facilities are owned or operated by the same person or by persons under common or affiliated ownership or management.

(C) The permitting authority may permit the discharge of salt from a new industrial source with operations and discharging facilities at multiple locations if one or more of the following requirements are met:

(I) The permittee has demonstrated that it is not practicable to prevent the discharge of all salt from the industrial source. This demonstration by the applicant must include detailed information on the factors set forth in section 61.8(2)(l)(i); with particular emphasis on an assessment of salinity off-set options that would contribute to state or interstate salinity control projects or salt banking programs and offset all or part of the salt loading to the Colorado River associated with the proposed discharge.

(II) In determining what permit conditions shall be required under section 61.8(2)(l)(i), above, the Division shall consider the requirement for an offset project to be feasible if the cost per ton of salt removal in the offset project options (i.e. the permittee's cost in conducting or buying into such projects where they are available) is less than or equal to the cost per ton of salt removal for projects undertaken by the Colorado River Basin Salinity Control Forum or less than the cost per ton in damages caused by salinity that would otherwise be cumulatively discharged from the outfalls at the various locations with operations controlled by the industrial source; or

(III) The permittee has demonstrated that one or more of the proposed discharges is of sufficient quality in terms of TDS concentrations to qualify for a "fresh water waiver" from the policy of "no salt return, whenever practical." An individual discharge that can qualify for a fresh water waiver shall be considered to have no adverse effect on achieving the adopted numeric salinity standards for the Colorado River system.

(D) For the purpose of determining whether a freshwater waiver can be granted, the quality of water discharged from the new industrial source with operations and

discharging facilities at multiple locations, determined as the flow weighted average of salinity concentrations at all outfall points, must meet the applicable benchmark concentration in accordance with section 61.8(2)(l)(i)(A).

(E) Very small-scale pilot activities, involving 5 or fewer outfalls, that are sited in areas not previously developed or placed into production by new industrial source operations with discharges at multiple locations under common or affiliated ownership or management, may be permitted in cases where the discharge of salt from each outfall is less than one ton per day or 366 tons per year. However, upon the date of the first permit renewal when the pilot activities have become part of a larger industrial development or production scale effort, all discharging facilities shall be addressed for permitting purposes, as a single industrial source with operations and discharges at multiple locations under common or affiliated ownership or management.

(iii) Intercepted Ground Water

The discharge of intercepted ground water must be evaluated in a manner consistent with the overall objective of "no salt return" whenever practical. The following provides more detailed guidance for those situations where ground waters are intercepted with resultant changes in ground-water flow regime.

(A) The "no-salt" discharge requirement may be waived where the discharged salt load reaching the main stem of the Colorado River is less than one ton per day or 350 tons per year, whichever is more appropriate. Evaluation will be made on a case-by-case basis.

(B) Consideration should be given to the possibility that the ground water, if not intercepted, normally would reach the Colorado River System in a reasonable time frame. A permittee desiring such consideration must provide detailed information including a description of the topography, geology, and hydrology. Such information must include direction and rate of ground-water flow and the chemical quality and quantity of surface streams and springs that might be affected. If the information adequately demonstrates that the ground water to be intercepted normally would reach the river system in a reasonable time frame and would contain approximately the same or greater salt load than if not intercepted, and if no significant localized problems would be created, then the Division may waive the "no-salt" discharge requirement.

(C) In those situations where the discharge does not meet the criteria in (A) or (B), above, the applicant for a new permit will be required to submit the following information on the potential discharge for consideration. Applicants for reissuance of a permit need only provide any relevant information on changed circumstances, in regard to the following information, since the previous application.

(I) Description of the topography, geology, and hydrology. Such information must include the location of the development, direction and rate of ground-water flow, chemical quality and quantity of ground water, and relevant data on surface streams and springs that are or might be affected. This information should be provided for the conditions with and without the project.

(II) Alternative plans that could substantially reduce or eliminate salt discharge. Alternative plans must include:

(a) Description of water rights, including beneficial uses, diversions, and consumptive use quantities.

(b) Description of alternative water supplies, including provisions for water reuse, if any.

(c) Description of quantity and quality of the proposed discharge.

(d) Description of how salts removed from the discharge shall be disposed of to prevent their entering surface waters or ground water aquifers.

(e) Technical feasibility of the alternatives.

(f) Total construction, operation, and maintenance costs; and costs in dollars per ton of salt removed from the discharge.

(g) Closure plans to ensure termination of any proposed discharge at the end of the economic life of the project.

(h) A statement as to the one alternative plan for reduction of salt discharge that the applicant recommends be adopted, including an evaluation of the technical, economic, and legal practicability of achieving no discharge of salt

(i) Such information as the permitting authority may deem necessary.

(D) In determining whether a "no-salt" discharge is practicable, the Division shall consider, but not be limited to, the water rights and the technical, economic, and legal practicability of achieving no discharge of salt.

(E) Where "no-salt" discharge is determined not to be practicable the Division shall, in determining permit conditions, consider.:

(I) The impact of the total proposed salt discharge of each alternative on the lower main stem in terms of both tons per year and concentration.

(II) The costs per ton of salt removed from the discharge for each plan alternative.

(III) The compatibility of state water laws with each alternative.

(IV) The capability of minimizing the discharge of salt.

(V) The localized impact of the discharge.

(VI) The minimization of salt discharges and the preservation of fresh water by using intercepted ground water for industrial processes, dust control, etc., whenever it is economically feasible and environmentally sound.

(iv) Fish Hatcheries

Discharges from fish hatcheries shall be allowed an incremental increase in salinity of 100 mg/l or less above the flow weighted average salinity of the intake supply water. The 100 mg/l

incremental increase may be waived if the discharged salt load reaching the Colorado River system is less than one ton per day, or 350 tons per year, whichever is more appropriate. Evaluation is to be made on a case-by-case basis.

(A) The Division may permit a discharge in excess of the 100 mg/l incremental increase at the time of issuance or reissuance of a CDPS discharge permit upon satisfactory demonstration by the permittee that it is not practicable to attain the 100 mg/l limit. Demonstration by the applicant for a new permit must include information on the following factors relating to the potential discharge. Applicants for reissuance of a permit need only provide any relevant information on changed circumstances, in regard to the following factors, since their previous demonstration.

(I) A description of the fish hatchery and facilities.

(II) A description of the quantity and salinity of intake water sources.

(III) A description of salt sources in the hatchery.

(IV) A description of water rights, including diversions and consumptive use quantities.

(V) A description of the discharge, covering location, receiving waters, quantity of salt load, and salinity.

(VI) Alternative plans for minimizing the salt discharge from the hatchery. Alternative plans should include:

(a) A description of alternative means of salt control.

(b) The cost of alternative plans, in dollars per ton, of salt removed from discharge.

(VII) Such other information pertinent to demonstration of non-practicability as the Division may deem necessary.

(B) In determining what permit conditions shall be required, the Division shall consider the following criteria including, but not limited to:

(I) The practicability of achieving the 100 mg/l incremental increase.

(II) Where the 100 mg/l incremental increase is not determined to be practicable:

(a) The impact of the proposed salt input of each alternative on the lower main stem in terms of tons per year and concentration.

(b) The costs per ton of salt removed from discharge of each alternative plan.

(c) The capability of minimizing the salt discharge.

(III) If, in the opinion of the Division, the database for the hatchery is inadequate, the permit will contain the requirement that the permittee monitor the water supply and the discharge for salinity. Such monitoring

program shall be completed within two years and the permittee shall then present the information as specified above.

(IV) All new and reissued CDPS permits for hatcheries shall require monitoring of the salinity of the intake water supply and the effluent at the time of peak fish population.

(a) Analysis for salinity may be either as total dissolved solids (TDS) or by electrical conductivity where a satisfactory correlation with TDS has been established. The correlation should be based on a minimum of five different samples.

(v) Discharge of Once-Through Non-Contact Cooling Water

(A) Definitions:

(I) The terms "non-contact cooling water" and "blow-down" are defined as per 40 CFR 401.11 (m) and (n).

(II) "Non-contact cooling water" means water used for cooling that does not come into direct contact with any raw material, intermediate product, waste product or finished product.

(III) "Blow-down" means the minimum discharge of recirculating water for the purpose of discharging materials contained in the water, the further buildup of which would cause concentration in amounts exceeding limits established by best engineering practice.

(B) Permits shall be authorized for discharges of water that has been used for once-through non-contact cooling purposes based upon a finding that the returned water does not contribute to the loading of salts or the concentration of salts in the waters of the receiving stream in excess of a de minimus amount.

(C) This provision shall not supplant nor supersede any other water quality standard of the receiving stream adopted pursuant to the Clean Water Act, including but not limited to impairment of designated uses of the stream as established by the governing water quality authority having jurisdiction over the waters of the receiving stream.

(D) Non-contact cooling water shall be distinguished from blow-down and blow-down or any commingling of once-through non-contact cooling water with another waste stream prior to discharge to the receiving stream must meet the requirements of section 61.8(2)(l)(i).

(E) Where "no-salt" discharge is determined not to be practicable the Division shall, in determining permit conditions, consider:

(I) The impact of the total proposed salt discharge of each alternative on the lower main stem in terms of both tons per year and concentration.

(II) The costs per ton of salt removed from the discharge for each plan alternative.

(III) The compatibility of state water laws with each alternative.

(IV) The capability of minimizing the discharge of salt.

(V) The localized impact of the discharge.

(VI) The minimization of salt discharges and the preservation of fresh water by using intercepted ground water for industrial processes, dust control, etc., whenever it is economically feasible and environmentally sound.

(a) Description of water rights, including beneficial uses, diversions, and consumptive use quantities.

(b) Description of alternative water supplies, including provisions for water reuse, if any.

(c) Description of quantity and quality of the proposed discharge.

(d) Description of how salts removed from the discharge shall be disposed of to prevent their entering surface waters or ground water aquifers.

(e) Technical feasibility of the alternatives.

(f) Total construction, operation, and maintenance costs; and costs in dollars per ton of salt removed from the discharge.

(g) Closure plans to ensure termination of any proposed discharge at the end of the economic life of the project.

(h) A statement as to the one alternative plan for reduction of salt discharge that the applicant recommends be adopted, including an evaluation of the technical, economic, and legal practicability of achieving no discharge of salt.

(i) Such information as the permitting authority may deem necessary.

(vi) Municipal Discharges

(A) Municipal discharges to any portion of the Colorado River stream system shall be allowed an incremental increase in salinity of 400 mg/l or less above the flow weighted averaged salinity of the intake water supply. The maximum incremental increase requirement, and the requisite demonstration that it is not practicable to meet the incremental increase requirement, may be waived in those cases where the salt load reaching the mainstem of the Colorado River is less than one ton per day or 366 tons per year, whichever is more appropriate. Evaluation will be made on a case-by-case basis. The following addresses additional cases where meeting the incremental increase requirement for municipal discharges may be deemed not to be practicable.

(I) The Division may permit a discharge in excess of the 400 mg/l incremental increase, at the time of issuance or reissuance of a CDPS discharge permit, upon satisfactory demonstration by the permittee that it is not practicable to attain the 400 mg/l limit Demonstration by the applicant for a new permit must include information on the following factors relating to the potential discharge. Applicants for reissuance of a

permit shall either submit a statement that their previous demonstration is still applicable or submit new information consistent with the following list describing any changed circumstances.

(a) A description of the municipal entity and facilities.

(b) A description of the quantity and salinity of intake water sources.

(c) A description of significant salt sources to the municipal wastewater collection system and identification of entities responsible for each source, if available.

(d) A description of water rights, including diversions and consumptive use quantities.

(e) A description of the wastewater discharge, covering location, receiving waters, quantity, salt load, and concentration of TDS.

(f) Alternative plans for minimizing the salt contribution from the municipal discharge. Alternative plans should include:

(i) A description of collection system salt sources and alternative means of control.

(ii) The cost of alternative plans, in dollars per ton, of salt removed from discharge.

(g) Such other information pertinent to demonstration of non-practicability as the Division may deem necessary.

(B) In determining what permit conditions shall be required, the Division shall consider the following criteria including, but not limited to:

(I) The practicability of achieving the 400 mg/l incremental increase.

(II) Where the 400 mg/l incremental increase is not determined to be practicable:

(a) The impact of the total proposed salt input of each alternative on the lower mainstem in terms of tons per year and concentration.

(b) The costs per ton of salt removed from the discharge for each alternative plan.

(c) The capability of minimizing the salt discharge.

(C) If, in the opinion of the Division, the database for the municipal wastewater discharge is inadequate, the permit will contain the requirement that the permittee monitor the water supply and the wastewater discharge for salinity. Such monitoring program shall be completed within 2 years and the discharger shall then present the information as specified above.

(D) All new and reissued CDPS permits for municipalities shall require monitoring of the concentration of the TDS of the intake water supply and the wastewater treatment plant effluent in accordance with the following guidelines:

Treatment Plant Design Capacity	Monitoring Frequency	Type of Sample
<1.0MGD	Quarterly	Grab
1.0 - 5.0MGD	Monthly	Composite
5.0 - 50.0 MGD	Weekly	Composite
>50.0 MGD	Daily	Composite

Analysis for salinity may be either as total dissolved solids (TDS) or by electrical conductivity where a satisfactory correlation with TDS has been established. The correlation should be based on a minimum of five different samples. Monitoring of the intake water supply may be at a reduced frequency where the salinity of the water supply is relatively uniform as demonstrated by a minimum of two years worth of samples.

(m) Whenever the practical quantitation level "PQL" for a pollutant is higher (less stringent) than an effluent limitation or other reporting requirements that would result from (1) direct application of site-specific surface water quality standards, (2) the statewide standards in Regulation No. 31, section 31.11, (3) site specific ground water quality standards in Regulation No. 42, or (4) statewide ground water quality standards in Regulation No. 41, section 41.5(c), the (PQL) shall be used as the compliance threshold. The Division may establish site specific or discharge specific PQLs where the permittee is able to demonstrate, to the satisfaction of the Division, that the effluent possesses a matrix of pollutants that interfere with analytical procedures near the level of detection. In the absence of a site specific or discharge specific PQL, the Division shall utilize as the PQL, the PQLs listed in the most current edition of the Division's "PQL Guidance Document" as the permit reporting limit.

61.8(3) <u>CONDITIONS OF PERMITS</u>

(a) Nothing in any permit shall ever be construed to prevent or limit application of any emergency power of the Division.

(b) The conditions set forth in permits will implement, among other matters, procedures, requirements, and restrictions with respect to the following:

(i) Identification and address of the owner and operator and of the appropriate contact individual of the activity, facility, process, feedlot, or municipality to be permitted.

(ii) Location, quantity and quality characteristics of the permitted discharge. The Division shall specify average and maximum daily quantitative limitations for the level of pollutants in the authorized discharge in terms of weight, where applicable or, as in the case of flow, pH, temperature, radiation and any other pollutants not appropriately expressed by weight, in other appropriate terms. The Division may, in its discretion, in addition to the quantitative limitations by weight, specify other limitations, such as average or maximum concentrations;

(iii) Effluent limitations, standards, and conditions in accordance with section 61.8(2) of this regulation and effluent limitation regulations at 5 CCR 1002-62, Regulation No. 62 <u>et. seq.</u> and conditions for treatment prior to discharge to a domestic wastewater treatment works;

(iv) Monitoring as well as record-keeping and reporting requirements described in section 61.8(4);

(v) Schedule of compliance where the Commission has adopted new standards, adopted temporary modifications, adopted revised standards that have become more stringent, or

where the Division has developed new interpretations of existing standards including, but not limited to, implementation requirements through approved TMDLs and Wasteload Allocations and antidegradation reviews;

(vi) Submission of pertinent plans and specifications for the facility, process, or activity in accordance with a compliance schedule; and

(vii) Changes in plans and specifications for control facilities, if any, required by the Division as a condition for the issuance of the permit.

(c) Inspection and Entry. The Division has the power, upon presentation of proper credentials, to enter and inspect at any reasonable time and in a reasonable manner any property, premise, or place for the purpose of investigating any actual, suspected, or potential source of water pollution, or ascertaining compliance or noncompliance with any control regulation or any order promulgated by the Division. Such entry is also authorized for the purpose of inspecting and copying records required to be kept concerning any effluent source.

(i) In the making of such inspections, investigations, and determinations, the Division, insofar as practicable, may designate as its authorized representatives any qualified personnel of the Department of Agriculture. The Division may also request assistance from any other state or local agency or institution.

(ii) If such entry or inspection is denied or not consented to, the Division is empowered to and shall obtain, from the district or county court for the judicial district or county in which such property premise or place is located, a warrant to enter and inspect any such property, premise, or place prior to entry and inspection. The district and county courts of the state of Colorado are empowered to issue such warrants upon a proper showing of the need for such entry and inspection.

(iii) The Division shall split a sample with the permittee if requested to do so by the permittee.

(d) The permit shall not be transferred to another party without prior notification to the Division and requirements of sections 61.8(6) and 61.15 have been met.

(e) Whenever notification of any planned physical alterations or additions to the permitted facility is required pursuant to 61.8(5), the permittee shall furnish the Division such plans and specifications which the Division deems reasonably necessary to evaluate the effect on the discharge, the stream, or ground water. If the Division finds that such new or altered discharge might be inconsistent with the conditions of the permit, the Division shall require a new or revised permit application and shall follow the procedures specified in sections 61.5 through 61.6 and 61.15 of these regulations.

(f) Every permit issued shall contain such terms and conditions as the Division determines to be necessary to ensure compliance with applicable control regulations, water quality standards, and the state and federal Act.

(g) The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee as necessary to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee, only when necessary to achieve compliance with the conditions of the permit.

(h) The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

(i) Bypass.

(i) Bypasses are prohibited and the Division may take enforcement action against the permittee for bypass, unless:

(A) bypass is unavoidable to prevent loss of life, personal injury, or severe property damage;

(B) there were no feasible alternatives to bypass such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(C) proper notices were submitted in compliance with section 61.8(5).

(ii) "Severe property damage" as used in this subsection means substantial physical damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

(iii) The permittee may allow a bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance or to assure optimal operation. These bypasses are not subject to the provisions of paragraph (i) above.

(iv) The Division may approve an anticipated bypass, after considering adverse effects, if the Division determines that the bypass will meet the conditions specified in 61.8(3)(i)(i).

(j) Upset. An upset constitutes an affirmative defense to an action brought for noncompliance with effluent limitations if the permittee demonstrates, through properly signed, contemporaneous operating logs, or other relevant evidence, that:

(i) An upset occurred and the permittee can identify its cause(s);

(ii) The facility was being properly maintained at the time;

(iii) The permittee submitted proper notice of the upset in compliance with paragraph (d) of section 61.8(5) of this regulation; and

(iv) The permittee complied with any remedial measures required under paragraph (h) of this section.

In addition to the demonstration required above, a permittee who wishes to establish the affirmative defense of upset for a violation of effluent limitations based upon water quality standards shall also demonstrate through monitoring, modeling or other methods that the relevant standards were achieved in the receiving water.

In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

(k) It shall not be a defense for a permittee in an enforcement action that it: would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

(l) Solids, sludges, or other pollutants removed in the course of treatment or control of waste waters shall be disposed in accordance with applicable state and federal regulations.

(m) If a toxic effluent standard or prohibition, including any applicable schedule of compliance specified, is established by regulation pursuant to Section 307 of the Federal Act for a toxic pollutant which is present in the permittee's discharge and such standard or prohibition is more stringent than any limitation upon such pollutant in the discharge permit, the Division shall institute proceedings to modify or revoke and reissue the permit to conform to the toxic effluent standard or prohibition.

(n) Where applicable, the Division shall specify a schedule of compliance leading to compliance with the Federal and State Acts. Such schedule shall require the permittee to achieve compliance as soon as possible, but not later than the applicable statutory deadline under the Federal and State Acts.

(i) If the schedule of compliance exceeds one (1) year, interim requirements and dates (not more than one (1) year apart) shall be set for achievement of interim goals. Either before or up to fourteen (14) days following each interim date and the final compliance date, the permittee shall provide the Division with written notice of the permittee's compliance or non-compliance with the interim or final requirements.

(ii) The Division, may, upon request of the permittee, revise or modify a schedule of compliance if the Division determines that the permittee has shown good and valid cause exists for such revision, and if within thirty (30) days following receipt of notice from the Division, the Regional Administrator does not object in writing.

(iii) The first permit issued to a new source or a new discharger shall contain a schedule of compliance only when necessary to allow a reasonable opportunity to attain compliance with requirements issued or revised after commencement of construction but less than three years before commencement of the relevant discharge.

(iv) For recommencing dischargers, a schedule of compliance shall be available only when necessary to allow a reasonable opportunity to attain compliance with requirements issued or revised less than three years before recommencement of the discharge.

(o) Filing of a timely and complete application shall cause the expired permit to continue in force to the effective date of the new permit. The permit's duration may be extended only through administrative extensions and not through interim modifications.

(p) The permit may contain requirements for design and implementation of a groundwater monitoring program, if necessary and reasonable to determine possible water quality impacts from the point source discharge.

(q) The permittee shall furnish to the Division, within a reasonable time, any information which the Division may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. The permittee shall also furnish to the Division, upon request, copies of records required to be kept by the permit.

(r) The permit shall include best management practices to control or abate the discharge of pollutants when numeric effluent limitations are infeasible, when the practices are reasonably

necessary to achieve effluent limitations and standards, or when authorized under 304(e) of the federal act for control of toxic pollutants and hazardous substances.

(s) For a privately owned treatment works, the Division may include any conditions expressly applicable to any user, as a limited co-permittee, that may be necessary in the permit issued to the treatment works to ensure compliance with applicable requirements under these regulations. Alternatively, the Division may issue separate permits to the treatment works and to its users, or may require a separate permit application from any user. The Division's decision to issue a permit with no conditions applicable to any user, to impose conditions on one or more users, to issue separate permits, or to require separate applications, and the basis for that decision, shall be stated in the rationale for the draft permit for the treatment works.

(t) The Division may include in the permit any conditions imposed in grants made to POTWs under Sections 201 and 204 of Clean Water Act that are reasonably necessary for the achievement of effluent limitations under 61.8(2).

(u) Notwithstanding 61.8(3)(r), the permit shall, where appropriate, include control measures, innovative solutions, or other management approaches to control or abate the discharge of pollutants or the impacts from the discharge of pollutants when numeric effluent limitations are infeasible, when reasonably necessary to achieve effluent limitations, or to achieve and maintain an applicable water quality standard or antidegradation requirement.

61.8(4) <u>MONITORING, RECORDING AND REPORTING</u>

(a) Any discharge authorized by a discharge permit may be subject to such monitoring, record-keeping, and reporting requirements as may be reasonably required in writing by the Division, including the requirements concerning the installation, use and maintenance of monitoring equipment or methods in accordance with standard procedures and methods established by the Division.

(i) Where permit effluent limitations or reporting requirements are set below the PQL, discharge permits will contain corresponding reporting levels based on the PQLs established pursuant to this regulation at section 61.8(2)(m).

(ii) In lieu of PQLs identified in section 61.8(2)(m)(i) or (ii), the permittee may request permit amendment to incorporate a site specific, or discharge specific PQL which has been developed in accordance with section 61.8(2)(m).

(iii) At the time of permit renewal, the Division shall evaluate any existing site specific or discharge specific PQLs and may require demonstration of current suitability of that PQL by the permittee.

(b) The owner or operator of any facility, process, or activity from which a discharge of pollutants is made into state waters or into any domestic wastewater treatment works shall according to standard procedures and methods prescribed by the Division in a permit:

(i) establish and maintain records;

(ii) make reports;

(iii) install, calibrate, use and maintain monitoring methods and equipment, including biological and indicator pollutant monitoring methods;

(iv) sample discharges; and

(v) provide additional reasonably available information relating to discharges into domestic wastewater treatment works.

(c) To assure compliance with permit limitations, the following shall be monitored by the permittee:

(i) the concentration (or other measurement specified in the permit) for each pollutant limited in the permit; and

(ii) the volume of effluent discharged from each outfall.

(iii) Other measurements as appropriate.

(d) All permits shall specify required monitoring including type, intervals, and frequency sufficient to yield data which are representative of the monitored activity including, when appropriate, continuous monitoring. Monitoring results required by the permit shall be reported on a discharge monitoring report (DMR) or other forms provided or specified by the Division.

(e) To assure compliance with the permit, domestic wastewater treatment works, in addition to the requirements of paragraphs (c)(i) and (c)(ii) above shall monitor, at the discretion of the Division, the following:

(i) interceptor flow(s) at specific locations;

(ii) the number of building permits issued and/or new sewer taps contracted for; and

(iii) process control parameters and management and process control strategies employed by the owner and operator to ensure that the capacity of the treatment works to remove pollutants as specified in the permit is not exceeded and that the permit limitations and conditions are consistently met.

(f) Calculations for all limitations that require the averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Division in the permit.

(g) The permittee shall provide access to the Division to sample the discharge at a point after the final treatment process but prior to the discharge mixing with state waters upon presentation of proper credentials.

(i) If the permittee monitors at the point of discharge any pollutant limited by the permit more frequently than required by the permit, using approved test procedures or as specified in the permit, the result of this monitoring shall be included in the calculation and reporting of data to the Division.

(h) Any records of monitoring activities and results shall include for all samples:

(i) The date, type, exact place, and time of sampling or measurements;

(ii) The individual(s) who performed the sampling or measurements;

(iii) The date(s) analyses were performed;

(iv) The individual(s) who performed the analyses;

(v) The analytical techniques or methods used; and

(vi) The results of such analyses.

(j) All sampling shall be performed by the permittee according to specified methods in 40 CFR Part 136; methods approved by EPA pursuant to 40 CFR Part 136; or methods approved by the Division, in the absence of a method specified in or approved pursuant to 40 CFR Part 136.

(k) The permittee shall retain for a minimum of three (3) years records of all monitoring information, including all original strip chart recordings for continuous monitoring instrumentation, all calibration and maintenance records copies of all reports required by this permit and records of all data used to complete the application for this permit. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the permittee or when requested by the Division or Regional Administrator.

(l) For all permittees monitoring, recording, and reporting requirements of discharges under the permit shall be as specified by the Division. Reporting shall be as frequent as the Division shall reasonably determine to be necessary.

(m) All reports required by permits and any other report or information submitted to the Division shall be signed and certified in accordance with the signature and certification requirements set forth in section 61.4(1). Falsification and tampering of information may result in criminal liability pursuant to section 25-8-610 C.R.S.

(n) Reporting by municipal separate storm sewer systems. The operator of a large or medium municipal separate storm sewer system or a municipal separate storm sewer that has been designated by the Division under 61.3(2)(e)(vii) must submit an annual report by the anniversary of the date of the issuance of the permit for such system. The report shall include:

(i) The status of implementing the components of the stormwater management program that are established as permit conditions;

(ii) Proposed changes to the stormwater management programs that are established as permit condition. Such proposed changes shall be consistent with 61.4(3)(c)(ii)(D);

(iii) Revisions, if necessary, to the assessment of controls and the fiscal analysis reported in the permit application under 61.4(3)(c)(ii)(E) and (F);

(iv) A summary of data, including monitoring data, that is accumulated throughout the reporting year;

(v) Annual expenditures and budget for year following each annual report;

(vi) A summary describing the number and nature of enforcement actions, inspections, and public education programs; and

(vii) Identification of water quality improvements or degradation.

(o) Reporting for stormwater discharges associated with industrial activity.

(i) Requirements to report monitoring results for stormwater discharges associated with industrial activity that are subject to an effluent limitation guideline shall be established on a case-by-case basis with a frequency dependent on the nature and effect of the discharge but in no case less than once a year.

(ii) Requirements to report monitoring results for stormwater discharges associated with industrial activity (other than those addressed in 61.8(4)(o)(i)) shall be established on a case-by-case basis with a frequency dependent on the nature and effect of the discharge. At a minimum, a permit for such a discharge may require:

(A) The discharger to conduct an annual inspection of the facility site to identify areas contributing to a stormwater discharge associated with industrial activity and evaluate whether measures to reduce pollutant loadings identified in a stormwater pollution prevention plan are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed;

(B) The discharger to maintain for a period of three years a record summarizing the results of the inspection and a certification that the facility is in compliance with the plan and the permit, and identifying any incidents of non-compliance;

(C) Such report and certification be signed in accordance with 61.4(1)(e)and(f));

(D) Permits for stormwater discharges associated with industrial activity from inactive mining operations may, where annual inspections are impracticable, require certification once every three years by a Registered Professional Engineer that the facility is in compliance with the permit, or alternative requirements.

(p) Permits shall require that the permittee report all instances of noncompliance at least annually.

61.8(5) <u>NOTIFICATION REQUIREMENTS</u>

(a) The permittee shall give advance notice to the Division of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

(b) Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule in the permit shall be submitted no later than fourteen (14) days following each scheduled date, unless otherwise provided by the Division.

(c) If the permittee knows in advance of the need for a bypass, the permittee shall submit prior notice, if possible, at least ten (10) days before the date of the bypass.

(d) The permittee shall report the following circumstances, orally, within twenty-four (24) hours of becoming aware of the circumstances, and, in writing, as provided in paragraph (e) of this section.

(i) Circumstances leading to any noncompliance that may endanger health or the environment;

(ii) Circumstances leading to any unanticipated bypass that exceeds any effluent limitation in the permit;

(iii) Circumstances leading to any upset which exceeds any effluent limitation in the permit; and

(iv) Any violation of a maximum daily discharge limitation for any of the pollutants listed by the Division in the permit to be reported within twenty-four (24) hours. This list shall include any toxic pollutant or hazardous substance, or any pollutant specifically identified as the method to control any toxic pollutant or hazardous substance.

(e) The permittee shall report to the Division, in writing, any circumstance subject to the 24-hour notification requirement described in paragraph (d) of this section. The written report shall be submitted to the Division within five (5) working days of the time the permittee becomes aware of said circumstances. The written report shall contain a description of the noncompliance and its cause; the period of noncompliance; including exact dates and times, and if the noncompliance

has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

(f) The permittee shall report all instances of noncompliance not subject to the notification requirements described in paragraphs (c) and (d) of this section, at the time the monitoring reports (DMR) required by section 61.8(4) are submitted. The reports shall contain the information listed in paragraph (e) of this section.

(g) The permittee shall notify the Division, in writing, thirty (30) days in advance of a proposed transfer of permit as provided in section 61.8(6) of this regulation.

(h) The permittee shall notify the Division, in writing, of any planned physical alterations or additions to the permitted facility. Notice is required only when:

(i) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged; or

(ii) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported pursuant to an approved land application plan.

(i) Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Division, the permittee shall promptly submit such facts or information.

(j) The permittee's notification of all anticipated noncompliance does not stay any permit condition.

(k) All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Division as soon as they know or have reason to believe:

(i) That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

(A) One hundred micrograms per liter (100 µg/l);

(B) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2.4-dinitrophenol and 2-methyl-4.6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

(C) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with section 61.4(2)(f).

(D) The level established by the Division in accordance with 40 CFR 122.44(f).

(ii) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

(A) Five hundred micrograms per liter (500 µg/l);

(B) One milligram per liter (1 mg/l) for antimony; and

(C) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with section 61.4(2)(f).

(D) The level established by the Division in accordance with 40 CFR 122.44(f).

61.8(6) <u>TRANSFER OF PERMITS</u>

(a) Except as provided in paragraph (b) of this section, a permit may be transferred by a permittee only if the permit has been modified or revoked and reissued as provided in section 61.8(8), to identify the new permittee and to incorporate such other requirements as may be necessary under the Federal Act, the Act, or these regulations.

(b) A permit may be automatically transferred to a new permittee if:

(i) The current permittee notifies the Division in writing at least 30 days in advance of the proposed transfer date in paragraph (b)(ii) of this section;

(ii) The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage and liability between them; and

(iii) The Division does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit.

61.8(7) <u>TERMS AND CONDITIONS APPLICABLE TO DOMESTIC WASTEWATER TREATMENT WORKS</u>

(a) If the permitted discharge is from a domestic wastewater treatment works, whenever deemed necessary to assure compliance with the Federal Act, the Act or State regulations, the Division shall include the following as permit conditions:

(i) The permittee shall require pretreatment (if pretreatment standards are promulgated by the State or EPA) of effluent from industrial, governmental, or commercial activities before such effluent is received into the gathering and collection system of the permittee as required in the Pretreatment Regulations;

(ii) The permittee shall include specified terms and conditions of its permit in all contracts for receipt by the permittee of any effluent not required to be received by the domestic permittee;

(iii) The permittee shall initiate engineering and financial planning for the expansion of the domestic wastewater treatment works whenever throughput reaches eighty (80) percent of the treatment capacity;

(iv) The permittee shall commence construction of such domestic wastewater treatment works expansion whenever throughput reaches ninety-five (95) percent of the treatment capacity or, in the case of a municipality, either commence such construction or cease issuance of building permits within such municipality until such construction is commenced; except that building permits may continue to be issued for any construction which would not have the effect of increasing the input of wastewater to the sewage treatment works of the municipality involved. Throughput and treatment capacity shall be determined by the Division;

(v) Where unusual circumstances (e.g. extraordinary storm event, broken sewer line, unanticipated or unapproved loading) result in throughput exceeding 80% of treatment

capacity, the permittee may, in lieu of initiating planning for expansion of the domestic wastewater treatment works, submit a report to the Division that demonstrates to the Division's satisfaction that it is extremely unlikely that the event will reoccur, or even if the event were to reoccur, 95% of the treatment capacity would not be exceeded.

(vi) Where unusual circumstances (e.g. extraordinary storm event, broken sewer line, unanticipated or unapproved loading) result in throughput exceeding 95% of treatment capacity, the permittee may, in lieu of initiating construction of expansion of the domestic wastewater treatment works, submit a report to the Division that demonstrates to the Division's satisfaction that the domestic wastewater treatment works was in compliance at all times during the event and that it is extremely unlikely that the event will reoccur.

(vii) Where the permittee submits a report pursuant to (v) or (vi), above, and the Division, upon review of such report, determines in writing to the permittee that the report does not support the required findings, the permittee shall initiate planning and/or construction of the domestic wastewater treatment works, as appropriate.

(viii) Inclusion of the requirement authorized by paragraph (iii) above shall be presumed unnecessary to assure compliance upon a showing that the area served by a domestic wastewater treatment works has a stable or declining population; but this provision shall not be construed as preventing periodic review by the Division should it be felt that growth is occurring or will occur in the area.

(ix) The permittee shall install a flow measuring device(s) to determine the throughput and effluent quantities of the wastewater system. The flow measuring device(s) must comply with the requirements for the State effluent limitations adopted in 5 CCR 1002-62, Regulation No. 62.

(b) Any condition set forth in the approval of the site location may become a condition of the permit, if identified specifically in the permit. Any site approval condition that is included in a permit pursuant to these regulations shall only be subject to enforcement through the Colorado Water Quality Control Act, section 25-8-101 C.R.S., et seq.

(c) The permittee shall provide adequate notice to the Division of the following:

(i) Any new introduction of pollutants into the domestic wastewater treatment works from an indirect discharger which would be subject to Section 301 and 306 of the Clean Water Act if it were directly discharging those pollutants. A new introduction of pollutants for purposes of this sub-paragraph is the introduction of any pollutant for which there is no effluent limitation or monitoring requirement in the domestic wastewater treatment works permit; and

(ii) Any substantial change in the volume or character of pollutants being introduced into that domestic wastewater treatment works by a source introducing pollutants into the domestic wastewater treatment works at the time of issuance of the permit. A substantial change, for purposes of this subsection, is a level of change that has a reasonable probability of affecting of the permittee's ability to comply with its permit conditions or to cause an exceedance of receiving stream water quality standards.

(iii) For purposes of this paragraph, adequate notice shall include information on the quality and quantity of effluent introduced into the domestic wastewater treatment works, and any anticipated impact of the change on the quantity or quality of effluent to be discharged from the domestic wastewater treatment works. Notice under this paragraph shall be provided within thirty (30) days of the time when the permittee knows or should have reasonably known that the new introduction or substantial change has occurred.

(d) The permittee shall require any industrial user of the treatment works to comply with the requirements of sections 63.8 through 63.13 of the Pretreatment Regulations, Regulation No. 63. At the discretion of the Division, where necessary to insure compliance with the permit, domestic wastewater treatment works' permittees shall develop and implement a pretreatment program. Pretreatment program requirements are defined at sections 9 and 10 of the Pretreatment Regulation, Regulation No. 63.

(e) For all domestic wastewater treatment works, the permit shall contain conditions requiring the proper disposal of sludge including biosolids, in accordance with State and federal regulations.

61.8(8) <u>PERMIT MODIFICATION, SUSPENSION, REVOCATION AND REISSUANCE AND TERMINATION</u>

(a) A permit may be modified, suspended, or terminated in whole or in part during its term for reasons determined by the Division including, but not limited to, the following:

(i) Violation of any terms or conditions of the permit;

(ii) Obtaining a permit by misrepresentation or failing to disclose any fact which is material to the granting or denial of a permit or to the establishment of terms or conditions of the permit; or

(iii) Materially false or inaccurate statements or information in the permit application or the permit.

(iv) A determination that the permitted activity endangers human health or the classified or existing uses of state waters and can only be regulated to acceptable levels by permit modifications or termination.

(b) A permit may be modified in whole or in part for the following causes, provided that such modification complies with the provisions of section 61.10:

(i) There are material and substantial alterations or additions to the permitted facility or activity which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit.

(ii) The Division has received information that was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of different permit conditions at the time of issuance. For general permits, this cause includes information indicating that cumulative effects on the environment are unacceptable. For permits issued to new sources or new dischargers, this cause includes information derived from effluent testing required under section 61.4(7)(e). This provision allows a modification of the permit to include conditions that are less stringent than the existing permit only to the extent allowed under section 61.10.

(iii) The standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued. Permits may be modified during their terms for this cause only as follows:

(A) The permit condition requested to be modified was based on a promulgated effluent limitation guideline, EPA approved water quality standard, or an effluent limitation set forth in 5 CCR 1002-63, Regulation No. 63, et seq.; and

(B) EPA has revised, withdrawn, or modified that portion of the regulation or effluent limitation guideline on which the permit condition was based, or has approved a

Commission action with respect to the water quality standard or effluent limitation on which the permit condition was based; and

(C) The modification takes place after the notice of final action by which the EPA effluent limitation guideline, water quality standard, or effluent limitation is revised, withdrawn, or modified; or

(D) For judicial decisions, a court of competent jurisdiction has remanded and stayed EPA promulgated regulations or effluent limitation guidelines, if the remand and stay concern that portion of the regulations or guidelines on which the permit condition was based and a request is filed by the permittee in accordance with this Regulation, within ninety (90) days of judicial remand.

(iv) The Division determines that good cause exists to modify a permit condition because or events over which the permittee has no control and for which there is no reasonable available remedy.

(v) Where the Division has completed, and EPA has approved, a total maximum daily load (TMDL) which includes a wasteload allocation for the discharge(s) authorized under the permit.

(vi) The permittee has received a variance.

(vii) When required to incorporate applicable toxic effluent limitation or standards adopted pursuant to section 307(a) of the Federal act.

(viii) When required by the reopener conditions in the permit

(ix) As necessary under 40 CFR 403.8(e), to include a compliance schedule for the development of a pretreatment program.

(x) When the level of discharge of any pollutant that is not limited in the permit exceeds the level that can be achieved by the technology-based treatment requirements appropriate to the permittee under section 61.8(2)(a).

(xi) To establish a pollutant notification level required in section 61.8(5).

(xii) To correct technical mistakes, such as errors in calculation, or mistaken interpretations of law made in determining permit conditions, to the extent allowed in section 61.10.

(xiii) When required by a permit condition to incorporate a land application plan for beneficial reuse of biosolids, to revise an existing land application plan, or to add a land application plan.

(xiv) When another State whose waters may be affected by the discharge has not been notified.

(xv) For any other cause provided in section 61.10.

(c) At the request of a permittee or any other interested person, the Division may modify or terminate a permit and issue a new permit if the following conditions are met:

(i) The Regional Administrator has been notified of the proposed modification or termination and does not object in writing within thirty (30) days of receipt of notification,

(ii) The Division finds that the permittee or interested person has shown reasonable grounds consistent with the Federal and State statutes and regulations for such modifications or termination;

(iii) Requirements of section 61.15 have been met, and

(iv) Requirements of public notice have been met.

(d) For permit modification, termination, or revocation and reissuance, the Division may request additional information from the permittee. In the case of a modified permit, the Division may require the submission of an updated application. In the case of revoked and reissued permit, the Division shall require the submission of a new application.

(e) Permit modification (except for minor modifications), termination or revocation and reissuance actions shall be subject to the requirements of sections 61.5(2), 61.5(3), 61.6, 61.7 and 61.15. The Division shall act on a permit modification request, other than minor modifications requests, within 180 days of receipt thereof. Except for minor modifications, the terms of the existing permit govern and are enforceable until the newly issued permit is formally modified or revoked and reissued following public notice.

(f) Upon consent by the permittee, the Division may make minor permit modifications without following the requirements of sections 61.5(2), 61.5(3), 61.7 and 61.15 of these regulations. Minor modifications to permits are limited to:

(i) Correcting typographical errors; or

(ii) Increasing the frequency of monitoring or reporting by the permittee; or

(iii) Changing an interim date in a schedule of compliance, provided the new date of compliance is not more than 120 days after the date specific in the existing permit and does not interfere with attainment of the final compliance date requirement; or

(iv) Allowing for a transfer in ownership or operational control of a facility where the Division determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittees has been submitted to the Division; or

(v) Changing the construction schedule for a discharger which is a new source, but no such change shall affect a discharger's obligation to have all pollution control equipment installed and in operation prior to discharge; or

(vi) Deleting a point source outfall when the discharge from that outfall is terminated and does not result in discharge of pollutants from other outfalls except in accordance with permit limits; or

(vii) Incorporating conditions of a POTW pretreatment program that has been approved in accordance with the procedures in 40 CFR 403.11 (or a modification thereto that has been approved in accordance with the procedures in 40 CFR 403.18) as enforceable conditions of the POTW's permits.

(g) When a permit is modified, only the conditions subject to modification are reopened. If a permit is revoked and reissued, the entire permit is reopened and subject to revision and the permit is reissued for a new term.

(h) The filing of a request by the permittee for a permit modification, revocation and reissuance or termination does not stay any permit condition.

(i) All permit modifications and reissuances are subject to the antibacksliding provisions set forth in 61.10 (e) through (i).

(j) If cause does not exist under this section, the Division shall not modify or revoke and reissue the permit.

61.8(9) EFFECT OF PERMIT ISSUANCE

(a) The issuance of a permit does not convey any property rights or any exclusive privilege.

(b) The issuance of a permit does not authorize any injury to person or property or any invasion of personal rights, nor does it authorize the infringement of federal, state, or local laws or regulations.

(c) Except for any toxic effluent standard or prohibition imposed under Section 307 of the Federal act or any standard for biosolids use or disposal under Section 405(d) of the Federal act, compliance with a permit during its term constitutes compliance, for purposes of enforcement, with Sections 301, 302, 306, 318, 403, and 405(a) and (b) of the Federal act. However, a permit may be modified, revoked and reissued, or terminated during its term for cause as set forth in section 61.8(8).

(d) Compliance with a permit condition which implements a particular standard for biosolids use or disposal shall be an affirmative defense in any enforcement action brought for a violation of that standard for biosolids use or disposal.

61.8(10) DISCHARGES TO DITCHES AND OTHER MAN-MADE CONVEYANCE STRUCTURES

(a) A permit for a point source discharge to a ditch or other man-made conveyance structure shall include such provisions as are necessary to:

(i) protect agricultural, domestic, industrial, and municipal beneficial uses made of the waters, which use or uses were decreed and in existence prior to the inception of the discharge.

(ii) assure compliance with any applicable water quality standards for waters of the state that may be affected by the discharge.

(b) Issuance of a permit for a point source discharge to a ditch or other man-made conveyance structure does not relieve the applicant from responsibility to acquire any property rights necessary to conduct its discharge into and through such structure and does not itself create any such property rights. Such statement shall be included in each applicable permit.

(c) Only that portion of the discharge (flow rates, quality and quantity) in existence prior to a subsequent decreed and existing use (flow rate, quality, quantity), and any changes having only a de minimis effect upon any such use, shall be exempt from requirements necessary for the protection of that subsequent decreed and existing use.

61.8(11) CONDITIONS FOR PHASE II MUNICIPAL STORMWATER PERMITS

(a) An individual permit or general stormwater permit certification issued to a regulated small MS4 shall contain the following requirements, at a minimum:

(i) At a minimum, the MS4 permit will require that the regulated small MS4 develop, implement, and enforce a stormwater management program designed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Colorado Water Quality Control Act (25-8-101 et seq., C.R.S.). The stormwater management program must include the minimum control measures described in subsection (ii) of this section, unless the small MS4 applies for a permit under 61.4(3)(c). Implementation of BMPs consistent with the provisions of the stormwater management program required pursuant to this section and the provisions of the permit required pursuant to subsection (ii) constitutes compliance with the standard of reducing pollutants to the MEP.

The initial permit for the regulated small MS4 will specify a time period of up to five (5) years from the date of permit issuance for development and implementation of the program.

(ii) Minimum control measures (management programs).

(A) Public education and outreach on stormwater impacts. The permittee must implement a public education program to:

(I) distribute educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff; and

(II) inform businesses and the general public of impacts associated with illegal discharges and improper disposal of waste.

(B) Public involvement/participation. The permittee must, at a minimum, comply with State and local public notice requirements when implementing the stormwater management programs required under the permit. Notice of all public hearings should be published in a community publication or newspaper of general circulation, to provide opportunities for public involvement that reach a majority of citizens through the notification process.

(C) Illicit discharge detection and elimination. The permittee must develop, implement and enforce a program to detect and eliminate illicit discharges (as defined at 61.2) into the permittee's small MS4.

(I) The permittee must:

(a) Develop, if not already completed, a storm sewer system map, showing the location of all municipal storm sewer outfalls and the names and location of all state waters that receive discharges from those outfalls;

(b) To the extent allowable under State or local law, effectively prohibit, through ordinance or other regulatory mechanism, non-stormwater discharges into the storm sewer system, and implement appropriate enforcement procedures and actions; and

(c) Develop and implement a plan to detect and address non-stormwater discharges, including illicit discharges and illegal dumping, to the system. The plan must include the following

three components: procedures for locating priority areas likely to have illicit discharges; procedures for tracing the source of an illicit discharge; and procedures for removing the source of the discharge.

(II) The permittee needs to address the following categories of non-stormwater discharges or flows (i.e., illicit discharges) only if the permittee identifies them as significant contributors of pollutants to the permittee's small MS4: landscape irrigation, lawn watering, diverted stream flows, irrigation return flow, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)), uncontaminated pumped ground water, springs, flows from riparian habitats and wetlands, water line flushing, discharges from potable water sources, foundation drains, air conditioning condensation, water from crawl space pumps, footing drains, individual residential car washing, dechlorinated swimming pool discharges, and street wash water (discharges or flows from fire fighting activities are excluded from the effective prohibition against non-stormwater and need only be addressed where they are identified as significant sources of pollutants to state waters).

(D) Construction site stormwater runoff control.

(I) The permittee must develop, implement, and enforce a program to reduce pollutants in any stormwater runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of pollutants in stormwater discharges from construction activity disturbing less than one acre must be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. If the Division waives requirements for stormwater discharges associated with a small construction activity in accordance with 61.3(2)(f)(ii)(B), the permittee is not required to develop, implement, and/or enforce its program to reduce pollutant discharges from such a site.

(II) The program must be developed and implemented to assure adequate design, implementation, and maintenance of BMPs at construction sites within the MS4 to reduce pollutant discharges and protect water quality. The program must include the development and implementation of, at a minimum:

(a) An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State or local law;

(b) Requirements for construction site operators to implement appropriate erosion and sediment control BMPs;

(c) Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;

(d) Procedures for site plan review which incorporate consideration of potential water quality impacts;

(e) Procedures for receipt and consideration of information submitted by the public, and

(f) Procedures for site inspection and enforcement of control measures.

(E) Post-construction stormwater management in new development and redevelopment

(I) The permittee must develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the small MS4. The program must ensure that controls are in place that would prevent or minimize water quality impacts.

(II) The permittee must:

(a) Develop and implement strategies which include a combination of structural and/or non-structural BMPs appropriate for the community;

(b) Use an ordinance or other regulatory mechanism to address postconstruction runoff from new development and redevelopment projects to the extent allowable under State or local law; and

(c) Ensure adequate long-term operation and maintenance of BMPs.

(F) Pollution prevention/good housekeeping for municipal operations.

(I) The permittee must develop and implement an operation and maintenance program that includes an employee training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. The program must also inform public employees of impacts associated with illegal discharges and improper disposal of waste from municipal operations. The program must prevent and/or reduce stormwater pollution from facilities such as streets, roads, highways, municipal parking lots, maintenance and storage yards, fleet or maintenance shops with outdoor storage areas, salt/sand storage locations and snow disposal areas operated by the permittee, and waste transfer stations, and from activities such as park and open space maintenance, fleet and building maintenance, street maintenance, new construction of municipal facilities, and stormwater system maintenance, as applicable.

(iii) If an existing qualifying local program requires the permittee to implement one or more of the minimum control measures of section 61.8(11)(a)(ii), the Division may include conditions in the permit that direct the permittee to follow that qualifying program's requirements rather than the requirements of section 61.8(11)(a)(ii). A qualifying local program is a local or State municipal stormwater management program that imposes, at a minimum, the relevant requirements of section 61.8(11)(a)(ii). The permit may be

reopened and modified to include the requirement to implement a minimum control measure if the other entity fails to implement it.

(iii) If the permittee obtains coverage under a general permit, the permittee is not required to meet any measurable goal(s) identified in the permittee's application in order to demonstrate compliance with the minimum control measures in section 61.8(11)(a)(ii)(D) through (F) unless, prior to submitting the permittee's application, the Division or EPA has provided or issued a menu of BMPs that addresses each such minimum measure. Even if no regulatory authority issues the menu of BMPs, however, the permittee still must comply with other requirements of the general permit, including good faith implementation of BMPs designed to comply with the minimum measures. The permittee may choose BMPs from the menu or select others that satisfy the minimum control measures.

(iv) The permittee must comply with any more stringent effluent limitations in the permit, including permit requirements that modify, or are in addition to, the minimum control measures, based on an approved total maximum daily load (TMDL) or equivalent analysis. The Division may include such more stringent limitations based on a TMDL or equivalent analysis that determines such limitations are needed to protect water quality.

(v) The permittee must comply with other applicable CDPS permit requirements, standards and conditions established in the individual or general permit, developed consistent with the provisions of section 61.8, as appropriate.

(vi) A permittee may rely on another entity to satisfy its CDPS permit obligations to implement a minimum control measure, or component thereof, if:

(A) The other entity, in fact, implements the control measure;

(B) The particular control measure, or component thereof, is at least as stringent as the corresponding CDPS permit requirement; and

(C) The other entity agrees to implement the control measure on behalf of the permittee. In the reports that the permittee submits under subsection (viii)(C) of this section, it must also specify that the permittee relies on another entity to satisfy some of its permit obligations. The permittee remains responsible for compliance with its permit obligations if the other entity fails to implement the control measure (or component thereof).

(vii) Evaluation and assessment.

(A) Evaluation. The permittee must evaluate program compliance, the appropriateness of its identified BMPs, and progress towards achieving its identified measurable goals. A summary of this evaluation shall be included in the permittee's annual report.

(B) Recordkeeping. The permittee must keep records required by the permit for at least three (3) years. The permittee must submit their records to the Division only when specifically asked to do so. The permittee must make the records, including a description of the permittee's stormwater management program, available to the public at reasonable times during regular business hours (see 61.5(4) for confidentiality provision). (The permittee may assess a reasonable charge for copying. The permittee may require a member of the public to provide advance notice.)

(C) Reporting. The permittee must submit annual reports to the Division for the permittee's first permit term. For subsequent permit terms, the permittee must submit reports in years two and four unless the Division requires more frequent reports. The permittee's report must include:

(I) The status of compliance with permit conditions, an assessment of the appropriateness of the permittee's identified BMPs and progress towards achieving the permittee's identified measurable goals for each of the minimum control measures;

(II) Results of information collected and analyzed, including monitoring data, if any, during the reporting period;

(III) A summary of the stormwater activities the permittee plans to undertake during the next reporting cycle;

(IV) A change in any identified BMPs or measurable goals for any of the minimum control measures; and

(V) Notice that the permittee is relying on another governmental entity to satisfy some of the permittee's permit obligations (if applicable).

(b) The Division may determine monitoring requirements for the permittee in accordance with State monitoring plans appropriate to the permittee's watershed. Participation in a group monitoring program is encouraged.

61.8(12) <u>QUALIFYING LOCAL PROGRAMS</u>

(a) For stormwater discharges associated with small construction activity identified in 61.3(2)(f)(ii)(A), the Division may include permit conditions that incorporate qualifying local erosion and sediment control program requirements by reference. A qualifying local erosion and sediment control program is one that includes:

(i) Requirements for construction site operators to implement appropriate erosion and sediment control best management practices;

(ii) Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;

(iii) Requirements for construction site operators to develop and implement a stormwater management plan. (A stormwater management plan includes site descriptions, descriptions of appropriate control measures, copies of approved local requirements, maintenance procedures, inspection procedures, and identification of non-stormwater discharges); and

(iv) Requirements to submit a site plan for review that incorporates consideration of potential water quality impacts.

(b) For stormwater discharges from construction activity identified in 61.3(2)(e)(iii)(J), the Division may include permit conditions that incorporate qualifying local erosion and sediment control program requirements by reference. A qualifying local erosion and sediment control program is one that includes the elements listed in section (a) above, and any additional requirements necessary to achieve the applicable technology-based standards of "best available technology" and "best conventional technology" based on the best professional judgment of the permit writer.

61.9 OTHER TYPES OF PERMITS

61.9(1) TEMPORARY AND EXTENDED PERMITS

(a) If the Division has not issued or denied a permit within one hundred eighty days after receipt of a complete and accurate permit application, unless this time limit is waived or extended by the applicant, or if the Division determines at any time after receiving an application that it cannot issue a permit prior to the expiration of an existing permit, the Division shall issue a temporary permit or the existing permit shall be extended pursuant to the operation of section 24-4-104 C.R.S.

(b) All temporary permits shall comply with the water quality standards and shall contain such conditions as are necessary to protect the public health and shall not be less restrictive than required by state and federal effluent guidelines unless a schedule of compliance or a variance is set forth therein. A temporary permit shall be issued for a period not to exceed two (2) years and shall expire as provided in the issuance or denial of the final permit.

(c) An applicant may appeal the decision of the Division with respect to the temporary permit in accordance with section 21.4A(3)(b) of the Procedural Regulations, Regulation No. 21.

(d) If and when the terms and conditions of a temporary permit are appealed in the instance of a new permit for a proposed discharge, the applicant is prohibited from discharging until a suitable temporary or final permit is issued unless the permittee accepts the permit subject to appeal. In the instance of an appeal of an extended existing permit, the terms and conditions of the extended permit remain in effect and are enforceable pursuant to section 61.7(1) of these regulations until final action on the permit is taken by the Division.

(e) If an existing permit is extended or a temporary permit issued pursuant to section 25-8-502 (a)(l) or 24-4-104 C.R.S., the temporary or extended permit shall be noticed n accordance with section 25-8-502, C.R.S., and section 61.5(2) of these regulations.

61.9(2) GENERAL PERMITS

(a) Coverage. The Division may issue a general permit to cover a category of discharges, except those covered by individual permits, within a geographic area which shall correspond to existing geographic or political boundaries. The general permit shall be written to regulate, either

(i) stormwater point source; or

(ii) a category of point sources other than stormwater point sources if the sources all:

(A) involve the same or substantially similar types of operations;

(B) discharge the same types of wastes;

(C) require the same effluent limitations or operating conditions;

(D) require the same or similar monitoring; and

(E) in the opinion of the Director, are more appropriately controlled under a general permit than under individual permits.

(b) Administration.

(i) In general.

General permits may be issued, modified, revoked and reissued, or terminated in accordance with 61.5(2), 61.5(3). 61.5(4), 61.6, 61.7,61.7(1), 61.8 and 61.8(3).

(ii) Authorization to discharge.

(A) Except as provided in 61.9(2)(b)(ii)(E) and (F), discharges (or treatment works treating domestic sewage) seeking coverage under a general permit shall submit to the Division a written application to be covered by the general permit. A discharger (or treatment works treating domestic sewage) who fails to submit an application in accordance with the terms of the permit is not authorized to discharge under the terms of the general permit unless the general permit, in accordance with 61.9(2)(b)(ii)(E), contains a provision that an application is not required or the Division notifies a discharger (or treatment works treating domestic sewage) that it is covered by a general permit in accordance with 61.9(2)(b)(ii)(F). A complete and timely application, to be covered in accordance with general permit requirements, fulfills the requirements for permit applications for coverage under a general permit unless the Division notifies the applicant that an individual permit is required.

(B) The contents of the application shall be specified in the general permit and shall require the submission of information necessary for adequate program implementation, including at a minimum, the legal name and address of the owner or operator, the facility name and address, type of facility or discharges, and the receiving stream(s). All applications shall be signed in accordance with 61.4(1).

(C) General permits shall specify the deadlines for submitting applications to be covered and the date(s) when a discharger is authorized to discharge under the permit;

(D) General permits shall specify whether a discharger (or treatment works treating domestic sewage) that has submitted a complete and timely application to be covered in accordance with the general permit and that is eligible for coverage under the permit, is authorized to discharge, in accordance with the permit either upon receipt of the application by the Division, after a waiting period specified in the general permit, on a date specified in the general permit, or upon receipt of notification of inclusion by the Division. Coverage may be terminated or revoked in accordance with 61.9(2)(b)(iii).

(E) Discharges other than discharges from publicly owned treatment works, combined sewer overflows, municipal separate storm sewer systems, primary industrial facilities, and stormwater discharges associated with industrial activity, may, at the discretion of the Division, be authorized to discharge under a general permit without submitting an application where the Division finds that an application requirement would be inappropriate. In making such a finding, the Division shall consider: the type of discharge, the expected nature of the discharge; the potential for toxic and conventional pollutants in the discharges; the expected volume of the discharges; other means of identifying discharges covered by the permit; and the estimated number of discharges to be covered by the permit. The Division shall provide in the public notice of the general permit the reasons for not requiring an application.

(F) The Division may notify a discharger (or treatment works treating domestic sewage) that it is covered by a general permit, even if the discharger (or treatment works treating domestic sewage) has not submitted an application to

be covered. A discharger (or treatment works treating domestic sewage) so notified may request an individual permit under 61.9(2)(b)(iii).

(iii) Requiring an individual permit.

(A) The Director may require any person authorized by a general permit to apply for and obtain an individual permit. Cases where an individual permit may be required include the following:

(I) the discharge is a significant contributor of pollution;

(II) the discharge is not in compliance with the conditions of the general permit;

(III) a change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source; or

(IV) effluent limitation guidelines are promulgated for point sources covered by the general permit;

(V) a water quality management plan containing requirements applicable to such point sources is approved; and

(VI) circumstances have changed since the time of the request to be covered so that the discharger is no longer appropriately controlled under the general permit, or either a temporary or permanent reduction or elimination of the authorized discharge is necessary.

(B) Any owner or operator authorized by a general permit may request to be excluded from the coverage of the general permit by applying for an individual permit, as required in 61.4.

(C) When an individual permit is issued to an owner or operator otherwise subject to a general permit, the applicability of the general permit to the individual permittee is automatically terminated on the effective date of the individual permit.

(D) A source excluded from a general permit solely because it already has an individual permit may request that the individual permit be revoked, and that it be covered by the general permit. Upon revocation of the individual permit, the general permit shall apply to the source.

(c) Any owner or operator shall apply for coverage in a general permit category, prior to beginning the activity and within the time frame specified in the general permit, on application forms supplied by the Division.

(d) The Division shall review the application and certify or deny the request based on criteria established by the Division for the category.

(e) Procedures will also include opportunity for any owner or operator to exclude himself or herself from the general permit process. Any such excluded owners or operators would then be subject to the individual permit program.

(f) General permits will include all conditions determined necessary by the State for protection of the waters of the State.

(g) General permits may be issued for a term of not more than five (5) years, and may be modified, suspended, or terminated by the permit-issuing agency if necessary to effectively implement protection of waters of the State. Termination may apply to individual owners or operators, to several owners or operators, or to an entire GPPA. In cases where the termination does not affect all owners and operators, the general permit shall remain in effect with respect to those unaffected owners and operators.

61.10 MODIFICATION AND RENEWAL OF PERMITS - ANTIBACKSLIDING

(a) Should the permittee desire to continue the discharge after the expiration of the period of the permit, the permittee shall submit a complete renewal application form. A complete renewal application shall consist of:

(i) A statement that the permittee is in compliance with or has substantially complied with all the terms, conditions, requirements, and schedules of compliance of the expiring permit;

(ii) A description of any substantial changes related to the facility or discharge occurring since the issuance of the existing permit, which materially affect the quantity or quality of the permitted effluent; and

(iii) Any additional information that the Division may find reasonably necessary to evaluate the renewal application.

(b) The Division may incorporate in a renewal permit any changes necessitated by statutory or regulatory revisions or material alterations affecting the quality of the permittee's effluent. Renewal applications review shall follow the standards of sections 24-4-102 and 24-4-104, C.R.S.

(c) All sections of these regulations pertaining to the issuance of permits except as provided in this section shall apply to any request for a permit renewal.

(d) Where the applicant has made timely and sufficient application for the renewal of a permit, if the application is denied and an adjudicatory hearing is timely requested, the Division's determination shall not be final until final action by the Division after the adjudicatory hearing.

(e) A permit may not be renewed, reissued, or modified to contain effluent limitations adopted pursuant to section 25-8-503(1)(b) (BPJ), which are less stringent than the comparable effluent limitations or standards in the previous permit, unless any one of the following exceptions is met and the conditions of paragraph (g) of this section are met:

(i) Material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of less stringent effluent limitations; or

(ii) Information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation or standard at the time of permit issuance; or

(iii) The Division determines that technical mistakes or mistaken interpretations of law were made in issuing the permit, which justified relaxation of the effluent limitations or standards; or

(iv) A less stringent effluent limitation or standard is necessary because of events over which the permittee has no control and for which there is not reasonable available remedy; or

(v) The permittee has received a permit variance; or

(vi) The permittee has installed the treatment facilities required to meet the effluent limitations in the previous permit and has properly operated and maintained the facilities but has nevertheless been unable to achieve the previous effluent limitations, in which case, the limitations in the renewed, reissued, or modified permit may reflect the level of pollutant control actually achieved (but shall not be less stringent than required by effluent guidelines in effect at the time of permit renewal, re-issuance, or modification).

(f) A permit may not be renewed, reissued, or modified to contain effluent limitations adopted pursuant to 61.8(2)(b) or (c) that are less stringent than the comparable effluent limitations in the previous permit, unless any of the exceptions provided herein is met and the conditions of paragraph (g) of this section are met.

(i) In waters where the applicable water quality standard has not yet been attained, effluent limitations based on a total maximum daily load or other waste load allocation may be revised to be less stringent if the cumulative effect of all such revisions assures attainment of such water quality standard, or the designated use which is not being attained is removed in accordance with Regulation No. 31, section 6 of the Basic Standards.

(ii) In waters where the applicable water quality standard has been attained, effluent limitations based on a total maximum daily load, other waste load allocation, or any other permitting standard (including any water quality standard) may be revised to be less stringent if such revision is subject to and consistent with the antidegradation provisions of Regulation No. 31 section 8 of the Basic Standards. Consistency with Regulation No. 31, section 8 shall be presumed if the waters in question have been designated by the Commission as "use protected"; or

(iii) Whether or not the applicable water quality standard has been attained:

(A) Material and substantial alterations or additions to the permitted facility occurred after permit issuance which justified the application of less stringent effluent limitations; or

(B) Information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation or standard at the time of permit issuance; or

(C) The Division determines that technical mistakes or mistaken interpretations of law were made in issuing the permit, which justified relaxation of the effluent limitations or standards; or

(D) A less stringent effluent limitation is necessary because of events over which the permittee has no control and for which there is not reasonable available remedy; or

(E) The permittee has received a permit variance; or

(F) The permittee has installed the treatment facilities required to meet the effluent limitations in the previous permit and has properly operated and maintained the facilities but has nevertheless been unable to achieve the previous effluent limitations, in which case, the limitations in the reviewed, reissued, or modified permit may reflect the level of pollutant control actually achieved (but shall not be less stringent than required by effluent guidelines in effect at the time of permit renewal, reissuance, or modification).

(g) In no event may a permit with respect to which paragraphs (e) and (f) of this section apply be renewed, reissued, or modified to contain an effluent limitation or standard which is less stringent than required by federal effluent guidelines in effect at the time the permit is renewed, reissued, or modified. In no event may such a permit to discharge into state waters be renewed, reissued, or modified to contain a less stringent effluent limitation if the implementation of such limitation would result in a violation of an applicable water quality standard.

61.11 WATER QUALITY STANDARDS BASED PERMITS - DETERMINATION OF ECONOMIC, ENVIRONMENTAL, PUBLIC HEALTH, AND ENERGY IMPACT

(a) Where a permit requires treatment to levels necessary to protect water quality standards and beyond levels required by technology-based limitation requirements, only for the purpose of disclosure in the record of decision, the Division must determine whether or not any or all of the water-quality-standard based effluent limitations are reasonably related to the economic, environmental, public health, and energy impact to the public and affected persons, and are in furtherance of the policies set forth in sections 25-8-102 and 25-8-104, C.R.S. Where economic, environmental, public health, and energy impact to the public and affected persons have been considered in the classifications and standards process, permits written to meet the standards may be presumed to have taken into consideration economic factors unless:

(i) A new permit is issued where the discharge was not in existence at the time of the classification and standards rulemaking, or,

(ii) In the case of a continuing discharge, additional information or factors have emerged that were not anticipated or considered at the time of the classification and standards rulemaking.

(b) The Division's determination shall be based upon information available to it including previous water quality classification and standards hearing records, information provided during the public comment period on the draft permit, information provided by the permittee or in response to specific requests for information.

(i) Permit public notice shall serve as Division notice to the applicant and the general public of treatment requirements beyond technology-based effluent limitations.

(ii) The permit applicant is advised to make available to the Division any economic, environmental, public health, or energy impact information regarding the reasonableness of the need for beyond technology based limitations within the thirty day public notice period provided for in section 61.5(2)(d) of these regulations.

(iii) The Division may formally request additional information from the applicant beyond that provided in the initial information submittal. The permit applicant's response to the Division's request must be made within forty-five days of receipt of the request or by a mutually agreed upon date.

(iv) The Division may extend the existing permit or issue a temporary permit in accordance with sections 25-8-502(5)(a)(I) and 24-4-104, C.R.S. to allow the applicant additional time to collect and submit relevant information regarding the adverse economic, environmental, public health, and energy impact consequences of requiring beyond technology-based effluent limitations in the permit.

(c) Such determination shall be included as a part of the written record of the issuance of the final permit, whether or not a variance is available under section 61.12(b) of these regulations to alter the water quality standards based effluent limitations.

61.12 VARIANCES

(a) A variance may be granted with respect to a standard, control regulation, or permit condition as provided in this section provided that the requirements for variances under the Federal Clean Water Act and the regulations promulgated thereunder are met

(b) Variances from control regulations which have general applicability may be granted if the Division determines that the benefits derived from meeting the limitation(s) do not bear a reasonable relationship to the economic, environmental, and energy impacts or other factors which are particular to the applicant in complying with the control regulations; except that such variances shall be consistent with the purposes of the Water Quality Control Act and these regulations, including the protection of existing beneficial uses.

(c) Any request for a variance with respect to a permit condition shall be made not sooner than 90 days after the filing of a complete permit application and not later than 30 days after issuance of the permit by the Division. Requests for variances from any other application of a control regulation shall be made within thirty (30) days of legal notice by the Division of the regulation or prior to operation of any new or expanded facility which would be affected by the control regulations. A variance may also be sought within thirty (30) days of facts becoming available which had not been reasonably available to the applicant prior to that time or upon application to the Commission for good cause shown.

(d) The Division shall approve or disapprove any variance request and issue its decision within ninety (90) days after receipt of all information submitted by the applicant and/or required by the Division for proper evaluation of the variance request

If the Division requires additional information for evaluation, the applicant shall be advised by the Division within 30 days if, and in what respects, the request is incomplete. If additional information is requested by the Division, the Division shall have fifteen (15) days in addition to the ninety (90) day period, from the date each additional information packet is submitted to determine whether the additional information which was submitted satisfies the request and to advise the applicant if, and in what respects, the additional information does not satisfy the request.

(e) The applicant for a variance shall submit any information which it desires the Division to review regarding the economic reasonableness of the control regulation, or other permit condition as it applies to the applicant and from which the variance is sought. If the applicant fails to submit such information, the Division will base its decision on information reasonably available to it.

(f) Notice of a variance request shall be sent to anyone who has requested such notice and shall be included on the next Commission agenda. Within forty-five (45) days of issuance of a variance decision by the Division which does not involve discharge permit conditions required by the Federal Act, the Commission on its own motion or on the motion of the Division or any interested person may decide to review the variance decision. In such event an adjudicatory hearing pursuant to section 24-4-105, C.R.S., shall be held and the Commission may affirm, modify, or deny the decision.

(g) A variance may be granted for no longer than the duration of the permit, During the duration of a permit, a variance may be renewed at the discretion of the Division in accordance with the same procedures which applied to the first variance decision.

(h) The applicant for a variance shall be responsible for submitting any additional information that may be necessary to comply with the requirements for variances of the Federal Clean Water Act and the regulations promulgated thereunder.

61.13 HOUSED COMMERCIAL SWINE FEEDING OPERATIONS

61.13(1) SCOPE AND PURPOSE

(a) The provisions in this section 61.13 implement the provisions of section 25-8-501.1, C.R.S. This section also includes permit regulations required by the federal concentrated animal feeding operation (CAFO) regulations as revised effective July 24, 2007 and December 22, 2008.

(b) The purpose of these regulatory provisions is to ensure that the storage and land application of waste from housed commercial swine feeding operations is done in a responsible manner so as not to adversely impact Colorado's valuable water resources.

61.13(2) SPECIFIC APPLICABILITY

(a) Housed commercial swine feeding operations have a duty to seek coverage under an individual discharge permit. No person shall operate, construct, or expand a housed commercial swine feeding operation without first having obtained an individual discharge permit from the Division.

(b) Housed commercial swine feeding operations shall comply with the relevant sections of Regulation #61, not superseded by this section 61.13, which shall be incorporated in the permit.

(c) Land Application Discharges from a housed commercial swine feeding operation – The discharge of residual solids or swine feeding process wastewater to surface water from a housed commercial swine feeding operation (HCSFO) as a result of the application of that residual solids or swine feeding process wastewater by the HCSFO to land areas under its control is a discharge from that HCSFO subject to permit requirements, except where it is an agricultural storm water discharge. For purposes of this section 61.13, where the residual solids or swine feeding process wastewater has been applied in accordance with site specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the residual solids or swine feeding process wastewater, as specified in those parts of the swine waste management plan that address subsections 61.13(3)(f)(viii), (ix),(x), and (xvi), a precipitation-related discharge of residual solids or swine feeding process wastewater from land areas under the control of a HCSFO is an agricultural stormwater discharge.

61.13(3) APPLICATIONS AND REQUIRED PLANS

(a) All new housed commercial swine feeding operations shall submit to the Division, at least one hundred eighty (180) days prior to beginning construction of facilities for such operations, a completed permit application on a form obtained from the Division. Provided, that the permit application may be submitted at a later date, that is not less than 180 days prior to swine being placed on the operation, with the approval of the Division following a pre-application meeting.

(b) Application requirements for New Operations – New housed commercial swine feeding operations shall provide the following information to the Division as set forth in the permit application;

(i) Relevant information pursuant to provisions of subsections 61.4(1), (2), and (7);

(ii) Calculations which identify the maximum proposed animal capacity in accordance with the definition of a housed commercial swine feeding operation;

(iii) A construction plan, as described in subsection 61.13(3)(d);

(iv) An operations plan as described in subsection 61.13(3)(e);

(v) A swine waste management plan as described in subsection 61.13(3)(f);

(vi) A monitoring plan as described in subsection 61.13(3)(g); and

(vii) A financial assurance plan, consistent with the requirements of subsection 61.13(3)(h); and

(viii) For non-land-application facilities, documentation that the operations will meet the definition of "non-land-application facility" for the term of the requested permit.

(ix) The following information:

(A) The name of the owner or operator;

(B) The facility location and mailing addresses;

(C) Latitude and longitude of the production area (entrance to production area);

(D) A topographic map of the geographic area in which the housed commercial swine feeding operation is located showing the specific location of the production area;

(E) Specific information about the number and type of housed swine (for example, boars, sows, feeders, nursery pigs);

(F) The type of containment and storage for residual solids and swine feeding process wastewater (for example, anaerobic lagoon, roofed storage shed, storage ponds, underfloor pits, above ground storage tanks, below ground storage tanks, concrete pad, impervious soil pad, stockpiles, composting), and total capacities for residual solids and swine feeding process wastewater (tons/gallons);

(G) The total number of acres under the control of the applicant available for land application of residual solids or swine feeding process wastewater;

(H) Estimated amounts of residual solids and swine feeding process wastewater generated per year (tons/gallons); and

(I) Estimated amounts of residual solids and swine feeding process wastewater transferred to other persons per year.

(c) Application Requirements for Existing Operations – Existing housed commercial swine feeding operations shall provide the following information to the Division as set forth in the permit application:

(i) Relevant information pursuant to provisions of subsection 61.4(1), (2), and (7);

(ii) Calculations which identify the maximum proposed animal capacity in accordance with the definition of a housed commercial swine feeding operation;

(iii) A construction plan, as described in subsection 61.13(3)(d). If the construction plan indicates that any provision of subsection 61.13(4)(c), or of the water quality setbacks established in subsection 61.13(4)(f), is not currently being met, then the application shall include a plan for making necessary modifications to the facilities by July 1, 2000 such that the applicable requirement(s) will be met;

(iv) Readily available information regarding the existing swine waste management practices of the operation, including any information related to the swine waste management plan elements identified in subsection 61.13(3)(f); and

(v) For non-land-application facilities, documentation that the operations will meet the definition of "non-land-application facility" for the term of the requested permit.

(vi) A swine waste management plan as described in subsection 61.13(3)(f);

(vii) The following information:

(A) The name of the owner or operator;

(B) The facility location and mailing addresses;

(C) Latitude and longitude of the production area (entrance to production area);

(D) A topographic map of the geographic area in which the housed commercial swine feeding operation is located showing the specific location of the production area;

(E) Specific information about the number and type of housed swine (for example, boars, sows, feeders, nursery pigs);

(F) The type of containment and storage for residual solids and swine feeding process wastewater (for example, anaerobic lagoon, roofed storage shed, storage ponds, underfloor pits, above ground storage tanks, below ground storage tanks, concrete pad, impervious soil pad, stockpiles, composting), and total capacities for residual solids and swine feeding process wastewater (tons/gallons);

(G) The total number of acres under the control of the applicant available for land application of residual solids or swine feeding process wastewater;

(H) Estimated amounts of residual solids and swine feeding process wastewater generated per year (tons/gallons); and

(I) Estimated amounts of residual solids and swine feeding process wastewater transferred to other persons per year.

(d) Construction Plan Requirements - The construction plan shall contain documentation which demonstrates that each applicable provision of subsection 61.13(4)(c) has been or will be met and which also demonstrates compliance with the water quality setbacks established in subsection 61.13(4)(f). In addition to such documentation, the plan shall include the following information:

(i) A description of the confined swine feeding operation site(s) and vicinity including a site plan(s) prepared on one or more 7.5' USGS topographic quadrangle maps or a high quality reproduction(s). The site plan(s) shall show:

(A) All swine feeding process wastewater collection systems in housed units and any swine feeding process wastewater conveyance, treatment, storage, and land application facilities and contiguous property for each site presently owned or utilized by the housed commercial swine feeding operation;

(B) The 100-year floodplain in the vicinity of the swine waste management aspects of the operation, which may be based on designations by the Colorado Water Conservation Board, where available; and

(C) The location of occupied dwellings, public or private schools, incorporated municipalities, private and community domestic water wells, wetlands, streams, and reservoirs which are within 200% of the setback distances specified in subsection 61.13(4)(f) of these regulations.

(ii) Design calculations, which document that applicable provisions of subsection 61.13(4)(c) have been met, for all swine feeding process wastewater collection systems in housed units and any swine feeding process wastewater conveyance, treatment, storage, and land application facilities.

(iii) For new facilities, construction plans and specifications for the waste collection systems in the housed units and the waste conveyance, storage, treatment, and land application systems consistent with the design calculations described in (ii), above. These shall also include the method that will be used to convey or transport the swine waste to the land application sites. The plans and specifications submitted with the application shall include sufficient detail to demonstrate compliance with the requirements of subsection 61.13(4)(c). If not included in the information submitted with the application, the following information shall be submitted prior to permit issuance or in accordance with a compliance schedule included in the permit:

(A) Construction and installation procedures;

(B) Assurances that testing will be conducted to assure that materials used in impoundments for the treatment, storage, or evaporation of swine feeding process wastewater meet the requirements of subsection 61.13(4)(c)(iii) of this regulation;

(C) Operating and performance characteristics of mechanical equipment and materials associated with the swine feeding process wastewater and residual solids collection/conveyance, storage, treatment, and land application systems.

(iv) For existing facilities, as-built construction plans and specifications, or other documentation as approved by the Division, for swine feeding process wastewater and residual solids collection systems in housed units and the waste conveyance, storage, treatment, and land application systems. These documents shall, to the degree practicable, be modified or supplemented such that the information in subsection (iii), above, is provided.

(v) For operations located on state trust lands, information sufficient to demonstrate that the provisions of subsection 61.13(4)(g)(ii)(C) are met.

(e) Operations Plan - The operations plan shall provide for compliance with the provisions of subsection 61.13(4)(d). The plan shall also include a description of necessary operation and maintenance procedures, including, but not limited to, the following:

(i) Procedures for the operation and maintenance of swine feeding process wastewater collection systems in housed units and swine feeding process wastewater and residual solids conveyance, treatment, storage, and land application systems to ensure their continued functionality, including periodic inspection procedures to ensure their physical and mechanical integrity;

(ii) Procedures to address spills and prevention of contamination due to equipment or structural failure and power outages. Such procedures shall not apply to spills that qualify as "de minimis" relative to the site-specific conditions, in accordance with a site-specific interpretation of "de minimis" proposed by the permittee, approved by the Division and included in the permit;

(iii) Procedures to ensure that surface and ground water quality is not impacted as a result of storage or disposal of dead animals.

(f) Swine Waste Management Plan – Any permit issued to a housed commercial swine feeding operation ("HCSFO") must require compliance with the terms of the HCSFO's site-specific swine waste management plan. The terms of the swine waste management plan are the information, protocols, best management practices, and other conditions in the swine waste management plan determined by the Division to be necessary to meet the requirements of subsections 61.13(3)(f), 61.13(4)(e) and 61.13(4)(f)(iii). A HCSFO shall develop and implement a complete swine waste management plan as of the date of permit coverage. The plan shall be prepared under the supervision of a professional engineer registered in the State of Colorado, by the Natural Resources Conservation Service, by a qualified Cooperative Extension Agent, by a certified crop advisor certified by the American Society of Agronomy or by an independent crop consultant certified by the National Alliance of Independent Crop Consultants. The plan shall include sufficient site-specific hydrologic and agronomic information, supplemented by other scientifically supported information, to document that land application of all residual solids and swine feeding process wastewater will be conducted and sustained at or below the agronomic rate of application for crops or vegetation to be grown on the application site(s). The plan shall quantify the disposition of all residual solids and swine feeding process wastewater produced at the facility whether put to beneficial use through land application on-site or transported off-site. The swine waste management plan must identify and address the following:

(i) Daily, seasonal, and annual quantities and/or flow rates of residual solids and swine feeding process wastewater to be applied to the land area;

(ii) Concentrations of specific constituents including, but not limited to, nitrogen, phosphorus, heavy metals, and salts present in the residual solids or swine feeding process wastewater as a result of the housed commercial swine feeding operation;

(iii) Climatic conditions, including temperature and precipitation regime, as they may seasonally affect the plants' ability to uptake nutrients and other constituents present in the wastewater;

(iv) Soil types in the land application sites;

(v) Documentation which supports any post-treatment reduction in waste concentration(s) prior to land application;

(vi) Identify the crops to be planted in each field, or any other uses such as pasture or fallow fields. Identify alternative crops that are not in the planted crop rotation for each field. Identify the realistic yield goal for each crop and alternative crop for each field.

(vii) The specific land parcels and acreage to receive the residual solids and swine feeding process wastewater and a demonstration that adequate and suitable land is available upon which to land apply the residual solids and swine feeding process wastewater in accordance with the agronomic rate of application;

(viii) Identify the constituents in residual solids, swine feeding process wastewater, and soils that will be analyzed, and the testing protocols that will be used for the analyses, to ensure the provisions of subsection 61.13(4)(e) are met ;

(ix) Identification and a description of the methods for determining application rates and setbacks, and the potential for nitrogen and phosphorus transport from land application sites that will ensure the provisions of subsection 61.13(4)(e) and 61.13(4)(f)(iii) are met;

(x) A description of the planned method of residual solids and swine feeding process wastewater land application, disposal, or other usage, land application equipment leak inspection protocols, and surface water runoff controls and setbacks that will be implemented to prevent wastes from being discharged to waters of the state or beyond the property boundary of the land application site;

(xi) A description of how the permittee will ensure adequate storage of residual solids and swine feeding process wastewater, including procedures to ensure proper operation and maintenance of the storage facilities;

(xii) A description of how animal mortalities will be managed to ensure that they are not disposed of in any liquid residual solids or swine feeding process wastewater system that is not specifically designed to treat animal mortalities, and are handled in such a way as to prevent the discharge of pollutants to surface waters;

(xiii) Indicate how the permittee will ensure that clean water is diverted, as appropriate, from the production area;

(xiv) Indicate how swine will be prevented from having direct contact with surface water;

(xv) A description of how chemicals and other contaminants handled on-site are not disposed of in any residual solids or swine feeding process wastewater storage or treatment system unless specifically designed to treat such chemicals and other contaminants;

(xvi) Identify specific records that will be maintained to document the implementation and management of the elements required in subsections 61.13(3)(f)(vii) through (xiv), above;

(xvii) Feed management practices employed, if any, to reduce nutrient concentrations in swine feeding process wastewater or residual solids;

(xviii) If swine waste is to be applied on property not owned by the permittee, written agreements with landowners for off-site land application must be included in the plan. Agreements entered into after March 30, 1999, with landowners for land application shall allow the Division or its agent to assume the rights of the permittee under the agreement in the event that a facility must be brought to final closure by the state unless alternative treatment and disposal are provided for under the financial assurance plan, subsection 61.13(3)(h). The permittee shall provide notice to each landowner of property on which off-site land application occurs of the Division's authority to enter and inspect premises pursuant to section 25-8-306, C.R.S. The permittee shall provide evidence that any agreement with the landowner entered into after March 30, 1999, provides a right of entry to the Division to monitor for compliance with the permit, either directly in the agreement or by assignment of the permittee's rights under the agreement. The Division may require that the permittee cease land application on any off-site lands to which the Division is denied entry; and

(xix) Changes to Swine Waste Management Plan

(A) Any permit issued to a HCSFO must require the following procedures when a HCSFO owner or operator makes changes to the swine waste management plan previously submitted to the Division:

(I) The HCSFO owner or operator must provide the Division with the most current version of the HCSFO's swine waste management plan and identify changes from the previous version, except that the results of calculations made in accordance with the requirements of paragraph 61.13(4)(e) are not subject to the requirements of this section.

(II) The Division must review the revised swine waste management plan to ensure that it meets the requirements of this section and applicable effluent limitations and standards, including those specified in 61.13(4) below, and must determine whether the changes to the swine waste management plan necessitate revision to the terms of the swine waste management plan incorporated into the permit issued to the HCSFO.

1. If revision to the terms of the swine waste management plan is not necessary, the Division must notify the HCSFO owner or operator and upon such notification the HCSFO may implement the revised swine waste management plan.

2. If the Division determines that the changes to the terms of the swine waste management plan are necessary, the Division must notify the public and make the proposed changes and the information submitted by the HCSFO owner or operator available for public review and comment. The process for public comments, hearing requests, and the hearing process if a hearing is held must follow the procedures applicable to draft permits set forth in 61.5. Once the Division incorporates the changes to the terms of the swine waste management plan into the permit, the Division must notify the owner or operator and inform the public of the final decision concerning changes to the terms and conditions of the permit.

(III) Changes to any terms of the swine waste management plan are incorporated as terms and conditions of the permit. Such changes include, but are not limited to:

1. Addition of new land application areas not previously included in the HCSFO's swine waste management plan;

2. Any changes to the maximum amounts of nitrogen and phosphorus derived from all sources for each crop, as set forth in paragraph 61.13(4)(e) of this section;

3. Addition of any crop or other uses not included in the terms of the HCSFO's swine waste management plan and corresponding field-specific rates of application expressed in accordance with paragraph 61.13(4)(e) of this section: and

4. Changes to site-specific components of the HCSFO's swine waste management plan, where such changes are likely to increase the risk of nitrogen and phosphorus transport to surface water.

(g) Monitoring Plan

(i) The monitoring plan shall describe monitoring methods which demonstrate compliance with subsections 61.13(4)(e) and 61.13(4)(k). Where the plan does not include quarterly sampling of ground water beneath each land application site, soils within the agronomic root zone, or soils within the monitoring zone, the plan shall include documentation that this sampling frequency is not practicable.

(ii) Where residual solids or swine feeding process wastewater are to be stored in lined earthen impoundments or land applied, the plan shall include a geo-hydrologic report for each such site prepared by a qualified professional geologist or ground water hydrologist that includes:

(A) A description of the lithology of the stratigraphic column from the surface down to the uppermost aquifer(s) encountered at the site(s), which may be taken from existing geologic maps for the site, if available;

(B) The depth to ground water and ground water flow direction at the site(s);

(C) The vertical and horizontal conductivity and gradients at the site(s);

(D) The amount of annual ground water recharge from precipitation and irrigation;

(E) Established baseline ground water quality at locations and for parameters to be determined in consultation with the Division;

(F) The locations and uses of all existing wells and springs within a one (1) mile radius of the proposed site(s); and

(G) Information which establishes whether there is a direct hydrologic connection between the ground water under the site(s) and adjacent surface waters.

(H) Map(s) and narrative descriptions of the proposed ground water monitoring wells, including locations, depths, and perforated intervals.

Provided, that the Division may waive the requirements for site-specific information regarding vertical and horizontal conductivity and/or the amount of annual ground water recharge based upon documented site-specific conditions such as great depth to ground water or presence of an impervious layer between the surface and the uppermost aquifer.

(iii) For operations located on state trust lands:

(A) Information which establishes concentrations of nitrogen, phosphorus, heavy metals and salts in the agronomic root zone and monitoring zone of each land application site, and in the ground water;

(I) For existing operations, baseline concentrations shall be established.

(II) For existing operations where the permit has expired, lapsed, or otherwise has not been valid for two years or more, or where housed commercial swine feeding operation activities have not occurred for two years or more, new baseline concentrations shall be established.

(III) For new land application sites at existing operations that have never received swine feeding process wastewater or residual solids,

background concentrations shall be established from the immediate vicinity of the housed commercial swine feeding operations on state lands but which have not been impacted by such operations.

(IV) For new operations, background concentrations shall be established from the immediate vicinity of housed commercial swine feeding operations on state lands.

(B) Background information which describes the existing plant communities (i.e., species composition, relative abundance, cover density) in the immediate vicinity of housed commercial swine feeding operations but which have not been impacted by such operations;

(C) Sampling, analysis and interpretive assessment methods and procedures to allow for a demonstration by the owner/operator of a housed commercial swine feeding operation that soil within the monitoring zone and ground water have not been contaminated above the established baseline or background conditions established pursuant to subsection 61.13(3)(g)(viii)(A), above.

(h) Financial Assurance Plan - The owner or operator of the housed commercial swine feeding operation shall provide a financial assurance plan which addresses the final closure of the housed commercial swine feeding operation and the conduct of any necessary post-closure activities. Post-closure activities would include, but not be limited to, continuing maintenance or monitoring activities. The extent of closure and post closure activities, and hence the cost estimate for such activities, shall take into account site-specific risk factors including, but not limited to, soils composition, hydrology, vegetation, climatic conditions and ambient levels of constituents of concern.

(i) Where required by the Division the permittee shall include in the financial assurance plan the undertaking of any corrective action made necessary by contamination caused by the housed commercial swine feeding operation or clean-up of any spill or breach.

(ii) The financial assurance plan shall provide for compliance with the provisions of subsection 61.13(4)(h) and shall contain written itemized cost estimates for hiring a third party to close a housed commercial swine feeding operation and to conduct any necessary post-closure activities assuming, at the time of closure, that the operation is operating at the maximum capacity anticipated during the term of the permit as identified in the permit application. The cost estimates shall be prepared under the supervision of a professional engineer registered in the State of Colorado and shall include, but not be limited to: removal and proper disposal of residual solids and swine feeding process wastewater from collection systems in housed units and conveyance, treatment and storage facilities; removal and proper disposal of any stockpiles; revegetation of the site and other actions necessary to assure long-term protection of water quality.

(iii) For operations located on state trust lands, written itemized cost estimates for hiring a third party to perform closure and post-closure activities for the housed commercial swine feeding operation, including revegetation of the site in a manner that prevents erosion.

(iv) The Division may reject the proposed form(s) of financial assurance upon a determination of insufficiency. The Division shall notify the permittee of the decision to accept or reject the proposed forms of financial assurance.

61.13(4) <u>REQUIREMENTS FOR HOUSED COMMERCIAL SWINE FEEDING OPERATIONS</u>

(a) Plan Submission and Compliance Requirements for Existing, New Existing Source, and New Source Facilities – Existing, new existing source, and new source housed commercial swine feeding operations shall submit the following information to the Division, by the dates identified below, for approval:

(i) A complete operations plan, as described in subsection 61.13(3)(e), shall be submitted no later than July 1, 1999;

(ii) Except for non-land application facilities, a complete swine waste management plan, as described in subsection 61.13(3)(f), shall be submitted no later than September 30, 1999. By December 31, 2006 the owner or operator of an existing source housed commercial swine feeding operation, which includes an operation that existed as of June 30, 2004, shall develop and implement a complete swine waste management plan in accordance with subsection 61.13(3)(f), as revised effective June 30, 2004. A new source operation, and an animal feeding operation that becomes a housed commercial swine feeding operation after June 30, 2004, shall develop and implement a complete swine waste management plan as of the date of permit coverage. A housed commercial swine feeding operation that was issued a permit by June 30, 2004, including non-land application operations, shall submit to the Division for approval by May 30, 2006 a swine waste management plan that meets the requirements of subsection 61.13(3)(f), including the elements of subsections 61.13(3)(f)(vii) through (xv), which were either revised or added effective June 30, 2004. Until such a plan is approved, an operation that was issued a permit by June 30, 2004 shall comply with its currently approved swine waste management plan.

(iii) A complete monitoring plan, as described in subsection 61.13(3)(g), shall be submitted no later than December 31, 1999; and

(vi) A complete financial assurance plan, as described in subsection 61.13(3)(h), shall be submitted no later than December 31, 1999.

The Division may, with accompanying justification, request additional information from the permittee for any of these plans. Failure to provide such information, or justification acceptable to the Division as to why the plan meets the requirement of the respective section, will be grounds for revocation of the permit.

(b) Review and Approval of Plans for Existing Facilities.

(i) Plans submitted pursuant to subsection 61.13(4)(a) shall be available for public review. Any person may submit written comments regarding the submitted plans within 30 days following the deadlines set forth in that subsection.

(ii) The permittee shall comply with the provisions of the plans submitted and approved under subsection 61.13(4)(a). The Division may amend or reissue the permit to include all or part of any approved plan as a condition of the permit.

(c) Facility Design and Construction Requirements.

(i) Evaporation impoundments shall be of sufficient capacity to retain any planned volume of liquid residual solids and the maximum design volume of swine feeding process wastewater produced during the continuous ten (10) year period of minimum net evaporation based on the entire period of record. Such impoundments shall also be capable of containing any planned volume of liquid residual solids and swine feeding process wastewater, including the runoff resulting from a 25-year, 24-hour storm, or if a new source facility, be capable of meeting the requirements set forth in

61.13(4)(d)(xvi)(B) below. The permittee shall confirm that these conditions have been met by conducting a water budget analysis and submitting that analysis with the design calculations. For purposes of the water budget analysis, pan evaporation rates should be utilized.

(ii) Open surface impoundments and tanks which are used to treat, store, or evaporate swine feeding process wastewater shall have at least two feet of freeboard above the working liquid level.

(iii) Swine feeding process wastewater collection systems in housed units, swine feeding process wastewater conveyance systems, and impoundments and tanks which are used to treat, store, or evaporate swine feeding process wastewater shall be constructed and maintained such that the seepage rate from any such system, tank, or impoundment does not exceed 1×10^{-6} cm/sec.

(iv) Facilities for storage of swine feeding process wastewater and liquid residual solids shall be provided to account for periods during which land application cannot occur in accordance with subsection 61.13(4)(e), and to be capable of containing liquid residual solids and swine feeding process wastewater, including the runoff resulting from a 25-year, 24-hour storm or, if a new source facility, be capable of meeting the requirements set forth in 61.13(4)(d)(xvi)(B) below. For existing source facilities, the volume of storage to be provided may be based on a site-specific analysis. This analysis shall account for: the peak volume and concentration of swine feeding process wastewater that will be generated during the identified period; seasonal plant uptake rates; and on-site climatic data or off-site published climatic data. In lieu of such analysis, the permittee shall provide capacity to store the peak volume of swine feeding process wastewater that will be generated during a six-month period.

(v) Facility designs for new housed commercial swine feeding operations shall be prepared under the supervision of a professional engineer registered in the State of Colorado.

(I) Any reduction in swine feeding process wastewater pollutant concentrations as a result of treatment shall be supported by site-specific data or applicable published engineering or agricultural waste management principles and shall include consideration of any applicable odor control requirements.

(vi) Depth markers shall be installed in all open-surface impoundments and tanks to indicate the design volume (pursuant to subsection 61.13(4)(c)(iv) and clearly indicate the two-foot freeboard elevation, and the minimum capacity necessary to contain the runoff and direct precipitation of the 25-year, 24-hour storm event. At a minimum, depth markers should be clearly marked in one (1) foot increments.

(d) Operation and Maintenance Requirements

(i) Accumulations of solids shall be removed from the swine feeding process wastewater treatment, storage, and evaporation impoundments and tanks as necessary to ensure sufficient capacity to retain all swine feeding process wastewater produced during periods when land application or disposal operations cannot be conducted due to conditions which may preclude land application in accordance with subsection 61.13(4)(e).

(ii) Residual solids stockpile areas shall be constructed to ensure that all precipitation which comes in contact with the stockpiles is captured and diverted to appropriate swine feeding process wastewater treatment or evaporation facilities.

(iii) Swine feeding process wastewater collection systems in housed units and swine feeding process wastewater conveyance systems shall be operated and maintained to collect and convey peak flows without overflowing.

(iv) No land application of residual solids or swine feeding process wastewater shall occur on lands which are saturated or on land with a snow depth of greater than one inch.

(v) No land application of residual solids or swine feeding process wastewater shall occur on lands which are frozen unless a site-specific analysis demonstrates that runoff will not occur.

(vi) Land application of residual solids and swine feeding process wastewater shall not occur:

(A) More than 30 days prior to or subsequent to the normal growing season for the crop to which the wastewater is being applied; or

(B) Outside of the period March 1 through October 31;

whichever is less restrictive, except pursuant to approved odor management, swine waste management, and monitoring plans.

(vii) Removal of solids or swine feeding process wastewater from an impoundment shall be accomplished in a manner that does not damage the integrity of the liner.

(viii) Operations shall be conducted in a manner that does not result in contamination of ground water or a discharge to surface water not specifically authorized by the permit.

(ix) Non-land-application facilities must identify a method of disposal of residual solids and swine feeding process wastewater other than by on-site or off-site land application. Such facilities shall also demonstrate that no discharge to surface waters shall occur.

(x) Weekly inspections shall be made in the production area of all freshwater run-on diversion devices, devices channeling contaminated stormwater to impoundments or tanks, runoff diversion structures, and impoundments and tanks. Such inspections of impoundments and tanks shall note the level of swine feeding process wastewater as indicated by the depth marker required under subsection 61.13(4)(c)(vi), above.

(xi) Daily inspections shall be made of water lines in the production area, including drinking water or cooling lines.

(xii) Any deficiencies found as a result of the daily and weekly inspections identified in subsections 61.13(4)(d)(x) and (xi), above, shall be corrected as soon as possible, but no later than 30 days of such a deficiency having been identified, unless factors preventing correction within 30 days have been documented.

(xiii) The owner or operator shall periodically inspect equipment used for land application of residual solids or swine feeding process wastewater.

(xiv) Mortality Handling - Mortalities must not be disposed of in any liquid residual solids or swine feeding process wastewater system, and must be handled in such a way as to prevent the discharge of pollutants to surface water, unless an alternative performance standard is approved by the Division that includes a technology designed to handle mortalities.

(xv) General Pretreatment Standards – Operations that introduce swine feeding process wastewater pollutants into publicly owned treatment works (POTW) must comply with 40 CFR 403.

(xvi) Effluent Limitations for housed commercial swine feeding operations (HCSFOs)

(A) Existing source operations

(I) Production areas - Except as provided in subsections 61.13(4)(d)(xvi)(I)(1) and (2) below, there shall be no discharge of residual solids or swine feeding process wastewater into surface water from the production area. Operations shall attain the limitations and requirements of this subsection 61.13(4)(d)(xvi)(A)(I) as of the date of permit coverage.

(1) Whenever precipitation causes an overflow of residual solids or swine feeding process wastewater, pollutants in the overflow may be discharged into surface water provided: 1) the production area is designed, constructed, operated, and maintained to contain all residual solids and swine feeding process wastewater, including the runoff and direct precipitation from a 25-year, 24-hour storm, at minimum; 2) the production area is operated in accordance with the production area best management practices specified in subsections 61.13(4)(c)(vi) and 61.13(4)(d)(x), (xi), and (xii), and the records specified in subsections 61.13(4)(j)(i), (ii), and (iii); and 3) the production area is operated and maintained in accordance with the provisions of subsection 61.13(4)(d) not pertaining to land application.

(2) Where an operation has requested and the Division has approved effluent limitation based upon a site-specific alternative technology, pursuant to section 61.13(4)(d)(xvii)(A), below.

(II) Land application areas – Discharges from land application areas are subject to the following requirements.

(1) Develop and implement the swine waste management plan specified in section 61.13(3)(f) and in accordance with the provisions of subsection 61.13(4)(a)(ii), and the best management practices specified in subsections 61.13(3)(f), 61.13(4)(e), and 61.13(4)(f).

(2) Maintain a complete copy of the information for the best management practices required at subsections 61.13(4)(e)(i), (e)(ii)(B), (e)(ii)(C), and (e)(ii)(D), subsections 61.13(4)(f)(iii) and 61.13(4)(d)(xiii), and the records specified at subsections 61.13(4)(j), (j)(i), and (j)(iv).

(3) Comply with the land application provisions of subsection 61.13(4)(d). Operations shall attain the limitations and requirements of this subsection 61.13(4)(d)(xvi)(A)(II)(3) as of the date of permit coverage.

(B) New source operations

(I) Production areas - Except as provided in subsections 61.13(4)(d)(xvi)(B)(I)(1) and (2) of this section, there shall be no discharge of residual solids or swine feeding process wastewater into surface water from the production area. Operations shall attain the limitations and requirements of this section 61.13(4)(d)(xvi)(B)(I) as of the date of permit coverage.

(1) Best management practice effluent limitations included in the permit must address the HCSFO's entire production area. In the case of any HCSFO using open surface impoundments or tanks that are used to treat, store or evaporate swine feeding process wastewater for which the Division establishes such effluent limitations, "no discharge of manure, litter, or process wastewater pollutants," as used in this section, means that the storage structure is designed, operated, and maintained in accordance with best management practices established by the Division on a site-specific basis after a technical evaluation of the storage structure. The technical evaluation must address the following elements:

a. Information to be used in the design of the open surface impoundments or tanks including, but not limited to, the following: minimum storage periods for rainy seasons, additional minimum capacity for chronic rainfalls, applicable technical standards that prohibit or otherwise limit land application to frozen, saturated, or snow-covered ground, planned emptying and dewatering schedules consistent with the HCSFO's Swine Waste Management Plan, additional storage capacity for swine feeding process wastewater intended to be transferred to another recipient at a later time, and any other factors that would affect the sizing of the open surface impoundments or tanks.

b. Open surface impoundments or tanks must be designed using procedures and/or software approved by the Division.

c. All inputs used in the open surface impoundment or tank design including actual climate data for the previous 30 years consisting of historical average monthly precipitation and evaporation values, the number and types of animals, anticipated animal sizes or weights, any added water and residuals, any other process wastewater, and the size and condition of outside areas exposed to rainfall and contributing runoff to the open surface impoundments or tanks. If actual climate data is not available, the best available data from the most proximate weather station(s), such as those utilized by the Colorado State University Colorado Climate Center or the National Oceanic and Atmospheric Administration should be used.

d. The planned minimum period of storage in months including, but not limited to, the factors for designing an open surface impoundment or tank as listed in paragraph (I)(1)(a) of this section. Alternatively the

HCSFO may determine the minimum period of storage by specifying times the storage pond will be emptied consistent with the HCSFO's Swine Waste Management Plan.

e. Site-specific predicted design specifications including dimensions of the storage facility, residual solids and daily swine feeding process wastewater additions, the size and characteristics of the land application areas, and the total calculated storage period in months.

f. Evaluation of the adequacy of the designed open surface impoundments or tanks must use evaluations and simulations approved by the Division. The evaluation must include all simulation inputs including, but not limited to, daily precipitation, temperature, and evaporation data for the previous 100 years, user-specified soil profiles representative of the HCSFO's land application areas, planned crop rotations consistent with the HCSFO's Swine Waste Management Plan, and the final modeled result of no overflows from the designed open surface impoundments or tanks. For those HCSFOs where 100 years of local weather data for the HCSFO's location is not available, HCSFOs may use a simulation with a confidence interval analysis conducted over a period of 100 years. The Division may approve equivalent evaluation and simulation procedures.

g. The Division may waive the requirement of (I)(1)(f) for a site-specific evaluation of the designed open surface impoundments or tanks and instead authorize a HCSFO to use a technical evaluation developed for a class of specific facilities within a specified geographical area.

h. Waste management and storage facilities designed, constructed, operated, and maintained consistent with the analysis conducted in paragraphs (I)(1)(a) through (I)(1)(g) of this section and operated in accordance with the additional measures and records required in section 61.13(4)(d) and 61.13(4)(e), will fulfill the requirements of this section.

i. The Division has the discretion to request additional information to support a request for effluent limitations based on a site-specific open surface impoundment or tank.

(2) The production area must be operated in accordance with the additional measures and recordkeeping required in section 61.13(4)(d) and 61.13(4)(e).

(3) Provisions for upset/bypass, as provided in 61.8(3)(i) & (j), apply to a new source subject to this provision.

(II) Land application areas – Discharges from land application areas are subject to the following requirements.

(1) Develop and implement the swine waste management plan specified in subsection 61.13(3)(f) and in accordance with the provisions of subsection 61.13(4)(a)(ii), and the best management practices required in subsections 61.13(3)(f), 61.13(4)(e), and 61.13(4)(f). Operations shall attain the limitations and requirements of this subsection 61.13(4)(d)(xvi)(B)(II)(1) as of the date of permit coverage.

(2) Maintain a complete copy of the information for the best management practices required by subsections 61.13(4)(e)(i), and (e)(ii)(B), (e)(ii)(C), and (e)(ii)(D), subsections 61.13(4)(f)(iii) and 61.13(4)(d)(xiii), and the records specified at subsections 61.13(4)(j), (j)(i), and (j)(iv). Operations shall attain the limitations and requirements of this subsection 61.13(4)(d)(xvi)(B)(II)(2) as of the date of permit coverage.

(3) Comply with the land application provisions of subsection 61.13(4)(d). Operations shall attain the limitations and requirements of this subsection 61.13(4) (d)(xvi)(B)(II)(3) as of the date of permit coverage.

(xvii) Voluntary Alternative Performance Standards

The owner or operator of a housed commercial swine feeding operation may voluntarily request the Division to establish alternative Colorado Discharge Permit System effluent limitations based upon the operation's proposed use of site-specific alternative technologies. The request shall include the information specified below. The operator shall attain the limitations and requirements of subsection 61.13(4)(d)(xvii), as of the date of permit coverage.

(A) Existing Source Housed Commercial Swine Feeding Operations – A supporting technical analysis and any other relevant information and data that would support such site-specific effluent limitations within the time frame provided by the Division. The supporting technical analysis and other relevant information and data shall consist of, but not be limited to, the following.

(I) Information about the proposed innovative technology that includes, but is not limited to, the following:

(1) A description of the technology, manufacturer's name and contact information;

(2) How swine feeding process wastewater and residual solids will be treated using the proposed innovative technology;

(3) The reason for and goal of using the technology;

(4) A summary and supporting documents of any research and non-research results that document the performance of the technology;

(5) Information about any deviation from research and non-research conditions, and the anticipated impacts of such deviations on the performance of the proposed innovative technology;

(II) Results from use of an appropriate technical analysis that calculates the following for discharges from the existing facility, unless an alternative evaluation method is approved by the Division. The calculations shall be based on a site-specific analysis of a storage system designed, constructed, operated, and maintained to contain all residual solids and swine feeding process wastewater, including runoff from a 25-year, 24-hour storm. The calculations shall also be based on all daily inputs to the storage system, including residual solids, all swine feeding process wastewater, direct precipitation, and runoff, and all daily outputs from the storage system, including losses due to evaporation, sludge removal, and the removal of swine feeding process wastewater for use on cropland at the operation or transported off site.

(1) A calculation determining the predicted median annual overflow volume from the production area based on a 25-year period of actual rainfall data applicable to the site.

(2) Site-specific pollutant data for the housed commercial swine feeding operation, including colonies of fecal coliform and *Escherichia coli*, and the mass of ammonia, phosphorus, biological oxygen demand (BOD_5), total suspended solids (TSS), chemical oxygen demand (COD), total organic carbon (TOC), temperature, pH, total dissolved solids (for discharges to the Colorado River System only), and other constituents required by the Division, The pollutant data shall be the result of representative sampling and analysis of all sources of input to the storage system, or other appropriate pollutant data.

(3) A predicted annual average discharge of the pollutants identified in subsection 61.13(4)(d)(xvii)(A)(II)(2) above, expressed where appropriate as a mass discharge on a daily basis (lbs/day), and calculated considering paragraphs 61.13(4)(d)(xvii)(A)(II) and 61.13(4)(d)(xvii)(A)(II) (1) and (2), above.

(III) Results from an appropriate analysis that provides the following for the proposed innovative technology:

(1) A prediction of the median annual discharge volume of swine feeding process wastewater that will occur over the same 25-year period identified in subsection 61.13(4)(d)(xvii)(A)(II), above.

(2) A prediction of the annual average discharge of pollutants identified in subsection 61.13(4)(d)(xvii)(A)(II)(2) above that will be associated with the discharges specified in subsection 61.13(4)(d)(xvii)(A)(III)(1), above.

(3) A demonstration that the proposed innovative technology will achieve a quantity of pollutants discharged from the production area equal to or less than the quantity of pollutants calculated pursuant to subsection 61.13(4)(d)(xvii)(A)(II)(3), above.

(IV) Documentation that provides the rationale and justification for the models and analysis that were used to address subsections 61.13(4)(d)(xvii)(A)(II) and (III) above, and for conclusions made. The Division may, with accompanying justification, request additional information from the operation for the proposed innovative technology, which may include an on-site inspection.

(V) A plan for implementing the innovative technology, including quality assurance practices that the permittee will use to ensure the proper functioning of the innovative technology, and an approach for monitoring performance.

(B) Where the frequency of discharges to surface waters under alternative performance standards is greater than that from a 25-year, 24-hour storm, as applicable, water quality standards-based effluent limits for pollutants in such discharges shall be set pursuant to the requirements of subsection 61.8(2)(b).

(C) Where the frequency of discharges to surface waters under alternative performance standards is greater than that from a 25-year, 24-hour storm, as applicable, discharges shall be monitored, recorded, and reported pursuant to the requirements of subsection 61.8(4).

(e) Swine Waste Management Land Application Requirements

(i) The disposal or land application of all residual solids and swine feeding process wastewater produced at the facility, whether put to beneficial use on-site or transported off-site, must minimize phosphorus and nitrogen transport from the land application sites to surface waters and shall be in accordance with the approved swine waste management plan.

(ii) The owner or operator of a housed commercial swine feeding operation shall ensure that no residual solids or swine feeding process wastewater generated by it shall be applied to land by any person at a rate that exceeds, in amount or duration, the agronomic rate of application. The agronomic rate of application shall be as specified by the most current published fertilizer suggestions of Colorado State University Cooperative Extension for the plants, or most closely related plant type, to which the nutrients are applied and:

(A) No application of residual solids or swine feeding process wastewater shall be made to lands if the soil nitrate level and other appropriate nitrogen credits (as specified by Colorado State University Cooperative Extension) in the agronomic root zone exceed the agronomic rate of nitrogen application for the crop to be grown;

(B) Application rates of residual solids and swine feeding process wastewater shall be based on a field-specific assessment of the potential for nitrogen and phosphorus transport from the field and that addresses the form, source, amount, timing, and method of application of nutrients on each field to achieve realistic yield goals, while minimizing nitrogen and phosphorus movement to surface waters.

(C) Residual solids, swine feeding process wastewater, and soils shall be sampled and analyzed quarterly for nitrogen and phosphorus content, in accordance with the monitoring requirements specified in subsection 61.13(4)(k)(vi). The results of these analyses are to be used in determining application rates for residual solids and swine feeding process wastewater.

(D) Assessments shall be made for each land application site of the potential for phosphorus and nitrogen transport from the site to surface waters and that address the form, source, amount, timing, and method of application of nitrogen and phosphorus to achieve realistic yield goals, while minimizing nitrogen and phosphorus movement to surface water. Phosphorus transport risk assessments shall be made using a transport risk-screening tool approved by the Division and that is current, readily available, peer-reviewed, and appropriate for use in Colorado. The screening tool shall provide for off-site transport risk scores of either low, medium, high, or very high. An initial assessment of the potential for nitrogen transport to surface water shall be made prior to residual solids or swine feeding process wastewater being applied to an application site after the operator implements the swine waste management plan that meets the requirements of subsection 61.13(3)(f), as revised effective June 30, 2004.

(I) After an initial assessment is made of the potential for phosphorus an/or nitrogen transport from a land application site to surface water, additional assessments shall be made at the following frequency, whichever is sooner:

(1) Of both phosphorus and nitrogen transport risk, every five (5) years; or

(2) Where a crop management change has occurred, assess phosphorus transport risk within one (1) year after a crop management change would reasonably result in an increase in the phosphorus transport risk assessment score, and assess nitrogen transport risk within one (1) year after such a change would reasonably result in the nitrogen transport to surface water not being minimized; or

(3) Where the top one foot of soil on an application site exceeds 80 mg/kg of sodium bicarbonate extractable phosphorus and the phosphorus transport risk assessment score was very high, assess phosphorus transport risk within six (6) months of intending to apply residual solids or swine feeding process wastewater.

(4) Where a nitrogen transport risk assessment reveals that nitrogen transport to surface waters is not minimized, assess nitrogen transport risk within six (6) months of intending to apply residual solids or swine feeding process wastewater.

(II) No application of swine feeding process wastewater or residual solids shall be made to a land application site if the sodium bicarbonate extractable phosphorus in the top one-foot of soil exceeds 80 mg/kg, unless the off-site phosphorus transport risk score for the site is high or less.

(III) No application of residual solids or swine feeding process wastewater shall be made to a land application site where the risk of off-site nitrogen transport is high or very high.

(IV) Where a multi-year phosphorus application was made to a land application site, no additional residual solids or swine feeding process wastewater shall be applied to the same site in subsequent years until

the applied phosphorus has been removed from the site via harvest and crop removal.

(E) If the soil nitrate-nitrogen level in the four- to six-foot or six- to eight-foot increment within the monitoring zone exceeds the comparative concentration, established in accordance with subsection 61.13(4)(k)(ii), by greater than ten milligrams per kilogram, the permittee will be presumed to have exceeded the agronomic rate of application and shall notify the Division in writing of this exceedance within 30 days of discovering it.

(I) The permittee shall, in consultation with the Division, develop and submit to the Division within ninety (90) days of discovering the exceedance an approvable intervention protocol, unless an extension of time is granted by the Division. The intervention protocol shall describe adjustments to the swine waste management plan that provide for strict minimization of future nitrogen loading within the monitoring zone. The Division may specify that appropriate measures for the purpose of remediating excessive nitrogen within the monitoring zone be included in the protocol.

(II) The protocol shall be implemented by the permittee within 30 days of it being approved by the Division. If remediation measures in an approved intervention protocol are not being implemented in accordance with the protocol, application of swine feeding process wastewater and/or residual solids to the applicable land application site shall immediately cease.

(III) The agronomic rate of application shall not be presumed to have been exceeded and the intervention protocol shall not be required if the results of confirmation sampling pursuant to a procedure approved by the Division demonstrate that the comparative concentration has not been exceeded by greater than ten milligrams per kilogram, or if the permittee submits to the Division a report that adequately documents that a force majeure was the cause of the nitrate-nitrogen exceedance. This report shall be submitted for approval no later than 30 days after discovering an exceedance caused by a force majeure event.

(IV) Status of intervention protocol activities shall be documented in quarterly monitoring reports.

(iii) All land application activities at housed commercial swine feeding operations shall be conducted in a manner that does not result in impairment of existing beneficial uses of state waters or exceedances of applicable water quality standards for surface water or ground water.

(iv) Where land application sites are not supporting active plant growth:

(A) Applications of swine feeding process wastewater and residual solids shall not at any time cause soil nitrate levels and other appropriate nitrogen credits in the agronomic root zone to exceed the agronomic rate for the upcoming growing season for the crop for which the solids or wastewater is applied.

(B) Swine feeding process wastewater and residual solids shall not be applied to land not supporting active plant growth except as provided under an approved Swine Waste Management Plan that includes appropriate best management

practices for such applications. Best management practices shall be specified in a guidance document cooperatively developed by the Division and stakeholders, and presented in a public hearing before the Water Quality Control Commission.

(v) Swine feeding process wastewater and residual solids produced at housed commercial swine feeding operations which are applied to land shall not exceed the cumulative pollutant loading limits for heavy metals as set forth in Table 1, below. Cumulative metal loading limits shall be calculated as the product of the total elemental analysis (concentration) of the residual solids and swine feeding process wastewater and the quantity of residual solids and volume of swine feeding process wastewater applied, respectively. Compliance with cumulative pollutant loading limits shall be documented by the permittee in reports submitted in accordance with subsection 61.13(4)(j). Documentation shall consist of data which quantifies cumulative loadings of the heavy metals to each land application site. If the cumulative loading limit specified in Table 1 is reached, no further residual solids or swine feeding process wastewater will be applied to the application site.

TABLE 1. CUMULATIVE POLLUTANT LOADING LIMITS, kg/ha (lbs/ac)	
Arsenic	41 (37)
Cadmium	39 (35)
Copper	1500 (1339)
Lead	300 (268)
Mercury	17 (15)
Nickel	420 (375)
Selenium	100 (89)
Zinc	2800 (2499)

(vi) Any reduction in swine feeding process wastewater concentrations as a result of losses subsequent to swine feeding process wastewater treatment and prior to land application shall be supported by site-specific data or applicable published engineering or agricultural waste management principles and shall be in accordance with the approved odor management plan.

(vii) Land application practices shall be managed to ensure that no residual solids or swine feeding process wastewater are discharged to waters of the state or beyond the property boundary of the application site.

(f) Water Quality Setbacks - Water quality setbacks shall be established for housed commercial swine feeding operations such that swine feeding process wastewater collection systems in housed units, swine feeding process wastewater conveyance, treatment, storage, and evaporation structures, land application sites, and residual solids stockpiles and impoundments, shall not be located:

(i) Within ten feet vertically of the seasonally high ground water level as determined in the monitoring plan;

(ii) Up-gradient and within 300 feet of a reservoir classified for Class I Recreational Use by the Water Quality Control Commission;

(iii) For land application systems only, within 200 feet of any body of surface water, including intermittent streambeds when standing or running water is present in the streambed, unless land application is made by either subsurface injection, or by surface application which is followed by incorporation within 48 hours, weather permitting, or the swine waste management plan describes measures which will be implemented to prevent runoff from the application site into the water body;

(iv) Within 50 feet of any body of surface water, including intermittent streambeds when standing or running water is present in the streambed;

(v) Within 150 feet of a private domestic water supply well or within 300 feet of a community domestic water supply well; and

(vi) For treatment, storage, and evaporation impoundments and residual solids stockpiles, only, within a 100-year floodplain as identified in accordance with subsection 61.13(3)(d)(i)(B), unless proper flood proofing measures (structures) are designed and constructed.

(vii) An existing housed commercial swine feeding operation may obtain a variance from one or more of these setback requirements for aspects of the operation that were constructed as of March 10, 1999, other than land application sites, if the permittee demonstrates to the satisfaction of the Division that its facilities or structures do not pose a risk to the quality of waters of the state that bears a reasonable relationship to the cost of compliance with the setbacks requirements.

(g) State Trust Lands

(i) In accordance with the mandate in the Colorado Constitution, Article IX, Section 10, that state land board trust lands be held in trust and be protected and enhanced to promote long-term productivity and sound stewardship, the construction, operation and waste management plans approved for housed commercial swine feeding operations on such lands shall not permit the degradation of the physical attributes or value of any state trust lands.

(ii) In order to prevent degradation of the physical attributes or value of any state trust lands relating to water quality:

(A) For new facilities and for new land application sites at existing operations that have never received swine feeding process wastewater or residual solids concentrations of nitrogen, phosphorus, heavy metals and salts in the soil within the agronomic root zone and monitoring zone, and the ground water below state trust lands shall not exceed levels identified as background conditions pursuant to subsection 61.13(3)(g)(iii)(A);

(B) For existing facilities where the permit has expired, lapsed, or otherwise has not been valid for two years or more, or where housed commercial swine feeding operation activities have not occurred for two years or more, concentrations of nitrogen, phosphorus, heavy metals and salts in the soil within the agronomic root zone and monitoring zone, and the ground water beneath state trust lands shall not exceed levels identified as baseline conditions pursuant to subsections 61.13(4)(j)(i) and 61.13(3)(g)(ii)(E), respectively;

(C) Swine feeding process wastewater collection systems in housed units, swine feeding process wastewater conveyance systems, and impoundments which are used to treat, store, or evaporate swine feeding process wastewater shall be constructed and maintained such that the seepage rate from any such system or impoundment does not exceed 1×10^{-7} cm/sec;

(D) Closure of operations on state trust lands shall include revegetation of the site in a manner that prevents erosion; and

(E) Monitoring conducted shall be sufficient to demonstrate compliance with subparagraphs (A) and (B), above.

(iii) The Division shall provide an adequate opportunity for the State Land Board to review and comment upon all construction, operations, swine waste management, monitoring, and financial assurance plans submitted for housed commercial swine feeding operations on state trust lands.

(iv) The Division shall consider any comments received from the State Land Board in its review and consideration of these plans. The Division shall not approve any plan if the State Land Board determines that the plan would permit the degradation of the physical attributes or value of any state trust lands.

(h) Financial Assurance Requirements - Valid financial assurance shall be a condition of conducting a housed commercial swine feeding operation. However, nothing in these regulations shall relieve the permittee of liability for closure, post-closure, and corrective action costs. Violation of any of the financial assurance requirements of these regulations shall be cause for the denial or revocation of the permit.

(i) The applicant or permittee shall provide financial assurances for the final closure of the housed commercial swine feeding operation and the conduct of any necessary post-closure activities, such that any contamination resulting from actions after the effective date of this regulation is remediated and future contamination is avoided.

(ii) If required by the Division, based on evidence that conditions create a reasonable potential for the housed commercial swine feeding operation to cause contamination, the applicant or permittee shall provide financial assurances for any corrective action made necessary by such contamination.

(iii) The financial assurance instruments shall be in the amounts determined in the approved financial assurance plan, or as otherwise required by the Division in accordance with subsection 61.13(4)(h)(vi)(B-C).

(iv) A financial assurance instrument shall meet the requirements of subsection 61.13(4)(h) and of Regulation No. 66, as applicable to the instrument.

(v) Financial assurance instruments for new housed commercial swine feeding operations must be approved by the Division before the permit will be issued, and shall meet the requirements of subsections 61.13(4)(h)(iii-iv).

(vi) The permittee of an existing housed commercial swine feeding operation shall provide a financial assurance instrument(s) within 90 days following the Division’s approval of a new or revised financial assurance plan as described in subsection 61.13(3)(h) within 90 days following the Division's approval of a new or revised financial assurance plan as described in subsection 61.13(3)(h). Such a financial assurance instrument(s) shall meet the requirements of subsections 61.13(4)(h)(iii-iv).

(A) Failure to provide the approved amount of financial assurance shall be a violation of the permit and may be cause for revocation of the permit.

(B) Where the Division has found a financial assurance plan to be incomplete, and the permittee is either not working in good faith to submit an approvable plan or does not respond to the Division's comments regarding the plan within a reasonable time, the Division may require that interim financial assurance be provided until such time as the financial assurance plan is approved.

(C) Before requiring interim financial assurance, the Division shall provide the permittee written notice of the deficiencies and an opportunity to cure those deficiencies within ninety (90) days of the written notice. If the period to cure expires without the permittee resolving the deficiencies, and an extension of time has not been granted by the Division, the amount of interim financial assurance required shall be established by the Division, based on relevant information related to the permittee.

(vii) The permittee shall review and update its approved financial assurance instruments each year in accordance with a schedule established in the permit. The amount of the financial assurance for closure and post-closure, and for any applicable corrective action, shall be recalculated annually by the permittee, as required in the permit, and shall account for inflation or deflation by using the most recent Implicit Price Deflator for Gross Domestic Product or its successor as published by the U.S. Department of Commerce. The recalculated amount shall also reflect any changes in the operation pertinent to the cost of closure, post-closure or required corrective action to address contamination. Provided, that for any year in which there have been no changes in the operation pertinent to the cost of closure, post-closure, or required corrective action and cumulative inflation as calculated above does not exceed 5% since the last update of the financial assurance instruments, no further update of the financial assurance instruments is required.

(A) In accordance with the schedule established in the permit, the permittee shall submit to the Division a report that, at minimum, documents that the review and update required above was conducted, explains how the review and update was done, informs who conducted the review and update, informs what the calculated cumulative inflation value is, and informs whether calculated cumulative inflation value exceeded 5% since the last update of the financial assurance instruments.

(B) The permittee shall have 90 days to provide a financial assurance instrument(s) for any increased amount of financial assurance, as required, after receipt of notification that the revised cost estimates have been approved by the Division. Such a financial assurance instrument(s) shall meet the requirements of subsections 61.13(4)(h)(iv).

(C) Failure to provide any increased amount of financial assurance, as required, shall be a violation of the permit and may be cause for revocation of the permit.

(viii) If at any time the Division determines that a permittee has insufficient financial assurance it shall notify the permittee.

(A) The permittee shall have 90 days, after receipt of the notification by the Division, to recalculate its financial assurance and provide a financial assurance instrument(s) for any increased amount of financial assurance, as required. Such a financial assurance instrument(s) shall meet the requirements of subsections 61.13(4)(h)(iii-iv).

(B) Failure to provide any increased amount of financial assurance, as required, shall be a violation of the permit and may be cause for revocation of the permit.

(ix) All financial assurance instruments shall be approved by the Division before being accepted.

(x) Subject to approval by the Division, the applicant or permittee shall use one or more of the following financial instruments to satisfy assurance requirements:

(A) One or more of the following instruments that meet the provisions of Regulation No. 66: irrevocable standby letter of credit; trust fund; surety bond; insurance; financial test; and/or written guarantee.

(B) Other instruments approved by the Division that meet the following requirements, except where the Division determines that the requirements of subsections (I) and/or (IV) are not applicable:

(I) An alternative instrument provides for the establishment of a standby trust that meets the requirements of Regulation No. 66.

(II) The issuing institution of an alternative instrument must have the authority to issue that instrument, and its operations shall be regulated and examined by a federal or state agency.

(III) The issuing institution of an alternative instrument must waive all rights and set off or liens against that instrument.

(IV) An alternative financial assurance instrument must contain a term that provides that the instrument cannot be cancelled by the issuer of the instrument, unless 90 days prior written notice is given to the Division and the Division gives written consent.

(V) Uses wording approved by the Division.

(xi) The permittee shall immediately notify the Division of any notice received or action filed alleging the insolvency or bankruptcy of an institution that issued to the permittee a financial assurance instrument, or alleging any violations of regulatory requirements that could result in suspension or revocation of the issuing institution's charter or license to do business.

(A) In the event the permittee becomes aware that an issuing institution is unable to fulfill its obligations under a financial assurance instrument for any reason, notice shall immediately be given to the Division.

(B) The permittee shall have 90 days from the date of providing notice to the Division as required under subsection 61.13(4)(h)(xi) to submit a financial assurance instrument(s) that replaces the required amount of financial assurance.

(C) Failure to provide any substitute or replacement financial assurance, as required, shall be a violation of the permit and may be cause for revocation of the permit.

(xii) Release of an approved financial assurance instrument - The Division will give written consent that a permittee or an institution that issued an instrument may, prior to closure, post-closure, and corrective action activities beginning at a permitted facility(ies), terminate an approved financial assurance instrument(s) when subsections (A) and (B)

below have been satisfied, and/or the applicable provisions of Regulation No. 66 for the instrument(s) have been satisfied:

(A) A permittee or institution that issued an instrument gives to the Division 90 days prior written notice of its request that a financial assurance instrument(s) be released.

(B) The permittee has provided a substitute financial assurance instrument(s) for the same amount of financial assurance that was provided by the instrument(s) requested to be released. Such a substitute instrument(s) must meet the requirements of subsections 61.13(4)(h)(iii)-(iv).

(xiii) Release of the Permittee from the Requirements for Financial Assurance - When closure, post-closure, and corrective actions required by a permit are complete or partially complete, financial assurance shall be released by the Division as follows:

(A) When the Division determines that initial closure activities have been completed for an operation, financial assurance, less identified retainages, shall be released.

(B) A sufficient amount of financial assurance shall be retained to pay for estimated costs of post-closure remediation activities. This portion of the financial assurance shall be held for a period of at least three (3) years after initial housed commercial swine feeding operation closure activities are completed, unless the Division determines that a shorter period of time is appropriate.

(C) The Division may release portions of the corrective action financial assurance for remediation of residual soil contamination, remediation of ground water contamination, or clean-up of any spill or breach when it determines that identified phases of required corrective action have been satisfactorily completed, less any retainages for completion of remaining requirements, such as confirmatory monitoring. Any amount remaining following final satisfactory completion of corrective action shall be released to the permittee.

(D) Release of any amounts of financial assurance shall not release the permittee or other responsible person from any responsibility for meeting closure or corrective action requirements.

(E) When the Division determines that the provisions of Regulation No. 66 that address reimbursement of financial assurance have been satisfied, as applicable to the permittee's approved financial assurance instrument(s).

(xiv) Forfeiture of Bond or Other Form of Financial Assurance.

(A) The Division may initiate financial assurance forfeiture after notice to the permittee and any surety that the permit has been violated and that there is a reasonable likelihood that the closure, post-closure, or corrective action obligations of the permittee will not be met.

(B) The Division will direct the expenditure of forfeited funds to remedy and abate the circumstances for which any financial assurance was required.

(C) Use of all financial assurance shall not relieve the permittee or other responsible parties from responsibility and liability for closure, post-closure, and corrective action costs. The Colorado Attorney General may bring suit to recover any costs

incurred by the state for closure, post-closure or corrective actions not covered by collected financial assurance monies.

(i) Spills and Contamination

(i) Any spill or contamination by a housed commercial swine feeding operation shall be reported immediately by the permittee to the Division and the county health department for the county in which the housed commercial swine feeding operation is conducted, by telephone, electronic facsimile or other means as specified by the Division in the permit.

(ii) A written report shall be submitted by the permittee so that it is received by the Division and the county health department for the county in which the housed commercial swine feeding operation is conducted within 24 hours after the spill or contamination occurs.

(iii) The permittee shall take immediate action to clean-up all spills so that impacts to soils, surface water or ground water are minimized to the greatest extent practicable. The permittee shall submit a report to the Division which describes the nature of the spill, any initial action taken to clean-up the spill, and any additional action that may be necessary to ensure that the spill does not result in permanent contamination of soils, surface water, or ground water. This report shall be submitted to the Division for approval no later than five working days after the spill occurs.

(iv) If it is determined that remediation of any spill or contamination by a housed commercial swine feeding operation cannot be completed within sixty days, the permittee may be required to undertake corrective action as specified by the Division. In such an instance, the Division may require adjustment of financial assurance as required in subsection 61.13(4)(h)(ii).

(v) The requirements of this subsection 61.13(i) shall not apply to spills that qualify as "de minimis" relative to the site-specific conditions, in accordance with a site-specific interpretation of "de minimis" proposed by the permittee and approved by the Division.

(j) Recordkeeping

Housed commercial swine feeding operations shall maintain on site a copy of its most current swine waste management plan and make it available to the Division or its designee, upon request. In addition, the operation shall create, and maintain on-site for five years from the date they are created, and make available to the Division or its designee, upon request, the following complete records:

(i) All applicable records identified in the swine waste management plan, pursuant to subsection 61.13(3)(f)(xvi);

(ii) The completed permit application required pursuant to subsection 61.13(3);

(iii) The following complete records for the production area:

(A) Records documenting the visual inspections required under subsections 61.13(4)(d)(x) and (xi);

(B) Weekly records of the depth of residual solids and swine feeding process wastewater in liquid impoundments and terminal storage tanks as indicated by the depth marker required under subsection 61.13(4)(c)(vi);

(C) Records documenting any actions taken to correct deficiencies required under subsection 61.13(4)(d)(xii). Deficiencies not corrected within 30 days shall be accompanied by an explanation of the factors preventing immediate correction;

(D) Records of mortalities management and practices used to meet the requirements of subsection 61.13(4)(d)(xiv);

(E) Records documenting the current design of any residual solids or swine feeding process wastewater storage structure, including volume of residual solids accumulation, design treatment volume, total design volume, and approximate number of days of storage capacity; and

(F) Records of date, time, and estimated volume of any overflow.

(iv) The following complete records for land application sites:

(A) Expected crop yields;

(B) The date(s) residual solids or swine feeding process wastewater is applied to each field;

(C) Weather conditions at the time of land application and for 24 hours prior to and following land application;

(D) Test methods used to sample and analyze residual solids, soils, and swine feeding process wastewater;

(E) Results from residual solids, swine feeding process wastewater, and soil sampling and analysis;

(F) Explanation of the basis for determining residual solids and swine feeding process wastewater application rates, as provided in the swine waste management plan required under subsection 61.13(3)(f);

(G) Calculations showing the total nitrogen and phosphorus that will be applied to each land application site, including sources other than residual solids or swine feeding process wastewater;

(H) Total amount of nitrogen and phosphorus actually applied to each field, including documentation of calculations for the total amount applied;

(I) The method used to apply the residual solids or swine feeding process wastewater; and

(J) Date(s) of inspections of residual solids and swine feeding process wastewater land application equipment.

(k) Monitoring and Reporting for Impoundments and Land Application Activities

(i) Housed commercial swine feeding operations shall provide baseline information which establishes concentrations of nitrate-nitrogen and ammonium-nitrogen in the soils within the agronomic root zone and monitoring zone in each land application site identified in the swine waste management plan. Information shall also be provided which establishes the concentrations of phosphorus in the top one-foot increment of soil in each land application area identified in the swine waste management plan. Baseline concentrations

shall be reestablished by an existing operation where the permit has expired, lapsed, or otherwise has not been valid for two years or more, or where housed commercial swine feed operation activities have not occurred for two years or more.

(ii) For the purposes of subsection 61.13(4)(e)(ii)(E), the comparative concentration shall be equal to the lesser nitrate-nitrogen concentration value of the following: 1) the baseline concentration determined pursuant to subsection (i), above; or, 2) the concentration found within the respective four- to six-foot or six- to eight-foot soil increment, as applicable, in the soil sample just prior to the most recent soil sample that was taken from below the land application site. Where the nitrate-nitrogen concentration in the most recent soil sample exceeds the comparative concentration by greater than ten milligrams per kilogram (as provided in subsection 61.13(4)(e)(ii)(E)) as the result of the agronomic rate of application having been exceeded, the succeeding comparative concentration for the applicable land application site shall be equal to the most recent comparative concentration plus 10 milligrams per kilogram, or the baseline nitrate-nitrogen concentration, whichever is less.

(iii) Housed commercial swine feeding operations shall provide baseline information representative of normal operating conditions which establishes concentrations of specific constituents including, but not limited to, nitrogen species, phosphorus, heavy metals, and salts present in the residual solids or swine feeding process wastewater as a result of the housed commercial swine feeding operation. Existing operations shall provide this information as a part of their initial swine waste management plan. New operations shall provide this information in accordance with a schedule of compliance established in their permit. The permittee shall provide a new assessment of these constituents whenever changes to the operation occur that could significantly change the concentrations of these constituents in the residual solids or swine feeding process wastewater;

(iv) Housed commercial swine feeding operations are subject to the monitoring, recording, and reporting conditions found at subsections 61.8(4)(a)-(d), (f)-(m) and (p).

(v) Housed commercial swine feeding operations shall submit, to the Division and the county health department, the following reports:

(A) Quarterly comprehensive monitoring reports and agronomic analyses that demonstrate that the operation has land applied residual solids and swine feeding process wastewater at no greater than agronomic rates. The reports shall include, but not limited to, the results and underlying data for all soil, residual solids, swine feeding process wastewater, ground water quality, and vegetative nutrient analyses as required by the permit or Monitoring Plan. The report shall include results and underlying data for impoundment seepage monitoring and soil nitrogen intervention protocol activities as required by the Division. The reports, except for intervention protocol activity information, shall be prepared on the latest version of forms supplied by the Division.

(B) Annually, one of the quarterly reports, as specified by the Division, shall include the following additional information:

(I) The maximum number of swine that have been housed at each site during the previous twelve (12) months;

(II) The estimated amount of total residual solids and swine feeding process wastewater generated in the previous twelve (12) months (tons/gallons);

(III) The estimated amount of total residual solids and swine feeding process wastewater permittee transferred to third parties in the previous twelve (12) months (tons/gallons);

(IV) The total number of acres for land application covered by the current swine waste management plan;

(V) The total number of acres of land application sites that were used for application of residual solids and swine feeding process wastewater in the previous twelve (12) months;

(VI) A summary of all residual solids and swine feeding process wastewater discharges from the production area that have occurred in the previous twelve (12) months, including date, time, and approximate volume;

(VII) A statement indicating whether the current version of the swine waste management plan was developed or approved by a certified nutrient management planner.

(vi) The permittee shall sample and monitor chemical and appropriate biological parameters identified by the Division as necessary to protect the quality and existing and future beneficial uses of ground water including, at a minimum, nitrogen species, phosphorus, heavy metals, and salts. At a minimum, the monitoring program shall include analysis and reporting of parameters in the ground water, soils within the agronomic root zone and monitoring zone within each land application site, swine feeding process wastewater, and residual solids. The nitrogen species monitored in soils shall be nitrate-nitrogen and ammonium-nitrogen within the agronomic root zone and nitrate-nitrogen within the monitoring zone.

(A) Monitoring of soils shall be on a quarterly basis, except when this frequency is not practicable due to: 1) physical conditions (e.g., frozen or saturated ground); 2) the potential for excessive damage to crops; or 3) when applications of swine feeding process wastewater or residual solids to specific land sites will not be made for at least three consecutive quarters. If a quarterly soil sample was not taken of a land application site for any of these three reasons, the permittee shall inform the Division of this fact in their quarterly report, and specify the reason for the sample not having been taken. When application of swine feeding process wastewater or residual solids has not been conducted for three consecutive quarters, soil monitoring shall occur within 90 days after the crop to which applications were made is harvested or goes dormant, and for subsequent quarters as required by the Division, based on the nitrogen values observed in the post-harvest soil tests. The permittee shall timely notify the Division in their quarterly reports of their intention not to apply solids or wastewater to specific land application sites for at least three consecutive quarters.

(B) The Division may waive monitoring requirements for salts and sodium bicarbonate extractable phosphorus below the one foot soil depth and in ground water if it is demonstrated by the permittee, based upon such information as requested by the Division, that there is no reasonable potential of contamination from such constituents at the permitted facility.

(C) The Division may waive monitoring requirements for any of the constituents identified in Table 1 in subsection 61.13(4)(e)(v) if it is demonstrated by the permittee, based upon such information as requested by the Division, that there is no reasonable potential of contamination from such constituents at the permitted facility.

(D) The program shall also include monitoring to ensure that no seepage occurs from any waste impoundments in excess of those rates established in subsection 61.13(4)(c)(iii) or 61.13(4)(g)(ii)(C), as applicable.

(E) Monitoring of ground water beneath each land application site shall be accomplished by sampling and analyzing on a quarterly basis the ground water in monitoring wells that are in locations identified in the monitoring plan, subsection 61.13(3)(g). Such monitoring shall not be required for land application sites for which the permittee submits, and the Division approves: 1) information documenting that ground water does not exist beneath a land application site; 2) information documenting that an impermeable geological layer exists beneath a land application site, and above the shallowest aquifer located beneath the land application site; or 3) a completed analysis of one-dimensional transport of water within the vadose zone of the land application site, using a transport model, mathematical calculation, or other Division-approved methods. The mathematical analysis shall be prepared by, or certified by, a professional engineer registered in the State of Colorado, a qualified professional geologist, or groundwater hydrologist. In addition, the analysis must conclude that water that annually passes below the root zone of the land application site will not reach ground water within one hundred years. Approval of the analysis does not remove the Division's authority to require at any time, as the result of soil monitoring information or for other reasons, the installation of new or additional wells for the purpose of monitoring ground water beneath a land application site. Immediately upon approval of the analysis, the permittee shall proactively protect ground water by implementing the following requirements:

I. Quarterly sample the two one-foot increments of soil below the monitoring zone for each land application site, in addition to other soil sampling requirements indicated in subsection 61.13(4)(j)(vi), except when this frequency is not practicable due to one of the three scenarios presented in subsection 61.13(4)(j)(vi)(A). The Division may require quarterly monitoring of soils at depths beneath two feet below the monitoring zone based on a nitrogen loading trend analysis of the monitoring zone or below the monitoring zone.

II. Analyze the two one-foot increments of soil for nitrate-nitrogen.

III. Notify the Division in writing within 30 days of discovering that the cumulative soil nitrate-nitrogen concentration level in any two foot increment within the monitoring zone, or in any one foot increment below the monitoring zone, exceeded the comparative concentration by greater than ten milligrams per kilogram.

IV. In consultation with the Division, develop and submit an approvable intervention protocol within ninety (90) days of the permittee discovering that the cumulative soil nitrate-nitrogen concentration level in any two foot increment within the monitoring zone, or in any one foot increment below the monitoring zone, exceeds the comparative concentration by greater that ten milligrams per kilogram, unless an extension of time is granted by the Division. The intervention protocol shall provide for strict minimization of future nitrate-nitrogen loading within the monitoring zone and below the monitoring zone. The Division may specify that appropriate measures be included in the protocol for the purpose of remediating excessive nitrogen within the monitoring zone and below the monitoring zone.

V. The protocol shall be implemented by the permittee within 30 days of it being approved by the Division. If remediation measures in an approved intervention protocol are not being implemented in accordance with the protocol, application of swine feeding process wastewater and/or residual solids to the applicable land application site shall immediately cease.

VI. The intervention protocol shall not be implemented if the permittee submits to the Division a report that adequately documents that a force majeure was the cause of soil nitrate-nitrogen concentrations exceeding the comparative concentration by greater than ten milligrams per kilogram.

VII. Document the status of intervention protocol activities in applicable quarterly monitoring reports.

(vii) Where the permittee has installed double liners with leak detection mechanisms, ground water monitoring around all such impoundments shall not be required.

(viii) The provisions of subsections 61.13(4)(k)(i), (ii), and (v), above, shall not apply to non-land-application facilities.

61.13(5) PERMIT FEES

(a) Each housed commercial swine feeding operation covered by a single permit shall pay permit fees in accordance with the schedule set forth in 25-8-502(1)(b)(I), C.R.S., and in accordance with section 61.15 of this regulation.

(b) As used in this paragraph (a), "working capacity" means the number of weaned swine that the housed commercial swine feeding operation is capable of housing at one time.

61.13(6) ENFORCEMENT

(a) The Division shall enforce the provisions of this section 61.13 in accordance with the provisions of Part 6 of the Act.

(b) The Division shall take immediate enforcement action against any housed commercial swine feeding operation that has exceeded the agronomic rate limit of subsection 61.13(4)(e).

61.14 GROUND WATER

61.14(1) APPLICABILITY

(a) Pursuant to this section a permit shall be required for all land application discharges and for all discharges from impoundments unless:

(i) The discharge is exempted under section 61.14(1)(b);

(ii) The discharge is subject to the jurisdiction of one of the implementing agencies described in 61.14(2);

(iii) The impoundment has received a waiver from the Division pursuant to section 61.14(9)(a); or

(iv) The owner of a land application system can demonstrate that:

(A) The design and operation of the system will result in complete evapotranspiration of the effluent;

(B) There is adequate storage provided for the effluent during periods of inclement weather or where the ground has been frozen unless the provisions of (A) above, can be met during the entire year; and;

(C) Any augmentation plan or substitute supply plan for the land application site does not provide a credit for return of the effluent to ground water.

(v) Land application of reclaimed water is occurring under the provisions of a notice of authorization issued pursuant to Regulation 84, including any return flow.

(b) The following facilities are specifically exempted from coverage under the ground water discharge provisions of this regulation:

(i) Any impoundment subject to regulation under the Uranium Mill Tailings Radiation Control Act, 42 U.S.C., Section 7901, et seq. as amended.

(ii) Any impoundment used in the treatment, storage or recharge of raw or potable water.

(iii) Any stormwater retention or detention impoundment.

(iv) Any impoundment or land application system for which a currently valid certificate of designation has been obtained pursuant to the Solid Waste Disposal Sites and Facilities Act, C.R.S. 1973, 30-20-101, et seq. as amended, and other impoundments or land application systems subject to regulation under that Act which are not part of a wastewater treatment system for which a Colorado Discharge Permit System (CDPS) permit for a discharge to surface waters is required.

(v) Any tank which does not result in a discharge to ground water.

(vi) Any beneficial use of biosolids through land application pursuant to the "Biosolids Regulation," Regulation 64 (5 CCR 1002-64), or the beneficial use of septage through land application pursuant to 40 CFR 503.

(vii) Any facility operating under a permit issued pursuant to the Underground Injection Control provisions of the Safe Drinking Water Act, 42 U.S.C. 300f, et seq.

(viii) Any individual sewage disposal system with a design capacity of 2,000 gallons per day or less, if designed and constructed in accordance with requirements pursuant to the Individual Sewage Disposal System Act, section 25-10-101 C.R.S., et. seq.

(ix) Any onsite landscape irrigation system located on a domestic wastewater treatment plant site using treated effluent that is applied at an agronomic rate.

(x) Any graywater treatment works with a design flow of 2,000 gallons per day or less, if designed and constructed in accordance with Regulation 86 (5 CCR 1002-86).

(c) Any ground water permit conditions, limitations, or control plans established by the Division pursuant to these regulations shall only be subject to enforcement through the Colorado Water Quality Control Act section 25-8-101, C.R.S. et seq.

61.14(2) REGULATION BY IMPLEMENTING AGENCIES

Consistent with section 25-8-202(7), C.R.S. this section shall only apply to those activities that are not subject to the jurisdiction of the following implementing agencies:

(a) The Division of Reclamation and Mining Safety of the Department of Natural Resources.

(b) The State Engineer of the Department of Natural Resources.

(c) The Oil and Gas Conservation Commission of the Department of Natural Resources.

(d) The Hazardous Materials and Waste Management Division of the Department of Public Health and Environment.

(e) The Division of Oil and Public Safety of the Department of Labor and Employment.

61.14(3) IMPACTS FROM SURFACE WATERS

The Division may assign permit limitations for any pollutants discharged to surface waters which may be shown, based on available information, to cause an exceedance of ground water standards or numerical protection levels. In establishing such limitations the Division shall take into account any attenuation in the concentration(s) of the pollutant(s) of concern in the stream up to the point of compliance.

61.14(4) POINT OF COMPLIANCE

Point(s) of compliance, where necessary to protect ground water standards or numerical protection levels, will be established by the Division in accordance with section 41.6 of the "Basic Standards for Ground Water", Regulation 41 (5 CCR 1002-41), except as provided below. For discharges to surface waters which are impacting ground waters the point of compliance shall be set as follows:

(a) Where the zone of aquifer recharge occurs prior to the site boundary, the point of compliance shall be set in accordance with section 41.6(d)(1).

(b) Where the zone of aquifer recharge occurs beyond the site boundary, the point of compliance shall be set at the beginning of the zone of aquifer recharge.

61.14(5) VERIFICATION MONITORING

(a) Pursuant to Section 61.8(2)(b)(iii)(A) the Division may, as a condition of the permit, require the permittee to monitor at any point prior to the point of compliance in order to provide an indication of concentrations of pollutants prior to application to land, in the vadose zone, or in the ground water prior to their reaching a point of compliance.

(b) Detection wells or vadose zone monitoring may be required in order to establish the quality of the effluent and ground water mix immediately downgradient of the land application site or impoundment. Where a modeled attenuation of pollutants in the vadose zone and/or in the ground water has been used as a basis for determining that effluent limits will be met at the point of compliance, the Division may require detection wells or other monitoring along one or more lines parallel with the flow path in order to verify that the predicted attenuation is taking place. Concentration values expected to occur prior to application to the land, in the vadose zone, or at detection wells, which are based on an expected level of treatment or a predicted attenuation, will be referenced in the permit for use in determining the need to prepare and implement a control plan as described in section 61.14(6).

61.14(6) CONTROL PLAN

(a) The Division may, as a condition of a permit, require the permittee to complete and submit a control plan if the concentration of an effluent parameter at any verification monitoring point exceeds; (A) A value based on the predicted attenuation at that point which was used to determine that an effluent limitation could be met at the point of compliance, or (B) The effluent limitation itself where the effluent limit is established at a point other than the point of compliance.

(b) The control plan described in section 61.14(6)(a) shall describe the action to be taken by the permittee which will insure that the concentration of the pollutant(s) of concern will not exceed the effluent limit(s) for the pollutant(s) at any point of compliance. As part of the plan the permittee may show, through additional monitoring or ground water quality modeling, that effluent limitations will not be exceeded at the point of compliance. As a condition of accepting the permittee's conclusions based on modeling or additional monitoring the Division may require the permittee, through a schedule of compliance, to install additional detection wells to verify the accuracy of the conclusions stated in the control plan. Where additional monitoring or modeling does not demonstrate that effluent limitations will be met at the point of compliance, the control plan must include an analysis of viable alternatives for elimination of the excess pollutant level(s) and selection of a preferred alternative/The Division may require the permittee to implement the selected alternative, or any other alternative if it find the selected alternative to be inadequate, in the form of a schedule of compliance to be added in an amendment to the permit. Implementation of a control plan does not abrogate the requirement to comply with all effluent limits at any point of compliance.

(c) A control plan will not be required where the permittee can demonstrate that the elevated pollutant concentrations are being caused by an off-site activity for which the permittee has no responsibility.

61.14(7) LAND DISPOSAL

(a) Discharges to land which qualify as land disposal pursuant to section 61.2(49) are required to meet effluent limitations determined in accordance with section 61.8(2)(b)(iii) to be necessary for protection of ground water standards, or numerical protection levels at any point(s) of compliance.

(b) Effluent limitations for land disposal systems shall, as a minimum, meet the applicable limitations found in section 61.8(2) of this regulation.

61.14(8) LAND TREATMENT

(a) Discharges to land which, pursuant to section 61.2 meet the definition of land treatment are required to meet effluent limitations at any point(s) of compliance determined in accordance with Section 61.8(2)(b)(iii) to be necessary for protection of ground water standards or numerical protection levels.

(b) Where effluent limits at a point of compliance are not required, due to a determination by the Division that no impact to ground water inconsistent with ground water standards or numerical protection levels is likely, the Division may require reasonable monitoring and reporting to continue to verify that the probability of impact to ground water is not significantly increasing due to the possible addition of new pollutants or to higher loading rates.

61.14(9) IMPOUNDMENTS

(a) The owner of any impoundment who can demonstrate, using a method which has been approved by the Division, that the seepage from the impoundment does not exceed 1×10^{-6} cm/sec ("Allowable Seepage") will be considered not to have a discharge to waters of the state, by virtue

of the insignificant nature of the seepage, and a waiver of the requirement to obtain a permit will be granted by the Division. In addition to demonstrating that the allowable seepage will not be exceeded, the owner must also receive the Division's concurrence, based on a review of the design, operating plan, and any other available information, that the type of liner or other impermeable material which is in place will maintain their integrity for the projected life of the impoundment. Such Division determination shall take into consideration the material(s) expected to be placed in the impoundment and other operation or maintenance factors which may affect the permeability. If the Division discovers that an incompatible material has been placed in the impoundment, or that proper operation and maintenance procedures for the specific type of liner or other impermeable material have not been followed, it may require a water balance or other additional testing to demonstrate that the seepage rate does not exceed the allowable seepage. Failure by the owner to conduct such testing will be grounds for the Division to require a permit for the discharge from the impoundment.

(b) Any owner of an impoundment who fails to demonstrate that the seepage from the impoundment is less than or equal to 1×10^{-6} cm/sec shall be required to submit an application and obtain a permit as required in section 61.14(10) which follows.

(c) Where effluent limits at a point of compliance are not required, due to a determination by the Division that no impact to ground water inconsistent with ground water standards or numerical protection levels is likely, the Division may require reasonable monitoring and reporting to continue to verify that the probability of impact to ground water is not significantly increasing due to the possible addition of new pollutants or to higher loading rates.

61.14(10) APPLICATION AND OPERATION REQUIREMENTS

(a) The owner of any land application system whose construction is commenced after July 1, 1993, is prohibited from applying any effluent to the land prior to obtaining an effective discharge permit. The owner of any impoundment who construction is commenced after July 1, 1993 and who has not received a waiver, pursuant to section 61.14(9)(a), is prohibited from placing any material, other than raw or potable water, in the impoundment prior to obtaining a discharge permit.

(b) Consistent with section 61.4, the owner of any existing land application system or impoundment which has not received a waiver pursuant to section 61.14(9) must submit a permit application to the Division within sixty days of being so notified. If the land application system and/or impoundment is already described in the rationale for CDPS permit, the information pertinent to the land application system and/or impoundment is not required to be submitted until the application for renewal of the CDPS is due. The owner of any other existing facility shall submit an application within two years of July 1, 1993, whether notification has been provided by the Division or not. The owner of any existing land application system or existing impoundment may continue operation of those facilities pending action on a permit application filed in conformance with the above stated requirements.

61.15 PERMIT FEES - GENERAL PROVISIONS

(a) Permit fees shall be paid in accordance with the schedule set forth in section 25-8-502(1)(b), C.R.S.

(b) As provided in 25-8-502(1)(b)(II), the Division may establish an interim fee in any case where the facility to be permitted does not fit into the existing categories and subcategories. The interim fee shall be consistent and equitable with the fee schedule contained in the law and regulations. The interim fee shall apply until the date of adjournment sine die of the next regular session of the General Assembly following the imposition of the interim fee.

(c) The annual permit fee or interim fee must be paid within the thirty (30) days of receipt of the Division's billing statement. All fees assessed shall be made payable to the Department of Public Health and Environment - Water Quality Control Division. All fees collected by the Division shall be credited to the appropriate sector funds:

(i) Water Quality Certification Sector Fund as provided in 25-8-502(1.2)(a)

(ii) Commerce and Industry Sector Fund as provided in 25-8-502(1.5)(a)(I)

(iii) Construction Sector Fund as provided in 25-8-502(1.5)(a)(II)

(iv) Pesticides Sector Fund as provided in 25-8-502(1.5)(a)(III)

(v) Municipal Separate Storm Sewer System Sector Fund as provided in 25-8-502(1.5)(a)(IV)

(vi) Public and Private Utilities Sector Fund as provided in 25-8-502(1.5)(a)(V)

The annual fee is to be used to support the expenses of the clean water program activities of the Division.

It is the intent of the General Assembly as stated in section 25-8-502(1)(c) C.R.S. as amended that a portion of the expenses of the discharge permit system be funded from the general fund, reflecting the benefit derived by the general public.

(d) Failure of the applicant or permittee to pay the annual or interim fee as required by section 25-8-502(1)(b) C.R.S. is a violation of the permit and shall result in the suspension of said permit and initiation of enforcement action by the Division, which could include revocation of the permit. Reinstatement of such revoked permit will require payment of the delinquent fee and any penalties levied but will not require a permit application or review pursuant to 5 CCR 1002-61, 61.4 or 1002-61, 61.5 et seq. Enforcement action pertaining to delinquent permit fees shall be taken in accordance with 25-8-601 C.R.S. et seq. and section 61.8 of the discharge permit regulations.

(e) The annual permit fee shall be applicable to all permittees of record as of July 1, 1983 and new permittees thereafter. Fees assessed under the Water Quality Control Act prior to the 1983 amendments are applicable to prior fiscal years up to June 3, 1983, regardless of the date upon which a permit action was taken by the Division.

61.16 ADMINISTRATION BY THE DIVISION

(a) The Director of the Division shall not receive nor, during the previous two (2) years, have received, a significant portion of his or her income directly or indirectly from permit holders or applicants for a permit. For the purpose of this Section, the term “significant portion of income” means 10 percent or more of gross personal income for a calendar year, except that it means 50 percent or more of gross personal income for a calendar year if the recipient is over 60 years of age and is receiving that portion under retirement, pension, or similar arrangement. The term "permit holders or applicants for a permit" shall not include any department or agency of the State government.

(b) The Division may enter into binding memoranda of understanding with the Regional Administrator dealing with the exchange of information and other matters concerning the issuance and administration of discharge permits.

(c) The Division shall comply with the provisions of the Act with respect to enforcement of the permit terms and conditions.

61.17 CONCENTRATED ANIMAL FEEDING OPERATIONS

61.17(1) SCOPE AND PURPOSE

(a) The provisions in this section 61.17 provide permit regulations for concentrated animal feeding operations as the result of the revised federal concentrated animal feeding operation (CAFO) regulations that became effective on April 14, 2003, and as revised effective July 24, 2007 and December 22, 2008.

(b) The purpose of these regulatory provisions is to ensure that CAFOs take appropriate actions to manage manure and process wastewater effectively in order to protect surface waters.

61.17(2) SPECIFIC APPLICABILITY

(a) The provisions in this section 61.17 are applicable to all new and existing CAFOs and to animal feeding operations that are designated as CAFOs by the Division, except any CAFO defined as a housed commercial swine feeding operation under section 61.2 of these regulations.

(b) Any discharge from a CAFO requires a permit except those that are agricultural storm water discharges as defined in section 61.17(2)(c). The owner or operator of a CAFO must seek coverage under a permit if the CAFO discharges to surface water. Specifically, the CAFO owner or operator must either apply for an individual permit or submit a notice of intent for coverage under a general permit.

(c) Land Application Discharges from a CAFO – The discharge of manure or process wastewater to surface water from a CAFO as a result of the application of that manure or process wastewater by the CAFO to land areas under its control is a discharge from that CAFO subject to permit requirements, except where it is an agricultural storm water discharge. For purposes of this section 61.17, where the manure or process wastewater has been applied in accordance with site specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure or process wastewater, as specified in those parts of the nutrient management plan that address section 61.17(8)(b), a precipitation-related discharge of manure or process wastewater from land areas under the control of a CAFO is an agricultural stormwater discharge.

(d) CAFOs shall comply with the relevant sections of Regulation #61, not superseded by this section 61.17, which shall be incorporated in the permit, where appropriate.

61.17(3) DEFINITIONS

As used in this subsection, the following definitions of terms apply.

(a) “25-YEAR, 24-HOUR STORM” means a storm of a 24-hour duration which yields a total rainfall of a magnitude which has a probability of recurring once every 25 years.

(b) “CHRONIC STORM” means a series of storms that occur during a 10-day period which yield a total precipitation of a magnitude that has a probability of recurring once every ten (10) years.

(c) “CLOSED FACILITY” means a concentrated animal feeding operation that has ceased operation and for which a permit is not in effect.

(d) "FREEBOARD" means the vertical distance measured from the liquid surface level (elevation) in an impoundment or tank to the top elevation of the impoundment or tank (for example, berm or wall).

(e) "LAND APPLICATION SITE" means land under the control of a CAFO operator, whether it is owned, rented, or leased by the CAFO, to which manure or process wastewater from the production area is or may be applied, or where cropping or nutrient budget decisions for the site are made by the CAFO.

(f) "MAN-MADE DRAINAGE SYSTEM" means a drainage ditch, flushing system, or other drainage device that was constructed by man and is used for the purpose of transporting manure or process wastewater.

(g) "MANURE" means feces, litter, and/or urine and materials, such as bedding, sludge, compost, feed waste, dry harvested forage, and any raw material used in or resulting from the operation of an animal feeding operation, that have been commingled with feces, litter, and/or urine.

(h) "MULTI-YEAR PHOSPHORUS APPLICATION" means phosphorus applied to a field in excess of the crop needs for that year. In multi-year phosphorus applications, no additional manure, residual solids, process wastewater, or swine feeding process wastewater is applied to the same land in subsequent years until the applied phosphorus has been removed from the field via harvest and crop removal.

(i) "OPERATOR" means any person who owns, leases, operates, controls, or supervises an animal feeding operation or concentrated animal feeding operation.

(j) "OVERFLOW" means the discharge of manure or process wastewater resulting from the filling of an impoundment or tank beyond the point at which no more manure or process wastewater can be contained by the structure.

(k) "PROCESS WASTEWATER" means water directly or indirectly used in the operation of a CAFO for any or all of the following: spillage or overflow from animal or poultry watering systems; washing, cleaning, or flushing pens, barns, manure pits, or other CAFO facilities; direct contact swimming, washing, or spray cooling of animals; or dust control. Process wastewater also includes any water which comes into contact with any raw materials, products, or byproducts including manure, litter, feed, milk, eggs, or bedding.

(l) "PRODUCTION AREA" means that part of a CAFO that includes the animal confinement area, the manure and residual solids storage area, the raw materials storage area, and waste containment areas. The animal confinement area includes but is not limited to open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milkrooms, milking centers, cowyards, barnyards, medication pens, walkers, animal walkways, and stables. The manure and residual solids storage area includes but is not limited to lagoons, runoff ponds, storage sheds, stockpiles, under house or pit storages, liquid impoundments and tanks, static piles, and composting piles. The raw materials storage area includes but is not limited to feed silos, silage bunkers, and bedding materials. The waste containment area includes but is not limited to settling basins, and areas within berms and diversions which separate uncontaminated storm water. Also included in the definition of production area is any egg washing or egg processing facility, and any area used in the storage, handling, treatment, or disposal of mortalities.

(m) "SETBACK" means a specified distance from surface waters, or potential conduits to surface waters, where manure, residual solids, swine feeding process wastewater, and process wastewater may not be land applied. Examples of conduits to surface waters include but are not limited to: open tile line intake structures, sinkholes, and agricultural well heads.

(n) "TANK OVERFLOW" means livestock drinking water in constant-flow cattle watering troughs that overflows into in-trough drain pipes and is retained separately from process wastewater storage.

(o) "VEGETATED BUFFER" means a narrow, permanent strip of dense perennial vegetation established parallel to the contours of and perpendicular to the dominant slope of the field for the purposes of slowing water runoff, enhancing water infiltration, and minimizing the risk of any potential nutrients or pollutants from leaving the field and reaching surface waters.

61.17(4) DESIGNATION OF AN ANIMAL FEEDING OPERATION AS A CONCENTRATED ANIMAL FEEDING OPERATION

The Division may designate any AFO as a CAFO upon performing an on-site inspection and determining that it reasonably could be a significant contributor of pollutants to surface water.

(a) The following criteria shall be considered to determine if an AFO will be designated as a CAFO:

(i) The size of the AFO and the amount of wastes reaching surface water;

(ii) The location of the AFO relative to surface water;

(iii) The means of conveyance of animal wastes and process wastewater into surface water;

(iv) The slope, vegetation, rainfall, and other factors affecting the likelihood or frequency of discharge of manure and process wastewater into surface water; and

(v) Other relevant factors.

(b) No AFO with animal numbers below those established for a Medium CAFO shall be designated as a CAFO unless:

(i) Pollutants from the animal feeding operation are discharged into surface water through a manmade ditch, flushing system, or other similar manmade device; or

(ii) Pollutants from the animal feeding operation are discharged directly into surface water that originate outside of the facility and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.

(c) Where an AFO is at risk of being designated a CAFO, the AFO operator shall submit to the Division, within 60 days of receiving written notice by the Division of such a risk, one of the following:

(i) In consultation with the Division, an approvable work plan and associated timeline for reducing actual or potential environmental impacts such that the Division would not designate the AFO as a CAFO. The operator shall implement the plan within 30 days of it being approved by the Division; or

(ii) A written statement indicating the operator's intention to operate as a CAFO and submit a complete application to be covered under a CAFO discharge permit within 180 days of the date of such statement.

(d) Where an operator does not complete and implement a work plan pursuant to section 61.17(4)(c)(i), or does not submit a written statement pursuant to section 61.17(4)(c)(ii), the AFO may be designated a CAFO by the Division and be required to submit a complete application to be covered under a CAFO discharge permit within 90 days of receiving written notice by the Division of such a designation and permit application requirement.

61.17(5) PERMIT APPLICATIONS

(a) Application Deadlines

(i) The operator of an operation that was defined as a CAFO under regulations that were in effect prior to June 30, 2004, and continues to be defined as a CAFO under subsection 61.2(17), must submit a complete application for a permit immediately where the operation discharges.

(ii) The operator of an operation that became defined as a CAFO after June 30, 2004, but which is not a new source, must submit a complete application for a permit as follows where the operation discharges:

(A) For newly constructed operations not subject to effluent limitations guidelines, 180 days prior to the time the CAFO places animals on the operation; or

(B) For other operations (e.g., resulting from an increase in the number of animals), as soon as possible, but no later than 90 days after becoming defined as a CAFO..

(iii) The operator of a new source CAFO must apply for a permit at least 180 days prior to the time that the operator places animals on the operation.

(iv) The operator of an animal feeding operation that is designated a CAFO pursuant to subsection 61.17(4), must submit a complete application for a permit no later than 90 days after receiving notice of the designation.

(b) Permit Renewal

The operator of a CAFO that seeks to continue with permit coverage shall submit a new permit application consistent with section 61.17(5)(c) at least 180 days before the existing permit expires

(c) Permit Application Requirements (Individual and General Permits)

All new and existing CAFOs shall provide the following to the Division, at minimum, using the application form provided by the Division:

(i) The name of the owner(s) and operator(s) of the operation;

(ii) The contact information of the operator, including mailing address, electronic mail address, facsimile phone number, and office and cell phone numbers;

(iii) The facility location (including section, township, and range) and mailing addresses;

(iv) Latitude and longitude at the entrance to the production area;

(v) A location map (USGS topographic map with 1:24,000 or 1:50,000 scale, or other topographic map of similar accuracy) that illustrates the following:

(A) Location and outline of production areas and land application sites;

(B) Drainage patterns from the production areas;

(C) Location and depths of functional wells, including monitoring wells, within a one-half mile radius of the center of the production areas;

(D) Name and location of public roads located within 1.0 mile of the production areas; and

(E) Name and location of surface waters that will receive discharges from impoundments or terminal storage tanks.

(vi) Specific information about the type and number of animals, whether in open confinement or housed under roof;

(vii) The type of containment and storage for manure and process wastewater (for example, anaerobic lagoon, roofed storage shed, storage ponds, underfloor pits, above ground storage tanks, below ground storage tanks, concrete pad, impervious soil pad, stockpiles, composting), and total capacities for manure and process wastewater storage;

(viii) A site plan of production areas that includes locations of and, where appropriate, names of buildings, manure storage areas, composting areas, impoundments and tanks, piping to impoundments and tanks, transfer piping between impoundments, tanks, manure separation systems, pens, lift stations, berms, process wastewater conveyances, 100-year flood plains (in whole or in part within production areas), and location after each impoundment or terminal tank where permitted discharges to surface waters will occur.

(ix) Design calculations, drawings, specifications, tables, and other documents prepared by or reviewed by a professional engineer registered in Colorado, that document and certify the following. Such documents prepared by a professional engineer shall contain the professional engineer's seal. Such documents reviewed by a professional engineer shall have an accompanying letter indicating what was reviewed and what is being certified by the professional engineer.

(A) The volume of process wastewater runoff generated by portions of the production area that are tributary to each impoundment during applicable storm events;

(B) Drawings for each impoundment that consist of a plan view and cross-sectional views (one each way). The cross sectional views shall include the location of piping, splash pads, chutes, bracing, and spillways. Label in a cross-sectional view, elevations of: 1) the basin floor; 2) manure and process wastewater storage volume (at maximum operating level); 3) precipitation volume from the storm event that is applicable to the permit for which coverage is being requested; 4) process wastewater volume from the storm event that is applicable to the permit for which coverage is being requested; 5) two feet of freeboard, or other freeboard level approved by the Division pursuant to section 61.17(8)(b)(iii)(A); and 6) the top of berms;

(C) That a properly designed and constructed spillway is, or will be, in place at each discharging impoundment, unless the Division has approved that a spillway is not required;

(D) That accurate, permanent depth markers are, or will be, in place that indicate the depth of process wastewater in each open surface liquid impoundment and tank, that are clearly marked in one (1) foot increments, and that clearly indicate the two-foot freeboard elevation (or other freeboard level approved by the Division) and the minimum capacity necessary to contain the required rainfall event, plus two feet of freeboard (or other freeboard level approved by the Division);

(E) That two feet of freeboard, or other freeboard level approved by the Division pursuant to section 61.17(8)(b)(iii)(A), exists in each open surface impoundment

and terminal tank, above the precipitation amount of the storm event that will be specified in the permit, plus associated process wastewater runoff volume, plus manure and other process wastewater storage volume;

(F) That clean water is diverted, as appropriate, from the production areas, manure stockpiles, and composting areas;

(G) That structures used to divert process wastewater from the production areas are sized to carry the flow expected from the storm event that will be specified in the permit for which coverage is being requested; and

(H) That all impoundments, tanks, manure stockpiles, or composting areas located within a 100-year floodplain are protected from inundation and damage from 100-year or smaller flood events.

(x) The total number of acres under control of the applicant available for application of manure or process wastewater;

(xi) A standard operating procedure for measuring and recording precipitation;

(xii) Estimated amounts of manure and process wastewater generated per year (tons/gallons);

(xiii) Estimated amounts of manure and process wastewater transferred to other persons per year (tons/gallons);

(xiv) A nutrient management plan that, at a minimum, satisfies the requirements specified in section 61.17(8)(b);

(xv) Where alternative performance standards are being requested, the information required in subsection 61.17(7), and any additional information requested by the Division pursuant to subsection 61.4(1)(k);

(xvi) Other information required by the Division; and

(xvii) Signature of the application form in accordance with the requirements of subsection 61.4(1).

(d) Permit Review and Processing

CAFO owners or operators must submit a notice of intent (i.e., permit application) when seeking authorization to discharge under a general permit in accordance with 61.17(5)(a). The Division will review these submittals to ensure that the notice of intent includes the information required by 61.17(5)(c), including a nutrient management plan that meets the requirements of 61.17(8)(b) and applicable effluent limitations and standards, including those specified in 61.17(6). When additional information is necessary to complete the notice of intent or clarify, modify, or supplement previously submitted material, the Division may request such information from the owner or operator. If the Division makes a preliminary determination that the notice of intent meets the requirements of 61.17(5)(c) and 61.17(8)(b), the Division will notify the public of the Division's proposal to grant coverage under the permit to the CAFO and make available for public review and comment the notice of intent submitted by the CAFO, including the CAFO's nutrient management plan, and the draft terms of the nutrient management plan to be incorporated into the permit.

For permits, the process for submitting public comments and hearing requests, and the hearing process if a request for a hearing is granted, will follow the procedures applicable to draft permits set forth in section 61.5. For nutrient management plans, the Division may establish an appropriate period of time and process for the public to comment and request a hearing that differs from those specified in section 61.5. The Division will respond to significant comments received during the comment period and, if necessary, require the CAFO to revise the nutrient management plan in order to be granted permit coverage.

When the Division authorizes coverage for the CAFO owner or operator under the general permit, the terms of the nutrient management plan as specified in 61.17(8)(b)(xii) become incorporated as terms and conditions of the permit for the CAFO. The Division will notify the CAFO owner or operator and inform the public that coverage has been authorized and of the terms of the nutrient management plan incorporated as terms and conditions of the permit applicable to the CAFO.

(i) The incorporation of the terms of a CAFO's nutrient management plan into the terms and conditions of a general permit when a CAFO obtains coverage under a general permit in accordance with 61.17(5), is not cause for modification to the general permit pursuant to the requirements of section 61.17(8)(b)(xv).

61.17(6) EFFLUENT LIMITATION REQUIREMENTS FOR CONCENTRATED ANIMAL FEEDING OPERATIONS

Except where a variance has been granted pursuant to section 61.12, CAFOs must achieve the following effluent limitations:

(a) All Existing CAFOs

(i) Effluent Limitations for existing Large Horse and Sheep CAFOs – There shall be no discharge of process wastewater into surface water except as follows: whenever precipitation causes an overflow of process wastewater from a production area designed, constructed, operated, and maintained to contain all manure and process wastewater, including the runoff and direct precipitation from a 25-year, 24-hour storm, at minimum, any process wastewater pollutants in the overflow may be discharged into surface water.

(ii) Effluent Limitations for existing duck CAFOs - Discharges resulting from production areas at dry lot and wet lot duck CAFOs with 5,000 or more ducks shall achieve the following effluent limitations:

Regulated Parameter	Maximum Daily[1]	Maximum Monthly Average[1]	Maximum Daily[2]	Maximum Monthly Average[2]
BOD_5	3.66	2.0	1.66	0.91
Fecal coliform	([3])	([3])	([3])	([3])

[1] Pounds per 1000 ducks.

[2] Kilograms per 1000 ducks.

[3] Not to exceed MPN of 400 per 100 ml at any time.

(iii) Effluent Limitations for existing Large Dairy Cow, Cattle, Swine, Poultry, and Veal Calf CAFOs

(A) Production areas - Except as provided in paragraphs (iii)(A)(I) and (iii)(A)(II) of this section, there shall be no discharge of manure or process wastewater into surface water from the production area. These Large CAFOs shall attain the limitations and requirements of this section 61.17(6)(a)(iii)(A) as of the date of permit coverage.

(I) Whenever precipitation causes an overflow of manure or process wastewater, pollutants in the overflow may be discharged into surface water provided:

1) The production area is designed, constructed, operated, and maintained to contain all manure and process wastewater, including the runoff and direct precipitation from a 25-year, 24-hour storm, at minimum; and,

2) The production area is operated in accordance with the production area best management practices specified in section 61.17(8)(f)(ii), and the records specified in section 61.17(8)(c), below.

(II) Where a CAFO has requested and the Division has approved effluent limitation based upon site-specific alternative technologies, pursuant to section 61.17(7)(a), below.

(B) Land application areas – Discharges from land application areas are subject to the following requirements. Existing Large Dairy Cow, Cattle, Swine, Poultry, and Veal Calf CAFOs shall attain the limitations and requirements of this section 61.17(6)(a)(iii)(B) or upon the date of permit coverage.

(I) Develop and implement the nutrient management plan specified in section 61.17(8)(b), and the best management practices specified in section 61.17(8)(b)(x).

(II) Maintain a complete copy of the information for the best management practices required by section 61.17(8)(b)(x), and the records specified at sections 61.17(8)(c), (c)(i), and (c)(iv).

(iv) Small and Medium CAFOs – Effluent limitations for these CAFOs shall be determined by the Division using Best Professional Judgment.

(b) New Source CAFOs

The following CAFOs that commenced construction after April 14, 2003 are considered new sources and are subject to the following effluent limitations, as applicable.

(i) Effluent Limitations for new source Large Horse and Sheep CAFOs – There shall be no discharge of process wastewater into surface water except as follows: whenever precipitation causes an overflow of process wastewater from a production area designed, constructed, operated, and maintained to contain all manure and process wastewater, including the runoff and direct precipitation from a 25-year, 24-hour storm, at minimum, any process wastewater pollutants in the overflow may be discharged to surface water.

(ii) Effluent Limitations for new source duck CAFOs -

(A) There shall be no discharge of process wastewater into surface water from dry lot and wet lot duck CAFOs with 5,000 or more ducks except as follows: whenever precipitation causes an overflow of process wastewater from a production area designed, constructed, operated, and maintained to contain all manure and process wastewater, including the runoff and direct precipitation from a 25-year, 24-hour storm, at minimum, any process wastewater pollutants in the overflow may be discharged into surface water.

(B) Pretreatment standards – There shall be no introduction of process wastewater to a publicly owned treatment works (POTW) by a new source Duck CAFO with 5,000 or more ducks, except as follows:

(I) As provided in 40 CFR 403.7; or

(II) Whenever rainfall events cause an overflow of process wastewater from a facility designed, constructed, operated, and maintained to contain all manure and process wastewater, including the runoff and direct precipitation from a 25-year, 24-hour storm, at minimum, any process wastewater pollutants in the overflow may be introduced to a POTW.

(iii) Effluent Limitations for new source Large Dairy Cows and Cattle other than Veal Calves

(A) Such a CAFO that commenced construction after April 14, 2003 shall attain the same limitations and requirements as specified in section 61.17(6)(a)(iii) above, except that the limitations and requirements for land application areas shall be attained as of the date of permit coverage.

(B) Such a CAFO that commenced discharging as a new source after April 14, 1993, and prior to April 14, 2003, shall be subject to the effluent limitation provisions specified in section 61.17(6)(a)(iii), above.

(iv) Effluent Limitations for new source Large Swine, Poultry, and Veal Calf CAFOs that commenced construction after April 14, 2003

(A) Production areas - Except as provided in paragraphs (iv)(A)(I) and (iv)(A)(II) of this section, there shall be no discharge of manure or process wastewater into surface water from the production area. These CAFOs shall attain the limitations and requirements of this section 61.17(6)(b)(iv)(A) as of the date of permit coverage.

(I) Any CAFO subject to this subpart may request that the Division establish best management practice effluent limitations designed to ensure no discharge of manure, litter, or process wastewater based upon a site-specific evaluation of the CAFO's open surface manure storage structure. Best management practice effluent limitations included in the permit must address the CAFO's entire production area. In the case of any CAFO using an open surface manure storage structure for which the Division establishes such effluent limitations, "no discharge of manure, litter, or process wastewater pollutants," as used in this section, means that the storage structure is designed, operated, and maintained in accordance with best management practices established by the Division on a site-specific basis after a technical evaluation of the storage structure. The technical evaluation must address the following elements:

(1) Information to be used in the design of the open manure storage structure including, but not limited to, the following: minimum storage periods for rainy seasons, additional minimum capacity for chronic rainfalls, applicable technical standards that prohibit or otherwise limit land application to frozen, saturated, or snow-covered ground, planned emptying and dewatering schedules consistent with the CAFO's Nutrient Management Plan, additional storage capacity for manure intended to be transferred to another recipient at a later time, and any other factors that would affect the sizing of the open manure storage structure.

(2) Open manure storage structures must be designed using procedures and/or software approved by the Division.

(3) All inputs used in the open manure storage structure design including actual climate data for the previous 30 years consisting of historical average monthly precipitation and evaporation values, the number and types of animals, anticipated animal sizes or weights, any added water and bedding, any other process wastewater, and the size and condition of outside areas exposed to rainfall and contributing runoff to the open manure storage structure. If actual climate data is not available, the best available data from the most proximate weather station(s), such as those utilized by the Colorado State University Colorado Climate Center or the National Oceanic and Atmospheric Administration should be used.

(4) The planned minimum period of storage in months including, but not limited to, the factors for designing an open manure storage structure listed in paragraph (A)(I)(1) of this section. Alternatively the CAFO may determine the minimum period of storage by specifying times the storage pond will be emptied consistent with the CAFO's Nutrient Management Plan.

(5) Site-specific predicted design specifications including dimensions of the storage facility, daily manure and wastewater additions, the size and characteristics of the land application areas, and the total calculated storage period in months.

(6) Evaluation of the adequacy of the designed manure storage structure must use evaluations and simulations approved by the Division. The evaluation must include all simulation inputs including, but not limited to, daily precipitation, temperature, and evaporation data for the previous 100 years, user-specified soil profiles representative of the CAFO's land application areas, planned crop rotations consistent with the CAFO's Nutrient Management Plan, and the final modeled result of no overflows from the designed open manure storage structure. For those CAFOs where 100 years of local weather data for the CAFO's location is not available, CAFOs may use a simulation with a confidence interval analysis conducted over a period of 100 years. The Division may approve equivalent evaluation and simulation procedures.

(7) The Division has the discretion to request additional information to support a request for effluent limitations based on a site-specific open surface manure storage structure.

(8) The Division may waive the requirement of (A)(I)(6) for a site-specific evaluation of the designed manure storage structure and instead authorize a CAFO to use a technical evaluation developed for a class of specific facilities within a specified geographical area.

(9) Waste management and storage facilities designed, constructed, operated, and maintained consistent with the analysis conducted in paragraphs (A)(I)(1) through (A)(I)(7) of this section and operated in accordance with the additional measures and records required in section 61.17(8)(c) and 61.17(8)(f) below, will fulfill the requirements of this section.

(II) The production area must be operated in accordance with the additional measures and recordkeeping required in section 61.17(8)(c) and 61.17(8)(f) below.

(III) Provisions for upset/bypass, as provided in 61.8(3)(i) & (j), apply to a new source subject to this provision.

(B) Land application areas – New source Large Swine, Poultry, and Veal Calf CAFOs shall attain the limitations and requirements of this paragraph (B) as of the date of permit coverage.

(I) Develop and implement the nutrient management plan specified in section 61.17(8)(b), and the best management practices specified in section 61.17(8)(b)(x).

(II) Maintain a complete copy of the information for the best management practices required by section 61.17(8)(b)(x), and the records specified at sections 61.17(8)(c).

(v) Effluent Limitations for Large Swine, Poultry, and Veal Calf CAFOs that commenced discharging as a new source after April 14, 1993, and prior to April 14, 2003 - Such CAFOs shall be subject to the effluent limitation provisions specified in section 61.17(6)(a)(iii), above.

(c) General pretreatment standards – CAFO permittees that introduce process wastewater pollutants into a publicly owned treatment works (POTW) must comply with 40 CFR 403.

61.17(7) VOLUNTARY ALTERNATIVE PERFORMANCE STANDARDS

Pursuant to sections 61.17(6)(a)(iii)(A)(II) and 61.17(6)(b)(iv)(A)(II) above, a Large Dairy Cow, Cattle, Swine, Poultry, or Veal Calf CAFO, may voluntarily request the Division to establish alternative Colorado Discharge Permit System effluent limitations based upon the operation's proposed use of site-specific alternative technologies. The request shall include the information specified below. The owner or operator shall attain the limitations and requirements of subsection 61.17(7)(a) or (b), as applicable, as of the date of permit coverage.

(a) Large Dairy Cow, Cattle, and Existing Source Swine, Poultry, and Veal Calf CAFOs - A supporting technical analysis and any other relevant information and data that would support

such site-specific effluent limitations within the time frame provided by the Division. The supporting technical analysis and other relevant information and data shall consist of, but not be limited to, the following.

(i) Information about the proposed innovative technology that includes, but is not limited to:

(A) A description of the technology, manufacturer's name and contact information;

(B) How process wastewater and manure will be treated using the proposed innovative technology;

(C) The reason for and goal of using the technology;

(D) A summary and supporting documents of any research and non-research results that document the performance of the technology;

(E) Information about any deviation from research and non-research conditions, and the anticipated impacts of such deviations on the performance of the proposed innovative technology;

(ii) Results from use of an appropriate technical analysis that calculates the following for discharges from the existing facility, unless an alternative evaluation method is approved by the Division. The calculations shall be based on a site-specific analysis of a storage system designed, constructed, operated, and maintained to contain all manure and process wastewater, including runoff from a 25-year, 24-hour storm. The calculations shall also be based on all daily inputs to the storage system, including manure, all process wastewater, direct precipitation, and runoff, and all daily outputs from the storage system, including losses due to evaporation, sludge removal, and the removal of process wastewater for use on cropland at the CAFO or transported off site.

(A) A calculation determining the predicted median annual overflow volume from the production area based on a 25-year period of actual rainfall data applicable to the site.

(B) Site-specific pollutant data for the CAFO, including colonies of fecal coliform and *Escherichia coli*, and of the mass of ammonia, phosphorus, biological oxygen demand (BOD_5), total suspended solids (TSS), chemical oxygen demand (COD), total organic carbon (TOC), temperature, pH, total dissolved solids (for discharges to the Colorado River System only), and other constituents required by the Division. The pollutant data shall be the result of representative sampling and analysis of all sources of input to the storage system, or other appropriate pollutant data.

(C) A predicted annual average discharge of the pollutants identified in subsection 61.17(7)(a)(ii)(B) above, expressed where appropriate as a mass discharge on a daily basis (lbs/day), and calculated considering subsections 61.17(7)(a)(ii) and 61.17(7)(a)(ii)(A) and (B), above.

(iii) Results from an appropriate analysis that provides the following for the proposed innovative technology:

(A) A prediction of the median annual volume of process wastewater that will occur over the same 25-year period identified in section 61.17(7)(a)(ii), above.

(B) A prediction of the annual average discharge of pollutants identified in subsection 61.17(7)(a)(ii)(B), above, that will be associated with the discharges specified in subsection 61.17(7)(a)(iii)(A), above.

(C) A demonstration that the proposed innovative technology will achieve a quantity of pollutants discharged from the production area equal to or less than the quantity of pollutants calculated pursuant to subsection 61.17(7)(a)(ii)(C), above.

(iv) Documentation that provides the rationale and justification for the models and analysis that were used to address subsections 61.17(7)(a)(iii)(B) and (C) above, and for conclusions made. The Division may, with accompanying justification, request additional information from the operation for the proposed innovative technology, which may include an on-site inspection.

(v) A plan for implementing the innovative technology, including quality assurance practices that the permittee will use to ensure the proper functioning of the innovative technology, and an approach for monitoring performance.

(b) Where the frequency of discharges to surface waters under alternative performance standards is greater than that from a 25-year, 24-hour storm, as applicable, water quality standards-based effluent limits for pollutants in such discharges shall be set pursuant to the requirements of subsection 61.8(2)(b).

(c) Where the frequency of discharges to surface waters under alternative performance standards is greater than that from a 25-year, 24-hour storm, as applicable, discharges shall be monitored, recorded, and reported pursuant to the requirements of subsection 61.8(4).

61.17(8) ADDITIONAL REQUIREMENTS FOR CONCENTRATED ANIMAL FEEDING OPERATIONS

(a) Production Area Design and Construction Requirements.

(i) Process wastewater Storage Capacity Requirements - Concentrated animal feeding operations, except existing dry lot and wet lot duck CAFOs with 5,000 or more ducks, shall meet one of the following design and construction standards regarding process wastewater storage capacity. Precipitation data used to comply with design and construction requirements for storage capacity shall be from a document approved by the Division.

(A) Small and Medium CAFOs – Process wastewater storage capacity requirements shall be determined by the Division using Best Professional Judgment.

(B) Baseline Impoundment and Tank Storage Capacity Requirement for Large CAFOs - Impoundments and tanks for production areas of Large CAFOs (except existing duck CAFOs with 5,000 or more ducks) shall be designed and constructed so that they are capable of storing, at minimum, the volume of all liquid manure and process wastewater, including the runoff resulting from a 25-year, 24-hour Storm, or the runoff volume resulting from a Chronic Storm whichever is larger. Prior to rebuilding or constructing a new impoundment or tank, the operator or owner is strongly advised to contact the Division for the purpose of determining the required storage capacity standard for permitting purposes.

(I) New Source Swine, Poultry, or Veal Calf Operations - Impoundments and tanks for production areas of these new source CAFOs shall be

designed and constructed so that these structures meet the requirements set forth in 61.17(6)(b)(iv).

(II) Other New Sources, including Duck CAFOs with 5,000 or More Ducks – New source CAFOs that are not swine, poultry, or veal calf operations shall meet the same baseline storage capacity requirement as specified in subsection 61.17(8)(a)(i)(B) above.

(C) Evaporation Storage System Standard - Evaporation impoundment systems shall be designed and constructed to withstand a consecutive 10-year period of maximum recorded rainfall, as determined by a water budget analysis process which includes manure and process wastewater loading during that period and provides sufficient capacity to retain all rainfall and process wastewater from the applicable design storm event without overflow. For purposes of determining the consecutive 10-year period of maximum recorded rainfall, the entire period of record shall be utilized. Such impoundments shall also be capable of containing any planned volume of liquid manure and process wastewater, including the runoff resulting from a 25-year, 24-hour storm. If a new source Swine, Poultry or Veal Calf Operation, such impoundments shall be capable of meeting the requirements set forth in 61.17(6)(b)(iv).

(ii) Spillways - An impoundment shall have a spillway that is designed and maintained to prevent erosion of the structural integrity of the impoundment, except where the operator requests and the Division approves that a spillway is not required.

(A) An impoundment that holds a depth of process wastewater that is five feet or less, retains process wastewater for 48 hours or less and, from which any overflow will be captured by a down gradient impoundment or tank, shall be exempt from this requirement.

(B) An operator may request approval from the Division that no spillway is required for an impoundment where the operator demonstrates that structural integrity of the impoundment will be maintained without a spillway in the event of an overflow.

(iii) For new source Large CAFOs and newly constructed CAFOs - designs of diversion structures and impoundments for process wastewater, and of structures that divert clean water from running onto production areas, manure stockpiles, and composting areas shall be prepared and certified by a professional engineer registered in the State of Colorado.

(iv) Clean water shall be diverted, as appropriate, from running onto feedlots, holding pens, manure and process wastewater storage systems, manure stockpiles, composting areas, and the like. Structures used to divert clean water from running onto new source Large Swine, Poultry, and Veal Calf CAFOs, shall be capable of meeting the requirements set forth in 61.17(6)(b)(iv).

(v) Structures used to divert process wastewater from production areas to impoundments or tanks shall be sized such that they can carry the flow expected from a 25-year, 24-hour storm. For new source Large Swine, Poultry, and Veal Calf operations, such structures shall be capable of meeting the requirements set forth in 61.17(6)(b)(iv).

(b) Nutrient Management Plan Requirements

61.17(8) ADDITIONAL REQUIREMENTS FOR CONCENTRATED ANIMAL FEEDING OPERATIONS

(i) Any permit issued to a CAFO must include a requirement to implement a nutrient management plan that, at a minimum, contains best management practices and procedures necessary to meet the requirements of this section and applicable effluent limitations and standards.

(ii) The permittee shall develop and implement a nutrient management plan upon the date of permit coverage for existing and new source CAFOs.

(iii) Ensure adequate storage of manure and process wastewater, including procedures to ensure proper operation and maintenance of the impoundments and tanks. The procedures shall include, but not be limited to:

(A) Except during the designed storm event, manure and process wastewater stored in impoundments and terminal tanks shall be removed as necessary to maintain a minimum of two (2) feet of freeboard, except where the operator requests and the Division approves an alternative freeboard level. The request shall include documentation that the alternative level will protect structural integrity of impoundments and terminal tanks and be functionally equivalent to two feet of freeboard in preventing overflows caused by factors such as wind and receiving direct precipitation.

(B) For operations that land apply process wastewater, whenever the design capacity of impoundments and tanks is less than the volume required to store runoff from the designed storm event, the structures shall be dewatered to a level that restores the required capacity once soils on a land application site has the water holding capacity to receive process wastewater.

(iv) Ensure proper management of animal mortalities (that is, dead animals) to prevent discharge of pollutants to surface waters. Mortalities shall remain on the production area until disposal and shall be managed to ensure that they are not disposed of in a liquid manure, storm water, or process wastewater storage system that is not specifically designed to treat animal mortalities;

(v) Ensure that clean water is diverted, as appropriate, from the production area;

(vi) Prevent direct contact of confined animals with surface waters;

(vii) Ensure that chemicals and other contaminants handled on-site are not disposed of in any manure, storm water, or process wastewater storage system unless specifically designed to treat such chemicals and other contaminants;

(viii) Site-specific conservation practices that have been identified and will be implemented, including as appropriate, buffers or equivalent practices, to control runoff of pollutants to surface water. Such practices shall include, but are not limited to:

(A) Solid manure shall be incorporated as soon as possible after application, unless the application site has perennial vegetation or is no-till cropped, or except where the nutrient management plan adequately demonstrates that surface water quality will be protected where manure is not so incorporated.

(B) Process wastewater to furrow- or flood-irrigated land application sites shall be applied in a manner that prevents any process wastewater runoff into surface waters.

(C) When process wastewater is sprinkler-applied, the soil water holding capacity of the soil shall not be exceeded.

(D) Process wastewater shall not be applied to either frozen or flooded land application sites.

(E) Manure or process wastewater shall not be land-applied within 150 feet of domestic water supply wells, and within 300 feet of community domestic water supply wells.

(ix) Identify protocols for appropriate sampling and testing of manure, process wastewater, and soil;

(x) Establish protocols to land apply manure or process wastewater in accordance with site specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure or process wastewater. Such protocols shall include, but are not limited to:

(A) No application of manure or process wastewater shall be made to a land application site at a rate that will exceed the capacity of the soil and the planned crops to assimilate nitrate-nitrogen within twelve (12) months of the manure or process wastewater being applied.

(B) Manure and process wastewater shall be applied as uniformly as possible with properly calibrated equipment.

(xi) Identify specific records that will be maintained to document the implementation and management of the minimum nutrient management plan elements described in subsections 61.17(8)(b)(i) through (x), above.

(xii) Terms of the Nutrient Management Plan

(A) Any permit issued to a CAFO must require compliance with the terms of the CAFO's site-specific nutrient management plan. The terms of the nutrient management plan are the information, protocols, best management practices, and other conditions in the nutrient management plan requested by the Division for clarification or justification in order to meet the requirements of paragraph 61.17(8)(b) of this section.

(B) The terms of the nutrient management plan, with respect to protocols for land application of manure, litter, or process wastewater required by paragraph 61.17(8)(b)(x) of this section and, as applicable, 61.17(8), must include:

(I) The fields available for land application;

(II) Field-specific rates of application properly developed, as specified in paragraph 61.17(8)(b)(xii)(B)(IV) below, to ensure appropriate agricultural utilization of the nutrients in the manure, litter, or process wastewater; and

(III) Any timing limitations identified in the nutrient management plan concerning land application on the fields available for land application;

(IV) Description of the rates of application of manure, litter, and process wastewater to be land applied, according to the following specifications:

(1) Maximum amounts of nitrogen and phosphorus derived from all sources of nutrients, for each crop identified in the nutrient management plan, in chemical forms determined to be acceptable to the Division, in pounds per acre, for each field;

(2) The outcome of field-specific assessment of potential for nitrogen and phosphorus transport to surface water for each field, using the USDA, NRCS Colorado Phosphorus Index Risk Assessment tool or other Division-approved method;

(3) The crops to be planted in each field or any other uses such as pasture of fallow fields (including alternative crops identified in accordance with paragraph 61.17(8)(b)(xii)(B)(IV)(7) of the section);

(4) The realistic yield goal for each crop or use identified for each field;

(5) The nitrogen and phosphorus recommendation for each crop or use identified for each field from a method approved by the Division. Such methods may include, but are not limited to, the most current published fertilizer suggestions of the Cooperative Extension in Colorado or adjacent states, or the most current nutrient management planning guidelines for Colorado as published by the USDA, NRCS.

(6) The methodology by which the nutrient management plan accounts for the following factors when calculating the amounts of manure, litter, and process wastewater to be land applied:

a) Results of soil tests conducted in accordance with protocols identified in the nutrient management plan, as required by paragraph 61.17(8)(b)(ix) of this section;

b) Credits for all nitrogen in the field that will be plant available;

c) The amount of nitrogen and phosphorus in the manure, litter, and process wastewater to be applied;

d) Consideration of multi-year phosphorus application;

e) Accounting for all other additions of plant available nitrogen and phosphorus to the field;

f) The form and source of manure, litter and process wastewater;

g) The timing and method of land application; and

h) Volatilization of nitrogen and mineralization of organic nitrogen.

(7) For alternative crops identified in the CAFO's nutrient management plan that are not in the planned crop rotation:

a) The crops must be listed by field, in addition to the crops identified in the planned crop rotation for that field;

b) The nutrient management plan must include realistic crop yield goals and the nitrogen and phosphorus recommendations from sources specified in 61.17(8)(b)(xii)(B)(IV)(5) above;

c) Maximum amounts of nitrogen and phosphorus from all sources of nutrients and the amounts of manure, litter, and process wastewater to be applied must be determined in accordance with the methodology described in paragraph 61.17(8)(b)(xii)(B)(IV)(6) of this section.

(C) If approved by the Division, nutrient management plan terms that meet the requirements of 40 CFR 122.42(e)(5)(i) may also be used to satisfy the requirements of 61.17(8)(b)(xiii).

(xiii) The following projections must be included in the nutrient management plan submitted to the Division, but are not terms of the nutrient management plan:

(A) The CAFO's planned crop rotations for each field for the period of permit coverage;

(B) The projected amount of manure, litter, or process wastewater to be applied;

(C) Projected credits for all nitrogen in the field that will be plant available;

(D) Consideration of multi-year phosphorus application;

(E) Accounting for all other additions of plant available nitrogen and phosphorus to the field;

(F) The predicted form, source, and method of application of manure, litter, and process wastewater for each crop.

(xiv) CAFOs must calculate maximum amounts of manure, litter, and process wastewater to be land applied at least once each year using the methodology required in paragraph 61.17(8)(b)(xii)(B)(IV)(6) of this section before land applying manure, litter, and process wastewater and must rely on the following data:

(A) A field-specific determination of soil levels of nitrogen and phosphorus, including, for nitrogen, a concurrent determination of nitrogen that will be plant available consistent with the methodology required by paragraph 61.17(8)(b)(xii)(B)(IV)(6) of this section, and for phosphorus, the results of the most recent soil test conducted in accordance with soil testing requirements approved by the Division; and

(B) The results of most recent representative manure, litter, and process wastewater tests for nitrogen and phosphorus taken within 12 months of the date of land application, in order to determine the amount of nitrogen and phosphorus in the manure, litter, and process wastewater to be applied.

(xv) Changes to a Nutrient Management Plan

61.17(8) ADDITIONAL REQUIREMENTS FOR CONCENTRATED ANIMAL FEEDING OPERATIONS

(A) Any permit issued to a CAFO must require the following procedures when a CAFO owner or operator makes changes to the CAFO's nutrient management plan previously submitted to the Division.

(I) The CAFO owner or operator must provide the Division with the most current version of the CAFO's nutrient management plan and identify changes from the previous version, except that the results of calculations made in accordance with the requirements of paragraph 61.17(8)(b)(xiv) of this section are not subject to the requirements of paragraph 61.17(8)(b)(xv) of this section.

(II) The Division must review the revised nutrient management plan to ensure that it meets the requirements of this section and applicable effluent limitations and standards, including those specified in 61.17(6) above, and must determine whether the changes to the nutrient management plan necessitate revision to the terms of the nutrient management plan incorporated into the permit issued to the CAFO. If revision to the terms of the nutrient management plan is not necessary, the Division must notify the CAFO owner or operator and upon such notification the CAFO may implement the revised nutrient management plan. If revision to the terms of the nutrient management plan is necessary, the Division must determine whether such changes are substantial changes as described in paragraph 61.17(8)(b)(xv)(A)(III) of this section.

(1) If the Division determines that the changes to the terms of the nutrient management plan are not substantial, the Division must make the revised nutrient management plan publicly available and include it in the permit record, revise the terms of the nutrient management plan incorporated into the permit, and notify the owner or operator and inform the public of any changes to the terms of the nutrient management plan that are incorporated into the permit.

(2) If the Division determines that the changes to the terms of the nutrient management plan are substantial, the Division must notify the public and make the proposed changes and the information submitted by the CAFO owner or operator available for public review and comment. The process for public comments, hearing requests, and the hearing process if a hearing is held must follow the procedures applicable to draft permits set forth in 61.5. Once the Division incorporates the changes to the terms of the nutrient management plan into the permit, the Division must notify the owner or operator and inform the public of the final decision concerning changes to the terms and conditions of the permit.

(III) Substantial changes to the terms of a nutrient management plan incorporated as terms and conditions of a permit include:

(1) Addition of new land application areas not previously included in the CAFO's nutrient management plan. Except that if the land application area that is being added to the nutrient management plan is covered by terms of a nutrient management plan incorporated into an existing permit in accordance with the requirements of paragraph 61.17(8)(b)(xii) of this section, and

the CAFO owner or operator applies manure, litter, or process wastewater on the newly added land application area in accordance with the existing field-specific permit terms applicable to the newly added land application area, such addition of new land would be a change to the new CAFO owner or operator's nutrient management plan but not a substantial change for purposes of this section;

(2) Any changes to the maximum amounts of nitrogen and phosphorus derived from all sources for each crop, as set forth in paragraph 61.17(8)(b)(xii)(B)(IV) of this section;

(3) Addition of any crop or other uses not included in the terms of the CAFO's nutrient management plan and corresponding field-specific rates of application expressed in accordance with paragraph 61.17(8)(b)(xii) of this section; and

(4) Changes to site-specific components of the CAFO's nutrient management plan, where such changes are likely to increase the risk of nitrogen and phosphorus transport to surface water based on the USDA, NRCS Colorado Phosphorus Index Risk Assessment tool or other Division-approved method.

(c) Recordkeeping Requirements

The permittee shall maintain on site a copy of its most current nutrient management plan and make it available to the Division or its designee, upon request. In addition, the permittee must create, maintain on-site for five years from the date they are created, and make available to the Division or its designee, upon request, the following records:

(i) All applicable records identified in the nutrient management plan, pursuant to subsection 61.17(8)(b)(xi) above.

(ii) The completed permit application required pursuant to subsection 61.17(5)(c), above.

(iii) The following complete records:

(A) Records documenting the visual inspections of the production area required under subsection 61.17(8)(f)(ii)(A) and (B);

(B) Weekly records of the depth of the manure and process wastewater in the liquid impoundment and terminal storage tank as indicated by the depth marker required under subsection 61.17(8)(f)(ii)(D);

(C) Records documenting any actions taken to correct deficiencies required under subsection 61.17(8)(f)(ii)(E). Deficiencies not corrected within 30 days shall be accompanied by an explanation of the factors preventing immediate correction;

(D) Records of mortalities management and practices used by the large CAFO to meet the requirements of subsection 61.17(8)(b)(iv);

(E) Records documenting the current design of any manure storage structures, including volume of solids accumulation, design treatment volume, total design volume, and approximate number of days of storage capacity;

(F) Records of date, time, and estimated volume of any overflow.

(iv) For permitted Large Dairy, Beef, Cattle, Swine, Poultry, and Veal Calf CAFOs, the following complete records for land application sites:

(A) Expected crop yields;

(B) The date(s) manure or process wastewater is applied to each land application site;

(C) Weather conditions at the time of land application and for 24 hours prior to and following application;

(D) Test methods used to sample and analyze manure, process wastewater, and soil;

(E) Results from manure, process wastewater, and soil sampling and analysis;

(F) Explanations of the basis for determining manure and process wastewater application rates, in accordance with the nutrient management plan;

(G) Calculations showing the total nitrogen and phosphorus that will be applied to each land application site, including sources other than manure or process wastewater;

(H) The total amount of nitrogen and phosphorus actually applied to each land application site, including documentation of calculations for the total amount applied;

(I) The method used to apply the manure and process wastewater;

(J) Date(s) of manure application equipment inspection.

(d) Transfer of Manure or Process Wastewater to Third Parties

Prior to transferring manure or process wastewater to other persons, Large CAFOs must provide the recipient of the manure or process wastewater with the most current nutrient analysis. The analysis provided must be consistent with the requirements of the nutrient management plan (subsection 61.17(8)(b)). Large CAFOs must retain for five years records of the date, recipient name and address, and approximate amount of manure or process wastewater transferred to another person.

(e) Annual Reporting Requirements

The permittee must submit an annual report to the Division that shall include the following:

(i) The number and type of animals, whether in open confinement or housed under roof;

(ii) The estimated amount of total manure and process wastewater generated by the CAFO in the previous 12 months (tons/gallons);

(iii) Estimated amount of total manure and process wastewater transferred to other persons by the CAFO in the previous 12 months (tons/gallons);

(iv) The total number of acres for land application covered by the nutrient management plan developed pursuant to subsection 61.17(8)(b);

(v) The total number of acres of land application sites that were used for application of manure and process wastewater in the previous 12 months;

(vi) A summary of all manure and process wastewater discharges from the production area that have occurred in the previous 12 months, including date, time, and approximate volume;

(vii) A statement indicating whether the current version of the CAFO's nutrient management plan was developed or approved by a certified nutrient management planner;

(viii) The actual crop(s) planted and actual yield(s) for each field, the actual nitrogen and phosphorus content of the manure, litter, and process wastewater, the results of calculations conducted in accordance with paragraph 61.17(8)(b)(xii) of this section, and the amount of manure, litter, and process wastewater applied to each field during the previous 12 months; and

(ix) The results of any soil testing for nitrogen and phosphorus taken during the preceding 12 months, the data used in calculations conducted in accordance with paragraph 61.17(8)(b)(xii) of this section, and the amount of any supplemental fertilizer applied during the previous 12 months.

(f) Operation and Maintenance Requirements.

(i) Accumulations of manure shall be removed from impoundments and tanks as necessary to maintain the capacity of the structures to retain the storage volume from the designed storm event.

(ii) Production Area Best Management Practices - The following best management practices shall be established and properly maintained by permitted Large Dairy, Beef Cattle, Swine, Poultry, and Veal Calf CAFOs:

(A) Perform weekly inspections of all stormwater run-on diversion devices, runoff diversion structures, animal waste storage structures, and devices channeling process wastewater to impoundments or tanks.

(B) Perform daily inspections of water lines, including drinking water or cooling water lines.

(C) Perform weekly inspections of impoundments and tanks and record the process wastewater level in open surface impoundments and terminal storage tanks as indicated by the depth marker required under section 61.17(8)(f)(ii)(D), below.

(D) Install depth markers in all open surface impoundments and terminal storage tanks to indicate the design volume and to clearly indicate the minimum capacity necessary to contain a "25-year, 24-hour", storm event, as applicable, and to clearly indicate the two-foot freeboard elevation, or other approved freeboard elevation. At minimum, depth markers should be clearly marked in one (1) foot increments.

(E) Correct any deficiencies found as a result of daily and weekly inspections as soon as possible, but no later than 30 days of such a deficiency having been

identified, unless factors preventing correction within 30 days have been documented.

(iii) Inspect Land Application Equipment – The permittee must periodically inspect for leaks from equipment used for land application of manure or process wastewater. At minimum, such inspection shall be made annually and within the six month period prior to the first application of manure or process wastewater, and at least once daily when process wastewater is being applied.

(iv) Setback Requirements – Unless the permittee exercises one of the alternatives provided for in 61.17(8)(f)(iv)(A) and (B) below, manure and process wastewater shall not be applied closer than 100 feet to any down-gradient surface waters, open tile line intake structures, sinkholes, agricultural well heads, or other conduits to surface waters.

(A) As a setback alternative, the permittee may substitute the 100-foot setback with a 35-foot wide vegetated buffer where applications of manure or process wastewater are prohibited.

(B) As a setback alternative, the permittee may demonstrate that a setback or buffer is not necessary because implementation of alternative conservation practices or field-specific conditions will provide pollutant reductions equivalent or better than the reductions that would be achieved by the 100-foot setback.

(g) Closure Requirements - A permittee shall demonstrate to the satisfaction of the Division that there is no remaining potential for a discharge of manure or process wastewater that was generated while the operation was a CAFO.

61.18 - 61.20 Reserved

61.21 STATEMENT OF BASIS AND PURPOSE FOR THE AMENDMENTS TO THE REGULATIONS ENTITLED "REGULATIONS FOR THE STATE DISCHARGE PERMIT SYSTEM"

In accordance with the requirements of C.R.S. 1973, 24-4-103(4) the Commission adopts this Statement of Basis and Purpose. These regulations prescribe the requirements and procedures for implementation of the State Discharge Permit System and for continuation of the NPDES program delegated to the State in 1975 by the U.S. Environmental Protection Agency. These regulations are intended to comply with the State's agreement with EPA, applicable requirements of Federal law, and the Colorado Water Quality Control Act as amended by S.B. 10 (1981). These regulations are expected to improve and make more efficient an existing program.

The General Assembly significantly amended the Colorado Water Quality Control Act with the adoption of S.B. 10 (1981), and this is the primary reason for these amendments. The new law became effective on July 1, 1981. The changes primarily concern revised definitions, timeframes for action, a newly mandated fee structure, and implementation of S.B. 10. These regulations provide direction to the Water Quality Control Division and potential dischargers into state waters. The direction specifically relates to preparation and evaluation of applications for discharge permits or their renewal, modification, revocation or suspension. Major subjects covered by these regulations are as follows:

(1) Applications must be determined by the Division to be complete within 45 days and must be issued within 180 days except under specified conditions. Minimum requirements for completeness are described.

(2) These regulations seek enhancement of public participation in the permit process. They provide for adjudicatory hearings wherein applicants for discharge permits and any other person

potentially adversely affected may demand an adjudicatory hearing within 30 days of the issuance of the final determination of a permit by the Division.

(3) Effluent limitations for each permit must, as a minimum, meet the applicable State effluent limitations and/or technology-based effluent limitations in accordance with requirements of Section 301 of the Federal Clean Water Act. In addition the Division is required to insure that sufficient treatment is provided to meet the applicable water quality standards for the receiving water. These regulations specify the manner of implementing water quality standards in permits. Section 6.9.2(2) provides a basic framework describing the relationship between water quality standards and permit limitations. Additional experience with this subject matter may allow more specific description of the process for transferring instream water quality standards into permit effluent limitations.

(4) Permit application requirements are divided into mandatory information and information required at the option of the Division.

(5) For the reissuance of permits, the regulations have been written to minimize the burden on applicants where essentially no change in conditions has occurred.

(6) In accordance with Section 204(3) of the Water Quality Control Act these regulations require the Commission to determine whether beyond secondary treatment is economically reasonable prior to such limitations going into effect. These regulations provide that in evaluating the economic reasonableness of treatment beyond secondary, the Commission will consider, among other relevant factors, the rate structure of the effected municipality, the economic burden of individual rate payers, the existence of facilities prior to July 1, 1981, and the availability of construction grant funds for the construction of any such facilities.

(7) The footnote for ammonia and nitrate adopted in the South Platte River Basin is not affected by these regulations and remains applicable.

(8) The concept of variances introduced by S.B. 10 (1981) and implemented in those regulations specifies a request for a determination by the Division that the benefits derived from meeting water quality standard based permit limitations bear reasonable relationship to the economic, environmental, and energy impacts or other factors which are peculiar to the applicant in meeting water quality standards. The Division may grant a variance for no longer than the duration of the permit, but existing beneficial uses must be protected.

(9) Discharges to ditches and other man-made conveyance structures was the subject of considerable testimony during the hearing. These regulations are intended to protect the interests of ditch owners and to assure compliance with any applicable water quality standards for waters of the State that may be affected by the discharge, even if effluent limitations more stringent than otherwise necessary are thereby required. Such discharges must protect agricultural, domestic, industrial, and municipal beneficial uses made of the waters of the ditch which use or uses were decreed and in existence prior to the inception of the discharge.

(10) Section 6.14.1(3) seeks to clarify uncertainty created by 25-8-503(6), C.R.S. 1973, as amended by S.B. 10, concerning the relationships of discharges to a ditch and subsequently decreed uses where the discharge subsequently changes in flow rate, quality or quantity.

(11) For the purposes of these Regulations the Commission did not find it necessary to decide whether or not waters in a ditch or other man-made conveyance are state waters within the meaning of the Water Quality Control Act. No problems are anticipated since discharges to ditches require a permit by the terms of the Act.

(12) In accordance with the language and intent of 25-8-502(1)(b), of the revised Water Quality Control Act, these regulations are intended to provide a fee structure which is sufficient to accomplish three basic objectives.

1. Meet the Division's expenses in processing and administering discharge permits, which are a vital component of the water quality program;

2. Assess fees fairly and equitably against those who require Division services so that dischargers are not unduly burdened with excessive fees; and

3. Enable the Division to reasonably manage and administer existing resources and expected staff additions authorized by Senate Bill 10.

The Commission proposed a simple fee structure whereby the permit applicant would pay an hourly charge of $80.00 for each hour of direct technical time spent by the Division on the permit. That rate was also intended to cover administrative and clerical time for all hours worked whether or not directly billable to a specific permit.

At the October 6, 1981 Commission hearing on the proposed final permit regulations many witnesses expressed grave reservations about the hourly rate established, and questioned the Division's proposal in terms of the intent of S.B. 10 (1981). In effect, the first fee proposal was requiring permit applicants (whether new, renewals, or for amendments) applying in a particular fiscal year, to bear the cost of all permit activities in that year, whether such costs were directly attributable to them or not. It also became evident that permittees would have trouble budgeting for a fee when they didn't know how much it was going to cost. In addition there was much testimony stating that the hourly fee was excessive. The Commission is responsive to these and other concerns. However, the Commission feels that under the changes in the Water Quality Control Act and with current budget assumptions, it is fair and necessary to assess a reasonable level of permit fees for issuance and on-going administration which will supplement the amount of State, General and Federal funds available. The Commission has set interim fees that would not be a fixed cost for each permit but would charge each applicant for actual hours on that permit.

These regulations provide that the Commission will review recommendations of the Division annually on fees for both permit issuance and annual permit administration. The Division will analyze its total budget for each year, including State general funds, Federal funds, and estimated revenue from fees and enforcement fines. The Commission will review in accordance with these regulations the findings and updated information from year to year and authorize reasonable fees to be collected based upon budget needs from year to year.

(13) Another major issue which arose during hearings on these regulations was that Senate Bill 10 did not provide guidance as to the different procedures and requirements for new and renewal permits. Commenters stressed that the regulations define what would be considered a "new permit" for a previously existing facility. 25-8-502(1)(b), of the revised Act states that "an application shall be considered a renewal if it is based on the same facility, process, and flow upon which the current permit is based, including any application for expansion or change which has been granted."

The Commission feels strongly that what constitutes "substantial" change for a facility must be reviewed on a case by case basis and cannot be defined for all possible types of facilities or changes that may occur. Many witnesses felt that for renewal of a permit, the Division should merely refer to previously submitted information and quickly re-issue the same permit. In some cases this can be done but in many others past information submitted is inadequate. Renewal permits are not necessarily substantially less time-consuming to process than an application for a new facility.

The Division fully expects that as time records are compiled it will have better documentation as to efforts spent on renewals for different types of facilities and can more closely compare relative costs of new and renewal applications.

(14) The Division is in the process of revising its permit application forms. Until recently it had been using EPA application forms for most types of facilities but found them lacking in terms of the completeness of information requested. Receiving appropriate information from the start will allow the Division to effectively review the application and to determine what conditions should be included in the permit.

(15) Relative to the economic reasonableness of its action in adopting these regulations the Commission considered: (1) the impact to permit applicants incurred in their data acquisition and preparation of forms; and (2) the cost of permitting and administration of existing permits which are passed on to permit applicants by the Division with the expected benefits. The Commission found these impacts entirely reasonable compared with the economic benefits of maintaining existing beneficial uses of state waters. It found the imposition of costs of compliance to be an insignificant part of the overall program for protecting the State's waters. Except with respect to permit fees, no evidence was submitted regarding specific costs for compliance with these regulations.

The parties to the Commission hearings held in preparation of these regulations are listed on the attached page.

PARTIES TO THE HEARINGS FOR THE REGULATIONS FOR THE STATE DISCHARGE PERMIT SYSTEM

1. Northwest Colorado Council of Governments
2. Amax Inc.
3. Flatlron Sand and Gravel Co.
4. Colorado Association for Housing and Building
5. Rio Blanco Oil Shale Company
6. Eastman Kodak Company
7. Cotter Corp.
8. Rocky Mountain Oil & Gas Association, Inc.
9. CF&I Steel Corp.
10. Trout Unlimited
11. Colorado Association of Commerce and Industry
12. City of Thornton
13. Exxon Company, U.S.A.
14. Cathedral Bluffs Shale Oil Co.
15. Union Carbide Corporation
16. City and County of Denver
17. Larimer - Weld Regional Council of Governments
18. Colorado Mining Association
19. City of Colorado Springs
20. Public Service Company of Colorado
21. Mission Viejo Water and Sanitation District
22. Cities of Englewood and Littleton
23. City of Fort Collins, Colorado
24. City of Loveland, Colorado
25 Cache La Poudre Water Users Association
26. Town of Estes Park, Colorado
27. Town of Windsor, Colorado
28. Hewlett-Packard
29. City of Westminster, Colorado
30. Adolph Coors Company, Chevron Shale Oil Company, Brannan Sand & Gravel, Colorado Sand &

Gravel, Snowmass Water & Sanitation District
31. Special District Association of Colorado
32. The Crested Butte Water and Sanitation District
33. City of Arvada
34. Breckenridge Sanitation District
35. The Colorado Municipal League
36. Parker Water & Sanitation District

FISCAL STATEMENT REGARDING AMENDMENTS TO THE REGULATIONS ENTITLED: "REGULATIONS FOR THE STATE DISCHARGE PERMIT SYSTEM"

GENERAL FISCAL IMPACT

Costs are incurred by an applicant for a discharge permit during pre-application facility evaluation. Such evaluation is needed to provide data required in a discharge permit application. The extent of the evaluation varies as a function of facility size and complexity. The information about facilities for which a permit is required is readily available to the management of an existing facility or may be contained in a prior permit. For a new facility much of the data would be contained in design and engineering documents needed by the applicant for reasons other than the filing of a permit application.

Permit applications contain both mandatory and optional information requirements. This reduces data demands to those which are essential. Applicants for permitting of major discharges are required to submit more data than are applicants for minor discharges.

Further, based on testimony, data requirements thought by parties to impose additional cost were minimized. All data required in these regulations is necessary and will be used in the Division's engineering evaluation of the discharge for which a permit is sought. Utilization of the public participation and adjudicatory hearing provisions of these regulations would expose permit applicants, the Division, and petitioners other than permit applicants, to hearing and case preparation expense. The amount is unpredictable.

The major costs of compliance with these regulations will be incurred by permittees in meeting discharge permit effluent limitations. However, these regulations specify only the procedures for imposing such requirements and not the requirements themselves. Therefore, the major costs of compliance must be determined on a case-by-case basis upon permit issuance. Consistent with these considerations little specific information was submitted to the Commission regarding the cost of compliance with these regulations except with respect to permit fees.

Procedures associated with variances and consideration of treatment of domestic wastewater beyond secondary provide opportunities for financial relief that were not available under previous permit regulations.

SPECIFIC FISCAL, IMPACT OF CERTAIN REGULATORY PROVISIONS

I. PERMIT TERMS AND CONDITIONS - Permits are written for five (5) year periods subject to renewal. Permit conditions require the permittee to comply with water quality standards, effluent limitations and U.S. Environmental Protection Agency requirements under the Clean Water Act. Cost to permittees of wastewater treatment are not changed substantially as the result of the amendments included in these regulations but may be by provisions of S.B. 10(1981) concerning "economic reasonableness" when this issue is addressed in the adoption of water quality standards and upon permit issuance.

II. PERMIT APPLICATION REQUIREMENTS - These regulations, as amended, do not change basic information requirements for permit applications. Section 6.6.0 of these regulations specifies the minimum and optional information requirements.

III. TREATMENT BEYOND SECONDARY - Section 6.12.0 of these regulations provides that the Commission must determine whether treatment beyond secondary is "economically reasonable" before such treatment can be imposed upon domestic wastewater treatment works. The fiscal impact from these regulations on rate payers for cost of beyond secondary treatment will be that which is passed on to them in their billings for service. Thus, specific impact is not quantifiable. The requirement for such treatment is reviewed case by case and the potential overall impact on the State cannot be predicted. Beneficiaries of treatment beyond secondary are expected to be downstream users of the waters receiving the discharge. Such waters often support beneficial uses, such as recreation, water supply, and aquatic life. This indirectly increases the fiscal benefits of water based recreational opportunities.

IV. VARIANCES - If a variance to water quality standards is granted after case by case review, it will have positive fiscal impact on those paying for treatment to meet permit conditions. In some cases, it could be argued that granting a variance has negative environmental impact on water quality or aquatic life in the water body segment subject to the variance and thus fiscally adversely impact downstream users who could be required to additionally treat water before using it.

V. FEES - These regulations provide for a two-tier fee system:

1. Permit processing and issuance fee, Subsection 6.16.1

2. Annual permit administration fee, Subsection 6.16.2

Based on the fiscal note to S.B. 10 (1981) and later estimates by the Division of the revenues to be derived from permit fees, the fiscal impact for fiscal year 1982 is approximately $372,000 from permit fees. This is a cost to permit applicants and permit holders and income to the water quality control fund from which appropriations are made for operation of the permit program. Approximately $128,000 was expected from enforcement fines in FY-82 and $128,000 in FY-83, but enforcement fines are not a provision of these regulations. It is essential that in the application of the fee portion of these regulations that sufficient cash funds are generated to cover the costs of permit processing and administration such that the various aspects of S.B. 10 and particularly the 180 day response time in the Act is satisfied. This makes the fees an issue of need to cover cost versus the appropriate level of the fee from the viewpoint of permit applicants. Testimony on this issue resulted in separation of the fee for annual administration of the permit from the fee for its preparation. Such separation facilitates budgeting by permit applicants and permit holders. Failure to raise sufficient cash funds through fees to cover permitting costs would impose a fiscal impact equal to the difference between fees obtained from permitting and the expenses incurred. This could result in a request to the General Assembly for supplemental funds or layoff of personnel. This later alternative would diminish the Division's responsiveness to program requirements. The payment of the fees indirectly impacts the rate payers as a cost and similarly impacts all taxpayers as a potential offset to general taxation. S.B. 10 (1981) limits the maximum fee for a new permit to $25,000, and to $5,000 for a renewal permit as defined in the Act for any and all permits required for an entire contagious plant site.

The specific fee schedule adopted is as follows: (a) technical work - $20.00 per hour; (b) administrative work - $20.00 per hour; and (c) clerical work - $8.50 per hour.

There are currently approximately 1100 discharge permit holders in the State. Permitting activity will vary from approximately 250 to 300 actions per year.

PARTIES TO PROCEEDINGS

1. Adolph Coors Company
2. Castle Pines; Silverthorne/Dillon; and Purgatory
3. Larimer-Weld Regional Council of Governments

4. Cotter Corporation
5. The Colorado Association of Commerce and Industry (CACI)
6. The City of Boulder
7. The City of Loveland
8. The City of Longmont
9. AMAX Inc.
10. The Colorado Water Congress (CWC)
11. Eastman Kodak Company
12. Trout Unlimited
13. Colorado Mining Association (CMA)
14. Gulf & Western
15. Metro Denver Sewage Disposal District No. 1

61.22 STATEMENT OF BASIS AND PURPOSE FOR AMENDMENTS TO THE REGULATIONS TITLED: "REGULATIONS FOR THE STATE DISCHARGE PERMIT SYSTEM" (THE PERMIT REGULATIONS)

In accordance with the requirements of C.R.S. 1973, 24-4-103(4) the Commission adopts this Statement of Basis and Purpose.

These amendments bring the Permit Regulations into conformity with the "Water Quality Control Act", C.R.S. 1973, 25-8-101. et seq. as amended in the 1982 session of the (Colorado General Assembly by House Bill 1097, and in the 1983 session by Senate Bill 303 and House Bills 1203 and 1571.

House Bill 1097 deleted the words, "or as subsequently amended." from the definition of "Feedlot" in Section 6.3.0(18) and the words, "or in subsequent amendments to this criteria." from the definition of "separate storm sewer" in Section 6.3.0(30) of the Permit Regulation.

Senate Bill 303 repealed and re-enacted with amendments Section 25-89-502(1)(b), C.R.S. 1973, to provide a schedule of annual fees which will be the only fees the Water Quality Control Division may assess upon a discharger. The fees are to be used only to fund the expenses of the discharge permit system. All fines and penalties are to be credited to the General Fund rather than to the water quality control fund as previously provided. S.B. 303 also repealed Section 25-8-502(6) which grandfathered the procedures for processing permit applications received before July 1, 1981.

House Bill 1203 authorizes the Division to exercise best professional judgment, (BPJ), in establishing effluent limitations on case-by-case basis for individual permits in the absence of federally promulgated effluent guidelines or effluent limitations of the Commission. Review by the Commission of technology-based effluent limitations based on BPJ may be requested and shall take place in a non-adjudicatory hearing.

House Bill 1571 defines the term "commence construction" relative to domestic wastewater treatment works expansion whenever throughput and treatment capacity reaches a specified capacity.

In its notice of rulemaking hearing on these amendments the Commission requested comment on the meaning of "for good cause" from House Bill 1203 in the proposed Section 6.9.2. The Commission stated in its notice, "it appears that the phrase 'for good cause' may be redundant with the requirement that the Division exercise best professional judgment only if there is a federal technology-based limitation for which there are no effluent guidelines or regulations.'

As its alternate proposal in this matter CF&I Steel Corporation disagreed with the suggestion in the public notice that the phrase "for good cause" is redundant and should be deleted as creating an ambiguity. CF&I urged that the language of the regulation track the statutory language which was agreed to by the Commission.

In its prehearing statement, the City of Arvada stated it did not object to the inclusion of the phrase "for good cause" in the proposed amendment, but does feel that the phrase is redundant and unnecessary to effectuate the terms and intent of House Bill 1203. Considering the comments it received and its desire to give full expression to the statutory language, the Commission adopted regulatory language interpreting "for good cause" to mean when it is consistent with the purposes of the Legislative Declaration 25-8-102, C.R.S. 1973.

Arvada stated "since the Water Quality Control Division may consider all factors pertaining to discharges, and in the exercise of best professional judgment determine effluent limitation requirements, the proposed amendment is economically reasonable." The Commission concurs and further finds that the entire amendment which it has adopted is economically reasonable.

A comment by the New Jersey Zinc Company was that the Division is precluded from assessing fees for work done on a permit application if processing of the application was not completed prior to the effective date of S.B. 303, July 1, 1983. The Commission has determined that the more reasonable interpretation is that the permit fee requirements of S.B. 10 (1981) should apply for all permit processing work done before July 1, 1983, because there is nothing in the language of S.B. 303 to indicate that the legislature sought to overturn retroactively the determination in S.B. 10 that the Division's 1982-83 permit processing costs would be borne by permittees, since the processing costs were occurred before July 1 , 1983, the permittee should be required to pay them.

61.23 BASIS AND PURPOSE

The purpose of this amendment is to remove apparent inconsistencies between two of the regulations recently adopted by the Commission with regard to the Act's provision in Section 204(3) for a hearing on the economic reasonableness of requiring treatment beyond secondary treatment. The amendment additionally extends the opportunity for a rulemaking hearing on stream classifications and or numeric standards for ammonia and nitrite to all pollutants for which beyond secondary treatment may be required. The latter amendments could help resolve problems of conflicts between the Clean Water Act and state procedures alleged by EPA.

This amendment clarifies that when the Division proposes to issue a permit that would require treatment beyond secondary treatment, the permittee must exercise the statutory right to a hearing given in Section 204(3) by requesting that hearing. In this way, only those permittees who believe that treatment beyond secondary treatment is economically unreasonable! for their facilities will have hearings.

The amendment also clarifies that although the conditions requiring beyond secondary treatment will not go into effect during the review process, other permit conditions will go into effect as usual.

This amendment provides that, when a permittee requests a hearing under Section 204(3), the Commission may in its discretion, proceed first with a rulemaking hearing for the purpose of reclassifying, or changing the numeric standards of the stream segment into which the permitted facility discharges. In this manner, if a change in stream standards results that would in turn require a change in the permit conditions, the need for a hearing pursuant to Section 204(3) could be obviated. If, after rulemaking, the permittee was still desirous of proceeding with Section 204(3) adjudicatory hearing, that right would still be available.

By adopting this amendment, the Commission intends to avoid two conflicts with the Clean Water Act ("CWA") alleged by EPA. One is the granting of variances from stream classifications or standards for individual permittees. EPA contends that the granting of such variances is impermissible under the CWA; whereas, changes in classifications and standards are acceptable with certain limitations. The second alleged conflict is the prohibition in the CWA against a board or body which approves permit applications from having as a member any person who receives a significant portion of his income from a permit holder. The same prohibition does not apply to rulemaking, which affects permits, such as stream classifications.

Finally, this amendment deletes from the permit regulations the reference to the "Footnote for Unionized Ammonia and Nitrite". In view of the other changes, this reference would be redundant.

FISCAL IMPACT STATEMENT

These amendments to clarify procedures for hearings pursuant to C.R.S. 1973, 25-8-204(3) (beyond Secondary Treatment Requirements) have no fiscal impact which can be identified at this time. Any fiscal impacts that could be associated with this action would be more properly attributable to prior actions of the Commission. The Commission believes it has acted in an economically reasonable manner by adopting these amendments.

Adopted: April 14, 1986
Effective: May 30, 1986

61.24 BASIS AND PURPOSE

These amendments bring the Regulations for the State Discharge Permit System ("the permit regulations") into compliance with Senate Bill 83 changes to the Water Quality Control Act, C.R.S. 25-8-101 et seq., that became effective June 4, 1985.

S.B. 83 corrects certain deficiencies in the state water quality permit program. EPA specifically identified three areas of the permit program which did not comport with Federal requirements. Each of these problems inadequate coverage of activities for which criminal penalties could be imposed, variances from water quality standards granted to individual permittees through their permits without sufficient notice or a legitimate concurrent change in the water quality standards through rulemaking, and the Commission's acting as an appellate body for reconsideration of decisions made on individual permits in contravention of the Federal law's conflict of interest provision - has been resolved through S.B. 83.

S.B. 83 modified C.R.S. 25-8-204(3) to delete the right to a hearing for dischargers whose permits require treatment beyond secondary, in which hearing the Commission was to determine whether such treatment was economically reasonable before it could be required. These regulations were modified in Section 6.12.0 to prevent hearings held under this section from violating the conflict of interest provision in the Federal Clean Water Act.

C.R.S. 25-8-401(5)(b) now applies only to those variances still allowed under the Water Quality Control Act which will primarily be limited to variances from control regulations such as variances from the state effluent limitations found in 5 CCR 1002-3.10.1.1.

C.R.S. 25-8-401(5)(b) requires that if a variance is granted before the Division issues the relevant permit, the Division must republish the public notice and the permit in draft form with the variance. This is necessary to comply with EPA's notice provisions. On the other hand, if a variance is granted after the Division has issued the permit, the variance must be published as a permit modification which also goes to public notice and is also necessary for compliance with EPA's regulations.

For variance from regulations which are not required for compliance with the Federal discharge permit program, in other words from regulations which either go beyond Federal requirements or from regulations which do not apply under federal law to an NPDES permittee, an appeal from a Division decision regarding the variance can be made to the Commission. For all other variances, a dissatisfied party must appeal to a hearing officer as a part of the general adjudicatory hearing on the permit under the APA. Where the APA does not automatically stay permits, once contested, S.B. 83 specifically grants the Division the right to stay its own permits upon challenge. C.R.S. 25-8-404.

Because of the potential overlap between C.R.S. 25-8-403 and 25-8-404 and the potential for confusion among the regulated community, the Commission is promulgating these regulations explaining how the

Division will grant administrative stays. Without certain guidelines to control when a stay is appropriate it is possible that arbitrary decisions could result.

S.B. 83 modifies C.R.S. 25-8-501(2) to spell out that the terms of a permit govern until that permit is formally changed after public notice. EPA requested this clarification because permittees might otherwise argue that a request for rulemaking before the Commission, or a decision by the Commission with regard to a specific standard would automatically stay enforcement of a permit condition based on the standard.

S.B. 83 modified Section 25-8-505(a)(l) to provide that, where the Division cannot meet the 180 day deadline for permit issuance, the Division may automatically extend an existing permit for a renewal permittee, as is provided in the APA, or issue a temporary permit to a new applicant. These regulations provide for an appeal of such temporary permits and also require public notice of a permit extension.

The S.B. 83 revision to C.R.S. 25-8-503(1)(b) provides that the Division has Best Professional Judgement (BPJ) authority on a permit-by-permit basis when necessary for compliance with the "Federal Act". The Clean Water Act, in Section 402(a)(1), gives EPA's Administrator specific BPJ authority. EPA has interpreted this section also to allow states with delegated programs the ability to exercise BPJ authority, under the same circumstances as the Administrator. It is Section 402(a)(1) of the Federal Clean Water Act on which EPA bases its regulations that spell out States' BPJ authority. See 40 C.F.R. 125.3(c).

There is an opinion by EPA's general counsel in which no distinction is made between State and Federal permit writers with regard to the ability to include BPJ provisions in a permit. In re Central Hudson Gas and Electric, OGC, Vol. 2, p. 371 (July 29, 1977), NPDES opinion No. 63. Further, there is a case in which the court did not distinguish between State and Federal permit writers in the context of BJP permits. American Frozen Foods, Inc. v. Train, 539 F. 2d 107 D.C. Cir. (1976). Finally, the legislative history of the 1977 Clean Water Act amendments, vol. Ill, p. 461, in which Senator Muskie stated, with reference to Section 402, that Federal and State permit issuers had the ability to write BPJ permits when no applicable BAT limits existed. At the State level, Senator Allard read into the record immediately before the Senate voted to accept the conference committee versions of Senate Bill 83, a statement that indicated that the legislative interest was to include both federal statutes and regulations.

For these reasons, it is evident that the Division has been granted the authority to make BPJ determinations as provided by the regulations. Senate Bill 83 modifies subparagraph (c) of Section 503(1) to provide for review of a BPJ decision by a hearing officer, as opposed to the Commission, to avoid the conflict of interest prohibited by the Clean Water Act. This review is a part of a general adjudicatory hearing on the permit. In addition, subparagraph (c) now provides that the standard for review is different from what would ordinarily be required, to wit, the Division bears the burden of proving by substantial evidence that its formulation of BPJ permit limits is justified.

S.B. 83 modifies the variance provision of the Colorado Water Quality Control Act of 1981 (S.B. 10) by deleting entirely the right to a variance from water quality standards previously allowed under C.R.S. 25-8-503(4). It now states that water quality based effluent limitations must be based on "appropriate physical, chemical and biological factors reasonably necessary to achieve the levels of protection required by the standards."

Section 25-8-503(9) C.R.S. is a new section added by Senate Bill 83 which allows the permit variances that are consistent with the Clean Water Act. For the most part, variances under the Federal Act can be granted only by the Administrator; however, certain variances, such as those from temperature standards, may be granted by a State agency. In addition, this section grandfathers previously granted variances.

S.B. 83 modifies C.R.S. 25-8-501(2) to spell out that the terms of a permit govern until that permit is formally changed after public notice. EPA requested this clarification because permittees might otherwise argue that a request for rulemaking before the Commission, or a decision by the Commission with regard to a specific standard would automatically stay enforcement of a permit condition based on the standard.

S.B. 83 modified Section 25-8-505(a)(l) to provide that, where the Division cannot meet the 180 day deadline for permit issuance, the Division may automatically extend an existing permit for a renewal permittee, as is provided in the APA, or issue a temporary permit to a new applicant. These regulations provide for an appeal of such temporary permits and also require public notice of a permit extension.

The S.B. 83 revision to C.R.S. 25-8-503(1)(b) provides that the Division has Best Professional Judgement (BPJ) authority on a permit-by-permit basis when necessary for compliance with the "Federal Act". The Clean Water Act, in Section 402(a)(1), gives EPA's Administrator specific BPJ authority. EPA has interpreted this section also to allow states with delegated programs the ability to exercise BPJ authority, under the same circumstances as the Administrator. It is Section 402(a)(1) of the Federal Clean Water Act on which EPA basis its regulations that spell out States' BPJ authority. See 40 C.F.R. 125.3(c).

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For these reasons, it is evident that the Division has been granted the authority to make BPJ determinations as provided by the regulations. Senate Bill 83 modifies subparagraph (c) of Section 503(1) to provide for review of a BPJ decision by a hearing officer, as opposed to the Commission, to avoid the conflict of interest prohibited by the Clean Water Act. This review is a part of a general adjudicatory hearing on the permit. In addition, subparagraph (c) now provides that the standard for review is different from what would ordinarily be required, to wit, the Division bears the burden of proving by substantial evidence that its formulation of BPJ permit limits is justified.

S.B. 83 modifies the variance provision of the Colorado Water Quality Control Act of 1981 (S.B. 10) by deleting entirely the right to a variance from water quality standards previously allowed under C.R.S. 25-8-503(4). It now states that water quality based effluent limitations must be based on "appropriate physical, chemical and biological factors reasonably necessary to achieve the levels of protection required by the standards."

Section 25-8-503(9) C.R.S. is a new section added by Senate Bill 83 which allows the permit variances that are consistent with the Clean Water Act. For the most part, variances under the Federal Act can be granted only by the Administrator; however, certain variances, such as those from temperature standards, may be granted by a State agency. In addition, this section grandfathers previously granted variances.

Section 6.12.0 of this regulation provides for a statement of the beneficial uses to be attained or maintained by the effluent limits in a CPDES and the analysis of the determination that led to that conclusion. These provisions are in compliance with C.R.S. 25-8-503(8), a new section added by Senate Bill 83. It requires that the Division include in its permit rationale, which accompanies a final permit at issuance, a statement whether or not the water quality standard based effluent limitations are reasonably related to the economic, environmental, public health, and energy impact to the public and affected persons of the permit conditions. To write such a statement, the Division is authorized to request the information necessary to make this determination.

FISCAL IMPACT STATEMENT:

The amendments in this regulation have no fiscal impact beyond the statutory changes which brought about the amendments.

PARTIES TO THE PROCEEDINGS

1. Adolph Coors Company
2. Castle Pines; Silverthorne/Dillon; and Purgatory
3. Larimer-Weld Regional Council of Governments
4. Cotter Corporation
5. The Colorado Association of Commerce and Industry (CACI)
6. The City of Boulder
7. The City of Loveland
8. The City of Longmont
9. AMAX Inc.
10. The Colorado Water Congress
11. Eastman Kodak Company
12. Trout Unlimited
13. Colorado Mining Association (CMA)
14. Gulf & Western
15. Metro Denver Sewage Disposal District No. 1

61.25 STATEMENT OF BASIS AND PURPOSE (1987 REVISIONS)

These amendments are necessary to facilitate the complementary amendments to the Basic Standards and Methodologies which resulted from extensive public hearing input identifying deficiencies in the stream classification and water quality standards-setting process. The Water Quality Control Commission determined that three areas of the Basic Standards Regulation should be examined - Metals/Methodologies, Nitrogen Standards, and the Aquatic Life Classification. These committees composed of experts in the various subject areas were organized to investigate and report on recommended improvements to those subjects. The Commission chose to revise the Basic Standards Regulation for Metals/Methodologies and the Nitrogen Standards initially, and to postpone revisions to the Aquatic Life Classification system.

Since there is a clear and necessary relationship between the stream classification/water quality standards system and the discharge permit system, it was considered vital to provide a clear implementation procedure for the changes to the stream standards resulting from the committees' work. This implementation procedure is embodied in the amendments to this regulation.

All revisions are confined to Section 6.9.2 of this Regulation, entitled Definition of Effluent Limitations. Since the recommendations of the committees to adopt an acute/chronic stream standard system for metals and nitrogen species, discharge permits should reflect this important change. Other changes to monitoring methods, low flow basis, compliance period, and increase in ambient metals level were incorporated in the procedures for establishing discharge limitations to assure that the Basic Standards Regulation is properly applied.

Fiscal Impact Statement

Since these amendments implement complementary changes to the Basic Standards and Methodologies, no separate and unique fiscal impact results. The fiscal impact to users of and dischargers to state waters is described in the Basic Standards and Methodologies' Statement of Basis and Purpose (1987 Revisions) and the accompanying Fiscal Impact Statement.

61.26 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE (1988 Biomonitoring Provisions)

The provisions of 25-8-202(l)(d) and 25-8-501 to 25-8-504, C.R.S. provide the specific statutory authority for adoption of these regulatory provisions. The Commission also adopted, in accordance with 24-4-203(4), C.R.S. the following Statement of Basis and Purpose.

Several parties to the hearing contend this regulation is essentially a "water quality standard" pursuant to Section 25-8-204, and/or a "control regulation" pursuant to Section 25-8-205, and that the requirements for regulations promulgated under these sections have not been met. The biomonitoring regulation, however, is neither of these. It is a permit condition, which the Commission is authorized to regulate pursuant to Section 25-8-20(1)(d) and (2); thus, the requirements of Section 25-8-204 and 205 do not apply to the regulation.

BASIS AND PURPOSE:

Overview

Protection of aquatic life uses of surface waters in Colorado warrants biomonitoring requirements in discharge permits. Chemical testing alone cannot predict the biological effects of effluent constituents. Toxicity can arise from synergistic interactions among multiple effluent constituents, none of which alone would be toxic, and such effects cannot be predicted. Whole effluent toxicity (WET) is completely different from conventional pollutants in terms of its nature, its sources, and its treatability. The addition of WET testing to the Colorado program will provide greater assurance that continuous sources of effluent toxicity are being addressed. The purpose of the new biomonitoring provisions in Section 6.9.7 is to implement an effective program to control toxic effluent discharges in the State of Colorado, to identify and eliminate, to the extent possible, recurrent WET in domestic and industrial discharges, and to provide direction to the Division on the implementation of the "free from toxics" section of the Basic Standards and Methodologies, 5 CCR 1002-8, Section 3.1.11(1) which states in part:

"Substances attributable to human-induced discharges... shall not be introduced into waters of the State... in amounts, concentrations or combinations which are harmful to the beneficial use or toxic to humans, animals, plants or aquatic life."

This new section provides guidance on the use of acute biomonitoring as a detective tool for the detection and control of WET and the characterization of toxicants. As used in the 1988 biomonitoring provisions, the term "toxicity" refers only to toxic effects on aquatic organisms such as fish and macroinvertebrates, and carries no implication whatsoever relative to human health effects. A separate policy statement prepared by the Division addresses implementation of the "free from toxics" provision as it applies to human health.

Chemical analysis of effluent provides only a partial evaluation of the potential toxicity of a discharge to aquatic life. Monitoring for all potentially toxic compounds on a continuous basis for each discharger would be extremely costly. Even if cost-effective, chemical analyses are unable to determine the biological significance of the presence of concentration of specific chemicals in an effluent, and cannot evaluate the synergistic or antagonistic effect of compounds in causing effluent toxicity. There are compounds for which an accurate (or reproducible) method of chemical analysis has not yet been developed, as well as compounds which are just beginning to be evaluated for toxic effects. Biomonitoring provides a means of evaluating the toxicity of a discharge which could not otherwise currently be accomplished.

Similarly, biomonitoring alone provides insufficient information for the development of control programs to eliminate effluent toxicity. Biomonitoring detects WET but cannot identify the specific compounds causing toxicity. Both biomonitoring and chemical testing are necessary components of effective toxicity control programs. Thus, the successful implementation of toxicity control programs will require a combination of biomonitoring and chemical testing, and the costs of toxics control will reflect the costs of biomonitoring, chemical testing, and pretreatment program administration.

Apparent differences between direct discharging industries and POTW's center on the fact that POTW's may receive highly variable influents, some of which they have little or no control over, while the wastewater treatment operations of industrial facilities receive wastes of relatively constant quality over which the industry has complete control. While POTW's do receive highly variable influent this may also be true in some cases for industries. Although treatment of toxicants is an option, treatment may not be a

practical option for POTW's except where the toxicants are nonionized ammonia or residual chlorine. POTW's generally may have to rely on the identification of toxicants and the elimination of toxicant sources to control WET, while industries may be able to rely on treatment. The major difference between industries and POTW's regarding control of WET may be that industries will require less time to identify the cause(s) of toxicity. The time requirements for implementation of control options, especially where construction of treatment facilities is concerned, are unlikely to vary greatly between industries and POTW's.

Biomonitoring shall be implemented in the State of Colorado in a manner consistent with the stream classifications and standard setting process. This means that stream dilution as well as stream classifications will be considered in defining biomonitoring test procedures. If a situation arises where the benefits of controlling WET are not commensurate with the costs, the Commission may enact a site-specific modification to the standard.

Applicability

In establishing the regulation, a distinct effort was made to allow consideration of site specific conditions. Examples of this are found in the industrial and domestic exemptions and in the modification of test protocol. As future information is gained additional flexibility may be adopted as a result of recommendations of the biomonitoring task force.

Industrial categories exempted from the biomonitoring provisions are those which have been shown not to be significant contributors of pollution and in the case of exploratory mines, where historic drainage exists, to be consistent with the existing mine policy of the Division.

New industrial permittees are required to meet a stricter standard of performance for controlling WET than renewal permit applicants, in that new industrial dischargers for which it is possible to simulate the effluent quality must show that the effluent will pass the appropriate biomonitoring test(s) prior to receiving a permit. A new facility which is subject to chronic monitoring is encouraged to have the pollution control equipment necessary to pass the chronic toxicity test in place and ready to operate at the time of discharge in order to avoid as much as possible the introduction of toxic pollutants into the environment.

New domestic permit applicants, due to the potentially complex nature of the influent as well as the inherent inability of the domestic discharger to control or simulate all potential discharges into the sewer system, are not bound by the provisions for new industrial applicants.

Domestic dischargers are provided the opportunity to seek a waiver from the biomonitoring provisions due to the costs associated with biomonitoring but only if toxicity is shown not to be a potential problem.

Biomonitoring will be required of domestic dischargers with facility design capacity greater than 5 MGD. Domestic dischargers with facility design capacities less than or equal to 5 MGD will be exempt from biomonitoring requirements unless the Division finds that biomonitoring requirements are warranted on a site specific basis. The 5 MGD cutoff was selected because it is logical to assume that toxicity problems are more likely to occur in discharges from larger facilities, and the selection of the 5 MGD cutoff softened the economic impact of biomonitoring on small POTW's. A distinction has been made between domestic permittees under five MGD which treat only domestic wastewater and those which do not. This distinction is warranted in view of the higher risk of toxicity which may be associated with discharges that contain commercial and/or industrial contributions. The Division retains the latitude to require biomonitoring of smaller dischargers for cause.

Although national concerns over effluent toxicity have focused on direct and indirect industrial discharges, there is reason to suspect that some toxicants in POTW effluents may originate from household wastes. Detergents, disinfectants, emulsifiers, cleaning agents, solvents, petroleum products, contraceptive agents, and pesticides can all enter domestic sewers from households. Copper, lead, and zinc may enter sewers from household plumbing corrosion. It is important to assess the significance of potential toxicants

from domestic sources in order to structure an effective toxicity control program. Additionally, where domestic-only facilities which accept septage exist close to industrialized areas where a pretreatment program is in effect, the opportunity exists for industries to avoid pretreatment by having toxic wastes hauled by septage haulers to domestic-only POTW's which do not perform biomonitoring.

Basis for Enforcement

WET cannot be predicted accurately because specific chemical testing cannot predict either the biological significance of effluent constituents or synergistic interactions among effluent constituents. The requirements of Section 6.9.7 are principally intended to address ongoing WET resulting from normal operations. Section 6.9.7 generally is not intended to address one-time, non-repeated events such as illegal dumps. These events are addressed elsewhere in the permit regulations.

Because WET cannot be predicted accurately and thus is not under the permittee's close control, the traditional approach to enforcement in which an exceedance of a permit limit constitutes an enforceable permit violation is not appropriate. Section 6.9.7 specifically replaces the traditional numeric permit limit with a mandatory sequence of tiered responses which lead to a systematic investigation of toxicant identification and sources, and of treatment options, in a timely manner. The regulation focuses resources on the problem of WET elimination, rather than emphasizing penalties.

Enforcement of toxicity limits is keyed to the diligence with which dischargers who identify recurrent WET pursue the elimination of WET. This mode of enforcement is justified because in the case of domestic facilities treatment plants have not been designed to treat toxics. Dischargers must be given the opportunity to investigate and eliminate WET before findings of permit condition violations are appropriate. Enforcement based on the results of individual biomonitoring tests was rejected because it is only practical to control recurrent WET, because of the Commission's desire to afford dischargers an opportunity to investigate the causes of toxicity, and because WET may appear through no fault of the discharger, as a result of activities beyond his control. Further, some uncertainty yet exists relative to the accuracy of a single test and the impact of a single discharge upon the uses of the receiving stream. Biomonitoring for information purposes only, with no enforcement provisions, was rejected so that the Division would have authority to require diligent efforts to investigate and eliminate WET. In addition, if toxicity were found, but no mechanism existed to investigate and attempt to correct the same, both the Division and dischargers would potentially be subject to citizen suits.

Diligence is judged using three criteria: Timeliness of response, use of appropriate analytic methodologies, and use of adequate quality control procedures to assure the integrity of analytic results. Timing of response requirements throughout the toxicity incident response are specified in the body of Section 6.9.7. Guidance for determining the appropriateness of analytic methodologies and quality control measures is provided in Guidance for Conducting Toxicity Reduction Evaluations in Colorado.

Section 6.9.7 provides for penalties of up to $10,000 per day for periods during which a permittee displays a lack of diligence in investigating or controlling WET.

There is Division concern that the enforcement approach for biomonitoring based on diligence may not provide adequate incentive for an entity to investigate the toxicity or impact of new effluent sources prior to initiating discharge. This concern is more directly addressed through current permit provisions which require Division notification of any facility change such as additions or alterations which may change effluent quality or quantity. If a permittee detects WET, satisfies all provisions of Section 6.9.7 for investigation and elimination of WET, and determines that the cause of WET is a new source or activity that was inadequately evaluated prior to commencement of the discharge, the Division may proceed with enforcement based on violation of appropriate permit provisions. Examples of violations cited in such situations may be failure to notify the Division of a change in the character of the effluent (quality or quantity) or the discharge of an unauthorized pollutant.

Intake Credits

Some stream segments are polluted from natural sources, nonpoint sources, or abandoned mine activities to the degree that they could exhibit toxicity through biomonitoring. It is appropriate for entities to be responsible for remediation of adverse water quality impacts from the addition of pollutants to surface waters, but generally it is not appropriate to require entities to remediate poor water quality conditions found in the intake water. Thus, a credit is provided in Section 6.9.7(4)(a)(vi). Where the water is treated for potable or industrial purposes, however, the credit is based upon toxicity levels present following the treatment. Toxicity in the intake water should not be considered part of a pattern of toxicity for the discharge. A concern was expressed over the discharge of potentially toxic intake waters to different segments of a better quality. Thus, to qualify for the credit, the discharge must be to the same stream segment from which it was withdrawn or downstream segments of equal or lesser standards.

Test Methods

The test methods identified in the regulations are those which the EPA has published. These methods have been included to insure consistency among permittees as well as to insure utilization of an EPA approved methodology which is a requirement of Colorado discharge permits. It should be noted that EPA is updating the chronic test methods and should be issuing the revision within a year.

The Division has drafted a guidance document entitled Guidelines for Conducting Whole Effluent Toxicity Tests, which will serve to eliminate confusion on the part of Colorado permittees concerning biomonitoring test protocols as EPA continues to develop new biomonitoring methodologies. The discharge permit represents a binding legal contract, including those portions, such as analytical methodologies, incorporated by reference. The Division Guidance will establish the biomonitoring test procedures which Colorado dischargers must follow. Revision of this guidance by the Division will trigger a distribution of the new guidance document to permittees of record.

Acute Toxicity Limit

The acute toxicity limit is established in two parts. The first part acknowledges the stream standard process in the State of Colorado through the instream waste concentration (IWC). This part of the limit is a dilution of the discharge, expressed as a percentage, at and below which the detection of a pattern of toxicity triggers the requirement to undertake a toxicity incident response aimed at eliminating WET. This part of the acute toxicity limit is site-specific, dependent via the IWC upon the low flow of the receiving water and the rate of discharge. However, in order to insure that the effluent as a whole does not have a significant toxicity problem, the second part of the limit was established to allow no mortality greater than 50% in any dilution of the effluent. The 50% mortality portion of the limit is consistent with the current mixing zone provision contained in the basic standards, 5 CCR 1002-8, Section 3.1.9(3).

Consistent with the basic standards, the acute toxicity limit applies to all state water regardless of classification. In order to apply the limit to an unclassified segment, or in the case of a discharge to a stream segment not classified for the protection of an aquatic life use, the limit is modified via the IWC by using the low flow statistic of the next downstream segment classified for the protection of aquatic life uses, rather than the low flow statistic of the receiving segment. In order to relieve economic burdens on small dischargers, the effluent volume used for calculating the IWC Is the design capacity of the facility stipulated in the current permit. The 50% mortality portion of the limit, however, also continues to apply.

Numeric standards for specific compounds always supersede more general standards such as WET. Where WET can be attributed to specific compounds, stream standards and permit limits for such compounds will be set at levels adequate to protect receiving stream uses up to a numeric limit equal to the 50% mortality portion of the limit. These specific standards and limits rather than the acute toxicity limit will be the primary means of control. Where WET is detected and the benefits of controlling WET are not commensurate with the costs, the Commission may establish a site-specific modification to stream standards.

Toxicity Reduction Evaluation

It is the intent of this regulation to require dischargers to undertake biomonitoring of their effluents to provide an indication of whether the effluents contain toxic materials. If biomonitoring tests show that toxic materials in toxic amounts may exist in the effluent, then these regulations require further action by dischargers to find the cause and to eliminate to the extent possible, any unacceptable level of in-stream toxicity. The Toxicity Reduction Evaluation (TRE) has been included as a mandatory provision of the biomonitoring regulation and has been structured to allow permittees flexibility in determining the cause(s) of toxicity where a recurring pattern of acute toxicity is demonstrated in an effluent, or where the preliminary toxicity investigation is unsuccessful in identifying the cause(s) of toxicity. Flexibility in determining the cause(s) of toxicity is afforded to permittees both by the preliminary toxicity evaluation, and by the fact that the Phase II TRE is developed on a case-by-case basis. The current Methods for Toxicity Reduction Evaluations, Phase I. Toxicity Characterization Procedures (Draft June 24, 1988) published by EPA addresses only the Phase I TRE procedures and is only a draft document at this time. However, in order to insure consistency in methodology between individual permittees which conduct a TRE, the most current EPA guidance has been identified as the appropriate guidance methodology.

However, where specialized requirements and time frames are encountered such as in the Phase II TRE Plan, and the control program, permit reopening is necessary in order to have an enforceable document, provide the permittee legal recourse where there is disagreement and provide the public an opportunity for input. Thus, there is some potential for delay in the process.

While the Commission is aware that the Clean Water Act toxics requirements may be limited in certain instances to the 307(a) pollutants, states have the authority to adopt standards more stringent than federal requirements. Recognizing that chemical testing is not adequate to predict the biological effects of effluents and recognizing that toxicity may result from synergism between constituents which by themselves are not toxic, it was determined that biomonitoring requirements are justified in the interest of protecting aquatic life uses.

Chronic Toxicity Monitoring

Chronic biomonitoring is not required of as broad a group of dischargers as acute biomonitoring because of questions about the sensitivity and reliability of the test methodology, and the fact that toxicity characterization (Phase ITRE) methods have not yet been developed for chronic toxicity. The need for chronic toxicity monitoring will be determined based upon the type of discharge, the classification of the receiving stream and appropriate low flow to effluent ratios. The Division will have the discretion to require chronic testing for dischargers to stream segments without aquatic life numbers where appropriate. An example of a situation in which such requirements would be appropriate is where a determination is made that an aquatic life segment will be adversely impacted by a discharge to an upstream non-aquatic life segment.

Pretreatment

It is the intention of the Commission that, upon renewal or reopening of municipal permits with biomonitoring requirements in conjunction with pretreatment programs, the Division will delete those requirements and incorporate requirements consistent with Section 6.9.7.

Incorporation Into Permits

The biomonitoring requirements of Section 6.9.7 will be applied to all new and renewal permits as well as permits reopened consistent with the State Discharge Permit System regulation, 5 CCR 1002-2, Section 6.9.3(8).

Fiscal Impact

The costs incurred by the permittees to satisfy the new application test requirements and the compliance test requirements will vary depending on whether the permittee must conduct both acute and chronic

tests and whether the permittee conducts the test at their own laboratory or contracts with an outside laboratory.

The Environmental Protection Agency has estimated the costs for a contract laboratory to be: $400 for the acute Ceriodaphnia test, $550 for the acute fathead minnow test; $1000 for the chronic Ceriodaphnia test and $1100 for the chronic fathead minnow test. However, EPA has also recognized that as more laboratories begin to conduct biomonitoring tests the market will become more competitive and the prices should lower.

Based on EPA cost estimates, the following costs have been projected to illustrate the direct costs that may be incurred by a discharger as a result of the adoption of the biomonitoring regulation.

1. Routine Testing: $3,800 - $6,100 per year per discharge point

2. Accelerated Testing: $800 - $2,750 per incident

3. Phase I TRE Resolution: $7,200 - $29,000 per incident (est.)

    A. Phase I TRE biomonitoring: $5,200 - $7,100/incident (Based on a minimum of 13 acute tests)

    B. Chemical characterization: $1,000-$20,000 per incident (Chemical monitoring costs will depend on the number of samples and the fraction responsible for the toxicity. A minimum of 10 to 20 samples per incident is expected.)

4. Phase II TRE: $20,000 plus per incident (Best professional judgment for an activity that requires legal, engineering, field sampling, and chemical and biological sampling to resolve.)

A wide range of cost estimates for testing were submitted, ranging up to twice the estimated costs present here. In addition, it is acknowledged that the estimated costs could represent a significant financial burden for small dischargers such as mining operations. However, it has been determined that the benefits at this time outweigh such burdens. This issue may be re-explored by the Task Force.

Comparatively the cost that the permittee would incur if as complete chemical analyses as possible were required, instead of biomonitoring, is estimated to be: $250 for metals, $165 for radium, $1000 for priority pollutants and $1000 for the hazardous substance list. The actual cost will depend upon the laboratory analyzing the wastewater and as stated in the overview there are compounds for which analytical methods have not yet been accepted or developed.

The largest cost for biomonitoring will be to facilities which must conduct both acute and chronic tests and these costs will be the largest in the first year of sampling. Any facility which has toxicity present in the discharge will incur more costs. The cost for conducting a TRE will increase if the Phase I TRE cannot identify the toxicity problem and a Phase II TRE must be conducted. Costs for eliminating the cause of toxicity will vary depending on whether the pollutant can easily be removed from the discharge through either removal from a POTW collection system or through treatment. If pollutants are removed from POTW collection systems there may be additional cost involved with alternate disposal. Some treatment technologies could add a substantial cost to the facility for installation and operation and maintenance.

Biomonitoring Task Force

During testimony for the biomonitoring regulations, many concerns were raised relative to technical and implementation issues. The concerns have included benefits to be derived from the program, technical issues with testing and follow-up investigations on toxicity incidents as well as costs associated with the various stages. There was also concern as to the adequacy of the adopted regulation and future

modification of the regulation. In order to address these concerns and produce a more refined program for the future a biomonitoring task force will be established.

A member of the Water Quality Control Commission will chair the task force which will consist of a maximum of 12 additional people. To the extent feasible, representation will be based upon agencies and interests such as the following: large and small municipalities, large and small industries, mining, one or more environmental groups, EPA, the Water Quality Control Division, the general public, and a contract laboratory.

During the first three years the general charge of the task force will be to:

1. Provide technical assistance to the Division on test protocol, at a minimum evaluating alternate test species, selection of dilution water and quality control.

2. Provide technical assistance on the Division investigation protocol.

3. Identify costs associated with all aspects of the program.

4. Identify needed regulatory change.

5. Attempt to evaluate the benefits derived from the program.

The Division should to the extent feasible provide to the task force all available, non-confidential analytical data, cost data, and technical issues plus pertinent information on biomonitoring received from permittees. It is the Commission's intent to establish the task force for advisory purposes only. Responsibility for implementation of the biomonitoring program resides with the Division.

PARTIES TO THE PROCEEDINGS

1. The Town of Salida
2. Adolph Coors Company
3. Snowmass Water & Sanitation District
4. Sunnyside Gold Corp.
5. The Rocky Mountain Oil and Gas Association
6. AMAX Inc.
7. The Metropolitan Denver Sewage Disposal District No. 1
8. Eastman Kodak Company
9. The Colorado Association of Commerce and Industry (CACI)
10. The Colorado Water Congress (CWC)
11. The Colorado Mining Association (CMA)
12. The City of Northglenn
13. Colorado Springs Department of Utilities
14. Frisco Sanitation District
15. Amoco Production Company
16. County of Clear Creek

61.27 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE (1989 Revisions)

The provisions of 25-8-202(1)(d) and (2); and 25-8-501 to 504 C.R.S. provide the specific statutory authority for the amendments to this regulation adopted by the Commission. The Commission also has adopted in compliance with 24-4-103(4) C.R.S., the following statement of Basis and Purpose.

BASIS AND PURPOSE:

BASIS AND PURPOSE:

These revisions are primarily to provide 1) conformity with the 1988 amendments to the Colorado Water Quality Control Act as contained in House Bill 1010; 2) conformity with the September 30, 1988 revisions of 3.1.0 (5 CCR 1002-8), the Basic Standards and Methodologies for Surface Water; 3) typographical errors and insertions for clarification; and 4) conformity with SB 83. There are, however, three additional revisions which will be discussed in specific detail.

The revisions per H.B. 1010 consist of changing the period of permit public notice from 45 days to 30 days in 6.6.2 and 6.12.0. Changes per the Basic Standards occur in 6.6.2 to address public notice of antidegradation reviews and in 6.9.2 to address the title change and stream low flow values for permit limitation derivation. The revisions per SB 83 consist of deleting reference to variances on water quality standards in 6.13.0(3) and (5). For clarification of acute limitations for whole effluent toxicity 6.9.2(2)(h) was modified, consistent with provisions of 6.9.7.

Three changes of greater significance occur in 6.7.0(4), 6.8.0(3), 6.9.3(10) and 6.9.2(2)(i). The change to 6.7.0(4) and 6.8.0(3) will allow improved program efficiency and more timely permit issuance. Existing regulation dictates the permit effective date as 30 days after issuance. Thus for renewal permits which complete processing early, the Division has delayed issuance for an effective date of the day after existing permit expiration. The revision will allow the Division to issue renewal permits more than 30 days before existing permit expiration, while citing the renewal permit effective date as the day after existing permit expiration. All other aspects for stay requests and adjudicatory requests would remain unchanged. The section has also been revised to clarify that until a permit or amendment becomes effective, operation per the provisions of the permit or amendment is unauthorized.

The changes to 6.9.3(10) are for the purpose of clarifying that permit amendments are subject to the provision of 6.7.0, such as a 30-day effective period. A portion of the section is deleted as it was repetitive.

Section 6.9.2(2)(i) is amended to delete the phrase "and distribution". This revision provides consistency with intake credits as allowed by 6.9.7(4)(a)(vi). The credit is applied after treatment but does not allow the introduction of metals in the distribution system. The introduction of metals to potable water in a distribution system is typically associated with corrosive waters, as indicated by indices such as the Langlier Saturation index and the Aggressive Index. Because of human health concerns with such potable waters, EPA is in the midst of promulgating regulations under the Safe Drinking Water Act to control corrosivity. At present, draft regulations have been noticed and final regulations are expected in the fall of 1989. There is also concern about metals accumulation in domestic sewage sludges where corrosive waters exist. It should be noted that technology exists to control corrosivity and would be performed prior to distribution. This accumulation has the potential to reduce a sludge grade quality and thus limit its disposal alternatives and potentially increasing disposal costs. From the water quality standards standpoint, it is appropriate for permit effluent limitations to control pollutant additions to water. As the metals are added as a result of this use and such addition may impact the beneficial uses of the receiving stream, it is appropriate that such incremental increase be subject to compliance with established water quality standards.

Finally, comments were received from the Office of Regulatory Reform (ORR), expressing concern that several specific aspects of the regulation as proposed are "unnecessary", principally because they restate information contained in statute. The Commission agrees that such duplication should be avoided to the maximum degree practical, and has made most of the changes recommended by ORR. The one exception is the reference in Section 6.6.2(4) to the 30 day comment period for draft permits - a time period that also appears in statute. After consideration of this issue, the Commission has determined that this duplication cannot and should not be entirely eliminated. The Commission believes that providing one document that sets forth a complete and integrated description of the discharge permit process is beneficial to the public. Merely attaching a copy of the Act to the Commission rules, or selectively reprinting portions of the statute would not serve the same purpose.

Based upon comments provided at the hearing, and the Commission's general experience, it is apparent that members of the public who use the Commission's regulations - lawyers, technical personnel, and

others - typically rely on the regulations as published in the Colorado Code of Regulations (CCR). The Secretary of State has informed the Commission that statutory material separate from regulations cannot be published in CCR. Requiring the public to constantly cross-reference two documents (the regulation and the statute) would be confusing and unnecessarily burdensome. Therefore, the Commission has determined that in this instance the limited type of duplication in question is in fact necessary.

PARTIES TO THE PROCEEDINGS OF THE HEARING HELD ON JULY 10, 1989

1. The City of Colorado Springs

61.28 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE (1990 Land Application/Impoundment Revisions)

The provisions of 25-8-202(1)(d) and (2) and 25-8-501 to 504 C.R.S. provide the specific statutory authority for the amendments to this regulation adopted by the Commission. The Commission also has adopted in compliance with 24-4-103(4) C.R.S., the following statement of Basis and Purpose.

BASIS AND PURPOSE:

Overview

These revisions are being made to include requirements for discharges to ground water via land application or impoundments. Such requirements have been anticipated since sections for these items, 6.14.2 and 6.15.0, have been "reserved" in the regulations since the 1981 revisions. These amendments are being made to provide specific regulatory guidance for protection of ground water standards or Division established numerical protection levels for discharges from land application systems and impoundments.

The concept of Division established numerical protection levels was brought forward in a joint Commission/Division policy statement for the implementation of the “Basic Standards for Ground Water", dated March 13, 1987. Its purpose is to provide a mechanism for regulatory control of individual discharges to ground water in the absence of site-specific classification and standards, while preserving the notion that the ground water in the vicinity of the activity will be formally classified by the Commission at some future time. The Commission intends that in developing numerical protection levels the Division would use the criteria in the "Basic Standards for Ground Water" so that, to the maximum extent possible, numerical protection levels would be consistent with standards that the Commission would be likely to establish. For example, in response to comments submitted by several parties, the Commission has clarified that only "reasonably probable" future uses should be considered by the Division in determining numerical protection levels. The Commission assumes that these provisions will be applied in a manner consistent with C.R.S. Section 25.8.302(2)(c). Any affected party can object to numerical protection levels and ask the Commission for site specific classification and standard-setting, which would override any inconsistent determination made by the Division. No classification and standard-setting authority is being delegated to the Division; rather, the Division is authorized to make a determination applicable to a specific facility unless and until the Commission reaches a different result through rulemaking.

Because of their nature, discharges from impoundments and land application systems are reaching state waters (ground water) whose beneficial uses must be protected. The Division will determine, after review of information supplied in the application, that one of three levels of permit conditions are necessary to protect the beneficial uses. The three levels are assumed to be: (1) limitations based on promulgated standards or numerical protection levels to be monitored using ground water wells at the point of compliance, or at a location prior to the point of compliance if requested by the permittee, along with appropriate verification monitoring; (2) monitoring of ground water or vadose zone sampling, only, based on calculations which indicate that contamination of ground water is unlikely due to available dilution, distance to existing ground water, degree of treatment provided, lack of use (current and potential), etc. and (3) monitoring of the discharge at the surface based on similar conditions described in (2), above.

Effluent limits may be determined by using published results of field studies or site-specific modeling results to predict attenuation of pollutants between the point of release and the point of compliance. Vadose zone monitoring is only anticipated to be used where a control regulation limiting the quality or quantity of a pollutant is in place or where the permittee would prefer such monitoring in lieu of installing ground water monitoring wells. In the latter case the Division will take further attenuation of pollutants beyond the monitoring device into account where available information (published material or modeling results) can support the proposed reduction and to the extent that beneficial uses are fully protected. Where the hydrologic or geologic characteristics in the vicinity of the discharge dictate, as shown through modeling or other appropriate analyses, attenuation of the mass pollutant(s) will be considered in establishing effluent limitations. The parties suggested that "background" concentrations of pollutants be taken into account by the Division in establishing effluent limitations. The Commission intends that, consistent with the regulatory approach that has been taken for surface waters, background concentrations will be taken into account in its determination of applicable standards and classifications or in a Division determination of numerical protection levels in accordance with the criteria in the "Basic Standards for Ground Water".

Authority to regulate impacts to ground water via recharge of effluent which is discharged to surface waters has been added but will be used only where information (such as studies which include formal field data collection and analysis) documenting such impacts exists. Where the impacts are well documented the Division will include effluent limits and a schedule of compliance, if necessary, to protect the ground water below the recharge zone. In other cases additional monitoring or studies may be required by the permit in order to fully document impacts before additional treatment is required.

The process for determining a "point of compliance" in the regulation has been referenced to the Basic Standards for Ground Water so that a consistent approach is maintained. For discharges to surface waters where the zone of recharge begins prior to the site boundary the Commission has determined that it is appropriate to establish the point of compliance using the same criteria for a direct discharge to ground water. The Commission recognizes that there may be situations where ground water is not impacted for a significant distance beyond the site boundary. In these cases the point of compliance may be set at a point no further downstream than the beginning of the zone of recharge. This is consistent with the overall framework the Commission has established that ground water contamination inconsistent with standards not be allowed beyond the site boundary.

The fate of pollutants as they travel through the soil/water matrix can be predicted using published material or modeling results but such predictions may be subject to significant error. Because the real possibility that undesirable concentrations of pollutants could reach and go beyond the point of compliance exists, requirements for detection wells or other verification monitoring and a control plan have been included. These elements will provide the permittee with a mechanism to detect excess contamination before it reaches the point of compliance and to eliminate such contamination if necessary to insure beneficial uses are protected and effluent limitation violations are avoided. If excess contamination is detected the permittee has the opportunity to take additional samples from existing or new wells, and/or use any other additional information to re-model the effluent/ground water mixture. If he can show that the effluent limits at the point of compliance can be met then remediation will not be required. Additional wells and/or monitoring may be required in order to verify new assumptions. If the results are negative then the permittee may request a variance from meeting standards for the effluent parameters of concern. It is only if such a variance request is denied that remediation will be required.

Several parties commented in rebuttal statements and at the rulemaking hearing that additional language was necessary to clarify the enforceability of the proposed amendments. The Commission has determined that a new section, 6.15.1(3), should be added to provide the necessary clarification.

Program Scope

Several parties proposed exclusions for activities which they believe would not have a significant impact on ground water. Specific criteria, identified in advance, were relied on to determine the types of activities which would be exempt from, or eligible for a waiver from, the requirements of the regulations. Elsewhere,

as a matter of policy, the Commission has chosen to include facilities with a potential for causing an impact to ground water and structured the regulations with sufficient flexibility so that an unnecessary burden will not be placed on low impact facilities. An example of this is the provision in Section 6.15.8(2) which allows the Division to issue a permit without effluent limits, where it determines that the potential for adverse impact is minimal. Such permits would require reasonable monitoring and reporting to assure that the conditions upon which the decision was made to not require effluent limits do not appreciably change. This type of permit would generally be applicable to facilities whose discharge could be shown to have a minimal probability of impacting the underlying ground water. This would need to be demonstrated through documentation of geological factors (permeability rates, depth to ground water, etc.), hydrological factors (a large alluvial flow: discharge ration, small volume of discharge, etc.) or water quality factors which would preclude such an impact.

The Commission recognizes the expense of gathering ground water data and intends that information required of applicants will be tailored to the likelihood of an impact on the ground water.

The Commission feels it is appropriate for the Division to issue general permits for certain activities because of the limited nature of their impact on ground water. For example, it was suggested that a general permit be issued for temporary structures, which would most probably fit into the above-described categories of facilities with limited impacts. The decision as to what types of general permits may be appropriate is left to the Division, pursuant to its authority in Section 6.10.2.

Exclusions

The statutory reference, in Subsection 6.15.2, to 25-8-202(7) C.R.S. is intended to exempt the activities identified therein from this regulation, provided those state implementing agencies are judged to be in compliance with the criteria of 25-8-202(7)(b)(ll).

Activities regulated by these agencies, where 'activity' is defined in part in Section 3.11.3(1) as "any operation that may discharge or cause a discharge of pollutants to ground water," are not subject to this permitting regulation, provided the Commission continues to determine that the implementing agencies are protecting present and future beneficial uses of ground water through those agencies' programs and that those agencies' actions are not causing a disproportionate burden on other dischargers or classes of dischargers who are subject to these, or implementing agencies', programs for implementing ground water standards established by the Commission.

In the event that Commission believes that an implementing agency is (1) not assuring compliance with the applicable ground water classifications and standards, (2) imposing a disproportionate burden on other dischargers or classes of dischargers subject to classifications and standards, or (3) not providing reasonable assurance that their implementation is in compliance with 25-8-202(7), the Division and the Commission shall make every effort to resolve apparent deficiencies, and any accompanying difference in understanding, through those interagency staff and Board/Commission communications discussed in the applicable Memorandum of Agreement.

In the event that these informal communications do not resolve the apparent deficiencies, the Commission may proceed to formal rulemaking to develop an appropriate regulatory procedure suited for those activities that appear to be inadequately regulated. This regulation, in its present form, has not been developed with those activities currently regulated by the implementing agencies considered. This regulation will not, therefore, be applied to such activities unless future Commission rulemaking finds it necessary and appropriate to broaden the scope of applicability.

Some parties expressed concern regarding whether impoundments that are part of a wastewater treatment system at a mining operation are intended to be covered by this regulation. Consistent with Section 25-8-202(7), the potential ground water quality impacts from such structures would be addressed in the first instance by the Mined Land Reclamation Division. The Commission assumes that the report now being prepared by the Mined Land Reclamation Division to describe how its programs will assure compliance with water quality standards and classifications will address these types of facilities. Only if it

were determined at a later date that such facilities have existing or potential adverse ground water quality impacts that are not being adequately addressed by the Mined Land Reclamation Division would it be appropriate for the Commission to consider further rulemaking in this regard. The Commission recognizes that there are a number of existing programs which strive to protect ground water quality form certain types of activities. The Commission has adopted these amendments because there are other activities which may impact ground water and are not covered by existing programs. But, at the same time the Commission has provided a number of exemptions from the regulation in order to avoid duplicate regulations.

Exclusions were provided for the following seven types of activities in addition to those activities excluded under Section 6.15.2.

Raw and potable water storage impoundments, which would include impoundments filled with water supplied by a public water supplier, are not expected to impact ground water because of the quality of water contained in them. Other impoundments used in water treatment (presedimentation and filter backwash) are not expected to have a negative impact; however, the Commission reserves the right to eliminate the exclusion for these types of impoundments if information to the contrary is developed.

Stormwater retention and detention ponds are not expected to have a negative impact on groundwater since they generally will be adjacent to a stream and any seepage would drain to the stream itself. They will be covered by future amendments to the regulation specifically for stormwater. Again, the Commission reserves the right to delete this exclusion if negative impacts are discovered.

Impoundments installed under the UMTRA are required to be adequately lined and no impact from them is expected.

The Hazardous Materials and Waste Management Division will continue to have responsibility for the regulation of discharges to ground water from solid waste impoundments that are not part of a wastewater treatment system for which a facility is required to obtain a CDPS permit for surface discharge. An exception to regulation under this rule also has been provided for any portions of a system (e.g. a sludge storage or disposal site) that are already covered by a certificate of designation issued pursuant to the Solid Waste Disposal Sites and Facilities Act.

The Water Quality Control and Hazardous Materials and Waste Management Divisions recognize the potential for overlap between their respective programs and held discussions to determine an efficient way to avoid duplication. They agreed that if a system is already covered by a CDPS permit it made good sense to confine regulation of that system to one agency. The exception for portions of systems which already have a certificate of designation was made in recognition of the fact that a substantial analysis of potential impacts as well as a requirement to install a ground water monitoring and reporting system will be required for such systems. This in turn, would minimize the probability on an impact to ground water.

The definition of "tank" which is patterned after the RCRA hazardous waste regulations, has been included (Section 6.3.0(45) and an exemption has been provided for tanks which do not result in a discharge of contained liquids to state waters. This exemption replaced a previously proposed exemption for certain structures at mechanical wastewater treatment facilities, and should cover such structures and similar structures at other facilities. In doing this the Commission intends to parallel the distinction between tanks and impoundments in the RCRA regulations in recognition of the fact that tanks are designed and constructed to be impermeable. Where the design or construction of a tank has not been done in a manner which will provide the expected impermeability, or where poor maintenance has allowed the tank to deteriorate to the point where it is leaking, the owner is required to obtain a permit if a discharge to ground water will occur.

In general, because the design of a majority of tanks has been reviewed by a regulatory agency, the Commission does not foresee a large number of tanks being required to be covered by a permit. Therefore, positive certification by tank owners that certain design, construction, and maintenance criteria have been met is not being required at this time.

However, should the owner of a tank become aware of a significant loss of fluid from that tank then they are expected to notify the Division immediately so that a determination regarding existing or future ground water impacts can be made.

Discharges to ground water from underground injection wells which are covered by a permit issued pursuant to the Underground Injection Control (UIC) provisions of the Safe Drinking Water Act are not expected to impact ground water to an unacceptable degree since the UIC permits contain conditions which are aimed at protecting drinking water uses.

Land applications of sludge for beneficial use, consistent with the Domestic Sewage Sludge Regulations, should be protective of ground water since the Board of Health, in promulgating those regulations, took ground water impacts into account. Once the federal sludge disposal regulations are finalized, changes will be made to the State sludge regulations which should result in additional protection.

Other exclusions were requested for recharge of raw water in a canal and for feedlots. The Commission understands that these activities are not subject to permit requirements due to statutory exemptions provided at 25-8-503(5) and 25-8-504(2), respectively. The Commission anticipates that any ground water impacts from feedlots will be addressed in the upcoming triennial review of the Feedlot Control Regulation (8.1.0). impacts from diversion of surface waters into canals for recharge are expected to be minimal.

Application Requirements

The requirements for submittal of information by applicants who discharge to ground water are general in nature. The physical aspects of each site will be unique and it is impractical to include application requirements which would be specific enough to address every situation. The Division has indicated that they intend to establish tiered application requirements based on the applicants size, the potential for impacting ground water and other site-specific considerations.

Land Application

Land application is being divided into two areas, land disposal and land treatment, based on the Division's experience with the types of land application systems which are being installed in the state and the function of those systems. Land disposal generally is used as a means of providing irrigation water for public use or agricultural areas and land treatment is self explanatory but may contain some functional elements of a land disposal system. Effluent limitations for land disposal systems will be set at some point prior to application and will be based on protection of ground water without any further treatment beyond that point. Ground water monitoring will generally not be required in such cases. The minimum levels of treatment described in Section 6.9.2(2) (technology based treatment) will be required, to provide a consistent approach throughout the state.

Impoundments

The Division's design criteria requires that domestic wastewater and storage impoundments be sealed such that seepage from the impoundment does not exceed one-thirty-second of an inch per day (0.92 $X10^{-6}$ cm/sec). Because this criteria has been used in the design of numerous domestic facilities, and it generally is considered to require an "impervious" liner to meet it, Section 15.9(1) allows the Division to grant a waiver of the requirement to obtain a permit for impoundments where seepage does not exceed $1x10^{-6}$ cm/sec. Test methods which would be acceptable in determining the seepage rate from a soil impoundment are described in "Design, Construction, and Evaluation of Clay Liners for Waste Management Facilities (EPA/530/SW-86/007F, November, 1988)". Test methods which would be acceptable for determining the seepage rate from impoundments which are lined with compacted soil or an artificial liner are described in "Lining of Waste Containment and Other Impoundment Facilities (EPA/600/288/052, September, 1988". Additional test methods which are not described in these documents will be considered on a case-by-case basis. In general, the accuracy of the test method will be

required to be higher for those impoundments which are expected to have a greater potential for impact on ground water quality. Therefore, small facilities which contain only domestic wastewater and which would not be expected to have an adverse impact, will be allowed to use simpler methods, such as a flow balance, to demonstrate the seepage rate. The Commission believes it is appropriate that this waiver be provided for both lined and unlined impoundments that meet the impermeability test, so long as the impoundment can be properly maintained throughout its design life. If this test cannot be met then there is a potential for adverse impact to the ground water quality and a permit should be required.

Implementation

A significant number of facilities may be impacted by these regulations. Therefore, in order to proceed in a rational fashion without exceeding the Division's resources, all new facilities will be required to comply immediately and existing facilities, as prioritized by the Division, will be required to apply for a permit within sixty days of notification or, at a maximum, within two years of the effective date of the regulation. An exception is provided for facilities whose land application systems or impoundments are currently described in the rationale for a CDPS permit. These facilities will be required to submit the appropriate information at the time of renewal of the CDPS permit.

The Commission has determined that the effective date of these amendments to the Discharge Permit Regulations will be July 1, 1991. This has been done in order to allow the Division time to pursue funding for necessary additional program support during the 1991 legislative session.

PARTIES TO THE PROCEEDINGS OF THE PUBLIC RULEMAKING HEARING STATE DISCHARGE PERMIT SYSTEM NOVEMBER 5, 1990

1. AMAX, Inc.
2. Kodak Colorado, Colorado Division
3. Metro Wastewater Reclamation District
4. ASARCO Incorporated & Res-ASARCO
5. Martin Marietta Corporation
6. Denver Southeast Suburban Water & Sanitation District
7. Inverness Water & Sanitation District
8. Fort Morgan Reservoir & Irrigation Company
9. NaTec Minerals, Inc.
10. Ground Water Management Subdistrict of the Central Colo. Water Conservancy District
11. CF&I Steel Company
12. Public Service Company of Colorado
13. Board of Water Works of Pueblo
14. Upper Black Squirrel Creek Groundwater Management District
15. Arapahoe County Water & Wastewater Authority
16. The Colorado Mining Association
17. North Front Range Water Quality Planning Association
18. Cherry Creek Basin Water Quality Authority
19. The Adolph Coors Company
20. City of Northglenn
21. Summittville Consolidated Mining Company, Inc.

61.29 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE (JANUARY 8, 1991 AMENDMENT)

The provisions of 25-8-202(1)(d) and (2); and 25-8-501 to 504 C.R.S. provide the specific statutory authority for the amendments to this regulation adopted by the Commission. The Commission also has adopted in compliance with 24-4-103(4) C.R.S., the following Statement of Basis and Purpose.

BASIS AND PURPOSE:

These amendments are necessary to complement the Pretreatment Regulations originally adopted by the Commission on April 5, 1988, and amended in June, 1990 and as a result of this hearing. The Pretreatment Regulations provide assurance the POTWs and the environment are protected from adverse impacts when hazardous or toxic wastes are discharged to a domestic sewer system. This is accomplished through the regulation of industries which discharge to a POTW, as well as the POTW itself. While the Pretreatment Regulations are implemented directly for industrial users, POTWs with discharge permits have pretreatment requirements included as part of the permits.

The discharge permit regulations have previously contained references to industrial pretreatment. These references have been to federal regulations and requirements. These amendments revise the references so as to correspond to the requirements as they appear in Section 6.9.3 of this regulation, Conditions of Permits.

The amendments being adopted were originally adopted by the Commission in the 1988 hearing that adopted the Pretreatment Regulations. However, due to confusion associated with three hearings postponing the Pretreatment Regulation's effective date, these amendments were never published. To avoid future confusion, these amendments are being formally readopted.

PARTIES TO THE PROCEEDINGS OF THE PUBLIC RULEMAKING HEARING JANUARY 8, 1991

1. Arapahoe County Water & Wastewater Authority
2. City of Colorado Springs
3. Upper Eagle Valley Consolidated Sanitation District

61.30 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE (1991 Revisions to Land Application/Impoundment Provisions).

The provisions of 25-8-202(1)(d) and (2) and 25-8-501 to 504 C.R.S. provide the specific statutory authority for the amendments to this regulation adopted by the Commission. The Commission also has adopted, in compliance with 24-4-103(4) C.R.S., the following Statement of Basis and Purpose.

The effective date for this portion of the discharge permit regulations has been changed from July 1, 1991 to July 1, 1992. The original effective date was established in the hope that the funding for necessary additional program support could be obtained during the 1991 legislative session. Because the legislation that would have provided this funding was not adopted, a delay in the effective date until after the next legislative session is necessary.

In addition, minor revisions to sections 6.9.2(1)(a), 6.9.2(2)(h), and 6.9.3(4) have been adopted to correct and clarify certain references, in accordance with recommendations of the Office of Legislative Legal Services staff. We also note that the reference to Section 3.11.3(1) on page 21 of the prior Statement of Basis and Purpose is a reference to the Basic Standards for Ground Water, located at 5 CCR 1002-8.

Finally, additional exemption has been added to Section 6.15.1(2), to cover individual sewage disposal systems of 2,000 gallons per day or less. This exemption has been added due to the size of these facilities and because they are already addressed by separate statutory and regulatory requirements.

61.31 STATEMENT OF BASIS AND PURPOSE, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE (1992 Revisions to Discharge to Ground Water and Land Application Provisions)

The provisions of 25-8-202(1)(d) and (2) and 25-8-501 to 504 C.R.S. provide the specific statutory authority for the amendments to this regulation adopted by the Commission. The Commission also has adopted, in compliance with 24-4-103(4) C.R.S., the following Statement of Basis and Purpose.

These portions of the regulations originally had a July 1, 1991, effective date following their adoption by the Commission in November, 1990. This interval between adoption and effective date was established to allow the regulated community time to become more familiar with the provisions of the regulations, and to allow the Division time to secure funding to carry out the administrative aspects of the regulations. While the first of these expectations, public; awareness, was accomplished during the intervening period, the second Division funding, was not obtained. Therefore, the Commission held a hearing in June, 1991, to consider extending the effective date until July 1, 1992, again in expectation of the Division securing funds to operate the program.

Unfortunately, once again no means of funding the Division for administering this program has been secured. Therefore, it is necessary to once again delay the effective date for one year to allow the state legislature an opportunity to consider a means to fund the program. The corresponding effective dates of the application and operation requirements in 6.15.10 were also changed to July 1, 1993, to be consistent with the new effective date of the regulations.

61.32 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE (1991 Biomonitoring Provisions Amendments)

The provisions of sections 25-8-202(1)(d) and 25-8-501 to 25-8-504, C.R.S. provide he specific statutory authority for adoption of these regulatory provisions. The Commission also adopted, in accordance with Section 24-4-103(4), C.R.S. the following Statement of Basis and Purpose.

Overview

In November, 1988, the Commission adopted Colorado's initial aquatic life biomonitoring requirements as part of the Discharge Permit System Regulations. These requirements were based upon what became known as the "diligence approach" to whole effluent toxicity (WET) control. This proved to be an unfortunate choice of words, as it came to connote a program which was dependent upon the good faith or "diligence" of the discharger in determining compliance with regulatory mandates. The regulation therefore appeared to some, including EPA, as an approach which had abandoned the concept of strict liability which is an integral part of the Clean Water Act. Though this was not the intention of the Commission, and in fact the regulation established a set of stringent requirements, the violation of which could result in immediate enforcement, the Commission has decided at this time to more clearly delineate the provisions of the State program and the Commission's intent. The Commission, nevertheless, reaffirms its belief that the original regulation constituted a lawful exercise of the State's authority to set its own water quality classifications and standards and interpret the same.

Following its initial deliberations after the June, 1991 hearing, the Commission reached a tentative decision to refine the 1988 regulation, but retain the same fundamental approach to enforcement that was set forth therein. The Commission was hopeful that establishing automatic schedules of compliance for test failures would satisfy the federal requirement that "limitations" be established to meet State-established water quality standards. However, the Commission has been advised by the Attorney General's Office that this approach would not fully satisfy the requirements of State law, which requires that a program consistent with federal statute and regulations be maintained. Therefore, the Commission has amended the original regulation in two fundamental respects. First, consistent with the requirements of Section 301(b)(1)(C) of the federal Act, which mandates the use of "limitations" to meet State-established water quality standards, including State narrative standards, the regulation provides for potential liability for individual test failures, as well as the automatic imposition of schedules of compliance where there is an exceedence of the acute toxicity limit. Thus, the enforcement process is triggered upon the failure of an acute toxicity test. A schedule of compliance will include additional testing, investigatory, and remedial requirements. Failure to comply therewith may result in a further enforcement response by the Division.

The second major change in the regulation is a direct result of the ongoing controversy between EPA headquarters and the State over permissible permit terms or conditions, with specific reference to EPA's

insistence that a single acute toxicity test failure result in an enforceable violation. This dispute has led to the EPA veto of numerous State-issued discharge permits, and has raised the specter of dual permitting for Colorado's regulated community. Certain permittees have been exposed to liability under both State and federal permit requirements. In addition, its exercise of veto authority has afforded EPA the opportunity to set permit conditions independent of those addressing WET once it has acquired permit issuance authority. In order to alleviate the concerns of certain Colorado permittees over this situation, and cognizant of the fact that EPA may not find all provisions of even this amended biomonitoring regulation to be acceptable, the Commission has written into the regulation an option. Pursuant to this option, individual permittees can choose to have WET provisions placed in their permits which have previously been approved by EPA Region VIII. Thus, only one permit will be issued, and it will be a State permit. However, it will reflect only EPA's preferred toxics control language.

Though the Commission would prefer not to implement what amounts to a bifurcated regulatory system, it believes that there is no better course of action available at this time pending either final judicial review of the concepts embodied in the original Colorado biomonitoring regulation or legislative clarification. Should either such development warrant, this regulation can be reconsidered at a later date.

The Commission takes this action with great reluctance. It had hoped that the federal system would allow more flexibility in the choice of specific provisions for implementing whole effluent toxicity testing requirements. These amendments are being adopted in the hope of minimizing extended controversy and to move forward with toxicity control efforts. This regulation shall be reconsidered should the currently pending challenges to EPA's June 2, 1989, regulation published at 54 Fed. Reg. 23868, et seq., prove successful in challenging EPA's authority to impose single test pass/fail biomonitoring limitations, or if future revisions to the Clean Water Act clarify or revise the authority in this area.

Enforcement Liability

The major concern raised by EPA was that under the original regulation individual biomonitoring test "failures"--i.e. tests resulting in an exceedance of the acute toxicity limit-were not directly subject to the potential for enforcement. This concern is resolved by the provisions of new subsections 6.9.7(1)(b) and (4)(a)(v). These sections now provide that a single exceedance of the acute toxicity limit may be a permit violation subject to enforcement. Specifically, permit violations may occur as a result of exceedances in a routine quarterly test or a Division-directed or conducted test.

Although the regulation now provides that single test exceedances of the acute toxicity limit may be permit violations potentially subject to the full range of enforcement and penalties, the Commission believes that this authority must be utilized with discretion. Because of the unique nature of this important new program, the Commission believes it is particularly important for the Division to give the public clear notice of its intended approach to implementation through its Biomonitoring Enforcement Guidance Document, which was submitted for informational purposes in this hearing. The Commission recommends that document not be amended without providing a public briefing to the Commission regarding proposed changes, and an opportunity for public comment to the Division.

As previously noted by the Commission at the time of its adoption of the original Colorado biomonitoring regulation, WET cannot be predicted accurately because specific chemical testing cannot predict either the biological significance of effluent constituents or possible interactions among effluent constituents. In the case of a POTW, WET may also appear as a result of non-repeated events, such as illegal dumps, or as the result of household products. As confirmed by EPA scientists, repeated test failures are often times necessary to isolate and identify the source of the toxicity. Finally, as evidenced by the written and oral testimony in the hearing record, there is still a measure of uncertainty surrounding the accuracy of a single acute toxicity test failure, and the impact of a single discharge upon the uses of the receiving stream.

In view of the above, the regulation continues to focus upon the identification and elimination of the toxicity, and departs to some limited extent from the traditional response to the exceedance of a numerical effluent limitation. The regulations provide for an automatic compliance schedule, with

accelerated testing and toxicity incident response measures required within explicit and strict timeframes, whenever any violation occurs. Biomonitoring test failures that occur during implementation of activities required by a compliance schedule, including accelerated testing to determine whether the toxicity is continuing and subsequent investigatory tests to identify the toxicant, would not be permit violations. However, many of the requirements of the compliance schedule, including accelerated testing and specific toxicity response measures, are identified in the regulation. Failure by the permittee to meet the terms of the compliance schedule may result in the imposition of a penalty of up to $10,000 for each day of noncompliance. On the whole, the program provided in this regulation is no less stringent than the traditional approach, and in many ways more aggressive. It is expected that implementation of the automatic and enforceable compliance schedule will result in more rapid elimination of toxicity from point source discharges than often occurs for chemical-specific effluent violations.

When a chemical-specific effluent limitation is violated, there is an immediate target for corrective measures-i.e. the chemical for which the effluent limitation has been exceeded. When whole effluent toxicity is detected, additional investigations are necessary to determine the nature and cause of that toxicity prior to implementing corrective measures to eliminate the toxicity. Because of the need to expeditiously complete this extra step to achieve water quality control, the Commission has taken the unique step of including in the regulation specific and tight deadlines that will apply to all permittees for implementing accelerated testing and toxicity incident response efforts. For chemical-specific effluent limitation violations, the imposition of response requirements is typically handled in a case-specific compliance schedule developed in connection with a notice of violation, which is a more time-consuming process.

If a situation should arise where the Division feels that quarterly test violations in combination with compliance schedule requirements are not creating an adequate incentive for prompt resolution of a serious pollution problem, the regulation also provides the authority for the Division to direct that additional biomonitoring tests be conducted. Any exceedances occurring in these Division-directed tests would constitute additional days of violation. If necessary in an extreme situation, the Division could direct that substantial additional testing be conducted, creating the potential for substantially increased liability if a problem were not otherwise being adequately addressed. The Commission contemplates that the need for such extreme measures would be rare, and that in addressing such situations the Division would be guided by the provisions of its Biomonitoring Enforcement Guidance Document. The Commission contemplates that the need for substantial additional Division-directed tests during the period of a compliance schedule would likely arise only in instances involving severe toxicity in the effluent or actual use impairment, in combination with the failure of the permittee to expeditiously investigate and eliminate the toxicity.

Should a permittee undertake all required steps to identify and remediate the toxicity, but be unable to do so, the compliance schedule can be revised so as to avoid a needless expenditure of the permittee's resources. However, the underlying obligation to eliminate the toxicity remains, and appropriate new permit conditions may be imposed by the Division if it determines in the future that such are warranted under the facts then in evidence.

General Applicability Provisions

The introductory language in Section 6.9.7(2) has been revised to provide that biomonitoring requirements will be applied in individual permits when the Division makes a threshold determination that the discharge would reasonably be expected to interfere with the attainment of applicable water quality classifications or standards. This should help assure the efficiency of this program, by applying these requirements where they are most needed, and it is consistent with the requirements of Section 303(c)(2)(B) of the federal Act as amended in 1987. The Commission intends that in making this determination the Division would take into account available information regarding the nature of the discharge, site-specific classifications and standards adopted for the receiving waters, whether the discharge is to an otherwise dry streambed, applicable statewide standards, and the nature of the information acquired by biomonitoring. The record demonstrates that the biomonitoring required by

Section 6.9.7 is a useful indicator of toxicity to aquatic life. No evidence was submitted demonstrating that this form of biomonitoring is a useful indicator of toxicity to other beneficial uses.

For segments not classified for aquatic life use, the Division should also consider any available information regarding why that use was not deemed attainable. If attainability is limited by nonpoint sources of pollution, or other point sources, the impact from which may be eliminated or minimized in the future, biomonitoring may be required. The Commission determined such monitoring requirements may be appropriate to assure that this permitted discharge will not cause toxicity that limits the options for overall improvement of the water quality.

As revised, subsections 6.9.7(2)(a)(i) and (b)(i) enumerate certain categories of discharges for which the biomonitoring requirements are presumptively inapplicable. These categories have been listed as a matter of efficiency since, as elaborated below, the best current information indicates that significant toxicity will not generally be expected for these types of discharges. However, the new introductory language for Section 6.9.7(2) gives the Division the authority to require biomonitoring information from any permittee, e.g. if there is reason to believes that the general presumption of no toxicity may not apply to a particular discharge that falls into the Section 6.9.7(2)(a)(i) and (b)(i) categories. If that information indicates that toxicity or the reasonable potential for toxicity are present, permit requirements, including the acute toxicity limit, will be imposed.

Several general permits are listed in sections 6.9.7(2)(a)(i) and (b)(i). The Division has indicated that it expects a lack of significant pollutants and toxics in "typical" effluents from such activities. Additionally, the application for certification for a specific facility is conditioned so as to require screening of the effluent and site conditions to identify nontypical conditions. If such conditions warrant, these facilities are then required to obtain individual permits. The following are additional factors that warrant a presumption of biomonitoring inapplicability for facilities covered by these general permits.

1) Placer Mining plus Sand and Gravel Mining and Processing. Water associated with this type of activity results from groundwater encountered in mining or process water resulting from washing of the gravels. The nature of this activity does not introduce toxics into the water, because of the lack of chemical additives and the lack of mineralization in the ore. Total suspended solids is the primary concern of these activities. Chemical additives utilized to control total suspended solids are subject to Division approval.

2) Construction Dewatering. Water from this type of activity is groundwater associated with a construction activity. As such, the addition of pollutants to the effluent should not occur except for total suspended solids plus oil and grease, which are subject to effluent limitations in the general permit.

3) Coal Mining. Water from this type of activity is limited to precipitation runoff and does not allow for the discharge of mine water. Such waters in Colorado have typically only demonstrated trace levels of dissolved metals or low pH. The primary concern with runoff is total suspended solids, which is typically controlled by simple settling. Chemical additives for enhanced settling of solids are subject to Division approval.

4) Potable Water Treatment Plants. Water from these facilities is typically associated with bypass waters and backwash waters. Pollutants of concern are total suspended solids and chlorine, which are subject to effluent limitations in the general permit. The likelihood of unknown toxics in such waters is very limited.

5) Domestic Treatment Facilities which Discharge to Unclassified Waters, Domestic Treatment Facilities which Discharge to State Waters Classified for Class 2 Aquatic Life. Facilities eligible for coverage under this grouping of permits must primarily receive domestic waste. Acceptance of industrial waste is a basis to deny certification and require an individual permit for the facility. As such, the likelihood of toxics in the effluent should be limited.

As to three other categories of industrial activities that are exempt from biomonitoring requirements, the following factors are the basis for the presumptive inapplicability of biomonitoring requirements:

1) Aquaculture. Aquaculture activities are effectively continuous biomonitoring tests. The presence of toxics in the effluent should be observed in the contained organisms. The most obvious impairment would be mortality, although it could be growth or reproduction related.

2) Water Treatment Plants. This grouping is simply larger facilities that are not eligible for coverage under the general permit for water treatment plants. The nature of the waters should be the same and thus free of toxics.

3) Exploratory Mines (where there is historic drainage). Toxicity in mine drainage is routinely associated with heavy metals. As Colorado has a very extensive system for acute and chronic water quality metals standards, chemical-specific effluent limitations should be protective of the existing receiving stream during exploration. Should active mining prove viable, WET limitations would be applied concurrent with the federal technology-based limitations and other water quality standard-based limitations.

The discussion in the regulation regarding the basis for the other categories of presumptive inapplicability of biomonitoring requirements should be self-explanatory.

Timing of Acute Limit Applicability

Section 6.9.7(4) has been revised to clarify the timing of applicability of the acute toxicity limit for different categories of dischargers. For new discharges, the limit will be incorporated into permits and become effective immediately. For discharges listed pursuant to Section 304(l)(1)(C) of the federal Clean Water Act, where biomonitoring is determined to be an appropriate component of an individual control strategy, the limit will become effective within a timeframe to allow compliance with the federal deadlines for these segments.

For other existing dischargers, the acute toxicity limit will be incorporated into permits at renewal or reopening if the Division has determined in accordance with Section 6.9.7(2) that biomonitoring requirements are appropriate, and become effective three years later. This timing is appropriate to allow these existing dischargers time to develop experience with this new type of monitoring and to implement any changes necessary to comply with the acute toxicity limit requirement. This is particularly appropriate since the segments affected by these dischargers were not listed under Section 304(1), and therefore were not believed to have a significant toxicity problem. Moreover, this approach is consistent with the approach being implemented by EPA Region VIII. During the first three years, should acute toxicity be identified the permittee will be required to conduct a toxicity incident response and identify a control program if possible. The control program will be expected to be implemented within a timely manner, which may be prior to the time that the limit becomes effective. In addition, if no acute toxicity is found in the effluent during such three-year period, this would be one factor taken into account by the Division in determining whether there is a continuing need for biomonitoring requirements in the permit, in accordance with Section 6.9.7(2). The Commission notes that the three year period already has started to run for many dischargers who had biomonitoring requirements included in their permits under the 1988 regulations.

Relation to Numerical Standards

Questions have arisen regarding the relationship between biomonitoring requirements used to help implement a narrative water quality standard and traditional numerical water quality standards. Section 6.9.7(4)(a)(vi) has been revised to clarify that numerical water quality standards are still intended to be determinative where applicable. If the acute toxicity limit is exceeded due to a substance for which a numerical standard exists, that standard will govern for assessing compliance.

The Commission has determined that this approach is appropriate as a matter of policy, to help preserve the viability of the overall, comprehensive Colorado water quality standards system. Substantial information, time and effort have gone into development of the existing acute and chronic numerical standards. At the same time, the Commission notes that exceedance of the acute toxicity limit, in spite of compliance with a numerical standard for a substance that has caused the exceedance, generally will indicate that the numerical standard in question should be reassessed. In such circumstances the numerical standard may need to be tightened to help assure protection of the classified uses, and the results of the WET testing would be taken into account in the next review of the numerical standard.

The revised regulation also provides the option for the Division to establish an interim effluent limit to control a specific substance that is determined to cause acute toxicity, but for which no numerical water quality standard exists, until the Commission can adopt such a standard.

Chronic Toxicity

With respect to chronic toxicity biomonitoring, the Commission has continued to include only testing requirements in the regulation at this time. The regulation does not establish a chronic toxicity limit. As discussed in the Statement of Basis and Purpose for the original biomonitoring provisions, legitimate questions have been raised regarding the sensitivity and reliability of the chronic test methodology. In addition, standardized toxicity characterization methods have not yet been developed for chronic toxicity.

Chronic limits were not considered appropriate for several reasons. Test variability is considered to be high and laboratory and site variables in test conditions, such as type of dilution water and food quality may influence test results and lead to excessive false positives or false negatives. Through its complex effluent toxicity testing program, EPA has claimed that the results of chronic testing of effluents is predictive of adverse ecological impacts of toxic discharges. However, this claim is being questioned in those studies where results are based on the non-lethal test endpoints of growth and reproduction. Moreover, if chronic toxicity were to be found, Toxicity Reduction Evaluation (TRE) procedures are not available for investigating the cause of chronic toxicity. Until these issues are resolved, the results of chronic tests must be used with caution and are best used to obtain supplemental information about a discharge impact to receiving waters, but not as a permit limit.

EPA regulations (40 C.F.R. Section 122.45(d)) provide that water quality standards be translated into daily maximum, weekly average, and/or monthly average permit limits, "unless impracticable." In view of the limitations on the current state of the science as described above, the Commission has determined that imposing chronic toxicity effluent limits would be impracticable at this time. This decision will be reassessed over time, as new information becomes available. In the meantime, the Commission will continue to rely principally on the extensive system of chemical-specific water quality standards that is already in place in Colorado to control chronic toxicity in point source discharges. In addition, information developed as a result of the chronic toxicity testing required by the current regulation will be taken into account where applicable in triennial reviews of water quality standards, to consider possible revisions of chemical-specific standards.

Other Revisions

Several additional provisions of the original regulation have been revised, either to respond to concerns raised by EPA or to provide additional clarification. In other instances, the Commission has determined that concerns raised by EPA did not warrant revisions in the regulation.

Use of the term "spontaneous disappearance" of toxicity was another item of concern to EPA. The EPA interpretation was that if toxicity spontaneously disappeared and the incident was closed, the exceedances also disappeared from the records. This was an erroneous interpretation, as the provision simply allows the permittee relief from continued investigation when the toxicity is no longer present. To address this concern, Section 6.9.7(4)(c)(v) has been amended to clarify that the relief is simply from further investigation.

EPA also expressed concern that the provisions in Section 6.9.7(4)(c)(iv) regarding "requests for relief" could be interpreted to allow-in certain circumstances-toxicity that exceeded the acute toxicity limit to continue to be discharged, with no continuing obligation to eliminate the toxicity. The Commission has revised this section to clarify that this is not the intent. Rather, the "relief" potentially provided is with respect to further chemical and biological investigation and testing requirements. Of course, if a permittee has taken all appropriate measures that it and the Division have been able to identify and has been unable to identify and eliminate the source of the toxicity, those facts should be taken into account by the Division in proposing modifications to the permit or the compliance schedule which would avoid an unproductive expenditure of the permittee's resources.

"Cost/benefit analysis" associated with the control program, as referenced in Section 6.9.7(4)(c)(iii), was another item of concern to EPA. EPA believed that Division review of such data would be a basis for not requiring compliance with the acute WET limit. This was not the case, as the Division would still expect implementation of the control program regardless of cost. The reason for submittal of the cost/benefit analysis was to make the data available to the Commission should the matter end up before them as a use classification issue. No modification to the regulation is proposed.

The Commission adopted three revisions to the provisions regarding test methods. The previous language in the acute toxicity definition regarding acceptable levels of mortality in the control samples has been deleted. This modification is appropriate, as the provision is more suitably addressed within a technical guidance document and the adjustment may save a permittee the cost of retesting based upon excessive control mortality when all other aspects of the test appear normal.

Second, a citation to an EPA guidance document regarding short-term methods for estimating toxicity has been moved from a definition in Section 6.9.7(1)(a) to the Test Methods provisions in Section 6.9.7(3). Third, language has been added to Section 6.9.7(3)(a) providing that the Division will advise the permittee within fifteen days if a retest is required due to unacceptable mortality in the control.

Section 6.9.7(4)(a)(v) referenced a document "Guidance for Conducting Toxicity Reduction Evaluations in Colorado". The document, however, was never developed. The regulation was therefore revised to reference the federal Technical Support Document “TSD", while retaining the option for state developed guidance which would take precedence.

Additional revision was made to the TRE portion of the regulation as follows:

1. Relief to use only the most sensitive of the two species in Phase I and II TREs, as long as confirmatory tests were conducted on both species.

2. An improperly titled federal TIE document was corrected along with new reference to the new TIE documents.

3. The existing regulation provides authority to the Division to determine if a Phase II TRE is required. One party requested criteria to assist the Division in making the determination. In reviewing the situation, the Division determined that if toxicity was not identified and eliminated by the Phase I TRE, the Phase II would automatically be required. The regulation was therefore modified accordingly. To accommodate this change, the timing of the Phase II TRE plan was tied to the due date of the Phase I TRE report.

4. Description of the Phase II TRE in the body of the regulation was made consistent with the definition of the term in the regulation.

5. The existing regulation lacked clarity as to what happened if toxicity existed at the end of the Phase II TRE. A provision was placed in the regulation such that the Division has the authority to require additional work on identifying the toxicant or treating the effluent, in addition to the existing Request for Relief provision.

PARTIES TO THE PROCEEDINGS OF THE PUBLIC RULEMAKING HEARING JUNE 3, 1991

1. Cherokee Water & Sanitation District
2. Res-ASARCO
3. Martin Marietta Corporation
4. City of Northglenn Water & Wastewater Association
5. Colorado Mining Association
6. Adolph Coors Company
7. Littleton/Englewood Bi-City Wastewater Treatment Plant
8. Colorado Wastewater Utility Council
9. City of Colorado Springs Wastewater Department
10. Climax Molybdenum Company
11. Eastman Kodak Company
12. Metro Wastewater Reclamation
13. City of Fort Collins

61.33 FINDINGS REGARDING BASIS FOR EMERGENCY RULE: JANUARY 6, 1992

The Commission held this emergency rulemaking hearing to delete references to two EPA documents and to correct errors in regulatory citations in the originally filed regulation. The affected regulation was amended on November 4, 1991 and was filed within the required timeframes with the Secretary of State's Office and the Office of Legislative Legal Services.

The Office of Legislative Legal Services notified the Commission that the two EPA documents were not correctly incorporated by reference pursuant to the requirements of Section 24-4-102(12.5) of the State Administrative Procedures Act. The Commission deleted the references to these documents in response to this notification. The Commission also corrected the errors in regulatory citations identified by the Office of Legislative Legal Services.

The Commission finds that the immediate adoption of the revised regulation is necessary for the preservation of public health, safety, or welfare and that compliance with normal notice requirements would be contrary to the public interest. This regulation, if not amended to correct the alleged legal deficiencies raised by the Office of Legislative Legal Services, would be subjected to review by the Legislative Committee on Legal Services to determine whether all or a portion of the rule should be recommended to the full general assembly for rescission. Emergency adoption is necessary to obviate the time and expense of needing to appear before the Legislative Committee unnecessarily, which would likely be required before normal notice requirements could be met.

61.34 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE (1992 BIOMONITORING AMENDMENTS)

The provisions of sections 25-8-202(1)(d) and 25-8-501 to 25-8-504, C.R.S. provide the specific statutory authority for adoption of these regulatory provisions. The Commission also adopted, in accordance with Section 24-4-103(4), C.R.S. the following Statement of Basis and Purpose.

The Commission held this Rulemaking Hearing to make permanent the changes made in an Emergency Rulemaking Hearing that was held on January 6, 1992.

The Emergency Rulemaking Hearing was held to delete references to two EPA documents and to correct errors in regulatory citations in the originally filed regulation, in response to concerns raised by the Office of Legislative Legal Services.

61.35 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE (1993 Whole Effluent Toxicity Revisions)

On 1988, Section 6.9.7, Aquatic Life Biomonitoring, was adopted by the Commission to address a new federal focus for the discharge permit program. EPA challenged the validity of the adopted regulation, taking the position that it was inconsistent with the existing federal statute and later that it was inconsistent with the provisions of 40 C.F.R. 122.44(d) which were adopted June 2, 1989.

Though some of EPA's concerns were resolved by a 1991 amendment to the regulations, not all items of concern were eliminated. The continuing disagreement has led to numerous permits being vetoed by EPA, with dual state and federal permits resulting for an increasing number of permittees. To resolve this matter, the permit regulation is being revised to delete Section 6.9.7 and a portion of Section 6.9.2(2)(h) and add a new Section 6.92(5), which is modeled upon 40 C.F.R. 122.44(d). Additional detail regarding the Division's approach to implementing whole effluent toxicity requirements will be provided in Division policy guidance documents.

The federal regulation is currently the subject of lawsuits that have been filed, challenging certain provisions. If such lawsuits ultimately result in revisions to the current federal regulation, appropriate changes to the state regulation would be considered. In addition, efforts are underway to address whole effluent toxicity testing as part of the Clean Water Act reauthorization process. Any legislative changes may similarly result in the amendment of this regulation.

Several parties to the hearing were concerned as to the applicability of Section 6.9.2(5)(vi), feeling that it addressed provisions other than whole effluent toxicity. One goal relative to whole effluent toxicity is to identify and control the specific toxicants once whole effluent toxicity is identified. Section 6.9.2(5)(vi)(A) effectively states requirements presently contained in Section 3.1.14(4) of the Basic Standards, with the added authority to replace a whole effluent toxicity limit for a specific parameter with a specific numeric limit where no water quality control standard for that parameter has been established by the Commission. Paragraph B in turn addresses the situation where the specific toxicant cannot be identified but the fraction, such as non-polar organic compounds, is identified. In lieu of establishing numeric limits for all parameters within this fraction, paragraph B provides authority to identify an indicator parameter within the fraction which if maintained below a set level will assure whole effluent toxicity is adequately controlled.

PARTIES TO THE PROCEEDINGS OF THE PUBLIC RULEMAKING HEARING FEBRUARY 2, 1993

1. The Metro Wastewater
2. Kodak Colorado
3. Climax Molybdenum Co.
4. Colorado Mining Association
5. Martin Marietta Corp.
6. The City of Colorado Springs
7. Adolph Coors Company
8. The Littleton-Englewood Bi-City Wastewater Treatment
9. City & County of Denver

61.36 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE (Phase I - Stormwater Permit Application Regulations - 1993)

STATUTORY AUTHORITY

The provisions of 25-8-202(1)(d) and (1)(i) and (2); and 25-8-501 to 504 C.R.S.(1989 Repl. Vol. 11, 11A and 1992 Supp.) provide the specific statutory authority for this amendment to the Colorado Regulations for State Discharge Permit System, adopted by the Commission. The Commission has also adopted, in compliance with 24-4-103(4) C.R.S. (1988 Repl. Vol 10A and 1992 Supp.), the following statement of Basis and Purpose.

BASIS AND PURPOSE

This is the statement of basis and purpose for adopting the regulations entitled "Phase I Stormwater Permit Application Regulations".

A. APPLICABILITY

These regulations apply to permit application requirements for point source discharges of stormwater runoff including municipalities with populations of greater than 100,000 (and interrelated discharges) and industrial facilities in the identified categories. The industrial categories are for the most part facilities which engage in manufacturing activities. Retail and wholesale entities are generally not included. Active and inactive mining operations where stormwater is contaminated by contact with certain materials and construction activities are also included. Some of the changes made in this amendment affect all of the permits under the Colorado Discharge Permit System and are not limited to stormwater permit application and permit requirements. These changes are discussed in Section E. below.

B. GOAL OF STORMWATER PROGRAM

The goal of the stormwater program is to protect state waters from adverse impacts from discharges of stormwater-borne pollutants including sediment. This goal is achieved through regulating the point source discharge of stormwater from large and medium-sized municipalities and certain industrial sources. These regulations are designed to reduce the discharge of pollutants in stormwater through the implementation of facility-specific stormwater management plans, which emphasize pollution prevention over active treatment of stormwater.

C. NEED FOR STORMWATER CONTROLS

A stormwater program is needed to reduce the impacts of stormwater-borne pollutants on the waters of the state of Colorado. It is an important element of a comprehensive water quality protection program.

1. National Perspective: The "National Water Quality Inventory, 1988 Report to Congress" ("Report") provides a general assessment of water quality based on the biennial reports submitted by the states under Section 305(b) of the Clean Water Act. The Report indicates that stormwater runoff from a number of diffuse sources, including agricultural areas, urban areas, construction sites, land disposal activities, and resource extraction activities, is the leading cause of water quality impairment cited by the states (EPA, 1990).

2. Statewide Perspective: Colorado's Nonpoint Source Assessment Report of 1989 identifies impacts of nonpoint source water pollution throughout Colorado. Nonpoint sources have historically included those sources which are diffuse in nature, and have not been regulated through the conventional permit programs of the Clean Water Act until recently. These sources include runoff from: urban areas, agricultural activities, forestry and logging activities, construction activities and areas of abandoned/inactive mining. All of these sources except agricultural activities and forestry and logging activities are included to some extent in Phase I of the stormwater permitting program. The Nonpoint Source Assessment Report indicates that 1,434 stream miles of Colorado's streams have been affected by resource extraction activities and urban/construction activities (WQCD, 1989).

3. Dillon Reservoir Perspective: Water quality at Dillon Reservoir has deteriorated over its 20-year life span. The Clean Lakes Study of Dillon Reservoir has identified phosphorous as the primary contributor to the water quality problem. A major portion of the phosphorous loading was found to be attributable to urban sources including runoff from residential areas, Interstate Highway 70, and construction sites, as well as leakage from septic tanks (WEA, 1983).

4. Metropolitan Denver Perspective: The Denver area was selected for inclusion in the Nationwide Urban Runoff Program (NURP), a program sponsored by the U.S. Environmental Protection Agency and the U.S. Geological Survey. In the analysis of the contributions of urban storm runoff

to the South Platte River, it was determined that storm runoff was the major contributor of total suspended solids, total organic carbon, and total lead and a significant contributor of total zinc (USGS, 1984). The study also showed that the storm event mean concentration of total cadmium, total copper, total iron, total manganese, total lead and total zinc exceeded the established water-quality standards in 100 percent of the storm-runoff periods.

D. NEED FOR A STATE PROGRAM

A State stormwater program is needed to maintain an effective and comprehensive CDPS program and to continue to improve the working relationship between the State and the regulated community. Stormwater controls are a basic component of a comprehensive water quality protection program. The CDPS program is the appropriate vehicle for permitting point source discharges of stormwater.

1. Regulation of Industries and Municipalities: Designated industries and municipalities with populations greater than 100,000 will be required to obtain stormwater discharge permits regardless of whether or not the State of Colorado develops regulations for the stormwater program. If the state does not adopt its own regulations, the Federal regulations still apply to the municipalities and industries within the state. State regulations allow for the regulated community to participate in the formation of a state program.

2. Maintaining a State-Delegated Program: In order to maintain the integrity of the state CDPS program, it is necessary to develop regulations and implement the stormwater program. The Clean Water Act, NPDES program, specifically defines stormwater discharges as point sources which require permits. The Clean Water Act, which is the statutory authority for the NPDES program, also requires that in order to maintain delegated authority, a state must have regulations that are consistent with the federal regulations. Including stormwater discharges in an efficient manner in the CDPS program in the State of Colorado requires the promulgation of regulations which address stormwater discharges, and further, requires that the regulations be consistent with the federal rules.

E. DISCUSSION OF REGULATIONS

These regulations are consistent with 40 C.F.R. 122.26 (1992). With few exceptions, the state regulations use the same language as the federal regulations. This was done to provide a smooth transition from operating the program under the federal regulations to operating under Colorado regulations. This will also insure that Colorado's regulations are consistent with the federal requirements. The regulations contain a few modifications and details which will enhance the implementation of the program. In addition, most of the amendments to 40 C.F.R. 122.21, 122.22,122.28, 122.42, 122.44 and 122.48, that are found in 55 Fed. Reg. 47990 (November 16, 1990) and 57 Fed. Reg. 11394 (April 2, 1992) are also included in these regulations.

1. Potential Overlap with Other State Regulations: The Administrative Procedures Act (24-4-103(4)(b)(V) C.R.S. (1988 Repl.Vol.10A) requires the rulemaking entity to explain any apparent duplication or overlap that might be created between the proposed regulations and any existing State regulations.

   The Commission recognizes that other state agencies may also have jurisdiction concerning matters covered by CDPS permits issued by the Division regarding stormwater discharges. For example, the Hazardous Materials and Waste Management Division addresses run-on and runoff controls for solid and hazardous waste disposal sites. The Stormwater Permit Application Regulations require that operators of landfills also must obtain permits to discharge stormwater to state waters.

   In addition, the Division of Minerals and Geology (DMG) of the Department of Natural Resources is specifically mandated to ensure that "disturbances to the prevailing hydrologic balance of the

affected land and surrounding area and to the quality and quantity of water in surface and ground water systems both during and after mining operations {are} minimized." Section 34-32-116(i)(h), C.R.S. (1984). Pursuant to this statute, DMG requires that measures be taken to protect the hydrologic balance as a condition of granting a Mined Land Reclamation Board permit.

Phase I of the Stormwater Permit Application Regulations requires that mining activities obtain stormwater discharge permits if they have a point source discharge of stormwater that is contaminated by contact with any overburden, raw material, intermediate products, byproducts, finished products or waste products located at the mining site. These permits require that measures be taken to control the sources of stormwater pollution.

According to state statute, the Division is solely responsible for the issuance and enforcement of permits authorizing point source discharges to state waters, Section 25-8-202(7)(b)(l), C.R.S. (1989 Repl.Vol.11 A). Also, stormwater permit applications are a federal requirement and the proposed regulations are necessary to assure compliance with the federal act. See Section 25-8-202(7)(b)(ll)(A), C.R.S. (1989 Repl. Vol. 11 A). Finally, the Division may not transfer any of its stormwater permitting and enforcement functions to other state agencies unless those agencies are delegated authority to perform such functions by the EPA. 40 C.F.R. Sections 123.1(g)(1) and 123.62(c) (1992).

2. NRDC v. EPA - Light Industry Exemption: A significant issue in the federal stormwater regulation is a provision exempting industries in federal category (xi) from the permit application requirement. Under the federal rule, these industries do not have to apply for a permit during Phase I, provided that their industrial activities and materials are not exposed to stormwater. In Natural Resources Defense Council v. Environmental Protection Agency, 966 F.2d 1292 (1992), the Ninth Circuit Court of Appeals vacated the exemption and remanded the rule to EPA, apparently because the exemption was not supported by evidence in EPA's record. In a December 18, 1992 Federal Register Notice, EPA announced that it would not require category (xi) permit applications, pending further rulemaking on the subject.

   The Commission has received extensive testimony and other evidence in support of the exemption from a coalition of industries within category (xi). The evidence indicates that, given the nature of their products, the represented industries must carry out their manufacturing in a clean and dry indoor environment. Likewise, given the nature of the materials used and the final product, these industries tend to protect incoming and outgoing materials from exposure to the elements. Compared with other facilities subject to Phase I permitting, these industries pose a relatively minor risk of water quality impacts associated with stormwater.

   Considering the supporting evidence provided by the coalition of category (xi) industries at the hearing, the Commission finds that adoption of a category (xi) exemption from Phase I permitting at this time is appropriate. Accordingly, the rule adopted by the Commission divides the federal category (xi) into two state categories - one for which evidence was presented in this hearing (category (xi)) and one for which no evidence was presented (category (xii)). Only the industries in category (xi) adopted in this rule are subject to the exemption.

   The adopted exemption clarifies the term "exposed to stormwater," as that term is used in the federal exemption, by describing the circumstances under which a material or material handling activity would not be considered to be exposed to stormwater. This clarification is intended to provide better guidance to both the regulated entities and the Division.

3. NRDC v. EPA - Exemption for Smaller Construction Sites: The federal stormwater permit application regulations also include an exemption from permitting for construction sites that disturb less than five acres. In the same opinion, the Court also found this exemption to be arbitrary and capricious because it was not supported by the record. The Phase I stormwater permit application rules duplicate the federal language regarding construction sites that disturb less than five acres. Independent information provided by the Division on this matter supports

retention of this exemption for Phase I of the stormwater program. It is not the Commission's intention to define "industrial in nature" at this time. The Commission feels that retention of the exemption for construction activities that disturb less than five acres is consistent with the congressional intention to have a phased approach to stormwater permitting. The Commission intends to revisit this issue at the time that Phase II regulations are adopted.

4. Other Changes to the Permit System Regulations: These regulations include changes at several places in the Colorado Regulations for State Discharge Permit System. The first group of changes occurs at 6.2.2 and 6.2.3 regarding incorporation by reference and severability. Section 6.2.2 assures compliance with the Administrative Procedures Act Section 24-4-103 (4) (1988 Repl.Vol.10A and 1992 Supp.). Section 6.2.3 assures the maintenance of the balance of the CDPS Program, if one or more provisions is found to be invalid.

The second group of changes occurs at 6.3.0. DEFINITIONS. Definitions of terms used in the new stormwater sections were added, including: co-permittee, illicit discharge, incorporated place, large municipal separate storm sewer system, major municipal separate storm sewer outfall, medium municipal separate storm sewer system, municipal separate storm sewer, overburden, runoff coefficient, significant materials, stormwater, stormwater associated with industrial activity, stormwater outfall, and uncontrolled sanitary landfill.

The definition of "municipality" was revised to be more consistent with the federal definition. However, the phrase "or an Indian tribe or an authorized Indian tribal organization," was deleted from the federal language since the EPA issues permits on Indian Lands. A definition of "Division" was added to clarify that the reference is to the Water Quality Control Division and not the Division of Administration as specified in the Water Quality Control Act.

The other changes from the federal definitions include modifications to "municipal separate storm sewer". The terms "borough" and "parish" were removed because they are inconsistent with Colorado law. Also, the reference to "Indian tribe or an authorized Indian tribal organization," was deleted from the federal language since the EPA issues permits on Indian lands. The definitions of "large" and "medium municipal separate storm sewer system" were slightly modified. Individual Colorado cities are named rather than to refer to an appendix in the Federal Register and the 1990 Census is referenced rather than the 1980 Census. Additionally, the portion of the definition of "stormwater discharges associated with industrial discharges" that enumerates the specific industrial categories was placed in the Applicability section of the regulations at 6.4.2.(5)(b). The definition of "separate storm sewer" was removed since it is now redundant with the new definitions

The third group of changes and additions occurs at 6.4.0 APPLICABILITY. This section was divided into two subsections, one dealing with general applicability (6.4.1) and one with stormwater applicability (6.4.2). The general applicability section contains the pre-existing applicability information.

The new stormwater information was added in its own section. Subsection 6.4.2(5) contains the identification of entities that are required to obtain permits in Phase I of the stormwater program. Subsection 6.4.2(5)(b) identifies Phase I industrial categories (i)-(xi). Subsection 6.4.2(5)(c) identifies large and medium municipalities. These sections contain the same provisions as the federal requirements. Subsection 6.4.2 (6) is reserved for Phase II. When federal regulations regarding Phase II are promulgated, this section will be completed.

The fourth and fifth groups of changes occurs in Section 6.5.0 APPLICATION FOR A PERMIT. This section was divided into three subsections, one dealing with general application requirements (6.5.1), one with application requirements for existing manufacturing, commercial, mining and silvaculture discharges (6.5.2), and one with stormwater application requirements (6.5.3). The General Application Subsection (6.5.1) includes the pre-existing requirements and was amended to reconcile Colorado general application requirements with federal rules.

Subsection 6.5.2 was added to address requirements that are part of both the general and stormwater permit program. It is added in anticipation of requirements that may be added in the October 1993 hearing regarding the general CDPS program. These provisions are referenced in Subsection 6.5.3 and therefore are necessary to the stormwater program at this time.

Subsection 6.5.3 was added to address requirements unique to stormwater permit applications. Section 6.5.3(1) contains the application time frames for existing and new industrial stormwater permits and large and medium municipalities stormwater permits. Section 6.5.3(2) details the industrial stormwater permit application procedures. This section contains the same provisions as the federal requirements. Section 6.5.3(3) details the municipal stormwater permit application procedures. This section contains the same provisions as the federal requirements, except that references to the Great Lakes and estuaries were removed and the term "reservoirs" was added to 6.5.3(3)(iv)(C)IV).

The sixth group of changes relates to actual permit requirements, not to application requirements. Section 6.9.4. MONITORING, RECORDING AND REPORTING, was amended to include new material. The new reporting requirements for municipalities and industries with stormwater permits are discussed in 6.9.4.(8) through (10), and are the same as the federal requirements.

The seventh and final group of changes occurs at 6.10.2 GENERAL PERMITS. These changes affect all general permits issued in the CDPS program, not just stormwater discharge general permits. This section was broken into a subsection on "Coverage" and one on "Administration". The Administration subsection contains additions from 40 C.F.R. 122.28(b)(2)(1992). The automatic general permit certification due to the Division's failure to act was broaden to included any time frames less than 30 days if specifically included in a general permit (6.10.2 (2)(d)).

F. IMPLEMENTATION

The permitting of stormwater discharges is part of the CDPS permitting program for point source discharges. See Clean Water Act Section 402 (p) and 40 C.F.R. Section 122.1(b)(2) (1992). As such, the stormwater permitting regulations are integrated into the existing permitting regulations. Portions of the Colorado "Regulations for State Discharge Permit System" that are not unique to stormwater may also apply to point source discharges of stormwater.

Since the stormwater program is a component of the CDPS program, it is intended that the stormwater permitting regulations be implemented following the Division procedures and policies established as a part of overall CDPS permit program. Enforcement should be handled in a manner consistent with the other portions of the CDPS program.

The Division is urged to enter into agreements with other state agencies that also have jurisdiction pertaining to stormwater matters. It is suggested that such agreements include provisions that address coordination of: outreach efforts to all point source stormwater dischargers; mutual permit requirements regarding stormwater controls; inspections; data sharing and enforcement strategies.

G. REFERENCES

(1). U.S. EPA, preamble to the National Pollutant Discharge Elimination System Permit Application Regulations for Stormwater Discharges, Final Rule. Federal Register, Nov. 16, 1990.

(2). USGS (U.S. Geological Survey), 1984. Analysis of Urban Storm Runoff Data and the Effects on the South Platte River, Denver Metropolitan Area, Colorado (WRI84-4159).

(3). WEA (Western Environmental Analysts), 1983. Clean Lakes Study of Dillon Reservoir in Summit County, Colorado, for Northwest Colorado Council of Governments.

(4). WQCD (Colorado Water Quality Control Division), 1989. Nonpoint Source Assessment Report.

The amendment also restructures the existing section. Application requirements which were previously found in the Section 6.6.1 were relocated to this section.

Provisions regarding minimum signatory and certification requirements have been added to the general application requirements section. The added provision are consistent with §122.22 of EPA's regulations. Other general application requirements consistent with §122.21 of EPA's regulations have been added.

Terms and Conditions of Permits

A substantial number of provisions have been added to this general section, reflecting minimum federal requirements found in §§122.41, 122.42, 122.43, 122.44 and 122.45 of EPA's regulations.

Two provisions restricting the Division's authority to issue permits have been added. The first added provision applies where the Regional Administrator timely and properly objects to the issuance of the permit. The Commission believes the addition of this prohibition is beneficial to the regulated entity because it relieves the entity from having to comply with two permits. The Commission does not intend this provision, however, to be interpreted so as to allow the violation of provisions of the CWQCA which have no federal counterpart, should an EPA-issued permit be obtained.

The second provision added restricts the Division's ability to issue a permit to a new source or new discharger unless the new source or discharger demonstrated that the new discharge will not cause or contribute to the violation of water quality standards.

Applicable technology-based effluent limitations for specific categories of industries adopted by EPA pursuant to §304(b) of the federal act have been incorporated by reference in Section 6.9.2. Additional applicable effluent limitations and guidelines adopted by EPA in Parts 125 and 129 of 40 C.F.R. have also been incorporated by reference.

PARTIES TO THE RULEMAKING HEARING July 6, 1993

1. Martin Marietta Corporation
2. Board of County Commissioners of Arapahoe County
3. Category XI Group (AVX Corporation, Ball Aerospace, Colorado Association of Metal Finishers, Hauser Chemical, Hewlett-Packard Company, NCR Corporation, Printing Industries Association, Storage Technology Corporation, Woodward Governor Company)
4. Douglas County
5. The City of Thornton
6. The City of Arvada

61.37 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE (1994 Amendments Related to Delegation Issues)

STATUTORY AUTHORITY

The provisions of 25-8-202(1)(d) and (1)(i) and (2); and 25-8-501 to 504 C.R.S. (1989 Repl. Vol. 11A and 1992 Supp.) provide the specific statutory authority for this amendment to the Colorado Regulations for State Discharge Permit System, adopted by the Commission. The Commission has also adopted, in compliance with 24-4-103(4) C.R.S. (1988 Repl. Vol. 10A and 1992 Supp.), the following statement of Basis and Purpose.

BASIS AND PURPOSE

These revisions are primarily adopted to (1) add needed specificity regarding minimum permit application requirements and minimum terms and conditions which the Division must include in its permits: (2) resolve outstanding delegation issues with EPA; (3) increase the Division's ability to obtain information

regarding industrial dischargers; and (4) restructure, correct typographical errors, and eliminate obsolete language throughout these regulations.

Overview

These regulations implement the discharge permit program delegated by EPA in 1975, in accordance with the CWA and with EPA's delegation regulations (found at 40 C.F.R. Part 123). Part 123 of EPA's regulations prescribe minimum requirements for delegation and delineates EPA's role to oversee the States' implementation of the delegated programs.

In 1989, EPA initiated a comprehensive review of Colorado's program. EPA submitted extensive comments regarding the adequacy of the State's statutory and regulatory authority to implement a permit program which is consistent with the federal NPDES program. Adequate statutory and regulatory authority is a minimum delegation requirement under the CWA and Part 123. The bulk of EPA's comments relate to the absence from these regulations of minimum requirements pertaining to the issuance of permits. EPA's comments thus question the sufficiency of the State's regulatory authority.

The Commission believes that these regulations, together with the provisions of the CWQCA, provide (and have provided for the past 18 years) sufficient authority for the implementation of a State discharge permit program that is no less stringent than the federal program. The Commission acknowledges that these regulations are not as specific as comparable EPA regulations. Instead, the Division's implementation of the program relies, to some extent, on the CWQCA's directives regarding consistency with federal program requirements (e.g., §§25-8-502(3) and 25-8-503(1), C.R.S.)

While the Commission believes that the CWQCA and these regulations provide the required authority, the Commission acknowledges that the current system results in the Division's reliance on the federal act and federal regulations to derive permitting requirements. The Commission finds that, as a matter of policy, it is preferable for the Division to rely on the State's own permit regulations. Accordingly, this amendment adds a significant number of provisions pertaining to minimum application, boilerplate and other permitting requirements which the Division must follow in implementing the State program.

The Division testified at the hearing that the added provisions reflect, for the most part, the federal language the Division has relied upon so far in administering the permit system. For example, many of the provisions which have been added are already found in the Division's boilerplate permit application or boilerplate permit conditions. Therefore, the Commission expects the added provisions to have little, if any, practical impacts on dischargers.

Two of the provisions adopted in this amendment are unrelated to the delegation issues raised by EPA or to the need for specificity in these regulations. One of these provisions requires that, where a facility is owned by one entity and operated by another, both the owner and the operator sign the permit application and that the permit be issued to both as co-permittees. Currently, these regulations do not specify whether the owner, the operator, or both should apply for the permit. Section 25-8-501 C.R.S. specifically authorizes the Commission's adoption of this provision. The Commission further finds, based on the testimony at the hearing, that the adopted provision will increase the owners' awareness and responsibility over activities which may result in their environmental liability.

The second provision adopted in this amendment, which is not related to delegation, allows the division to require industrial permit applicants to submit information pertinent to their wastewater treatment and wastewater production facilities. Section 25-8-501 C.R.S. provides the specific authority for the Commission's adoption of this amendment. The Commission further finds, based on the Division's testimony, that the Division's increased ability to gain knowledge over an industrial facility's wastewater treatment process is needed, in some instances, to ensure compliance with the CWQCA and these regulations, and to prevent the creation of emergency situations related to noncompliance.

Since the Commission first published the rulemaking notice for these revisions to the discharge permit regulations, the Commission has amended the regulations to include stormwater provisions. In addition, the Ground Water and Land Application provisions adopted by the Commission in November of 1990 became effective on July 1, 1993 and were then incorporated into the text of these regulations. Proper notice was provided for the stormwater amendments, the ground water/land application amendments and for these amendments to the regulations and, therefore, additional notice for this rulemaking hearing is not necessary. If problems arise in the future as a result of this consolidation, the Commission will consider noticing for hearing any changes that may be necessary.

General Provisions

This amendment adopts an incorporation by reference clause and a severability clause. While the adoption of this amendment attempts to diminish reliance on the federal regulations, the Commission finds that textual incorporation of federal tables and language is unnecessary and impractical. Such is the case, for example, with the incorporation of categorical effluent limitations in Section 6.9.2. The Commission has adopted the incorporation by reference clause to ensure that any incorporation by reference throughout these regulations complies with §24-4-103 of the Administrative Procedures Act.

Definitions

This section has been amended to incorporate new terms used in the added provisions. In addition, a description of other pertinent Commission regulations which are referenced in these regulation has been added, to provide consistency throughout the regulations.

Applicability

The applicability section has been expanded to specify certain sources of pollutants which are required to obtain a discharge permit. The added provisions are consistent with the corresponding federal requirements found in §§122.1, 122.24, 122.25, and 122.27.

Application Requirements

The adopted amendment adds special application requirements for certain types of dischargers. The Commission intends these special application requirements to be read in conjunction with the general requirements so as to avoid duplication. Where a more specific requirement applies, the more general requirement should be deemed to be met.

The line drawing requirements of section 6.5.2(2) are intended to provide an overall view of the facility. Block units may be used to indicate large complex processes; however, upon request by the Division, more detailed information within the blocks must be submitted by the applicant. For purposes of this requirement, operations contributing wastewater are those processes or steps after which effluent streams and routed to treatment or pretreatment facilities and are not further used for manufacturing, commercial, mining or silvicultrue purposes. The Commission intends the Division to use its discretion to determine, on a case-by-case basis, the level of detail needed to satisfy this requirement.

The amendment also restructures the existing section. Application requirements which were previously found in the Section 6.6.1 were relocated to this section.

Provisions regarding minimum signatory and certification requirements have been added to the general application requirements section. The added provisions are consistent with §122.22 of EPA's regulations. Other general application requirements consistent with §122.21 of EPA's regulations have been added.

Terms and Conditions of Permits

A substantial number of provisions have been added to this general section, reflecting minimum federal requirements found in §§122.41, 122.42, 122.43, 122.44 and 122.45 of EPA's regulations.

Two provisions restricting the Division's authority to issue permits have been added. The first added provision applies where the Regional Administrator timely and properly objects to the issuance of the permit. The Commission believes the addition of this prohibition is beneficial to the regulated entity because it relieves the entity from having to comply with two permits. The Commission does not intend this provision, however, to be interpreted so as to allow the violation of provisions of the CWQCA which have no federal counterpart, should an EPA-issued permit be obtained.

The second provision added restricts the Division's ability to issue a permit to a new source or new discharger unless the new source or discharger demonstrated that the new discharge will not cause or contribute to the violation of water quality standards.

Applicable technology-based effluent limitations for specific categories of industries adopted by EPA pursuant to §304(b) of the federal act have been incorporated by reference in Section 6.9.2. Additional applicable effluent limitations and guidelines adopted by EPA in Parts 125 and 129 of 40 C.F.R. have also been incorporated by reference.

A provision allowing dischargers to claim credits for pollutants in their intake waters, consistent with §122.44(g) of EPA's regulation, has been added. The added provision clarifies the existing provision which allows credit for pollutants in intake waters "whenever appropriate circumstances exist," by spelling out the circumstances under which credit may be given. In addition, subsection (2)(i) of Section 6.9.2 has been eliminated because it allows for credit for pollutants in the intake waters under circumstances which are not allowed under federal regulations.

Section 6.9.2 has also been amended to allow the Division, under the described circumstances, to impose internal effluent limits. This provision is consistent with §122.45(i) of EPA's regulations.

EPA questioned Colorado's use of potentially dissolved values to express metals effluent limitations based on dissolved water quality standards, as provided in 6.9.2(2). It is the Division's practice and the Commission's intent that, in calculating potentially dissolved effluent limitations, a one-to-one relation between standard and limitation is assumed.

A number of provisions specifying "boilerplate" conditions to be includes in all permits have been added to Sections 6.9.3 and 6.9.4. These provisions include proper operation and maintenance, mitigation, proper treatment byproduct disposal practices, bypass conditions, and an upset defense provision. To the extent these provisions address sludge/biosolids disposal practices, the Commission intends the Division to coordinate with other agencies charged with sludge/biosolids regulation responsibilities. A new Section 6.9.5 has been added, consolidating all the notification requirements to which a permittee is subject.

The Commission has adopted the upset defense provision proposed by a number of the parties. The upset provision proposed by the Division mirrored that of EPA which restricts its application to upsets from technology-based limitations. In Colorado many permittee are subject to more restrictive water quality-based limitations. Such limitations are developed using conservative assumptions such as maximum discharge at minimum stream flow. There are situations when circumstances beyond the control of the permittee result in violations of water quality based effluent limitations without causing exceedances of instream water quality standards. The Commission believes that in these circumstances it is appropriate to allow application of the upset defense to violations of water quality-based limitations.

The regulation adopted by the Commission requires permittees who wish to rely on the upset defense for water quality-based limitations to not only meet the upset criteria but also to demonstrate through monitoring, modeling or other methods that the relevant water quality standards were achieved in the receiving water during the upset period. (If antidegradation-based limits are exceeded in an upset, the permittee must show the instream conditions that correspond to the antidegradation-based limits were not

exceeded.) The Commission notes that monitoring and modeling capability has advanced significantly in recent years. In some cases it may be possible using these techniques to show that no violation of water quality standards took place.

The Commission believes that dischargers should not be subject to enforcement liability where water quality-based limitations were exceeded as a result of an upset but there has been no instream exceedance of water quality standards. The alternative proposal advanced by the parties and adopted by the Commission allows a permittee to claim the affirmative defense of upset for a violation of effluent limitations based on water quality standards and it places the burden of proving the defense on the permittee, subject to review and determination by the Division.

The existing provisions regarding transfers of permits has been amended to distinguish the circumstances under which an automatic transfer is appropriate and those where new public notice and opportunity for comment must be given.

The existing provisions specifying boilerplate conditions applicable to domestic wastewater treatment works have been consolidated in a new Section 6.9.7. Obsolete language has also been eliminated. Likewise, the existing provisions pertaining to permit modification, suspension, and revocation and reissuance have been consolidated in a new Section 6.9.8. A clarification that the antibacksliding provisions applicable to renewed permits apply to modified or reissued permits has been added to the existing provision.

An antibacksliding provision consistent with the federal act has been added to Section 6.11.0. The adopted provision is different from EPA's rule but it is consistent with §§402(o) and 303(d)(4) of the Clean Water Act, as those provisions are interpreted by EPA. Sections 402(o) and 303(d)(4) are antibacksliding provisions enacted by Congress as part of the 1987 amendments to the CWA. EPA's current rule precedes the 1987 amendments. Since their enactment, EPA has drafted but has not yet adopted an amendment to the rule which reconciles it with the new statutory provisions. The Commission is required by State law to adopt regulation which are consistent with both the federal act and applicable federal regulations. In its current form, EPA's antibacksliding rule is not consistent with the federal act, a fact emphasized by EPA. The Commission finds that the adopted State rule is both reasonable and consistent with both the federal act and with EPA's interpretation of the federal act, as reflected in EPA's guidance and draft rule.

A question asked during the hearing was whether the adopted antibacksliding provision would preclude the Division from relaxing a water-quality-standard-based effluent limitation where the Commission modifies the water quality standard on which the limitation is based, to make it less stringent. The Commission intends the exception in Section 6.11.0(6)(b) to allow backsliding under such circumstances. Accordingly, where the Commission modifies a water quality standard to make it less stringent than a previously adopted water quality standard, the Division may relax the corresponding effluent limitation in a permit, provided that (1) the newly adopted water quality standard is being attained instream and (2) the relaxation is consistent with the Commission's antidegradation rule. Consistency with the Commission's antidegradation rule shall be presumed, in the antibacksliding review context, if the receiving waters are designated by the Commission as use protected pursuant to Section 3.1.8 of the Basic Standards.

PARTIES TO THE RULEMAKING HEARING

1. Metro Wastewater Reclamation District
2. City of Ft. Collins
3. Climax Molybdenum Company
4. Coors Brewing Company
5. City of Colorado Springs

61.38 FINDINGS REGARDING BASIS FOR EMERGENCY RULE FOR AMENDMENTS ADOPTED ON NOVEMBER 14, 1994

In July of 1994, the Commission adopted a comprehensive rewrite of these regulations. One of the purposes of the adopted amendments was to restructure the regulations to integrate previously adopted ground water and land application provisions. Those provisions were adopted by the Commission in November of 1990 but did not become effective until July 1, 1993. The July, 1994 rewrite integrated those provisions with the remaining provisions of the discharge permit regulations.

The Division's rewrite inadvertently omitted six ground water and land application provisions adopted by the Commission in November, 1990. Neither the Division nor any other party requested the omission of these provisions. Nor did the Commission intend their deletion.

The Commission finds that reinstatement of the omitted provisions is imperatively necessary to preserve public health, safety and welfare. Four of the omitted provisions provide the Division with needed authority to require information from a permit applicant. Such information may be crucial to evaluate whether the proposed land application or ground water discharge will adversely affect public health, safety or welfare. Absent this authority, such impacts may not be subject to the proper evaluation.

The other two omitted provisions provide the Division's authority to impose effluent limitations in ground water discharge permits. Absent the omitted language, the Division's ability to protect such standards through its permits may be jeopardized.

At the time of adoption of the emergency rule, there are at least 24 ground water discharge permit applications pending before the Division. Additional applications are expected within the next three months.

The Commission also finds that, since these provisions were already adopted by the Commission and their deletion was not intended by the Commission, their reinstatement is necessary to comply with state law.

The Commission finds that, for the reasons stated above, delaying reinstatement of the omitted provisions is contrary to the public interest. Therefore, the Commission adopts the omitted provisions presented by the Division through this emergency proceeding. The emergency rule shall be effective immediately and shall expire within three months of adoption.

61.39 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE (1994 Amendments Related to Salinity Issues)

STATUTORY AUTHORITY

The provisions of 25-8-202(1)(d) and (1)(i) and (2); and 25-8-501 to 504 C.R.S. (1989 Repl. Vol. 11A and 1992 Supp.) provide the specific statutory authority for this amendment to the Colorado Regulations for State Discharge Permit System, adopted by the Commission. The Commission has also adopted, in compliance with 24-4-103(4) C.R.S. (1988 Repl. Vol. 10A and 1992 Supp.), the following statement of Basis and Purpose.

BASIS AND PURPOSE

As a result of this hearing, the Commission has:

(1) Repealed the existing Regulations for Implementation of the Colorado River Salinity Standards through the NPDES Program, 3.10.0 (5 CCR 1002-11) and recodified the major provisions of this regulation as a new subsection 6.9.2(12) of the Regulations for the State Discharge Permit System; and

(2) Added two new sections to the recodified regulation, to incorporate additional policies of the Colorado River Basin Salinity Control Forum, in addition to making several editorial corrections to the regulation.

Repeal and Recodification:

The following statement of basis and purpose was adopted in conjunction with the original adoption of regulation 3.10.0:

The subject regulations are for implementation of the "Water Quality Standards for Salinity" for the Colorado River. These standards were adopted by the Water Quality Control Commission on May 4, 1976 and set numeric criteria for salinity in the Colorado River as follows:

Below Hoover Dam - 723 mg/l

Below Parker Dam - 747 mg/l

Below Imperial Dam - 879 mg/l

The standards are required by the Federal Water Pollution Control Act, 33 U.S.C. Section 303, and the Colorado River Basin Salinity Control Act, 43 U.S.C. Section 1571.

The Plan of Implementation is comprised of a number of Federal and non-Federal projects and measures to maintain the flow-weighed average annual salinity in the Lower Colorado River at or below numeric criteria at the three stations as the Upper and Lower Basin states continue to develop their compact-apportioned waters. One of the components of the Plan consists of the placing of effluent limitations, through the National Pollutant Discharge Elimination System (NPDES) permit program, on industrial and municipal discharges.

The purpose of the regulation is to provide more detailed guidance to those municipal and industrial dischargers who wish to establish the non-feasibility of a no-salt-return to the Colorado River as is required by the adopted plan.

Since the standard of "No salt return where practicable," has already been adopted by the Commission, the scientific or technological issues involved in this regulation are limited to the type of technical data that must be submitted for the Department of Health, to determine the type of permit condition that will be included in each discharge permit.

Upon review, the Commission believes that it is more logical for these regulatory provisions to be a part of the overall state discharge permit regulations, rather than a free-standing regulation. This should make these regulatory provisions more accessible to those in the public, including the regulated community, who are likely to have occasion to be concerned with these issues.

Addition and Revisions:

The majority of the revisions to the regulation involve reformatting and editorial changes that make several terms used in the salinity regulation consistent with those used in the permit regulations. Other revisions include deletion of the "Purpose" section of the salinity regulation as well as the definition of "New Construction" which is now out of date. The major additions are the inclusion of two policies, for intercepted ground water and fish hatcheries, that were adopted by the Colorado River Basin Salinity Control Forum in 1982 and 1988, respectively. The Division has been informally using these policies, where applicable, to establish permit conditions.

The provisions for intercepted ground water can be applied to discharges from mines and construction dewatering activities and also allow infiltration of saline ground water into municipal wastewater collection

systems to be taken into account. Their use allows for a much simpler application of criteria for determining permit conditions related to salinity which minimizes the burden on the permittee and the Division. The provisions that apply to fish hatcheries allow for a 100 mg/l increase in salinity through the facility in recognition of the fact that they are "flow through" systems and very little salinity is added. The Commission finds that it is appropriate to formally include these policies in the regulation.

61.40 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE (January, 1995 rulemaking)

The provisions of 25-8-202(1)(d) and (1)(i) and (2); and 25-8-501 to 504 C.R.S.(1989 Repl. Vol. 11,11A and 1992 Supp.) provide the specific statutory authority for this amendment to the Colorado Regulations for State Discharge Permit System, adopted by the Commission. The Commission has also adopted, in compliance with 24-4-103(4) C.R.S.(1988 Repl. Vol 10A and 1992 Supp.), the following statement of Basis and Purpose.

In July of 1994, the Commission adopted a comprehensive rewrite of these regulations. One of the purposes of the adopted amendments was to restructure the regulations to integrate previously adopted ground water and land application provisions. Those provisions were adopted by the Commission in November of 1990 but did not become effective until July 1, 1993. The July, 1994 rewrite integrated those provisions with the remaining provisions of the discharge permit regulations.

The Division's rewrite inadvertently omitted six ground water and land application provisions adopted by the Commission in November 1990. Neither the Division nor any other party requested the omission of these provisions. Nor did the Commission intend their deletion. On November, 14, 1994, the Commission reinstated these provisions on an emergency basis. The Commission now permanently adopts the reinstatement of the omitted provisions. Four of the omitted provisions provide the Division with needed authority to require information from a permit applicant. Such information may be crucial to evaluate whether the proposed land application or ground water discharge will adversely affect public health, safety or welfare. Absent this authority, such impacts may not be subject to the proper evaluation.

The other two omitted provisions provide the Division's authority to impose effluent limitations in ground water discharge permits. Absent the omitted language, the Division's ability to protect such standards through its permits may be jeopardized.

The Commission also finds that, since these provisions were already adopted by the Commission and their deletion was not intended by the Commission, their reinstatement is necessary to comply with state law.

61.41 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE (Total Recoverable Metals and Practical Quantitation Level Revisions - July 1994)

The provisions of section 25-8-202(1)(d) and 25-8-302; C.R.S., provide the specific statutory authority for adoption. The Commission also adopted, in compliance with section 24-4-103(4) C.R.S., the following statement of basis and purpose of these amendments.

STATEMENT OF BASIS AND PURPOSE

Section 6.9.2(2)(g) is amended to reflect in regulation the Commission intent for the translation of dissolved water quality standards to potentially dissolved permit conditions using a 1:1 ratio. Though not specifically stated, the translation ratio is found in "The Basic Standards and Methodologies for Surface Water, 3.1.0, (5 CCR 1002-8)" and was introduced to that regulation during the 1987 Revisions. The current amendment also provides in regulation a mechanism for expressing a dissolved water quality standard as the total recoverable fraction of the metal in a permit.

Section 6.9.2(13) is added to the regulation to formalize establishment of PQLs for permits. It has been demonstrated that some wastewater effluents possess a matrix of pollutants that can interfere with analytical procedures near the level of detection. This provision therefore allows the permittee an opportunity to demonstrate unique conditions in their discharge that may translate into a PQL for their effluent. Development of a site specific or discharge specific PQL does not alter the applicable standard as set by the Commission but only establishes a level of detection for a specific parameter in a specific effluent. The Division shall develop site specific or discharge specific PQLs utilizing the appropriate methodology. Additionally, the PQLs for organics which had previously been contained in “The Basic Standards and Methodologies for Surface Water, 3.1.0, (5 CCR 1002-8)" and "Basic Standards for Ground Water, 3.11.0 (5 CCR 1002-8)” were deleted from these documents and placed in this regulation. In determination of a PQL utilizing Best Professional Judgement as allowed in section 6.9.2(13)(c), the Division is expected to use technically current methodologies and literature and may consult with the PQL review committee. To clarify the need and process for incorporation of PQLs into permits and review of site specific PQLs at permit renewal, sections 6.9.4(1)(d), (e) and (f) have been added.

The Commission will expect the list of identified PQLs in section 6.9.2(13)(b) to be routinely reviewed and proposed changes referred to the Commission for consideration for adoption at a rulemaking hearing. To assist the Division in such a review process, the Commission encourages the use of a committee with a representative of the appropriate interest groups. Such interests at a minimum should include environmental groups, industry, municipal, water purveyors, agriculture and regulatory.

Based upon a review of Federal Register documents Vol. 57, No. 138/Friday, July 17, 1992 (page 31807) and Vol. 56, No. 20/Wednesday, January 30, 1991 (page 3552) both of which relate to the National Primary Drinking Water Regulations, discussion with laboratory staff of the Department and consideration of Table Value Standards for various use classifications for the respective parameters as identified in the Basic Standards and Methodologies for Surface Waters, 3.1.0, several of the PQLs were revised.

Some of the regulations adopted by the Commission are utilized by other agencies in defining requirements for a specific site. An example of such an agency is any of the implementing agencies identified in S.B. 181. In order that other agencies may utilize default PQLs established by the Commission, language has been provided in section 3.1.14(9) and 3.11.5.C{4) which specifically references the PQLs identified in 6.9.2(13) and thus makes the PQLs available for use by the implementing agencies. As implementing agencies have their own set of enabling legislation and regulations, the legal significance of Commission established PQLs must be determined by each individual agency. This condition is no change from that which existed with the previously established Commission PQLs.

PARTIES TO THE JULY 11, 1994 HEARING

1. Sierra Club and Colorado Environmental Coalition
2. City of Colorado Springs
3. Conoco, Inc.
4. Shell Oil Co.
5. Metro Wastewater Reclamation District, the City of Fort Collins, the Silver Coalition, and the Cyprus Climax Metals Company
6. Coors Brewing Company
7. City of Pueblo
8. ASARCO, Inc.

61.42 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE (Incorporation by Reference November, 1995)

The provisions of section 25-8-202(1)(d) and 25-8-302; C.R.S., provide the specific statutory authority for adoption. The Commission also adopted, in compliance with section 24-4-103(4) C.R.S., the following statement of basis and purpose of these amendments.

BASIS AND PURPOSE:

The regulation is being amended 1) to update the incorporation by reference provision, 2) delete reference to the City of Colorado Springs within the definition of "Medium Municipal Separate Storm Sewer System"' as requested by the Office of Legislative Legal Services, 3) to make appropriate modifications to make the regulation consistent with the state Act, and 4) to change the regulation title to one that is more recognizable to the public.

61.43 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY. AND PURPOSE (Incorporation by Reference May, 1996)

The provisions of section 25-8-202(1)(d) and 25-8-501 to 504; C.R.S., provide the specific statutory authority for adoption. The Commission also adopted, in compliance with section 24-4-103(4) C.R.S., the following statement of basis and purpose of these amendments.

BASIS AND PURPOSE:

The Commission added a new sentence to section 6.2.2 to comply with the incorporation by reference provisions of the Administrative Procedure Act, section 24-4-103 (12.5)(c).

61.44 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; JULY, 1997 RULEMAKING

The provisions of sections 25-8-202 and 25-8-401, C.R.S., provide the specific statutory authority for adoption of the attached regulatory amendments. The Commission also adopted, in compliance with section 24-4-103(4) C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

The Commission has adopted a revised numbering system for this regulation, as a part of an overall renumbering of all Water Quality Control Commission rules and regulations. The goals of the renumbering are: (1) to achieve a more logical organization and numbering of the regulations, with a system that provides flexibility for future modifications, and (2) to make the Commission's internal numbering system and that of the Colorado Code of Regulations (CCR) consistent. The CCR references for the regulations will also be revised as a result of this hearing.

61.45 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: FEBRUARY 9, 1998 RULEMAKING

The provisions of sections 25-8-202 and 25-8-401, C.R.S., provide the specific statutory authority for adoption of the attached regulatory amendments. The Commission also adopted, in compliance with section 24-4-103(4) C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

The Commission on January 17, 1997 convened a Informational Hearing for the triennial review of the Colorado Discharge Permit System Regulations, 5 CCR 1002-61. The single modification identified at the Informational Hearing pertained to the reference to the Code of Federal Regulations (CFR) which appears at section 61.1(2) of the regulations. That section is amended to reference the current CFR.

Additional changes have been made at several locations within the regulations to either correct typographical errors or inconsistencies in the format.

61.46 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: FEBRUARY, 1999 RULEMAKING

The provisions of sections 25-8-202, 25-8-401, 25-8-501.1, and 25-8-504, C.R.S., provide the specific statutory authority for the amendments to this regulation adopted by the Commission. The Commission has also adopted, in compliance with section 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE:

A. Background

Amendment 14, approved by Colorado voters on November 3, 1998, adds a new section 25-8-501.1 to the Colorado Water Quality Control Act, and amends section 25-8-504. These provisions establish a new requirement that an individual discharge permit be obtained by any person who operates, constructs, or expands a "housed commercial swine feeding operation." In this rulemaking hearing, the Commission adopted revisions to the Colorado Discharge Permit System Regulations to implement these new requirements.

At this time, the Commission has taken final action on only a subset of the issues raised in the rulemaking hearing, specifically the proposed new definitions in section 61.2. The Commission has taken this partial final action so that its determinations on these definitions will be known prior to an Air Quality Control Commission rulemaking hearing for the implementation of Amendment 14, which is scheduled for February 18, 1999, to facilitate consistency of the air quality and water quality regulatory programs.

B. Definitions

The regulation includes definitions for several terms also defined in the statute. The statutory definitions of "agronomic rate" and "housed swine feeding operation" appear verbatim in the regulation. The Commission expanded on several aspects of the statutory definition of "housed commercial swine feeding operation", to further clarify how this term will be applied in practice.

The phrase "capable of housing" is clarified to refer to the combined maximum capacities of individual housing units. The Commission intends this capacity to be based on the sum of the weights of swine anticipated to be present in all housing units at any one time, e.g. based on the business plan for the operation. That is, the capacity determination is to based on full use of existing physical facilities, consistent with standard industry practices aimed at providing a continuous supply of marketable hogs. If the owner demonstrates that standard practice results in swine at a variety of weights being present at any one time, the combined total of those various weights at the time of maximum utilization is to be used. The Commission does not believe that the proposal to allow a determination that an operation may be excluded from the definition, based on a commitment not to house more than a specified weight, is consistent with the statutory language, which is based on what an operation is "capable of housing", not on actual operations that may be at a lower level.

The definition includes default values to correlate the statutory 800,000 pounds threshold with different size categories of swine. The default number of feeder swine corresponding to 800,000 pounds is based on information that 265 pounds is a common market weight for feeders. However, the definition also allows the owner of an operation to provide specific information that demonstrates the appropriateness of an alternative capacity calculation for a particular facility. The Commission intends these elements of the definition to provide predictability and ease of application in most circumstances, while also providing flexibility to address any unique circumstances.

The regulation clarifies the phrase "under common or affiliated ownership or management" by focusing on majority ownership or actual or effective control of the management of those aspects of an operation related to swine production or swine waste management. The Commission does not intend that mere

similarity of practices, such as utilizing the same university feeding recommendations or local veterinarian or the same feed manufacturer alone evidence "effective control of the management" of operations. Moreover, limited cooperative efforts, such as participation in a common marketing organization or a commitment by multiple producers to meet common product standards (e.g. for organic pork) alone, without more extensive control of other aspects of swine production or waste management, would not constitute "effective control of the management" of an operation, so long as no entity has the ability to require such participation. The Commission anticipates that application of this definition will require the Division to exercise its judgment on a case-by-case basis to determine what circumstances evidence "effective control", e.g. based on actual decision-making authority, dominant market position, common control of significant aspects of the operations, or interrelationships that evidence that interactions between the entities are not "arms-length transactions." All possible circumstances and arrangements cannot be anticipated in the regulation.

In the hearing, there was considerable debate regarding the appropriate application of the housed commercial swine feeding operation definition to two specific types of arrangements: (1) where an operation would meet the definition of a housed commercial swine feeding operation due solely to its membership in an agricultural cooperative that qualifies as a housed commercial swine feeding operation, and (2) where a contract finisher would not meet the definition of "common or affiliated ownership or management except that it does not own the swine that it finishes. The Commission believes that operations that are involved in these two types of arrangements fall under the statutory "common or affiliated ownership or management" language and that, if they also meet one of the tests in the definition relating to water quality impacts, excluding those operations would be inconsistent with the requirements of the statute. The interdependency among the various phases of swine production - farrowing, finishing and processing - for these cooperatives does not appear to be substantially different from that associated with corporate operations. However, because many of these operations are family farms that have added housed swine facilities within the last several years, the Commission recognizes that these operations face a substantial financial and management challenge to come into compliance with the requirements of Amendment 14, especially considering the cumulative air and water quality requirements. Therefore, the Commission encourages the Division to grant appropriate waivers and/or establish up to a five-year compliance schedule where necessary to implement the new requirements due to economic hardship.

The Commission interprets the statutory phrase "integrated in any way" as referring to a potential measurable negative cumulative impact on state waters at any one location. The Commission intends that this potential is to be determined based on the location of facilities, not on operational controls. If this phrase were interpreted to refer solely to integration of business operations, it would be duplicative of the phrase "common or affiliated ownership or management," which would render the other phrases in the second half of this sentence in the statutory definition irrelevant.

Finally, the Commission's definition of "housed commercial swine feeding operation" clarifies the statutory phrase "discharge within the same watershed or into watersheds that are hydrologically connected." As a matter of policy, the Commission chose to focus on hydrologic units that it believes are of a size such that cumulative impacts on water quality from multiple swine feeding operations could be a concern, since the focus of these new statutory provisions is to assure adequate protection of water quality. The Commission also added language to clarify that these terms will not be deemed to apply if an owner demonstrates that there is no reasonable potential for two operations to result in a measurable negative cumulative impact at any one location. Again, this determination relies on the location of facilities, not on operational controls.

The statutory definition of "process wastewater" has been modified to refer to "swine feeding process wastewater", since the discharge permit regulation as a whole applies to many other types of process wastewater. In addition, this definition has been modified to clarify the intent that it apply to wastewater resulting from the swine feeding and wastewater management aspects of a housed commercial swine feeding operation.

In addition to adding several statutorily-defined terms to the regulation, the Commission included several additional definitions to provide clarity regarding the implementation of this new regulatory program. The

Commission added definitions of "new" and "existing" housed commercial swine feeding operations. The definitions hinge on whether physical construction of an operation was commenced by March 30, 1999, the anticipated effective date of these amendments to the discharge permit regulations. This distinction is necessary to accommodate the practical differences as to when permittees must submit a permit application and the "plans" required for housed commercial swine feeding operations. If construction of an operation commenced before the effective date of the regulation, it would not be possible to submit a permit application 180 days prior to the commencement of construction. Therefore, the Commission has decided as a matter of policy that is not practical or appropriate to use the June 1, 1998, date that appears in the air quality portion of Amendment 14 to determine what constitutes a new operation for purposes of the water quality control requirements, as was recommended by some parties.

The Commission included a definition of "aquifer", since this term is used in the statute and the regulation. This definition tracks the definition of this term in Colorado statutes for ground water management.

The term "contamination" is defined because of its use at several points in the statute and the regulation. The Commission defined this term with reference to the protection of adopted water quality classifications and standards. Although this term could be interpreted to refer to any degradation of water quality, the Commission rejected that interpretation, since the statute explicitly uses the term "degradation" when that more restrictive level of control is intended, i.e. for state trust lands.

The term "residual solids" has been defined to refer to manure and other solids separated from or resulting from the storage or treatment of swine feeding process wastewater. This term is included for simplicity and consistency, since several of the requirements of the regulation should logically apply to all of the waste-related solids included within this definition.

Finally, a definition of "non-land-application facility" has been added, since there is no water quality protection reason for operations that meet this definition to be subject to the land application requirements of the regulation. However, note that if any portion of the swine feeding process wastewater or the residual solids from an operation will be land applied, the operation does not meet this definition.

61.47 FINDINGS REGARDING BASIS FOR EMERGENCY RULE FOR AMENDMENTS ADOPTED ON MARCH 9, 1999

The Commission adopted identical revisions to this Rule 61 on both a permanent and emergency basis at its meeting on March 9, 1999. Amendment 14 requires the Commission to promulgate rules by March 31, 1999 to ensure the issuance and effective administration of permits by July 1, 1999. The Commission heard approximately fourteen hours of testimony at its February, 1999 meeting regarding implementation of Amendment 14, but was unable to complete deliberations in the time available. The permanent rule adopted on March 9, 1999 will become effective in the normal course of business on April 30, 1999. The provisions of that rule, however, require that housed commercial swine feeding operations submit permit applications by April 15, 1999. This date cannot practically be delayed without potentially delaying issuance of permits beyond the July 1, 1999 deadline for issuance of permits under Amendment 14. In order to provide continuous regulatory coverage so that the implementation can begin promptly, an emergency rule is necessary to cover the period until April 30, 1999. Accordingly, the Commission finds that immediate adoption of the temporary rule is imperatively necessary in order to comply with the mandates and deadlines of Amendment 14. Adoption of the permanent rule implementing Amendment 14 complied with the requirements of section 24-4-103, C.R.S. (1998). The permanent and temporary rules are substantively identical. The Commission therefore further concludes that compliance with the provisions of section 24-4-103, C.R.S. (1998) in adoption of a rule for the period March 30, 1999 to April 30, 1999 would be contrary to the public interest The Commission designates the effective period for this emergency rule as March 30, 1999 through April 30, 1999.

61.48 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: MARCH, 1999 RULEMAKING

The provisions of sections 25-8-202, 25-8-401, 25-8-501.1, and 25-8-504, C.R.S., provide the specific statutory authority for the amendments to this regulation adopted by the Commission. The Commission has also adopted, in compliance with section 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE:

A. Background

Amendment 14, approved by Colorado voters on November 3, 1998, adds a new section 25-8-501.1 to the Colorado Water Quality Control Act, and amends section 25-8-504. These provisions establish a new requirement that an individual discharge permit be obtained by any person who operates, constructs, or expands a "housed commercial swine feeding operation." In this rulemaking hearing, the Commission adopted revisions to the Colorado Discharge Permit System Regulations to implement these new requirements. In addition, corresponding revisions were adopted for the Confined Animal Feeding Operations Control Regulation, Regulation #81 (5 CCR 1002-81) to avoid regulatory overlap.

On February 9, 1999, the Commission took final action on a subset of the issues raised in the rulemaking hearing, specifically the proposed new definitions in section 61.2. This Statement of Basis and Purpose describes the remainder of the Commission's actions as a result of this rulemaking, as finalized on March 9, 1999.

In general, the Commission adopted regulatory provisions that closely track the language of Amendment 14, which already spells out many of the details of the new permitting requirements for housed commercial swine feeding operations. Additional detail and clarifications have been added where appropriate to establish a practical, efficient and predictable system for the implementation of these new requirements.

B. Permit System Overview

Amendment 14 requires that the Commission, on or before March 31, 1999, promulgate "rules necessary to ensure the issuance and effective administration of permits under this section by July 1, 1999." Section 25-8-501.1(4), C.R.S. In order to comply with this ambitious deadline, the Commission established a permitting structure that requires submission of initial permit applications by existing facilities by April 15, 1999, and contemplates issuance of the first round of permits to existing facilities by July 1, 1999. Although the April 15 deadline is little more than two weeks after the legal effective date of these new regulatory provisions, the Commission understands that the application forms for existing facilities will be available shortly after the Commission has taken final action in this rulemaking and approximately one month before this deadline. The permits issued prior to July 1 will establish an initial set of requirements for existing housed commercial swine feeding operations, to assure that the mandates of Amendment 14 are satisfied.

The Commission established separate deadlines for existing facilities to submit construction, operations, and swine waste management plans, financial assurance plans, and monitoring plans. The rationale for the timing of each of these documents is summarized below. The Commission has included in the regulation an opportunity for public review and comment on each of the plans submitted by existing operations. Because the provisions of the plans will become binding on permittees once approved by the Division, prior to actual amendment of the operations' permits, the Commission believes that it is appropriate to allow public input at this point in the process. At any time after the permittee submits some or all of these documents, the Division may reopen the permit issued to a facility to incorporate elements of the plan as permit requirements as appropriate. The permit modification process will provide an additional opportunity for public input relative to permit requirements to implement the provisions of the plans.

New facilities must submit permit applications 180 days prior to beginning construction of facilities for such operations. The Commission included an option for a permit application for a new facility to be submitted closer to the commencement of construction, with the approval of the Division following a pre-application meeting. This flexibility is intended to accommodate considerations such as the timing of financing of a new operation. However, the Commission left this option to the Division's discretion, due to its need to assure the completeness of a facility's planning and information development efforts prior to formal application submission, in order to be able to determine that it will be able to complete the formal permit processing in a shorter time period. This determination will also need to take into account the realities of the Division's workload at any given time. New facilities must submit construction, operations and swine waste management plans, financial assurance plans, and monitoring plans with the permit application. This timing will allow the Division to include all necessary requirements for new facilities to comply with Amendment 14 in the initial permit, so that all site-specific fine-tuning to meet the regulatory requirements occurs before operations begin.

In accordance with section 25-8-501.1(7), C.R.S. the Commission has established an annual permit fee of 20 cents per animal for swine at each housed commercial swine feeding operation covered by a separate permit, to offset the costs of administering the housed commercial swine feeding operation program. The Commission believes that it is reasonable to impose a fee on the number of animals at each separately permitted operation, even if the same animals were subject to a fee when housed at a separate operation during a different stage of the life cycle, since there are additional administrative and oversight costs associated with each permitted operation. The Commission has excluded unweaned swine in determining the number of animals on which a fee is to be based, in view of evidence regarding standard agricultural industry practice of not counting piglets separately from the sow until they are weaned. In view of the anticipated workload to implement the extensive requirements of Amendment 14, it appears that the funds generated by this fee plus additional resources will be needed to implement the water quality protection aspects of the program.

Testimony presented during the hearing described existing family farms that have added housed swine feeding operations within the last several years. Some of these operations are not themselves capable of housing 800,000 pounds of swine, but are considered to be under common or affiliated ownership or management (1) solely because of their membership in an agricultural cooperative that itself qualifies as a housed commercial swine feeding operation, or (2) because the operation contracts to produce swine for an affiliated agricultural cooperative. The Commission concluded in the Statement of Basis and Purpose accompanying the February 1999 adoption of definitions to implement Amendment 14 that such operations meet the statutory definition of "common or affiliated ownership or management." The Commission recognizes, though, that these operations face a substantial financial and management challenge to come into compliance with the requirements of Amendment 14, especially considering the cumulative air and water quality requirements. Therefore, the Commission provided an initial four-year deferral period for the existing cooperative members and contract producers that meet the definition of a housed commercial swine feeding operation.

During this initial deferral period, the Commission intends that the Division will work with the operations covered by this deferral and other interested persons to assess whether, how and in what circumstances a deferral should be extended for some or all of these facilities. The Commission intends to conduct a new rulemaking hearing prior to the expiration of the initial deferral period to consider potential changes to the regulation based on the results of the Division's assessment. This assessment of potential revisions to the regulation should consider appropriate criteria for a longer-term deferral for some operations, taking into consideration the extent of potential risk to water quality and the economic burden of compliance with these regulations. It should also consider potential information requirements for operations that seek to be covered by the longer-term deferral.

C. Construction, Operations and Swine Waste Management Plans and Requirements

Existing facilities must submit construction plans with the initial permit application. Since these plans will reflect structures already in place, the regulation allows existing facilities until July 1, 2000 to make any necessary changes to assure that the facility design and construction and water quality setback

requirements of the regulation are met. The water quality setback requirements established are not extremely restrictive, and the Commission believes that they generally reflect minimum reasonable separations necessary to assure water quality protection. However, the Commission included a variance provision in the regulation for existing structures at existing facilities, to account for circumstances where a particular permittee may be able to demonstrate that its facilities or structures do not pose a risk to water quality even though the setback requirements are not met. The Commission believes that this provision is appropriate since existing facilities have fewer options for modification of their operations, so long as protection of water quality is still documented. The Commission determined as a matter of policy that it is reasonable to expect all new operations to meet the setback requirements, since they are able to plan for such compliance in advance.

The Commission selected the specific construction requirements established in the regulation for all facilities to reflect the best available waste management practices. For swine feeding process wastewater collection systems, conveyance systems, and impoundments, the Commission chose a 1×10^{-6} cm/sec maximum seepage rate, consistent with the existing requirements for other confined animal feeding operations and for wastewater impoundments regulated under the "ground water" provisions of the discharge permit regulations. The Commission does not believe that any convincing justification has been presented to establish a more stringent requirement for housed commercial swine feeding operations.

The regulation requires submission of information regarding the 100-year floodplain, which is needed to determine compliance with the floodplain setback requirement. Where the floodplain has not already been identified and designated by the Colorado Water Conservation Board, the owner or operator will need to provide adequate technical information for a floodplain evaluation. The floodplain rules adopted by the CWCB establish standards that can be used to determine information that would be considered adequate for this purpose.

The regulation requires submittal of an operations plan for existing facilities by July 1, 1999, and a swine waste management plan by September 30, 1999. Because these plans provide the primary information to assure compliance with the requirements of Amendment 14, including application of wastes to land at an agronomic rate, it is important that these plans be submitted expeditiously. However, the Commission determined that it would not be realistic for such plans to be submitted, reviewed and approved in time to meet the July 1, 1999, deadline for the issuance of permits. Accordingly, the initial permits will include general requirements to assure that the major provisions of Amendment 14 are met, including a requirement limiting land application to the agronomic rate. These requirements will then be fine-tuned as appropriate through incorporation in the permit of aspects of the subsequently approved site-specific operations and swine waste management plans.

In order to assure that implementation of the statutory provisions occurs as expeditiously as practical, the Commission has added a requirement that existing facilities submit "readily available information" regarding existing swine waste management practices with the initial permit application. The Commission believes that it is reasonable to expect that all facilities will have some level of documentation available regarding these practices. Operations established since 1992 that meet the definition of a "concentrated animal feeding operation" under the Commission's current Confined Animal Feeding Operations Control Regulation were already required to have a "manure and process wastewater management plan" in place.

The operation and maintenance requirements established are all targeted at protection of water quality and are intended to reflect the best available waste management practices. There was considerable disagreement among parties to the hearing as to whether land application of manure or swine feeding process wastewater should be prohibited in certain circumstances, such as when the ground is frozen. The Commission adopted provisions intended to avoid land application that will adversely impact water quality, without establishing blanket prohibitions that would not allow utilization of common and accepted agricultural practices, such as applying some fertilizer after the conclusion of a growing season. The regulation does include a blanket prohibition of some activities that are not considered common and accepted agricultural practices, such as application to lands that are saturated or covered with snow, or where ponding is occurring. The Commission also decided that land application of residual solids and

swine feeding process wastewater (A) more than thirty days before and after the normal growing season for the crop in question, or (B) outside of the period from March 1 through October 31, whichever is less restrictive, should be prohibited in the absence of a site-specific analysis, since such application is not standard agricultural practice. To address this concern, any such application must be included In approved odor management, swine waste management, and monitoring plans. The specific provisions adopted are based on recommendations from experts at Colorado State University. The Commission notes that Amendment 14, in the definition of "agronomic rate of application", specifically recognizes the expertise of Colorado State University Cooperative Extension Service.

The swine waste management land application requirements established are also targeted at protection of water quality and are intended to reflect the best available waste management practices. Several specific provisions included in the regulation establish an operational definition for compliance with the agronomic rate requirement. In establishing these requirements, the Commission relied heavily on input from experts at Colorado State University. The comments submitted raised questions regarding several of these requirements.

There was disagreement in the testimony provided as to whether the provision limiting application when the cumulative soil nitrate-nitrogen level in the two one-foot increments monitored below the root zone exceeds a specified level is appropriate. The Commission believes that this provision is reasonable, especially since it is not stated as an absolute prohibition, but only as a restriction that applies unless the Division has approved a swine waste management plan that it determines will not result in an increase in the levels of nutrients below the root zone. The specific level stated in the regulation (160 pounds per acre) is a representative agronomic rate for a range of crops. If nutrients exceeding this level are present below the root zone, a problem exists that needs to be addressed by more conservative site-specific planning.

Some hearing participants also raised questions about the provision in earlier drafts of the proposed regulation that would have limited further land application if the soil nitrate-nitrogen level in any one-foot increment below the root zone exceeds a comparative concentration based on previous site conditions by greater than five milligrams per kilogram. In particular, they argued that five milligrams per kilogram is not enough of a difference to avoid confusion with natural variability. Although the Commission believes that the evidence submitted demonstrates that this difference is reliable to differentiate from natural variability with good sampling techniques the Commission decided that it was not appropriate to establish a regulatory restriction at a difference of five milligrams per kilogram in view of the large number of samples that would be required from each field to achieve a reliable result. The Commission has retained a provision that requires land application to be ceased if soil nitrate-nitrogen levels below the root zone exceed the comparative concentration by ten milligrams per kilogram, until the Division has approved a revised swine waste management plan. An opportunity is provided for confirmation sampling after an initial exceedance, to assure that results are accurate before requiring that land application cease. The Commission believes that this combination of provisions provides a reasonable set of checks to help assure that the agronomic rate requirement is being met.

Concerns were raised by some parties as to whether the provision limiting land application if sodium bicarbonate extractable phosphorus in the top one foot of soil exceeds 100 mg/kg was stringent enough to avoid surface runoff with excessive phosphorus levels. The Commission believes that this provision is appropriate, since it is consistent with recommendations by experts from Colorado State University and with a similar requirement established in the Colorado Biosolids Regulation.

One of the provisions that is intended to assure protection of water quality is a set of cumulative loading limits for several metals. These limits are the same as those adopted for the land application of biosolids (municipal wastewater treatment plant sludge) under current federal requirements. The regulation requires an initial screening of residual solids and swine feeding process wastewater to determine if any of these constituents is present at significant levels. If not, there is no requirement that ongoing monitoring for these constituents occur. In order to avoid unnecessary requirements, the Commission has included language providing for a waiver of the monitoring requirements for metals if the permittee

demonstrates that there is no reasonable potential for contamination from particular metals at the permitted facility.

The Commission also received a proposal that requirements for disinfection or other pretreatment controls for pathogenic organisms be established in the regulation. The Commission has declined to do so at this time. No substantial evidence was submitted to indicate that pathogens in residual solids and swine feeding process wastewater applied in compliance with this regulation pose a significant human health risk. In the absence of such evidence, the Commission does not believe that it is appropriate to establish an additional set of requirements for housed commercial swine feeding operations based solely on the fact that the potential for such a risk has not been disproved. The Commission also notes that other requirements included in the regulation, such as setbacks and monitoring for biological indicator parameters, provide protection against human health risks.

A number of comments addressed the requirements related to off-site land application of swine waste, i.e. application on lands not owned by the housed commercial swine feeding operation. For example, some producers proposed that the responsibility for assuring compliance with an agronomic rate of application should be on the third party that is applying the waste. However, the statute specifically puts the responsibility on the "owner or operator" of a housed commercial swine feeding operation to assure that "no solid or liquid waste generated by it shall be applied to land by any person" (emphasis added) in a manner that exceeds the agronomic rate.

Concern was also expressed regarding the provisions requiring assurance of Division access to third party lands where application occurs. The Commission believes that such access is essential to successful implementation of this program. The Commission has included three provisions to address this concern: a requirement that permittees notify off-site landowners of the Division's authority to enter and inspect premises, a requirement that new agreements (entered into after March 30, 1999) with landowners provide a right of entry to the Division, and a requirement that the permittee cease land application on any off-site lands to which the Division is denied entry. The Commission believes that these provisions reasonably balance the concern of not mandating changes to existing contracts with off-site landowners; with the concern of assuring the Division's ability to effectively administer this program.

A number of comments recommended that the Commission should limit the application of irrigation water to lands where swine waste is applied. The Commission declined to include this type of limitation in the regulation. The rate of application of water has some impact on whether an agronomic rate will be met. However, the Commission believes that the regulation includes adequate provisions (such as those discussed above, as well as preparation of and compliance with the swine waste management plan itself) to assure that an operation is complying with the agronomic rate requirement Moreover, the Commission's authority to directly regulate the quantity of water applied to lands pursuant to Colorado water rights is strictly limited by the provisions of section 25-8-104, C.R.S. As a matter of policy, the Commission chose to rely on other provisions to implement Amendment 14, rather than attempt to regulate water quantity management.

As noted above in the discussion of definitions, the Commission added a provision exempting "non-land-application facilities" from the requirement to submit a swine waste management plan, to avoid unnecessary regulation of facilities that are not land applying wastes. The Commission has included provisions requiring that such operations submit documentation with their permit applications that they meet the definition of a non-land-application facility.

D. Financial Assurance

Section 25-8-501.1(4)(d) requires housed commercial swine feeding operations to "provide financial assurance for the final closure of [such facilities], the conduct of any necessary post closure activities, the undertaking of any corrective action made necessary by migration of contaminants from the... operation into the soil and groundwater, or cleanup of any spill or breach." To implement this requirement, the regulation requires all housed commercial swine feeding operations to provide financial assurance for closure and post-closure activities. Calculation of the required amount of financial assurance is to be

based on hiring a third party to close the operation, assuming that the operation is operating at the maximum capacity anticipated during the permit term.

The regulation requires that financial assurance for corrective actions be provided only if the Division determines that existing conditions at an operation create a reasonable potential to cause contamination, as defined in the regulation. The Commission believes that this approach is more reasonable than requiring all operations to provide financial assurance for some hypothetical corrective action before any need for a specific corrective action is identified.

While recognizing the need for posting of financial assurances, the Commission is aware of the potentially significant costs associated with this requirement and does not intend that it create an undue financial burden upon producers. The amount of required financial assurances will, of course, be a case-by-case determination based upon site-specific factors, with specific reference to the reasonable potential for risk to surface and/or ground water presented by a given operation. In the case of properly managed operations, the amount posted as financial assurances to meet closure, post-closure, and corrective action requirements may be fairly small. It is not the intent of the Commission that closure and post-closure activities extend beyond those necessary to ensure that any remaining regulated waste product does not pose a measurable risk to ground water or surface water.

The regulation lists acceptable forms of financial assurance, but also allows the use of other mechanisms approved by the Division. The Commission attempted to preserve flexibility in implementing these requirements by not being extremely prescriptive in the regulation as to the specific instruments to be used, but has included a general requirement that all financial assurance instruments include wording approved by the Division to ensure that financial assurance remains adequate. The Commission intends that in determining appropriate wording the Division will draw on language from existing financial assurance requirements for other environmental programs.

The regulation requires that new facilities submit a financial assurance plan with their permit application, and that existing facilities submit their financial assurance plan at the same time as the site-specific monitoring plan, as discussed below. Permittees must provide the required financial assurance within 90 days of the Division's approval of the financial assurance plan. The regulation mandates an annual update of financial assurance for a facility, although the Division can also require an adjustment at any time that it determines that the current financial assurance is insufficient. No financial assurance update is required for years in which there have been no material changes in relevant aspects of the operation and cumulative inflation since the last update does not exceed five percent. The Commission rejected proposals that financial assurance updates be required only every five years, because of its concern that financial resource needs related to closure and post-closure could change substantially during that time period. A requirement for annual updates is common in financial assurance requirements for other environmental programs. The provision stating that no update is required if there have not been material changes or significant inflation should avoid the need for unnecessary updates.

The regulation also sets forth provisions regarding release from financial assurance requirements and potential forfeiture of financial assurance instruments. A default minimum three-year period is established for the Division to retain a portion of the financial assurance following closure, to provide for post-closure requirements. However, flexibility has been included for the Division to determine on a case-specific basis that a shorter period of time is appropriate. The Division may also release portions of any financial assurance required for corrective actions when it concludes that parts of the corrective action have been satisfactorily completed, in order to reduce the costs of maintaining financial assurance to permittees. Each of these elements has been modeled on existing financial assurance programs related to other environmental protection requirements. The Commission believes that each of these elements is necessary to assure a workable program that meets the purposes of the statutory provisions.

E. Monitoring and Reporting

The regulation includes initial monitoring and reporting requirements for existing facilities, to satisfy the requirements of section 25-8-501.1(6), C.R.S. The regulation also requires existing operations to submit a

site-specific monitoring plan by December 31, 1999. New operations must submit such a plan with their permit application. The Commission determined that the submission of these plans is appropriate to allow for fine-tuning of site-specific monitoring efforts, rather than rely in the long run on a fixed set of monitoring requirements for all facilities. At the same time, the initial monitoring requirements contained in the regulation will assure that adequate information to meet the requirements of Amendment 14 is developed prior to the review and approval of the site-specific plans.

The regulation requires the development of baseline information regarding both the levels of nitrogen in soils and the levels of various constituents in residual solids and swine feeding process wastewater. This information is necessary to assess potential impacts of the operation over time. The regulation also requires a redetermination of a "comparative concentration" of nitrate-nitrogen in soils below the root zone annually, to assess whether land application activities are resulting in nitrogen moving past the root zone in any year.

One of the issues that received extensive consideration in the rulemaking process is the specification of required depths for soil monitoring. Based on input from the parties and the recommendations of experts from Colorado State University, the Commission established a set of requirements that it believes are reasonable and appropriate to assure long-term protection of water quality without imposing undue expense and burden on permittees.

Another concern expressed during this rulemaking was how the statutory requirement for quarterly monitoring would be interpreted. The Commission included language to clarify that this frequency is not required when it would not be practical due to physical conditions (such as frozen or saturated ground) or when it is likely to result in excessive crop damage. The Commission believes that it is appropriate to apply the statutory requirement for quarterly monitoring in this manner to assure that it is not applied in a way that is unreasonable, counter-productive or overly burdensome. The Commission also provided flexibility to tailor the intensity of monitoring to site-specific circumstances based on the frequency of land application and the quantity of nutrients applied relative to the agronomic rate. The Commission believes that this is appropriate to assure that monitoring practices are cost-effective and well-tailored to individual operations,

Another type of reporting requirement established in the regulation is the requirement to report "any spill or contamination. "The Commission has clarified the application of this requirement by providing that "de minimis" spills need not be reported if the permittee has proposed and the Division has approved a site-specific interpretation of "de minimis" for the operation in question. While the Commission recognizes that certain small spills need not be reported if they pose no reasonable potential for an adverse impact on water quality, it does not appear feasible to establish a blanket definition of "de minimis."

F. State Trust Lands

Amendment 14 establishes specific requirements applicable to housed commercial swine feeding operations located on State Land Board trust lands. Section 25-8-501.1 (4)(f). Specifically, the construction, operations and waste management plans for such facilities "shall not permit the degradation of the physical attributes or value" of such lands. To implement this provision, the Commission has established requirements that operations on state lands (1) not degrade soil below the root zone or state waters above background or baseline quality, as applicable, (2) assure that swine waste process wastewater collection systems, conveyance systems and impoundments meet a 1×10^{-7} maximum seepage rate, and (3) provide for site closure that includes revegetation to prevent erosion.

Each of these additional requirements is imposed to assure protection of water quality on state lands. The corresponding monitoring and financial assurance requirements adopted should help ensure that these requirements are met. For new operations on state lands, background is to be determined based on soil and ground water conditions that have not been impacted by such operations. For existing operations on state lands, baseline conditions are to be determined based on soil and ground water conditions present as of the effective date of these new regulatory provisions. The purpose for this distinction is to avoid an application of new requirements to existing conditions that may be extremely difficult to alter. The

Commission does not believe that Amendment 14 requires remediation of existing soil contamination. However, this determination of existing baseline conditions will be used to prohibit further degradation of soils or ground water quality. For example, any worsening of ground water quality that occurred following the determination of baseline conditions would be a violation of the regulation, even if caused by the migration of contamination already present in soils at the time that this program is established.

The regulation requires the Division to provide the State Land Board an opportunity to review and comment on all plans submitted for operations on state trust lands, and prohibits; Division approval of a plan if the State Land Board determines that the plan would permit the degradation of the physical attributes or value of any state trust lands. The Commission believes that this should assure that this new program does not impinge on the State Land Board's constitutional role with respect to state trust lands.

G. Coordination with Air Quality Requirements

Amendment 14 establishes both water quality and air quality protection requirements. In developing the new water quality discharge permit regulations for housed commercial swine feeding operations, the Commission attempted to coordinate these requirements to the maximum degree possible with the new requirements being developed by the Air Quality Control Commission. Such coordination will best serve the interests of the regulated community, the general public, and the implementing agencies. In particular, the Commission adopted definitions that are also proposed as part of the new air quality regulations for housed commercial swine feeding operations and established application deadlines consistent with those proposed for air quality, to maximize coordination of permit application review and permit issuance.

H. Other Issues

Concern was expressed by a number of parties to the hearing regarding the costs of complying with the new requirements established for housed commercial swine feeding operations. A wide range of potential cost estimates was provided. The Commission attempted to adopt regulatory requirements that are as economically reasonable as possible, consistent with the many very specific requirements of Amendment 14. Where the statute provides room for flexibility, the Commission included flexibility with respect to implementation of specific aspects of the program, to the degree that it believes is consistent with meeting the intent expressed in the legislative declaration of Amendment 14, and keeping in mind the need to establish a program that will be feasible for the Water Quality Control Division to implement with the available resources. The Commission does not believe that the proposal from some parties to include a general waiver provision that would apply to all aspects of the housed commercial swine feeding operations program is appropriate, in view of the many explicit requirements in the statute.

The Commission declined to adopt proposals from several parties to include additional provisions in the regulation concerning enforcement of the Amendment 14 requirements. The Commission has not included provisions governing the Water Quality Control Division's exercise of its enforcement discretion in any other regulations, and does not believe that it is appropriate or necessary to take a different approach here. These matters are appropriately left to the judgment of the Division on a case-by-case basis. The Commission has also not included a requested "notice of intent to sue" provision in the regulation, with respect to the provision in Amendment 14 allowing civil actions for enforcement to be brought by any person who may be adversely affected by a housed commercial swine feeding operation. This statutory provision is self-implementing. As an administrative agency, the Commission is without authority to impose procedures related to the filing or conduct of district court actions.

Finally, the Commission notes its understanding and intent that the Water Quality Control Division will coordinate with local health agencies in the implementation of the housed commercial swine feeding operation permit program, to the greatest extent feasible in view of resources available to both state and local governments. Although the Commission does not believe it is necessary or appropriate to attempt to specify the details of this relationship in the regulation, the Commission believes that such a cooperative effort will strengthen the efficiency and effectiveness of this program. In particular, the Commission encourages the Division to seek local health agency assistance in implementation efforts in the field, such

as conducting inspections for purposes of compliance assurance or in response to site-specific complaints.

PARTIES TO THE RULEMAKING HEARING

1. Consolidated Nutrition, LC
2. Rocky Mountain Farmers Union
3. Colorado Association of Responsible Enterprises (Seaboard Farms Inc., Midwest Farms, Inc., D&D Farms, Inc. and Don Rutledge)
4. Colorado Livestock Association
5. Independent Agricultural Consultants of Colorado
6. J. R. & Velma Paxson
7. Marvin D. Pletcher
8. Alliance Farms Cooperative Association
9. Environmental Defense Fund
10. Colorado Farm Bureau
11. Bion Technologies, Inc.
12. Tamara Smith
13. Lucille M. Cook
14. Colorado State Board of Land Commissioners
15. Lawrence E. Schenck
16. Douglas Melcher
17. Ron Dobler
18. Galen Travis
19. Bell Farms, LLP
20. Colorado Counties, Inc.
21. Newsham Hybrids
22. Arlene M. West
23. Amino Acid Education Council
24. Lincoln County Board of County Commissioners
25. Dean & Sue Jarrett
27. Farm Credit Bank of Wichita
27. Janie Swopes
28. Colorado Association of Commerce and Industry
29. Equus Farms, Inc.
30. Colorado Water Conservation Board
31. Loveland Industries Inc.
32. The Yuma Pioneer
33. Upper Big Sandy Ground Water Management District
34. Twane & Donna Reker
35. Tom Bomhoft II
36. Wayne Schumacher
37. Keith Roelle
38. Rick Wernsman
39. David K. Amundson
40. Tom Wernsman
41. Bowman Family Partnership, Ltd.
42. Crystal Springs Farms, LLC
43. Northeast Colorado Health Department
44. G&G Pork Producers, LLC
45. Ricky L. Benish

61.49 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE DECEMBER 2000 RULEMAKING - PHASE II STORMWATER PERMIT REGULATIONS

The provisions of 25-8-202(1)(d), (1)(i) and (2); and 25-8-501 to 504 C.R.S., provide the specific statutory authority for adoption. The Commission has also adopted, in compliance with 24-4-103(4) C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

A. APPLICABILITY

These regulations apply to permits and permit application requirements for point source discharges of stormwater runoff including small municipalities (and interrelated discharges), industrial facilities owned or operated by municipalities, and small construction activity. They also apply to industrial facilities with no exposure of their industrial activities to stormwater.

B. REASON FOR AMENDING THE STATE PROGRAM

The State stormwater program is being amended to be compatible with EPA's amended federal stormwater regulation, 40 C.F.R. Parts 122, 123 and 124, which incorporates Phase II of the stormwater program. The changes were published in the Federal Register, Vol. 64, No. 235, on December 8, 1999.

These regulations are consistent with EPA's amended federal stormwater regulations. With a few specific exceptions, the State regulations have the same content as the federal regulations. Sections of the federal regulations were written in a "readable regulation" format that includes both rule requirements and EPA guidance that is not legally binding. In most cases, the Commission chose to omit the guidance sections from the regulation, and the Division will provide guidance on regulation implementation in separate documents. (At least one of these guidance documents will be in the form of Division policy, and will go through the public notice and comment process. See the section on Small Construction Activity, below.) Language that is derived from EPA guidance but is included as part of the State's regulation is legally binding.

The federal regulations also include several sections that are intended to allow the delegated states considerable flexibility in implementing the program. Further discussion on how the Commission has dealt with these sections is included below.

C. DISCUSSION OF AMENDED SECTIONS

Definitions, 61.2(79): Definition #79 addresses Non-standard Municipal Separate Storm Sewers Systems (MS4s), i.e., publicly owned systems for facilities that are similar to a municipality, such as military bases, and large education, hospital or prison complexes. The Commission elaborated on the definition provided by EPA. The State's definition includes a population criterion of at least 1000, which assumes that, in most cases, populations under that threshold have a low potential to pollute stormwater.

This was done to ensure that only systems that have a reasonable potential to impact stormwater quality will be regulated, and to provide more clarification to the regulated community on which facilities might initially need permit coverage, while keeping with the intent of the federal regulation. The Division can still designate facilities as requiring coverage (see section 61.3(2)(e)(vii)), even if they do not meet the threshold outlined here. Other criteria that could be used for evaluation include percent imperviousness area, total area, population density, land use, seasonality of population, and sensitivity of receiving waters (i.e., on the 303(d) list).

Definitions for Small Municipal Storm Sewer System and MS4 were also added, as per EPA's regulation.

Small Construction Activity - Waiver, 61.3(2)(f)(ii) - While the federal regulation allows for two different possible waivers for small construction activity, the Commission has elected to only include the waiver based on the Revised Universal Soil Loss Equation (RUSLE) (see below). One federal waiver is TMDL-based. The Commission believes that it would be difficult to administer, since the process involved in

implementing a TMDL is lengthy and complex, and that it would produce a workload for the Division that is not commensurate with any savings afforded the permittee, in terms of both explaining and applying the waiver. Also, the Division believes that it makes little sense to allow an otherwise regulated activity to discharge, without controls, to a stream that is known to be impaired for sediment, when that discharge produces sediment.

The other potential construction waiver is based on the potential for erosion, using location, weather patterns, season, and duration. To apply the RUSLE Equation waiver, the rainfall erosivity (R-Factor) must be determined using a State Approved Method. The Division will propose the State Approved Method after this regulation has been finalized, but before the application deadline for small construction sites. The State Approved Method will be made an official State policy and go through a public notice and comment process before going into effect. The methodology used for determining the R-Factor under the State Approved Method will be finalized by a work group that will convene in early 2001. The State Approved Method will be based on methodologies in Chapter 2 of the U.S. Department of Agriculture's Agriculture Handbook Number 703, Predicting Soil Erosion by Water. A Guide to Conservation Planning With the Revised Universal Soil Loss Equation (RUSLE), pages 21-56, dated January 1997. The Division will ensure that the State Approved Method will not allow sites to be waived that would not have obtained the waiver based on the method allowed for in 40 CFR 122.26(b)(15)(i)(A).

Regulated Small MS4s, 61.3(2)(f)(v) - Small municipalities (<100,000) in urbanized areas have been brought into the municipal part of the stormwater program, but with simpler application and permit requirements than for the Phase I medium and large municipalities. Some municipalities will be required to have permit coverage, while others must be evaluated by the Division, using the designation criteria described below, to determine whether permit coverage is needed.

Designating Small MS4s based on TMDLs, 61.3(2)(f)(iii) - The regulation allows the Division to designate a small MS4 as needing permit coverage if it "contributes to a violation of a water quality standard or is a significant contributor of pollutants to state waters." The most likely situation where this authority would be exercised is when an MS4 discharge is to an impaired water or must be covered under a wasteload allocation as part of a TMDL.

A review of the draft regulation after it was published showed that the application and permit requirements for a small MS4 designated under these criteria were not clear, especially if the designation was based on discharge to an impaired water or on a TMDL, and occurred before March 10, 2003. Therefore, the designation language under Phase II was expanded to be consistent with the language under Phase I. The section on types of regulated small MS4s was expanded at 61.3(2)(f)(v)(A)(lll)(e) to add a reference to small MS4s designated under 61.3(2)(f)(iii). This was to ensure that the application and permit requirements for such designated small MS4s are consistent with other small MS4s.

Designation Criteria, 61.3(2)(f)(v)(A)(lll) - EPA's suggested designation criteria were amended slightly, as follows: discharge to sensitive waters, high growth or growth potential, population density, contiguity to an urbanized area, and/or significant contributor of pollutants to State waters.

Regarding discharge to sensitive waters, the Commission provided a definition for the purposes of this regulation, to include those receiving waters that are classified as either Aquatic Life Class 1, a Drinking Water supply, or are on the Division's most current 303(d) list (i.e., need a TMDL). Regarding growth, while EPA recommends using a rate of 10%/decade, this element can have widely varying impacts, depending upon the initial population. Therefore, the Division will consider other factors when evaluating growth, such as population size, population density (in effect, using the third element to help evaluate the significance of the second), area of the municipality, potential impacts from growth, number of construction starts, etc. The element of being a significant contributor of pollutants is difficult to define, therefore something would have to trigger this element, such as the Division receiving information to support such a claim. Further discussion of this issue will be included in the guidance document.

Review of MS4s is two tiered. The first tier is the evaluation of the MS4 against the first five criteria included in the regulation. The second tier involves the evaluation of the MS4's current programs to

determine if the programs in place adequately address water quality concerns. That is, if an MS4 met one or more of the first five elements, then it could be designated, or have the option of providing verification to the Division that it is already implementing the applicable portions of the six minimum control measures. The burden of proof is on the MS4 to demonstrate to the Division that the MS4's program is acceptable.

An additional criterion is mentioned as having a high priority when the Division reviews other small MS4s: a combined permanent and seasonal population of over 10,000. This will address municipalities that periodically have large numbers of tourists, and thus have infrastructure in place to support a larger population than the number of permanent residents alone. This particular criterion was highlighted to indicate the Division's and Commission's concern for the stormwater pollution potential from these types of municipalities.

Municipal Waivers, 61.3(2)(f)(v)(A)(lll) - Two potential waivers for small municipalities located within an urbanized area are referenced in the federal regulation. The first waiver is for those municipalities with a population between 1000 and 10,000. The main criteria for this waiver are that: the Division has evaluated all State waters that receive a discharge from the MS4; the Division has determined that stormwater controls are not needed, based on an EPA-approved TMDL or an equivalent analysis of all of these State waters; and the Division has determined that future discharges from the MS4 do not have the potential to result in exceedances of water quality standards or other significant water quality impacts. Application of these criteria appears to be unachievable, as EPA staff have admitted, based on the difficulty in accurately predicting future runoff quality, as well as the work load inherent in a comprehensive evaluation and analysis of all receiving waters. Thus, the first waiver was not included in the proposed State regulation. The other waiver, for MS4s under 1000, was included as written in the federal regulation.

Original Industrial 'No Exposure' Exemption, 61.3(2)(e)(ii)(C), 61.3(2)(e)(iii)(J) and (K) - Paragraph 61.3(2)(e)(ii)(C) has been deleted, and categories (K) and (L) have been combined, based on the following. EPA's original Phase I regulation allowed a 'no exposure' exemption for industries under 40 CFR 122.26(b)(14)(xi), so-called 'light industry' or category (xi). In the State's regulation, category (xi) had been split into two categories. (K) was the category that listed the SIC codes for industries that did not need permit coverage if none of their industrial activities were exposed to stormwater. (L) was the category that listed the SIC codes from EPA's category (xi) where this exemption was not allowed (see 61.36.E.2, Statement of Basis and Purpose, 1993, for discussion). Paragraph 61.3(2)(e)(ii)(C) described the criteria for meeting the exemption. The Phase II federal regulation includes a 'no exposure' exclusion that has been broadened to include all industrial categories except construction, and so the original exemption, including the split into categories (K) and (L), is no longer needed.

New Industrial 'No Exposure' Exclusion, 61.3(2)(h): This regulation allows for industries with discharges composed entirely of stormwater to be excluded from permitting if there is 'no exposure' of industrial materials and activities to stormwater. As defined in the regulation, 'no exposure' means that all industrial materials and activities are protected by a storm resistant shelter to prevent exposure to precipitation, snowmelt, and/or runoff. It is anticipated that in most cases the shelter would be permanent; however, there are circumstances where permanent 'no exposure' of industrial activities or materials is not possible. Under such conditions, materials and activities may be sheltered with temporary covers such as tarps, between periods of permanent enclosure. However, under all circumstances the operator must ensure that there will be no exposure of pollutant sources to stormwater. Stormwater that has come into contact with industrial materials and/or activities is defined as a point source discharge requiring a stormwater discharge permit. If a point source discharge occurs from a facility which has submitted a 'no exposure' certification, the discharger would be in violation of the regulation, and permit coverage must be obtained.

The preamble to EPA's regulation provides further clarification on the definition of 'no exposure', in terms of which materials/activities are not included under the definition of 'industrial materials and activity':

-Drums, barrels, tanks, and similar containers may only be stored outside; that is, they may not be used while outside. The addition of material to or withdrawing of material from these containers while outside is deemed exposure, and as such, not allowed under the exclusion provisions.

-Adequately maintained vehicles used in material handling may be exposed to stormwater. This includes adequately maintained vehicles, and vehicles awaiting maintenance, such as trucks, automobiles, forklifts, pallet jacks, carts, dollies, or other such general purpose vehicles at the industrial site that are not industrial machinery, and that are not leaking contaminants or are not otherwise a source of industrial pollutants.

-Final products may also be stored outside without it being considered exposure; however, this only includes products that are not to be used in producing another product, even by another facility.

Time to Apply, 61.4(3)(a) - Consistent with the federal regulation, this regulation requires that industrial activities owned or operated by small municipalities (such as construction operations, gravel pits, and wastewater treatment plants with a capacity greater than 1 MGD), which have been under a permitting exemption, obtain permit coverage beginning in March 2003.

The Commission opted to change one of deadlines from the federal regulation. March 10, 2003 is the deadline for applications from small MS4s, and for municipal industrial facilities. The deadline for applications for small construction sites was changed from the March 2003 date to July 1, 2002. This was done to spread out the permitting workload, and to coincide with the expiration of the Division's existing Construction Stormwater General Permit, so that the new permit may incorporate the new provisions, if necessary.

For permitted facilities that qualify under the new industrial 'no exposure' exclusion, a no exposure certification may be submitted to the Division at any time following the promulgation of these regulations. (Qualifying permitted facilities may also opt to continue permit coverage.) For facilities currently covered by the original exemption described in paragraph 61.3(2)(e)(ii)(C), in accordance with paragraph 61.4(1)(a) a 'no exposure' certification or an application for coverage under a stormwater permit must be submitted to the Division within 60 days of this regulation's publication in the Colorado Register.

Application Requirements for Small MS4s, 61.4(3)(d) - The Commission and the Division strongly support cooperation between permit holders in complying with the six minimum control measures, or stormwater management programs, that will be required of the small MS4s. Thus, the federal language allowing for the possibility of MS4s applying jointly under a general permit, and the possibility of using a local qualifying program to satisfy one or more of the minimum control measures, is included in the State regulation. The Commission also included a provision allowing for co-permittees to apply for an individual permit. However, the final decision on this approach is within the Division's discretion, due to the extra resources that would be required to issue such a permit, potential complications for enforcement/compliance/liability, and the possibility of the co-permittees' goals being achieved under a general permit.

Permit Conditions, Minimum Control Measures, 61.8(11) - The minimum control measures required for small MS4s (public education, public involvement and participation, illicit discharge detection and elimination, construction site stormwater runoff control, post-construction stormwater management in new development and redevelopment, and pollution prevention/good housekeeping for municipal operations) are consistent with EPA's, except for the following changes.

-Public Education - This measure involves educating the public, including businesses, on the impacts of stormwater discharges and improper waste disposal on water bodies, and what the public can do to minimize these impacts. In the federal regulation, the section regarding businesses and improper waste disposal was located under the Illicit Discharges measure. It was moved here to combine the public education requirements under one section.

-Public Involvement - The public involvement minimum control measure was clarified to indicate that public notice is required for ail of the minimum control measures. EPA's regulation could have been interpreted to only require public notice for the public involvement minimum control measure. However, discussion in the preamble (both draft and final) indicates that EPA intended for the public notice requirement to apply to an MS4's entire stormwater management program. The Commission also clarified that the means of public notice should be effective, i.e., should attempt to reach a majority of citizens, through the use of a community publication or newspaper of general circulation.

-Illicit Discharges - This measure involves detecting and eliminating illicit discharges to the MS4. EPA's guidance language regarding some components that it recommended to be included in an MS4 program was added to this regulation: procedures for tracing the source of an illicit discharge; procedures for removing the source of the discharge, and procedures for locating priority areas likely to have illicit discharges. Some of the municipal members of the Task Force have had experience with illicit discharge detection programs, and believe that any valid program would necessarily include these components. Thus, the Commission has added this language to the regulation.

-Construction - This measure requires the MS4 to institute a program to reduce pollutants in stormwater runoff to the MS4 from construction activities that result in a land disturbance of one acre or more. There were no changes made from the federal requirements.

-Post-Construction The post-construction stormwater management measure addresses stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre. As per the federal regulation, it includes a requirement for municipalities to 'ensure adequate long-term operation and maintenance of BMPs.' This requirement makes municipalities responsible for seeing that BMPs for new development and redevelopment are operated and maintained properly, even those that the MS4 does not own. Several municipalities have expressed concern that this requirement could be extremely difficult or impossible to meet.

The standard for permit compliance for this sub-section is that municipalities ensure maintenance and operation of BMPs to the maximum extent practicable (MEP). In determining if an MS4 has complied to the MEP, the Division may consider such factors as the adequacy of the MS4's post-construction program, its ability to require that the necessary actions be performed by the responsible parties, how the MS4 has carried out the post-construction program, and, if necessary, the MS4's ability to provide appropriate mechanisms to ensure such maintenance and operation.

It is expected that the MS4 will put into place procedures, ordinances or other regulatory mechanisms that will require, to the extent allowed by State and local law, that BMPs be appropriately designed and planned, and provide for enforceable operation and maintenance by the owner/operator. Factors such as the extent of the inspection/verification system, and the procedures in place and implemented for instances when BMPs are not operated and/or maintained, can be evaluated by the State to determine if the MS4's program meets the MEP standard.

-Municipal Operations -This measure involves an operation and maintenance program, including an employee training component, that is designed to prevent or reduce pollutant runoff from municipal operations. EPA's guidance language on the types of municipal facilities that should be addressed under the good housekeeping/pollution prevention measure was included as a requirement in the State's regulation. The Commission believes these types of operations have the potential for stormwater pollution, and listing them in the regulation provides clarity on what is required from the regulated MS4s. Those that are found by an MS4 to be a low risk in its particular jurisdiction can be considered to be already complying with the regulation by preventing pollutant runoff, and thus no additional work on those operations would be needed.

Qualifying Local Programs, 61.8(12) - As per the federal regulation, this section authorizes the Division to accept the requirements of a qualifying local erosion and sediment control program as satisfying the requirements of the Division's construction permit(s). The local program would be incorporated by

reference into the Division's permit(s). Thus, while Division permit coverage by the construction operators or owners is still required, they will only have to comply with one set of requirements, not two.

PARTIES TO THE RULEMAKING HEARING

1. The City of Pueblo
2. The Northwest Colorado Council of Governments
3. Urban Drainage and Flood Control District
4. The City of Colorado Springs
5. The City of Fort Collins
6. Colorado Contractors Association
7. The City of Arvada
8. The City of Grand Junction
9. The City of Brighton
10. Colorado County Workgroup
11 Colorado Association of Commerce and Industry

61.50 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE (NOVEMBER, 2001 REVISIONS)

The provisions of 25-8-202(1)(d); and 25-8-501 to 504 C.R.S. provide the specific statutory authority for adoption of these regulatory amendments. The Commission also adopted the following statement of basis and purpose.

Basis and Purpose

As a result of this rulemaking, the Commission deleted the previous subsection 61.7(1)(e) of this regulation. The Commission determined that this provision should be deleted because no authority is established in section 25-8-406 of the Water Quality Control Act to extend the 10-day timeframe for acting on a request for administrative stay if the Division determines that additional information is needed to potentially grant a stay. The Commission notes that if these circumstances arise the Division has the option of denying the request for a stay, while advising the person requesting the stay that the Division is willing to reconsider its decision if the request is resubmitted with specified additional information included.

61.51 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE - MAY 2002 RULEMAKING - HB 01-1032 IMPLEMENTING REGULATIONS

The provisions of 25-8-202(1)(d), (1)(i) and (2); and 25-8-501 to 504 C.R.S., provide the specific statutory authority for adoption. The Commission has also adopted, in compliance with 24-4-103(4) C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

House Bill 01-1032 was passed by the legislature in the 2001 session and requires that regulations be adopted to establish a permit process that allows permit conditions to remain in effect as long as circumstances dictate those conditions. The bill also eliminates the five-year maximum term for permits and provides for a risk-based approach to streamline the permit renewal process where minimal changes in permit conditions are necessary.

The Commission has adopted a new subsection, 61.1(4), that provides for longer permit duration for those CDPS permits that are not subject to federal oversight, such as permits for discharges to ground water and permits for Housed Commercial Swine Feeding Operations. Although the statute no longer

specifies a maximum permit duration, the Commission adopted a nominal permit term of ten years as a significant change, requiring a thorough analysis of the potential impacts to water quality from the permitted operation, typically would occur within that time. In recognition of the need to consider site-specific circumstances, the Commission included a provision for the permit term to be increased or reduced depending on the risk that changes in the permit will be necessary to ensure that water quality standards are protected. The Commission expects that the Division will develop criteria to be used to determine when a permit period other than ten years is appropriate.

The Commission adopted a new subsection, 61.1(5), to address the aspect of the statute that requires permits to be reissued with minimal or no change.

The ability of the Division to reissue permits with little or no change as contemplated by HB 01-1032 is complicated by the fact that there have been a number of additions to the regulatory framework applicable to permits for discharges to surface waters, such as revisions to the antidegradation and mixing zone regulations. In addition, the level of ambient flow and chemistry data collected on many streams has increased and this "new" information must be considered at the time of permit renewal. In the near term, many of the permits for operations that discharge to surface waters will be affected by one or more of these changes and will require a comprehensive analysis to determine applicable water quality standards-based effluent limits. In addition, where additional effluent data are collected by permittees, these data must be evaluated to determine the "reasonable potential" for the discharge to cause or contribute to a water quality standards violation.

Initially, the opportunity to renew permits with little or no change may only apply to general permits and other permits of similar complexity for operations whose discharges contain few pollutants of concern and/or for which water quality analyses are based on one or more simplifying assumptions. As the rate of change in the regulatory framework slows, other types of permits will become less prone to major change at the time of renewal and would be more likely to meet the requirement for reissuance with little or no change. The Commission determined that a flexible process, that can be periodically updated to reflect current water quality conditions as affected by discharges, is necessary to maximize the number of permits that can be renewed with minimal or no change. Therefore, the Division will be required to develop, and periodically update, criteria to determine if a permit can be renewed with little or no change. These criteria should be based on input from a broad group of stakeholders and should initially be scheduled for review and revision every three years until the Commission determines that review at a five year interval can occur without significantly reducing the number of permits that might otherwise be renewed with minimal or no change.

Conforming changes to subsections 61.8(3)(o) and 61.10(a) have been made to delete references to five-year permit duration.

61.52 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE - JANUARY 2003 RULEMAKING HEARING - HOUSED COMMERCIAL SWINE FEEDING OPERATION PROVISIONS AND OTHER REVISIONS

The provisions of 25-8-202(1)(d) and (2), 25-8-401,25-8-501.1, and 25-8-504, C.R.S., provide the specific statutory authority for the amendments to this regulation adopted by the Commission. The Commission has also adopted, in compliance with 24-4-103(4) C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

I. PROVISIONS FOR HOUSED COMMERCIAL SWINE-FEEDING OPERATIONS

A. APPLICABILITY

I. PROVISIONS FOR HOUSED COMMERCIAL SWINE-FEEDING OPERATIONS

The provisions in section 61.13 apply to permits for housed commercial swine feeding operations (HCSFOs). Now that the regulations have been in place for three years, the Commission has determined that it is appropriate to modify the regulations to provide clarification of certain provisions that implement statutory requirements in section 25-8-501.1 of the Colorado Water Quality Control Act.

B. DISCUSSION OF AMENDED SECTIONS

Root zone and soil monitoring zone: Section 25-8-501.1(6) of the Colorado Water Quality Control Act ("the Act") states that certain parameters are required to be sampled and monitored within the root zone and soils beneath the root zone. In addition, section 25-8-501.1(2)(a) of the Act states that nutrients must be strictly minimized from passing below the root zone.

Previous regulatory language [subsection 61.13(4)(j)(i)] defined the root zone as being six or ten feet below the land surface, depending on the crop and soil texture. Previous language [subsection 61.13(4)(e)(ii)(A)] also stated that applications of residual solids or swine feeding process wastewater shall not be made if soil nitrogen in the root zone (as specified by Colorado State University Cooperative Extension) exceeds the agronomic rate of application.

Attempts to implement this language revealed that the defined root zone depths were too deep for the purpose of calculating agronomic rates of application. The maximum rooting depth of most crops is four feet; a select few crops are known to root deeper. Accounting for nitrogen within six or ten feet of soil when calculating agronomic rates results in an underestimation of the supplemental nitrogen need for the crops since crop roots cannot access all of the nitrogen at deep soil depths. Upon this realization, the Division implemented the use of agronomic root zones for crops that were based on Colorado State University Cooperative Extension published information. Nitrogen found in these zones was then used to calculate agronomic rates of application.

In order to bring consistency between the regulation and fertilizer calculation protocols, the Commission clarified the meaning of root zone by establishing the term "agronomic root zone." This term is defined in subsection 61.2(3) and replaces the previous root zone language in subsection 61.13(4)(j)(i). This root zone is as specified in Colorado State University Cooperative Extension's most current published fertilizer suggestions for the crops to be grown. The depth of these zones is the area within which crops are reasonably expected to access the majority of nitrogen.

As stated earlier, section 25-8-501.1(6) of the Act requires that certain parameters be monitored in the soils beneath the root zone. Previous regulatory language [61.13(4)(j)(i), and elsewhere] required that two feet of soils below the root zone must be sampled and monitored for nitrate-nitrogen. Since the root zone was six or ten feet below the land surface, the two-foot monitoring areas below the root zone were at six- to eight- foot and ten- to twelve-foot depths, depending on the crop and soil texture. These soil depths were assigned nitrate-nitrogen concentration triggers [61.13(4)(e)(ii)(C) and (D)] for use in verifying that nutrients were being strictly minimized from passing below the root zone.

Implementation of the regulation in this manner resulted in soil zones above the six- or ten-foot depths being monitored for nitrogen, but having no nitrate-nitrogen concentration triggers associated with them. Therefore, if excessive nitrate-nitrogen passed below the agronomic root zone, regulatory language did not exist to require HCSFOs to revise their agronomic practices until the nitrogen was moved into the six- to eight foot or ten- to twelve-foot depths. These depths are below the depth where excess nitrogen can be effectively mined out (phytoremediated) by deep-rooted crops, and ground water quality can be at risk from deeper movement of the nitrogen.

As a result, the Commission established the term "monitoring zone." This term is defined in subsection 61.2(49) and is the soil zone that is monitored to ensure that land application sites are being managed to strictly minimize nitrogen passing below the root zone. The Commission set the shallowest depth of this zone at four feet, since this is the maximum rooting depth that is used for calculating agronomic rates of application, according to Colorado State University Cooperative Extension's published fertilizer suggestions.

The Commission set the maximum depth of the monitoring zone at six or eight feet, depending on the soil texture and rooting depth of the crop that is currently being grown on the land application site. In addition, the Commission clarified the regulatory language to require sampling to the eight foot depth where soils of land application sites are predominantly sandy. The Commission's goal in establishing a deeper monitoring depth for sandy soils is to recognize that water and nitrate-nitrogen may leach through these soils more readily than through tighter soils. Other factors in addition to soil type (e.g. other chemical or soil conditions) can be important factors in leaching rates or concentrations. The Commission believes that it is important for the Division and others to examine more definitive options for identifying situations where more rapid leaching rates are expected, including the potential use of Natural Resource Conservation Service surveys of the relevant area, in considering possible further refinements of this regulation during its next review.

The revised soil monitoring depths were set two to four feet less than those in the previous language because the soil nitrate-nitrogen trigger (see the section below with the header by this name) has been moved to be applicable to this soil zone that is located immediately below the root zone, where it will be used to more readily detect excess nitrogen passing below the root zone. In addition, where excessive nitrogen is found within this newly defined zone, an intervention protocol can be implemented more rapidly to strictly minimize future nitrogen loading, and the excessive nitrogen more likely can be effectively remediated in a timely manner by deep-rooted crops relative to nitrogen that has been observed to migrate to the deeper depths that were stated in the previous regulation.

Documented values for crop uptake. 61.13(3)(f)(vi): The Commission is aware that all crops uptake nitrogen and phosphorus, which are the primary constituents of concern regarding potential effects on water quality. This uptake ability is reflected in fertilizer suggestions for these nutrients that are published by Colorado State University Cooperative Extension (CSUCE). The Commission also notes that if a CSUCE fertilizer suggestion requires the use of historical, on-site nitrogen uptake values for a crop, these values can be required to be submitted by the permittee to the Division under subsection 61.13(4)(j)(v) of the regulations. These values would be used to verify that applications of residual solids and swine feeding process wastewater are occurring at agronomic rates. As a result, the Commission believes that requiring swine waste management plans to document nutrient uptake is not necessary, and the previous subsection 61.13(3)(f)(vi) was deleted from the regulation. As a result of this action, subsections that followed subsection 61.13(3)(f)(vi) were renumbered for the existing regulation.

Land application site language: The previous regulation used more than one term when referring to land to which swine feeding process wastewater or residual solids was applied. In order to provide consistency, therefore, the Commission adopted the term "land application site" for use where the regulation refers to such lands.

Baseline and background concentrations for state trust lands. 61.13(3)(g)(iii)(A) and 61.13(4)(g)(ii): The previous language for this subsection stated that only background concentrations of elements need to be established for state trust lands under the monitoring plan. The Commission notes, however, that subsection 61.13(4)(g)(ii) indicates that for existing facilities, ground water and soils cannot be degraded beyond baseline (emphasis added) concentrations, which were not specifically required to be established. In addition, the Commission indicated in the Statement of Basis and Purpose accompanying the March 1999 regulations that determination of baseline concentrations is an appropriate requirement for existing operations so as to avoid an application of new requirements that may be extremely difficult to alter. In order to have consistency, therefore, the Commission adopted language for 61.13(3)(g)(iii)(A) that states that baseline concentrations must be established by existing operations on state trust lands.

The situation may occur whereby a permit for an existing operation has expired, lapsed, or otherwise has not been valid for two years or more. Similarly, the situation may occur whereby housed commercial swine feeding operations have not occurred for two years or more at an existing operation. During the interim period of at least two years, soil and ground water constituent concentrations may have changed as the result of various factors, including non-HCSFO agricultural activities that may have occurred. The Commission determined that such factors can result in higher or lower concentration values than those that existed under the previous permit. Since a purpose of the regulation is to prohibit further degradation

of soils or ground water quality at HCSFOs, the Commission adopted provisions requiring the re-establishment of baseline values for HCSFO operations on state trust lands that either have not been permitted or have not had HCSFO activities for two or more years.

The situation may occur whereby an existing operation wants to add a new land application site on state trust land that has never received swine feeding process wastewater or residual solids. Such an additional site is comparable to sites that would be used by new housed commercial swine feeding operations, for which background concentrations must be established. Background concentrations establish soil and ground water conditions that have not been impacted by HCSFO operations. Therefore, the Commission adopted provisions requiring that instead of baseline concentrations, background concentrations shall be established for additional land application sites on state trust lands

The adopted provisions described above affected subsections 61.13(3)(g)(iii) and 61.13(4)(g)(ii), where applicable.

Applications to land where ponding is occurring. 61.13(4)(d)(iv): This subsection previously stated that applications of residual solids or swine feeding process wastewater cannot occur on lands that are saturated, on lands where ponding is occurring, or on land with a snow depth of greater than one inch. The Commission recognizes that where ponding is occurring on sites as the result of applications of residual solids or swine feeding process wastewater, the receiving soils are either saturated or have some other barrier to liquid infiltration. Where ponding is occurring, the risk is potentially increased of contaminants being carried via runoff to waters of the state. HCSFOs must manage this risk under subsection 61.13(4)(e)(vii) which requires that land applications be managed to ensure that no solids or wastewater are discharged to waters of the state. Since the regulation prohibits applications of solids or wastewater to saturated lands, and prohibits discharges to waters of the state as the result of such applications, the Commission simplified the regulatory language by removing the reference to ponding.

Soil phosphorus triggers. 61.13(4)(e)(ii)(B): Swine feeding process wastewater and residual solids have significant concentrations of phosphorus. Not all of this phosphorus is necessarily taken up by plants within the growing season that the wastewater or solids is land-applied, thereby resulting in a build up of residual phosphorus in the soil. Soluble phosphorus that exists in runoff water from soils with high phosphorus concentrations can impact the quality of surface waters. In 1999, the Commission recognized this risk to surface waters and included language in the regulation that prohibited applications of wastewater or solids to soils where the phosphorus concentration in the top soil foot exceeded 100 mg/kg, unless a site-specific analysis shows that soil erosion and movement off-site will not occur. Since 1999, the Colorado Phosphorus Index Risk Assessment tool has been published by the USDA-Natural Resources Conservation Service and is currently in the process of being revised. This tool indicates that the risk of off-site soil phosphorus movement is not directly correlated with phosphorus concentrations in the soil; it is also affected by such factors as runoff risk rating for the soil, application method, and application rate. The Commission revised the regulation to change the acceptable threshold phosphorus concentration to 80 mg/kg, based on information in the Colorado Phosphorus Index Risk Assessment. In addition, the Commission has now specified that if this level is exceeded, a site-specific risk analysis must be developed, using a phosphorus risk screening tool approved by the Division. The Colorado Phosphorus Index Risk Assessment provides one such acceptable tool.

Soil nitrate-nitrogen trigger. 61.13(4)(e)(ii)(C) and (D): The definition of agronomic rate of application requires that nutrients be applied to plants at a rate that strictly minimizes the amount of nutrients that pass below the root zone. Previous regulatory language [in 61.13(4)(e)(ii)(C) and (D)] included two nitrate-nitrogen concentration values (nitrate-nitrogen triggers) for soils beneath the root zone that, if observed, triggered a presumptive finding that nitrogen passage below the root zone had not been strictly minimized. The observation also triggered the requirement that land applications cease until the swine waste management plan is evaluated and revised. The soil depth within which the two nitrate-nitrogen triggers pertained were ten to twelve feet and six to eight feet, depending on the soil texture and the type of crop grown. No nitrate-nitrogen trigger existed for shallower soil depths.

The Commission finds that a nitrate-nitrogen trigger is appropriate in shallower soil zones for the purpose of detecting in a more timely manner excessive movement of nitrogen below the agronomic root zone. Therefore, subsection 61.13(4)(e)(ii) was revised to indicate that a soil nitrate-nitrogen trigger is applicable in the monitoring zone. Application of the trigger in this zone will allow required changes in agronomic practices to be implemented in a more timely manner for the purpose of strictly minimizing the amount of future nitrate-nitrogen loading.

For the nitrate-nitrogen trigger, the Commission retained the standard that was in the previous 61.13(4)(e)(ii)(D); that is, the agronomic rate of application is presumed to have been exceeded if the comparative concentration has been exceeded by ten milligrams per kilogram. The Commission indicated in the Statement of Basis and Purpose accompanying the March 1999 regulations that, "it was not appropriate to establish a regulatory restriction at a difference of five milligrams per kilogram in view of the large number of samples that would be required from each field to achieve a reliable result." Previous language indicated that the ten milligrams per kilogram nitrate-nitrogen trigger was applicable to one-foot soil increments. Since soil samples in the monitoring zone are typically taken in two-foot increments, the Commission revised the regulation to have the trigger be applicable to two-foot soil increments. The Commission believes that it is appropriate to have the trigger be applicable to the six- to eight-foot depth, in addition to the four- to six-foot depth, for sandy soils and soils with deep-rooted crops. The additional depth of soils are sampled as required in 61.2(49), are available for capturing nitrogen that flows into this soil zone as the result of sandy soils being highly leachable, and are available for capturing nitrogen that may gravitate below the deeper roots of deep-rooted crops.

The Commission also amended previous language that indicated that if soil nitrate-nitrogen concentrations exceed the trigger, applications must cease until a revised swine waste management plan is approved by the Division. The amended language states that when the trigger is hit, an approvable intervention protocol must be developed for the applicable land application site in consultation with the Division, and be implemented within 30 days of the protocol being approved by the Division. The protocol must present adjustments that will be made to agronomic practices, such as reducing nitrogen fertilization rate or changing irrigation practices, that will strictly minimize future nitrogen loading within the monitoring zone. It also may require actions such as phytoremediation of excess nitrogen and cessation of land applications, as required by the Division. The determination of appropriate remediation measures will be a case-specific determination. The examples provided here are not intended to be exhaustive. The protocol also must indicate a timeframe under which the adjusted practices will occur, and criteria that will be used to signal the end of the need for remediation protocol activities.

The Commission believes that the development and implementation of such a protocol is more appropriate than requiring that applications of solids or wastewater immediately cease. However, the Commission has provided that if at any time remediation measures in an approved intervention protocol are not being implemented, land application must immediately cease. Where intervention protocols are required for land application sites not owned by the permittee, the Commission recognizes that the Division does not have the authority to order a non-HCSFO landowner to implement actions specified in the protocols. Where such a landowner declines to perform required actions, the Commission finds that the only practical alternative is to require that applications of swine feeding process wastewater or residual solids to the application site shall immediately cease.

The Commission finds that severe climatic events, rather than agronomic practices, can be the cause of excessive soil nitrogen moving below the agronomic root zone, resulting in the comparative concentration being exceeded by ten milligrams per kilogram. Therefore, the Commission added language that allows permittees to not implement a remediation protocol if the Division approves documentation from the permittee that a force majeure (e.g. a severe climatic event) was the cause of the nitrogen trigger having been exceeded.

The Commission finds that the previous soil nitrate-nitrogen trigger of 160 pounds per acre is not as meaningful as using the ten milligrams per kilogram trigger together with the comparative concentration value. The 160-pound concentration is very difficult to achieve in sandy soils and if observed, represents a significant diversion from the requirement that nitrate-nitrogen be strictly minimized from passing below

the agronomic root zone. In other soils the concentration may be observed above a soil compaction layer and may not represent the result of improper agronomic practices. Therefore, the Commission deleted the previous subsection 61.13(4)(e)(ii)(C).

Applications to land not supporting active plant growth, 61.13(4)(e)(iv): Previous parts (A), (B), and (C) of this subsection contained language that is included elsewhere in the regulation: 61.13(4)(j)(vi) which requires quarterly soil monitoring, and 61.13(4)(e)(ii) which requires that applications be made at an agronomic rate. Therefore, the Commission simplified the language in part (A) and deleted part (C). The previous language in Part (B) was replaced by language requiring that applications made to land not supporting active plant growth be done according to appropriate best management practices (BMPs). The Commission believes that the proper selection and use of BMPs that are appropriate for specific on-site conditions (such as sandy soils, steep slopes, bare soil, and close proximity to surface water) will provide for strict minimization of nutrients that run off to surface waters or which pass below the root zone, and provide for applications of swine feeding process wastewater and/or residual solids being made in agreement with the amount and duration requirements of the governing statute.

Disagreement among parties existed as to whether appropriate BMPs should be provided in a guidance document that is developed in a public process. The Commission believes that the public process is the best way to develop appropriate BMPs and that a guidance document of the BMPs will provide the Division and permittees with a known set of practices from which to select on a site-by-site basis. The Commission recognizes that use of a guidance document could unnecessarily restrict the use of BMPs that are not specifically listed in the document. Therefore, the guidance document should include language that allows the Division to approve the use of BMPs that are not specified in the document In addition, the document should be opened for review as necessary for possible revision of existing BMPs, or to include newly developed practices.

Water Quality Setbacks. 61.13(4)(f): The Commission finds that the previous language for this subsection was unclear about the meaning of a land application system, and whether the ten-foot vertical setback from ground water was applicable to just these systems or to other HCSFO structures, sites, or systems. It therefore deleted the term land application system", and replaced it with "site." The Commission also notes that swine housing units, wastewater conveyance, treatment, storage, and evaporative structures, land application sites, and residual solids stockpiles and impoundments all pose a risk to the quality of shallow ground water. In addition, shallow ground water may pose structural design and construction problems for housing units and wastewater storage systems. Therefore, the Commission revised this subsection to indicate that all of the above-listed structures and sites must not be located within 10 feet vertically of the seasonally high ground water level.

In addition, the Commission revised language in part (iii) of this subsection to clarify that the 200-foot setback from any body of surface water is applicable to land application sites, as opposed to land application systems.

Finally, the Commission assigned part (vii) to the last paragraph of the existing language of this subsection so that it is an identifiable paragraph.

Financial assurance. 61.13(4)(h): The statute requires that HCSFOs, "provide financial assurance for the final closure of [such facilities], the conduct of any necessary post closure activities, the undertaking of any corrective action made necessary by migration of contaminants from the operation into the soil and ground water, or cleanup of any spill or breach." The previous regulation states that permittees must submit financial assurance to the Division within 90 days following the Division's approval of a new or revised financial assurance plan (FAP). The Commission is aware that situations may occur whereby a permittee is not making adequate progress towards producing an approvable financial assurance plan. In order to ensure that financial assurance is in place to fund closure, post-closure, or corrective action activities absent an approvable FAP, the Commission revised 61.13(4)(h)(v) to indicate that the Division can require interim financial assurance to be submitted when a permittee has not made specified progress towards providing an approvable FAP.

Regarding financial assurance mechanisms, the Commission stated in the Statement of Basis and Purpose accompanying the March 1999 regulation that such instruments shall include wording approved by the Division to ensure that financial assurance remains adequate. The Commission also stated that, in determining appropriate wording, the Division should draw on language from existing financial assurance requirements for other environmental programs. Upon investigating the financial assurance requirements of the Departments Solid Waste and Hazardous Waste programs, the Division became aware of the potentially tenuous ability of financial test and guarantee instruments to indicate that adequate money is readily available for funding a third party to perform corrective actions, and closure and post-closure activities.

Of the allowable financial assurance instruments listed in subsection 61.13(4)(h)(vii), the financial test and guarantee (FT&G) instruments are the only ones that do not allow the Division to readily access cash funds. As a result, where a permittee has been approved to use one of the FT&G instruments, the expectation exists that the permittee will use its own funds to properly close/post-close the HCSFO operation before abandoning the operation or going out of business. Where this expectation is not met, the only recourse available to the Division for hiring a third party to close/post-close the operation is to sue for the required funds in court, which may be a bankruptcy court. The Division may not have the financial ability or time to pursue such a lawsuit, thereby leaving waters of the state and other environmental attributes at risk from the abandoned operation, which is contrary to the requirements of the governing statute.

The Commission finds that ensuring that adequate funds are readily available at all times for hiring a third party to properly close/post-close a HCSFO operation is essential to meeting the requirements of the statutory provisions. Therefore, the Commission revised subsection 61.13(4)(h)(viii) to require that approval by the Division of financial test and guarantee instruments submitted by permittees be based on criteria specified in a guidance document that is developed cooperatively by the Division and stakeholders, and presented at a public hearing before the Water Quality Control Commission. The criteria should indicate financial standards (e.g., ratios) that a permittee must meet on at least an annual basis, such that only permittees that have solid financial status are qualified to use a financial test or guarantee for the purpose of satisfying the financial assurance requirements of the regulation.

The Commission recognizes that it is highly probable that not all permittees will be able to use the financial test or guarantee, and that for those that cannot, providing a cash-funded form of financial assurance could be a hardship. The Commission encourages the Division to consider alternative mechanisms, such as trusts that are funded by the permittee over time, for use by permittees to satisfy financial assurance requirements.

<u>Baseline concentrations. 61.13(4)(j)(i):</u> Like other businesses, HCSFO operations can be sold to new owners and operators. The previous regulations were unclear as to whether new baseline concentrations were required of new owners of previously permitted HCSFOs. The Commission believes that baseline concentrations should not normally be re-established for on-going operations upon transfer of a permit or upon issuance of a new permit to such operations. It is aware, however, that situations may occur whereby a permit for an existing operation has expired, lapsed, or otherwise has not been valid for two years or more. Similarly, the situation may occur whereby HCSFO activities have not occurred for two years or more at an existing, permitted operation. During the interim period of at least two years, soil and ground water constituent concentrations may change as the result of various factors, including non-HCSFO agricultural activities that may have occurred. The Commission determined that such factors can result in higher or lower concentration values than those that existed under an issued permit. Since a purpose of the regulation is to prohibit further degradation of soils or ground water quality at HCSFOs, the Commission revised subsection 61.13(4)(j) to require the re-establishment of baseline values for HCSFO operations that either have not had a valid permit or have not had HCSFO activities for two or more years. New baseline values would serve the purpose of re-establishing the relevant "starting point" for permitted sites that would reflect the result of any intervening land surface activities on soil and ground water.

Comparative concentration. 61.13(4)(j)(ii): The Commission became aware that the previous language was unclear regarding to what the baseline nitrate-nitrogen concentration should be compared to derive the comparative concentration. Specifically, the phrase "prior to the most recent planting or growing season, for the crop to be grown that year" was difficult to interpret. Therefore, this regulatory subsection was amended to state that the baseline concentration is to be compared with the nitrate-nitrogen concentration found in the soil sample just prior to the most recent soil sample that was taken from below the land application site.

The Commission finds that the comparative concentration value should continue to reflect improvement in soil nitrate-nitrogen levels that may result from applications of swine feeding process wastewater or residual solids made at agronomic rates of application. Such comparative concentrations allow for effective use of the 10 milligram per kilogram nitrate-nitrogen trigger indicated in 61.13(4)(e)(ii)(C). The Commission also finds that: no reasonable justification exists for the continued use of a 1.0 milligram per kilogram lower limit for comparative concentrations. It therefore removed language that sets a lower limit for comparative concentration.

The Commission is aware that a soil nitrate-nitrogen concentration value can be significantly greater than the previous comparative concentration value, while still being below the baseline concentration. Where such a significant increase is the result of the permittee having exceeded the agronomic rate of application, the Commission finds that it is not appropriate for the succeeding comparative concentration to reflect the unwarranted increase in soil nitrate-nitrogen concentration. Therefore, the regulation was revised to specify how such a succeeding comparative concentration is to be calculated.

Quarterly monitoring reports. 61.13(4)(j)(v): Language was added to this subsection to state that information pertaining to impoundment seepage monitoring (required by the governing statute) and to intervention protocol activities (required under the existing subsection 61.13(4)(e)(ii)(C)) must be reported to the Division. The Commission is aware that quarterly reporting of intervention protocol activities may not be appropriate because such activities may not occur every quarter. Such activities would thus be reported in reports for quarters within which intervention activities occurred, or as otherwise required by the Division. Similarly, seepage monitoring results may more effectively be reported on a semi-annual or annual frequency, if provided for under the statute. Therefore, the Commission left to the Division's discretion the reporting frequency requirements for impoundment seepage monitoring.

Submittals to the Division of quarterly monitoring reports in a non-standard format presents challenges to the Division in being able to effectively review the reports in a timely manner for compliance of HCSFO activities with the regulations. Therefore, the Commission revised subsection 61.13(4)(j)(v) to indicate that reports, except of intervention protocol activities, must be prepared on current forms supplied by the Division. The Division indicated its intent to work with interested stakeholders in developing appropriate forms.

The existing language for this subsection requires that surface water monitoring information be included in quarterly monitoring reports. However, such monitoring is not required in the statute. Therefore, the words "surface water" were removed from the subsection.

Sampling and monitoring. 61.13(4)(j)(vi): The Commission notes that the previous language for this subsection was lengthy and addressed more than one topic of sampling and monitoring. Therefore, it segmented the subsection into five parts, (A) through (E), in addition to the introductory paragraph. Each part addresses a specific subtopic of monitoring.

The previous language stated that "nitrogen species" must be monitored in soils within the root zone and beneath the root zone. The Commission notes that the term "nitrogen species" can be interpreted in different ways, and can include the requirement that soil samples be analyzed for such species as nitrite-nitrogen or organic nitrogen, which have no practical relevance for agronomic rate of application or soil monitoring purposes. The nitrogen species of practical relevance are nitrate-nitrogen and ammonium-nitrogen. The former species is of primary concern since it is a soluble, mobile element that can easily be transported to ground water. In addition, a human health risk standard of 10 milligrams per liter of drinking

water exists for this species. Finally, a monitoring trigger exists for nitrate-nitrogen within the monitoring zone (see subsection 61.13(4)(e)(ii)(C).

Ammonium-nitrogen, while also is soluble, is positively charged and tends not to be transported through soils, except in coarse-textured soils. In addition, this species is typically mineralized (converted) rapidly by soil bacteria to the nitrate-nitrogen species. This mineralization activity occurs dominantly within the root zone of soils (within the top four feet) where air and moisture tend to be favorable for the biological process. As a result, minimal to negligible amounts of ammonium-nitrogen pass below the root zone and, once below the root zone, will remain in the ammonium-nitrogen form (that is, it will not be mineralized to nitrate-nitrogen). Where ammonium-nitrogen is transported to ground water, no human health risk standard exists for ammonium-nitrogen in drinking water. In addition, no monitoring trigger exists in the regulations for this nitrogen species.

As a result of the above discussion, the Commission finds that it is reasonable to require the monitoring of both nitrate-nitrogen and ammonium-nitrogen within the agronomic root zone, and of nitrate-nitrogen within the monitoring zone.

The Commission is aware that residual solids or swine feeding process wastewater is not applied annually to every permitted land application site. For example, applications in a wheat-fallow system commonly are made once every two years. Some HCSFOs apply to rangeland once every three years. It is not reasonable to require that soils be sampled quarterly in these circumstances. In recognition of this fact, the Commission added a third exception to the requirement that soils be monitored quarterly [in 61.13(4)(j)(vi)(A)]: where applications of solids or wastewater will not be made for at least three consecutive quarters, quarterly soil sampling and analysis is not required. For these situations, soil samples should be taken prior to applications, and after a crop is harvested or goes into dormancy. The Commission included language that allows for additional soil samples to be required at the Division's discretion, based on nitrate-nitrogen levels found in the soil samples. The three consecutive quarters standard was selected based on the fact that fertilizer applications would typically occur within this period where crops are planted annually on a field. The Commission also included language that requires permittees to timely notify the Division in their quarterly reports of their intention not to apply solids or wastewater to specific land application sites for at least three consecutive quarters.

The statute requires that nitrogen, phosphorus, heavy metals, and salts be monitored in soils. The Commission understands that nitrogen is the main element of concern in protecting ground water as the result of HCSFO activities. It therefore included language in 1999 that allowed the Division to waive monitoring requirements for heavy metals if it is demonstrated that no reasonable potential exists of contamination from the metals. Since phosphorus and salts are typically immobile in the soil, the Commission has now adopted provisions [in 61.13(4)(j)(vi)(B)] that provide the Division the ability to waive monitoring requirements for these elements below the first soil foot and in ground water if the same demonstration is made as required for heavy metals. Monitoring of phosphorus in the top foot of soil remains as a minimum requirement in order to comply with 61.13(4)(e)(ii)(B). Regarding salts, the Commission is aware that swine feeding process wastewater and residual solids can have high salt concentrations and when land applied, can cause an excess build up of salt concentrations in the soil, which can affect crop germination and growth. Therefore, the Commission finds that monitoring salts in the top soil foot is appropriate.

<u>Monitoring around water beneath each land application site. 61.13(4)(j)(vi)(E):</u> The previous regulation stated that ground water beneath each land application site must be monitored on a quarterly basis, except where not practicable due to specified conditions. The Commission is aware that such monitoring ideally is accomplished by sampling ground water in monitoring wells. Where shallow ground water (within approximately 50 feet of the ground surface) exists beneath a land application site, it is reasonable to expect that monitoring wells be installed. However, literally hundreds of different land application sites are listed in HCSFO permits. Most of these sites are owned and operated by local, independent farmers that have no relationship to a HCSFO except for agreements that allow swine feeding process wastewater or residual solids to be applied to the farmer's land. It is highly unlikely that the farmers would agree to having at least one monitoring well placed on their land. Such a well is an intrusion on their

private property, can act as a conduit for pollutants from the surface to ground water, and the monitoring of these wells will result in the ground water quality information below their private lands being available to the public under the state's open records statute.

If monitoring wells at private application sites are uniformly required, therefore, it is likely that most, if not all, of the farmers would no longer give HCSFOs the right to land apply wastewater or solids. As a result, HCSFOs would have to expand their lagoon capacity, buy their own land application sites, or otherwise manage the wastewater and solids.

An additional impact on permittees is the fact that the cost of installing one monitoring well (most sites will need at least two wells) is about $30 per foot. Most HCSFO land application sites have ground water that is at least 150 feet below the ground surface, meaning that each monitoring well will cost at least $4,500. In addition, since most wells would be installed on land not owned by a HCSFO, the HCSFO will not own the wells that it paid to have installed.

A question of the usefulness of installed monitoring wells also exists. As mentioned in the paragraph above, most land application sites have ground water that is at least 150 feet below the surface, meaning that it will take at least ten to twenty years for nitrogen applied with wastewater or solids, and which passes below the agronomic root zone, to reach ground water. By this time, the discovery of an excessive nitrogen plume is already too late to reflect the impact of current HCSFO activities on ground water.

In response to the above information, the Commission finds that allowing measures for proactive protection of ground water to substitute for the uniform use of wells to monitor deep ground water, will better effectuate the statutory intent of ensuring that ground water beneath land application sites is reasonably protected from applications of wastewater and residual solids. The Commission also finds that allowing the use of proactive protection measures will assist HCSFO operators in effectively allocating their resources to better protect the groundwater resources of the state. To ensure that proactive measures are effective in protecting ground water, the Commission adopted regulatory language requiring a higher standard of soil nitrate-nitrogen monitoring than that required for land application sites beneath which there is shallow ground water, where wells act as a back-up system for ensuring that ground water is not being contaminated. In addition, the Commission finds that not all land application sites, because of factors such as soil texture and geology, may be suitable to having ground water monitored using wells. The Commission concluded that a reasonable interpretation of the statute requires the establishment of some limit beyond which the risk of ground water contamination is so attenuated that monitoring serves no purpose related to protection of ground water. Although no well-established limit exists, the Commission considered the legislative definition of nontributary ground water in section 37-90-103(10.5), C.R.S., in determining what constitutes a reasonable limit for these purposes. Accordingly, the Commission added regulatory language that provides HCSFOs the opportunity to proactively protect ground water, in lieu of installing monitoring wells, if they submit a ground water risk assessment that confirms that water that passes below the root zone will not reach ground water for at least 100 years.

Finally, the Commission is aware that some land application sites will not have ground water beneath them, or will have an impermeable geological layer beneath them that prevents water and nitrate-nitrogen within the vadose zone from moving to ground water. The Commission concludes that no risk of groundwater contamination exists where the permittee demonstrates to the satisfaction of the Division that either no groundwater exists beneath a land application site or that an impermeable geological layer exists above the shallowest aquifer at the site. The Commission added language to subsection 61.13(4)(j)(vi) clarifying that monitoring is not required under these circumstances.

(B) PROVISIONS FOR OTHER THAN-HOUSED COMMERCIAL SWINE-FEEDING OPERATIONS

A. DISCUSSION OF AMENDED SECTIONS

Typographical Errors. Corrections, and Updates: The Commission has corrected typographical errors in numerous sections of the regulation and has corrected inconsistencies in the use of terms where they were found throughout the regulation. These corrections either have no effect on the meaning of the

regulation or revise the meaning of the regulation so that it is consistent with the parallel statutory language.

Section 61.1 (2) has been updated to reflect the latest standards and requirements promulgated by the U.S. Environmental Protection Agency that are adopted and incorporated by reference into the regulation.

Definitions (Section 61.2): The Commission adopted definitions for the terms "biosolids," "load allocation," "total maximum daily load," and "wasteload allocation" as those terms were in use in the existing version of the regulation and substantial additional language that uses the latter three terms has been adopted.

Application Requirements (Section 61.4): The Commission reviewed the application requirements in section 61.4 of the regulation to ensure consistency with the requirements in the federal regulations. This section was revised to: 1) eliminate typographical errors and make other non-substantive corrections; 2) to make minor changes to sections 61.4(4) and 61.4(6), to clarify terms and update a reference to the Pretreatment Regulation, respectively; and 3) to add required sampling for E. coli wherever sampling for fecal coliform is required to prepare for the implementation of E. coli-only standards as required in the 2000 revisions to the Basis Standards and Methodologies for Surface Waters.

Application Review Requirements (section 61.5(1)(c)): The Commission revised the language in this section to clarify that the one hundred eighty (180) day deadline for the Division to issue the permit is to be extended by the number of days that an applicant takes to submit additional information requested by the Division, plus fifteen (15) days provided to the Division to evaluate additional information.

Issued Permits (section 61.6(e)): The Commission revised this section to clarify, for renewal permits, rather that issuing a temporary permit if a permit is not issued within the statutory time frame, the previous permit is to be extended in accordance with section 61.8(3)(o) of the regulations.

Conditions of Permits - Prohibitions (section 61.8(1)(e)): The Commission revised this section to clarify the conditions under which interim limits and a schedule of compliance can be included in a permit. This includes situations where the Commission has: adopted new standards where standards for a parameter were not previously in place, adopted temporary modifications, adopted revised standards that have become more stringent, or where the Division has developed new interpretations of existing standards (including, but not limited to, implementation requirements through approved TMDLs and wasteload allocations and antidegradation reviews).

Definition of Effluent Limitations (section 61.8(2)): The Commission added subheadings to this section for ease of review and made the following changes to this section:

1. Revised section 61.8(2)(b)(i)(B) to allow the use of appropriate water quality modeling to determine when a discharge has the reasonable potential to cause, or measurably contribute to an in-stream excursion above a narrative or numeric water quality standard. This will provide flexibility to use predictive tools where the use of statistical interpretations of effluent data to determine reasonable potential may be inaccurate or unfeasible.

2. Deleted section 61.8(2)(b)(ix) as this language was repetitive of language at section 61.8(b)(vii).

3. Added new section 61.8(2)(c)(ii) to allow trading of existing wasteload allocations or reductions in load allocations among point and/or non-point sources. This formalizes a long-standing Division practice and will also allow the Division to implement emerging trading innovations that can allow water quality standards or other water quality-based requirements to be attained in a manner that maximizes the cost effectiveness amongst permittees and nonpoint sources.

4. Added new section 61.8(2)(c)(iii) to provide guidance to the Division and permittees discharging to a waterbody that is listed on the Division's 303(d) list of impaired waters. These situations are complicated by the fact that loads may have to be allocated amongst numerous point and

nonpoint source discharges and the TMDL on which the allocations will be based may be years from completion. These changes provide the Division, at the permittee's request, with the flexibility to extend a permit in order to have effluent limits based on a wasteload allocation from an approved TMDL or, where the TMDL may not be scheduled to be completed for some time, to establish effluent limitations based on site-specific factors based on available data and other information.

5. Revised section 61.8(2)(i) to recognize the Division's practice of including a combination of flow and concentration limits, which establish an implicit mass limit, in order to meet the federal requirement for mass limits in permits.

6. Revised section 61.8(2)(l), which applies to discharges to surface waters within the Colorado River Basin, to incorporate policy revisions adopted by the Colorado River Basin Salinity Control Forum (Forum) in October of 2002. The Commission adopted conforming changes to the regulation to address the following three additional types of industrial discharges: 1) new industrial sources that have operations and associated discharges at multiple locations; 2) “fresh water industrial discharges" where the discharged water does not cause or contribute to exceedances of the salinity standards for the Colorado River system; and 3) water that has been used for once-through non-contact cooling water purposes. The regulation was also amended to encourage new industrial sources to conduct or finance one or more salinity-offset projects in cases where the permittee has demonstrated that it is not practicable to prevent the discharge of all salt from proposed new construction.

   Recently there has been a proliferation of new industrial sources that have operations and associated discharges at multiple locations. An example is the recent growth in the development of energy fuel and mineral resources that has occurred in the upper Colorado River Basin. This type of industrial development may involve the drilling of relatively closely spaced wells into one or more geological formations for the purpose of extracting oil, gas or minerals in solution. Large-scale ground water remediation efforts involving multiple pump and treat systems operating for longer than one year may share similar characteristics. With such energy and mineral development and ground water remediation efforts there is the possibility of a single major industrial operation being comprised of numerous individual point source discharges under common or affiliated ownership or management that produce significant quantities of water as a byproduct or waste product over a long period. Given the large scope of these types of major industrial sources and the often elevated concentrations of salinity in their produced water, the total amount of salt loading that they could generate may be very large in comparison to efforts to mitigate salinity impacts through the Forum's plan of implementation and associated salt removal projects. Relatively small quantities of this produced water could generate one ton per day in discharges to surface waters. Since salinity is a conservative water quality constituent, such discharges of produced water, if uncontrolled, could have an adverse effect on achieving the adopted numeric salinity standards in the Colorado River.

   These kinds of major industrial sources strain the conventional interpretation of the industrial source waiver set forth in section 61.8(2)(l)(i)(A) of the regulation, which authorizes a discharge of salinity from a single point source of up to one ton per day in certain circumstances. This provision was adopted well before most of the new major industrial sources that have operations and discharges at multiple locations began to appear in the Colorado River Basin. A new category of industrial sources is, therefore, warranted. Permit requirements for "New Industrial Sources with Operations and Discharges at Multiple Locations under Common or Affiliated Ownership or Management" are set forth in section 61.8(2)(l)(ii) of the regulation. These new requirements are intended to apply to new industrial sources with operations that commence discharging after October 30, 2002.

   For purposes of interpreting the regulation, "common or affiliated ownership or management" involves the authority to manage, direct, superintend, restrict, regulate, govern, administer, or oversee, or to otherwise exercise a restraining or directing influence over activities at one or more

locations that result in a discharge of salinity into the Colorado River system. Common or affiliated ownership or management may be through the ownership of voting securities or may be indicated where individual sources are related through one or more joint ventures, contractual relationships, landlord/tenant or lessor/lessee arrangements. Other factors that indicate two or more discharging facilities are under common or affiliated ownership or management include: sharing corporate executive officers, pollution control equipment and responsibilities, common workforces, administrative functions, and/or payroll activities among operational facilities at different locations.

Sections 61.8(2)(l)(i) and (ii) of the regulation have been amended to allow the Division to authorize "fresh water industrial discharges" where the discharged water does not cause or contribute to exceedances of the adopted numeric salinity standards for the Colorado River system. Different end-of-pipe concentrations of salinity as shown in the table in section 61.82)(l)(i) of the regulation, are appropriate for discharges to tributaries depending upon their location within the basin. The concept of "benchmark concentrations" has been developed in order to address this need for different end-of-pipe concentrations. These benchmark concentrations are not to be interpreted as water quality standards. Rather, they are intended to serve solely for the establishment of effluent limits for implementing the waiver for "fresh water discharges." The allowance for freshwater discharges is intended to preserve flows from discharges in the basin, which do not cause significant degradation of existing ambient quality with respect to salinity. Operations or individual discharges that qualify for the freshwater waiver shall not be subject to any further limitation on salt loading under this policy.

The regulation has been amended to allow the Division to authorize industrial sources of salinity to conduct or finance one or more salinity-offset project when the permittee has determined that it is not practicable to prevent the discharge of all salt from proposed new construction or to reduce the salt loading to the Colorado River to less than one ton per day or 366 tons per year and the proposed discharge is not of sufficient TDS concentrations to be considered "fresh water." Presently, the Division can consider the costs and availability of implementing off-site salinity control measures to mitigate the adverse impacts of the permitted salt load. It is not intended that the applicant be required to develop or design an off-site salinity control project or establish a salt bank, but rather to assess the costs of conducting or buying into such projects where they are available. In the future the Forum or another entity may create a trading/banking institution to facilitate the implementation of a salinity-offset program, basin-wide. This would allow industrial sources to conduct or finance the most cost-effective project available at the time an offset project is needed regardless of the project's location in the basin.

Section 61.8(2)(l)(v) of the regulation has been added to address discharges of water that has been used for once-through non-contact cooling water purposes. The policy for such discharges shall be to permit these uses based upon a finding that the returned water does not contribute to the loading or the concentration of salts in the waters of the receiving stream beyond a de minimis amount. A de minimis amount is considered, for purposes of this policy, as an average annual increase of not more than 25 milligrams per liter (mg/l) in total dissolved solids measured at the discharge point or outfall prior to any mixing with the receiving stream in comparison to the total dissolved solids concentration measured at the intake monitoring point of the cooling process or facility. This regulation is not intended to supersede any other water quality standard that applies to the receiving stream, including but not limited to narrative standards promulgated to prohibit impairment of designated uses of the stream. It is the intent of the forum to permit the return of once-through non-contact cooling water only to the same stream from which the water was diverted. Non-contact cooling water is distinguished from blow-down water, and this policy specifically excludes blow-down or any commingling of once-through non-contact cooling water with another waste stream prior to discharge to the receiving stream. Section 61.8(2)(l)(i) of the regulation governs discharges of blow-down or commingled water.

PQLs (section 61.8(2)(m)): In July 1994, the Commission added Section 6.9.2(13) to this regulation to formalize establishment of PQLs for permits. This provision allows a permittee to demonstrate unique

conditions relevant to its discharge that may translate into a PQL for its effluent. This provision also allows the Division to develop site-specific or discharge-specific PQLs utilizing appropriate methodologies. In addition, the PQLs for organics which had previously been contained in The Basic Standards and Methodologies for Surface Water," § 3.1.0, (5 CCR 1002-8), and "Basic Standards for Ground Water," § 3.11.0 (5 CCR 1002-8), were deleted from those documents and placed in this regulation.

The Commission intended that the list of PQLs in Section 6.9.2(13)(b) should be routinely reviewed and that proposed changes should be referred to the Commission for consideration for adoption at a rulemaking hearing. The Commission encouraged the Division to establish a committee with representatives from the appropriate interest groups to assist the Division in reviewing the PQLs listed in Section 6.9.2(13)(b). The list of PQLs were listed in Section 61.8(2)(m).

Because in recent years, the Division has been focused primarily on reducing the backlog of administratively extended discharge permits, the Division has not been able to review the PQLs listed in Section 61.8(2)(m) and propose revisions for Commission consideration.

The Commission now believes that the most appropriate method of managing and updating the PQLs listed in Section 61.8(2)(m) of the regulation is to remove Table 1 from this regulation and incorporate it into a "PQL Guidance Document." This change will afford the Division more flexibility in reviewing the PQLs and updating them without the necessity of submitting them to the Commission for review and consideration at a Rulemaking Hearing. The Commission has retained the current language pertaining to the Division's development of site-specific or discharge-specific PQLs. The Commission has amended section 61.8(2)(m) to allow the Division to use PQLs listed in the most current edition of the "PQL Guidance Document." Until the guidance is completed the PQLs in the previous version of the regulation will continue to be appropriate unless the Division, based on standard laboratory practice, determines that an alternate PQL is appropriate.

Permit Modification, Suspension, Revocation and Reissuance and Termination (section 61.8(8): The Commission added two new sections (61.8(8)(a)(v) and (vi)) to clarify that the Division has the authority to reopen a permit to implement new standards and wasteload allocations derived from TMDLs into permits immediately. The Commission finds that it is important for these actions intended to improve water quality be implemented through discharge permits as soon as practicable.

Water Quality Standards Based Permits - Determination of Economic, Environmental, Public Health, and Energy Impact (section 61.11): The Commission deleted section 61.11 (b)(v) as it is duplicative of section 61.9(1)(e).

Variances (section 61.12): The Commission modified section 61.12(a) of the regulation to clarify that the requirements for variances under the Federal Clean Water Act and the regulations promulgated thereunder must be met.

PARTIES/MAILING LIST TO THE RULEMAKING HEARING January, 2003

1. Colorado Livestock Association and the Colorado Pork Producers Council
2. Colorado Farm Bureau
3. Equus Farms, Inc.
4. Metro Wastewater Reclamation District
5. Outwest Farms
6. National Hog Farms
7 Mountain Prairie, LLC & Bell Genetics Colorado, LLC
8. Dairy Farmers of America - Mountain Area Council and the Colorado Political Action Committee/Trust
9. Seaboard Farms
10. Central Plains Farms, Inc.
11. Global Eco-tech
12. SBT Production, LLC dba Heritage Farms

13. Enviro-Ag Engineering, Inc.
14. Alliance Farms Cooperative Association
15. Midwest Farms, LLC
16. Farmland Industries, Inc.
17. Livestock Engineering Solutions, Inc.

61.53 STATEMENT OF BASIS. SPECIFIC STATUTORY AUTHORITY. AND PURPOSE - APRIL 2003 RULEMAKING HEARING

The provisions of 25-8-202(1)(d) and (2), 25-8-401, 25-8-501.1, and 25-8-504, C.R.S., provide the specific statutory authority for the amendments to this regulation adopted by the Commission. The Commission has also adopted, in compliance with 24-4-103(4) C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

On March 10, 2003, the United States Environmental Protection Agency ("EPA") finalized a rule to postpone until March 10, 2005, the permit authorization deadline for National Pollutant Discharge Elimination System ("NPDES") stormwater permits for oil and gas construction activity that disturbs one to five acres of land. See 68 Fed. Reg. 11, 325 (March 10, 2003). EPA postponed the federal rule's permit authorization deadline because of new information regarding (1) the significantly-higher-than-expected numbers of small oil and gas construction sites that will be affected by the rule, (2) the need to evaluate the most appropriate Best Management Practices ("BMPs") for small oil and gas construction sites, and (3) the need to evaluate the costs of implementing BMPs for small oil and gas construction sites. See id. at 11, 327-28. Because of this recent action by EPA, the Commission has determined that a similar amendment to the State stormwater discharge permit regulations (which are derived from the federal regulations) is appropriate. Accordingly, the Commission has postponed until March 10, 2005, the State's stormwater discharge permit application deadlines for small oil and gas construction activities.

PARTIES/MAILING LIST TO THE RULEMAKING HEARING April, 2003

1. Colorado Oil & Gas Association and the Colorado Petroleum Association
2. Board of County Commissioners of the County of Mesa
3. The San Juan Citizen Alliance and the High Country Citizens Alliance

61.54 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE - FEBRUARY AND APRIL 2004 RULEMAKING HEARING

The provisions of 25-8-202(1)(d) and (2), 25-8-401, 25-8-501.1, and 25-8-504, C.R.S., provide the specific statutory authority for the amendments to this regulation adopted by the Commission. The Commission has also adopted, in compliance with 24-4-103(4) C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

A. BACKGROUND

Revisions to the concentrated animal feeding operation (CAFO) Federal regulations under the National Pollutant Discharge Elimination System (NPDES) became effective on April 14, 2003. Revisions were made to the permitting requirements (40 CFR 122) and to the effluent limitation guidelines (40 CFR 412). The revised regulation requires, among other provisions, a mandatory duty for CAFOs to apply for an NPDES permit and to develop and implement a nutrient management plan. 40 CFR 412.4(c)(3) of the revised Federal regulations requires state NPDES permitting programs to be revised to reflect the regulatory changes within one year of the effective date of the new regulations, where no amended or enacted statute is necessary. Part 25-8-504(2) of the Colorado Water Quality Control Act prohibits the

Division from issuing permits for animal or agricultural waste on farms and ranches except as may be required by the Federal act or regulations. Therefore, Colorado does not need to amend or enact a statute for the purpose of revising its CAFO permitting program and has until April 14, 2004 to revise its CAFO permitting program to reflect the new Federal regulations.

As a result of the revised Federal regulations, all but a very few CAFOs will be required to be covered under a permit. The existing Regulation #61 does not contain specific provisions for concentrated animal feeding operation permits other than the language in subsection 61.13(1)(c) stating that, "the provisions of any permit that is required for animal or agricultural waste on farms and ranches that are not housed commercial swine feeding operations shall not be any more stringent than, and shall not contain any condition for monitoring or reporting in excess of, the minimum required by the Federal Act or regulations." As a result, the Commission has taken final action on revising this Regulation #61 to add provisions for CAFOs.

In general, the Commission adopted regulatory provisions that closely track the language of the revised Federal regulations. Additional detail and clarifications have been added where appropriate to allow for effective implementation of the new requirements. The revised Federal regulations focus on protection of the nation's surface waters from pollutants in manure or process wastewater and, pursuant to page 7219 of the preamble of the revised regulations, do not include provisions for ground water controls and monitoring (even where there may be discharges to surface waters via ground waters that have a direct hydrologic connection to surface waters). Since, as discussed above, permits for animal or agricultural waste cannot include conditions in excess of those required by the Federal regulations, the Commission adopted provisions for the protection of surface waters by CAFOs. In order to provide protection of ground water from CAFO activities, the Commission also adopted in this rulemaking hearing revisions to the Confined Animal Feeding Operations Control Regulation [Regulation #81 (5 CCR 1002-81)].

B. DISCUSSION OF AMENDED SECTIONS

Definitions (61.2): Since the existing Regulation #61 does not contain specific provisions for CAFO permits, the Commission adopted several new definitions that pertain to such operations, including housed commercial swine feeding operations ("HCSFOs"). Definitions for the following terms were added from the revised Federal regulations, with changes made to refer to surface waters instead of waters of the United States, as appropriate: animal feeding operation, concentrated animal feeding operation, dry lot for ducks, fecal coliform, large concentrated animal feeding operation, medium concentrated animal feeding operation, multi-year phosphorus application, process wastewater, production area, setback, small concentrated animal feeding operation, total coliform, vegetated buffer, and wet lot for ducks. In addition, revised definitions for the Federal terms of manure, 100-year, 24-hour storm, and 25-year, 24-hour storm were added.

Definitions for the following non-Federal terms also were adopted to section 61.2 since they are applicable to CAFO and HCSFO regulations: freeboard, ground water, ground water recharge, public drinking water system, and surface water. The definition of ground water was taken from Colorado's Basic Standards for Ground Water regulation [Regulation No. 41 (5 CCR 1002-41)]. The definition of ground water recharge was taken from page 211 of "Groundwater" by R. Allan Freeze and John A. Cherry, Prentice-Hall, Inc. 1979.

The Commission added a definition of "surface water" since it is this specific subset of waters of the state that must be protected under the Federal CAFO regulations. Wording also was included in the definition that stipulates that this definition is applicable only to sections 61.13 and 61.17. Surface waters are also the waters of concern in the process that the Division must use to designate an AFO as a CAFO. Surface water is defined as "waters of the state that are also waters of the U.S." In keeping with the Federal interpretation of waters of the U.S., surface water includes subsurface water that may be hydrologically connected to surface water. The Commission intends that the hydrological connection aspect is pertinent only where it results in a contribution of pollutants being conveyed from ground water to surface water.

The Commission finds it appropriate to clarify the existing definition for "new source" in subsection 61.2 by adding the following new source criteria language from 40 CFR 122.29 (b)(1) and (2): "Except as otherwise provided in an applicable new source performance standard, a source is a "new source" if it meets [this] definition of "new source", and: 1) it is constructed at a site at which no other source is located; or 2) it totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or 3) its processes are substantially independent of an existing source at the same site. In determining whether these processes are substantially independent, the [Division] shall consider such factors as the extent to which the new facility is integrated with the existing plant, and the extent to which the new facility is engaged in the same general type of activity as the existing source. A source meeting the requirements of the [1), 2), or 3) above] is a new source only if a new source performance standard is independently applicable to it. If there is no such independently applicable standard, the source is a new discharger."

For the purpose of having the HCSFO regulations (section 61.13) be at least as stringent as the Federal regulations, the existing definition of swine feeding process wastewater was revised to include the process wastewater terms that are currently absent from the definition. The existing definition of residual solids was revised to include tanks (in addition to impoundments) and manure not separated from swine feeding process wastewater.

Clarification of AFO definition: Regarding the definition of an animal feeding operation (AFO), the Commission clarifies that wildlife and other non-traditional livestock animals, such as elk and llamas, are considered "animals" within the definition. The Commission also finds it appropriate to provide clarification of confined animal feeding operations that meet the criteria for an AFO, versus those that do not meet the criteria. To be an AFO, a facility must have animals stabled or confined for at least 45 days out of any 12 month period where crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility. Using these criteria, it is not the intent of this regulation to include true pasture and rangeland operations as AFOs. Nor is it the intent of this regulation to include winter feeding sites on pastures or rangeland, or properly grazed crop residues, as AFOs. A winter feeding site is not an AFO where it shows no vegetation during the winter but shows regrowth of desirable forage in the spring. However, pasture and grazing operations may also have confinement areas (e.g., feedyards, barns, pens) that may meet the definition of an AFO.

Regarding the "no vegetation" cover aspect of the criteria, page 7189 of the preamble of the revised Federal regulations states that incidental vegetation existing in a part, or parts, of a confined area, does not exclude the feeding operation from meeting the definition of an AFO. The Commission encourages the Division to use common sense and sound judgment in evaluating whether confined areas with incidental vegetation meet the definition of an AFO.

Part of the AFO definition refers to no vegetative cover being present during the normal growing season. However, Page 7189 of the preamble of the revised Federal regulations states that the "no vegetation" criteria in the definition is meant to be evaluated during the winter, if animals are confined during that time. The Commission is aware that backgrounding operations are common in the State, where cattle weaned in the fall are fed in pens through the winter until they are turned out to pasture or rangeland in the spring. In keeping with the Federal preamble language, the Commission finds that backgrounding feedlots are AFOs where no vegetation is present (whether during the winter or normal growing season), and animals are confined for 45 days or more out of any 12-month period. The Commission encourages the Division to use common sense and sound judgment in determining whether backgrounding feedlots meet the definition of an AFO.

Application for a Permit (61.4): Subsection 61.4 was revised to include a new subsection 61.4(9) that requires CAFOs to meet permit application requirements in the added subsection 61.17.

Housed Commercial Swine Feeding Operation Regulations (section 61.13): A housed commercial swine feeding operation (HCSFO) is also defined as a Large CAFO under the revised Federal regulations. As a Large CAFO, a HCSFO is subject to any requirements of the revised Federal regulations that are not already required under section 25-8-501.1 of the Colorado Water Quality Control Act and its implementing

regulations in subsection 61.13. For the purpose of having the HCSFO regulations (section 61.13) be at least as stringent as the Federal regulations, several additions and amendments were made to the regulations.

Subsection 61.13(2)(a) was revised to add the requirement that HCSFOs have a duty to seek permit coverage. A new subsection 61.13(2)(c) was added to reflect the Federal language regarding agricultural stormwater discharges from land application sites. Such discharges are not subject to stormwater permit requirements. Subsection 61.13(3)(a) was revised to add language that clarifies that a permit application must be submitted to the Division not less than 180 days prior to swine being placed on an operation. Subsection 61.13(3)(b) and (c) were revised to include additional permit application elements required by the Federal CAFO regulations, and to indicate that a swine waste management plan must be submitted by all operations. The existing regulations exempted non-land application HCSFOs from submitting a swine waste management plan. These facilities now must submit such a plan because it now must address residual solids and swine feeding process wastewater management on the production area, in addition to land application activities.

The Commission is aware that the Federal language requires that a complete permit application be submitted at least 180 days prior to animals being placed on some operations (such as a new or new source operation), and is aware that the Division could issue a permit to the operation prior to the end of the 180 day period. Therefore, the Commission clarifies that once a permit is issued, an operator is authorized to commence operation, even if the 180-day period has not ended.

40 CFR 122.42 requires as a permit condition that a nutrient management plan (NMP) be developed and implemented. For Large CAFOs, additional NMP elements are required under 40 CFR 412.4(c). The swine waste management plan required under subsection 61.13(3)(f) currently includes some of the required elements of the NMP and was revised as follows to include the additional elements. Language was added to the introductory paragraph to state that HCSFOs must develop and implement a swine waste management plan. Language also was added to indicate that the plan must also provide for compliance with subsection 61.13(4)(f)(iii), which addresses setback provisions specified in the Federal CAFO regulation. Subsection 61.13(3)(f)(vii) was revised to require specification of analytical protocols. In addition, the existing “interpretive analytical procedures to determine application rates” language was removed in order to simplify and provide focus to the subsection. A new subsection 61.13(3)(f)(viii) was adopted that requires a description of the methods for determining application rates and the potential for nitrogen and phosphorus transport from land application sites (a Federal requirement). New subsections 61.13(f)(ix), (x), (xii), (xiii), (xiv), and (xv) were added to include remaining elements required in the revised Federal regulations for an NMP.

Subsection 61.13(4)(a)(ii) was revised to require that a swine waste management plan be developed and implemented and that existing permitted operations (and that currently have approved swine waste management plans) must submit to the Division for approval a revised swine waste management plan that meets the requirements of subsection 61.13(3)(f), as revised effective June 30, 2004.

The impoundment storage criteria in subsection 61.13(4)(c) was revised to require that storage capacity also be provided to hold runoff from a 25-year, 24-hour storm or 100-year, 24-hour storm for existing source and new source facilities, respectively. The criteria does not specify that storage designs include the capacity to retain direct precipitation from the applicable storm event, since impoundments are required to maintain at least two feet of freeboard. This freeboard is sufficient to contain the three to four inches of direct rainfall that is typically received with a 25-year, 24-hour storm or 100-year, 24-hour storm.

The Federal language pertaining to assessments of land application sites for the potential of nitrogen transport from land application sites to surface waters, and pertaining to the Federal requirement that land application rates be based, in part, on such assessments, were added to subsection 61.13(4)(e). The swine waste management plan (subsection 61.13(3)(f)) requires that the permittee indicate how this subsection will be complied with.

The Commission notes that the existing regulation specifies, as a surface water protection measure, that no application of additional phosphorus be made to application sites where the top one foot of soil exceeds 80 mg/kg of sodium bicarbonate extractable phosphorus, unless an off-site phosphorus transport risk score is high or less. Therefore, the adopted regulation includes language that requires that a nitrogen transport risk assessment of application sites now must be made, in keeping with the Federal CAFO regulations. The Commission is aware that a published tool suitable for assessing nitrogen transport risk does not currently exist. Therefore, it finds that use by operators of the land application provisions of the swine waste management plan, which requires the use of setbacks and runoff controls, for example, and adherence by operators to the "no phosphorus application" standard discussed above, will result in nitrogen and phosphorus transport to surface waters being minimized, and is equivalent to the Federal requirement that application sites be evaluated for nitrogen transport to surface waters. The effectiveness of these practices in adequately controlling phosphorus and other pollutants from reaching surface waters is affirmed by language on Page 7210 of the preamble of the revised Federal regulations.

40 CFR 412.4 requires that manure and soil be sampled and that land application equipment be inspected for leaks. These requirements were added as new subsections 61.13(4)(e)(ii)(C) and 61.13(4)(d)(xiii), respectively.

40 CFR 412.37 requires implementation of four best management practices (BMPs) for the production area of a Large CAFO. The fourth BMP requires animal mortalities to not be disposed in any liquid residual solids or swine feeding process wastewater system and in a way that protects surface waters. This BMP was added as a new subsection 61.13(4)(d)(xiv).

The other three BMPs required under 40 CFR 412.37 for the production area (visual inspections, depth markers, and corrective actions) were inserted as additions to subsections 61.13(4)(c) [as a new part (vi)], and as new subsections 61.13(4)(d)(x), (xi), and (xii). Federal language regarding depth markers was revised to specify that the markers must be marked in maximum depth increments of one foot, since HCSFOs commonly use a water balance method for monitoring seepage from impoundments to satisfy the requirements of the existing subsection 61.13(4)(j)(vi)(D). The language also was revised to require that each marker show the required two-foot freeboard elevation.

Regarding the BMP requiring visual inspections of impoundments, the Commission finds it appropriate to clarify the scope of such inspections by including the following language from page 7216 of the preamble of the revised Federal regulations. " Impoundments must be inspected weekly to ensure structural integrity. For surface and liquid impoundments, the berms must be inspected for leaking, seepage, wind or water erosion, excessive vegetation, unusually low or high liquid levels, reduced freeboard, depth of the manure and process wastewater in the impoundment as indicated by the depth marker, and other signs of structural weakness."

The visual inspections BMP also requires inspections of water lines. The Commission would expect that such inspections be primarily of water lines that have potential to add process wastewater to any impoundment or that, if leaking, would result in a discharge to surface water. The Commission also would expect that the Division use common sense and sound judgment in determining what is or what is not a leak.

One of the BMPs requires that deficiencies found as the result of visual inspections be corrected as soon as possible. 40 CFR 412.37(b)(3) specifies that records must be kept documenting that, where deficiencies were not corrected within 30 days, an explanation must be provided of the factors that prevented immediate action. Therefore, the Commission finds it appropriate to amend the Federal language by stating that corrective action shall be taken by no later than 30 days of a deficiency having been identified.

40 CFR 412.4(c)(5) requires a baseline setback distance of 100 feet from surface waters and other sites for land application of manure and process wastewater. The existing HCSFO regulation specifies a setback of 200 feet, which is more stringent than the Federal requirement. Since a HCSFO permit can have provisions that are more restrictive than Federal requirements, subsection 61.13(4)(f)(iii) was not

revised to specify the Federal 100-foot setback standard, and the two compliance alternatives to this standard allowed for in the Federal regulation.

The Federal CAFO regulatory language pertaining to general pretreatment standards, effluent limitations, and voluntary alternative performance standards was added as new subsections 61.13(4)(d)(xv), (xvi), and (xvii), with some minor revisions to address existing HCSFO requirements and language.

40 CFR 412.37(b) and (c) require certain records be kept by Large CAFOs for production areas and land application sites, and that such records be maintained on-site for a period of five years from the date they are created. Since the existing HCSFO regulations do not specify recordkeeping requirements, the existing subsection 61.13(4)(j) was revised to become subsection 61.13(4)(k), with the new subsection 61.13(4)(j) now including language of required recordkeeping. Regarding weather conditions, the Commission believes that it is potential runoff as the result of precipitation before and after land application that is a concern relative to water quality. Therefore, recording of precipitation (whether it be no precipitation or some measurable amount) is appropriate for indicating weather conditions.

40 CFR 122.42(e)(4) specifies annual reporting requirements for CAFOs. The existing HCSFO regulations require quarterly reporting of agronomic rate, seepage monitoring, and intervention protocol activities. The revised Federal regulation requires reporting of several additional categories of information. As a result, the existing subsection 61.13(4)(j)(v) was revised to become 61.13(4)(k)(v) and to include the additional reporting requirements required in the revised Federal regulations, and to specify that the additional information be provided in one of the quarterly monitoring reports. The Commission encourages the Division to work with permittees to identify which quarterly report is appropriate for inclusion of the additional information. Regarding the reporting of swine numbers, it is not the intent of the Commission to prescribe the frequency that accurate counts are taken at sites, but expects that the permittee would conduct counts frequently enough to produce an accurate maximum number for the annual report.

C. DISCUSSION OF NEW SECTION 61.17 (CAFO REGULATIONS)

Since specific CAFO permitting regulations do not exist in the current Regulation #61, the Commission found it necessary to add a new section, 61.17, for inclusion of the requirements of the revised Federal regulations, and for the purpose of implementing the revised Federal regulations. The Commission clarified in subsection 61.17(2) that the section 61.17 applies to all CAFOs that are not defined as housed commercial swine feeding operations.

Scope and Purpose: In addition to the language provided for this section 61.17(1), the Commission clarifies that while a purpose of these regulations is to implement the revised Federal concentrated animal feeding operation (CAFO) regulations in 40 CFR Parts 9, 122, 123, and 412, the Federal regulations are neither incorporated by reference nor adopted verbatim in all cases.

Applicability: The Commission adopted “specific applicability” language that indicates that the section 61.17 regulations do not apply to housed commercial swine feeding operations (“HCSFOs”), but clarifies here that HCSFOs are also defined as Large CAFOs and are subject to the Federal requirements for CAFOs. However, as a result of the requirements of section 25-8-501.1 of the Colorado Water Quality Control Act, HCSFOs must comply with section 61.13.

Language was added to the “specific applicability” section to reflect the Federal language regarding agricultural stormwater discharges from land application sites. Such discharges are not subject to stormwater permit requirements.

Definitions: Subsection 61.17(3) includes definitions for sixteen terms: chronic storm, closed facility, freeboard, land application site, man-made drainage system, manure, multi-year phosphorus application, “100-year, 24-hour Storm”, operator, overflow, process wastewater, production area, setback, tank overflow, “25-Year, 24-Hour Storm”, and vegetated buffer. While some of these definitions also were

added to section 61.2 ("Definitions"), the definitions were included in 61.17(3) because some are applicable just to CAFOs and provide for ease of reference and interpretation; for example, a person could acquire 61.17 and have most of what is needed to understand the CAFO permit regulations.

The definition of "land application site" makes reference to land under the control of an AFO or CAFO. The Commission finds it appropriate to clarify that a land application site is under the control of a CAFO where it is owned or leased by the CAFO, where cropping and/or nutrient budget decisions for the site are made by the CAFO, or where the CAFO land applies process wastewater or manure to such land. Such land is not under the control of a CAFO where the CAFO simply agrees to release process wastewater or manure to the owner/operator of land that does not otherwise meet the criteria of being under the control of the CAFO.

The definition of chronic storm is the same as that used in the existing CAFO general permit that was issued by the Division in 2001.

Definitions of the following terms are the same as those in the revised Regulation #81, as adopted in today's rulemaking hearing: operator and tank overflow.

A definition of 'operator' does not currently exist in the regulation, but the Commission finds that such a definition is necessary in the regulations currently being adopted to provide meaning to the term 'operator' as used in subsection 61.17, and to provide a necessary connection to the term 'person', which is defined at 61.2(61).

Definitions of the following terms were taken from the revised Federal regulations and were amended where appropriate based on stakeholders input to provide clarification: land application site, manure, man-made drainage system, overflow, production area, setback, '100-year, 24-hour storm', '25-year, 24-hour storm', and vegetated buffer. The definitions of land application site, manure, man-made drainage system, and production area are the same as those in the revised Regulation #81, as adopted in today's rulemaking hearing.

Regarding 'manure', the revised Federal regulation has separate terms for litter from poultry operations and for manure. In an effort to minimize the use of different terms, the Commission adopted a definition of manure that includes litter from poultry operations.

Regarding the '25-year, 24-hour storm' and '100-year, 24-hour storm' definitions, the Commission understands that the authoritative document that the Division intends to preferentially accept for use in determining the magnitude of a such storms is the "Precipitation-frequency atlas of the Western United States, volume 3 (Colorado), 1973" as published by the National Oceanic and Atmospheric Administration, National Weather Service, Office of Hydrology, and that an alternative to this document must be approved by the Division as providing regional or State rainfall probability information that is equivalent to that defined by the National Weather Service in Technical Paper No. 40, "Rainfall Frequency Atlas of the United States," May, 1961.

The production area, as defined, includes the raw materials storage area, which includes but is not limited to feed silos, silage bunkers, and bedding materials. The Commission finds it appropriate to clarify that the raw materials storage area does not include locations where harvested dry forage (such as hay bale stacks) is stored outside of the production area or in hay fields.

<u>Designation of an AFO as a CAFO:</u> The Federal regulatory language for the process of determining if an AFO will be designated a CAFO was separated from the CAFO definition and placed as Section 61.17(4) for the purpose of more readily finding and identifying the process.

The Commission understands that as part of the process of determining whether an AFO should be designated as a CAFO, the Division will consider the five criteria listed in the regulation in order to conclude whether an AFO could cause significant degradation of surface water bodies subject to

antidegradation review or could cause an exceedance of any adopted surface water quality standard. The latter standards are specified in Regulation No. 31, "The Basic Standards and Methodologies for Surface Water."

Since the preamble of the Federal regulation (page 7199) allows States to provide an opportunity for an AFO that may be designated as a CAFO to take actions that eliminate conditions that pose a risk to surface water quality, the Commission included provisions in the regulations that provides for such an opportunity in the form of a work plan. The Commission is aware that some AFOs may have no easy solutions for eliminating or significantly abating risks to surface waters. Such AFOs may indicate to the Division that it intends to remain in its location and operate as a CAFO and apply for a permit. Where an AFO does not complete and implement a work plan as required, the Commission added language that the Division may designate the AFO as a CAFO and be required to submit a complete CAFO discharge permit application.

AFOs can be designated as CAFOs where they directly discharge process wastewater or manure into surface water through man-made drainage systems. The Commission clarifies that an overflow from an AFO impoundment or conveyance structure into surface water, or sheet flow runoff from and AFO into surface waters, are not direct discharges through man-made drainage systems.

Permit Application: 40 CFR 122.21 specifies information that is required in an application to be covered under a CAFO permit. It also specifies that all CAFOs have the duty to seek coverage under a discharge permit, and to maintain permit coverage. The Commission included these requirements in subsection 61.17(4) and found it appropriate to include additional requirements for a permit application to provide the Division with adequate information to determine whether an applicant meets permit requirements.

The Commission is aware that the majority of CAFOs in the state do not hold coverage under a permit. As a result, permit application deadlines specified in 40 CFR 122.23(g) are included in subsection 61.17(4). The Commission amended some the Federal deadlines, such as for new sources, to account for the state regulations not being promulgated until a year after the effective date of the revised Federal regulations.

Page 7201 of the preamble of the revised Federal regulations states that there is a sound basis in the administrative record for the presumption that all CAFOs have a potential to discharge to waters of the United States such that they should be required to apply for a permit. Pursuant to 40 CFR 122.21(c) of the Federal regulations, such CAFOs must submit a permit application at least 180 days before the date on which a discharge is to commence. The Commission realizes that CAFOs cannot predict when a discharge may occur outside of receiving in excess of a 25-year, 24-hour storm and that, for all intents and purposes, such CAFOs must apply for a permit immediately. Therefore, and pursuant to page 7205 of the preamble of the revised Federal regulations, the regulation presently being adopted does not change the existing requirement that operations that were defined as CAFOs under the prior Federal regulations should immediately apply for a permit.

Where a CAFO must submit a permit application immediately, the Commission understands that the Division released on June 17, 2003 a Notice of Intent form that provides time to such a CAFO for meeting permit requirements and submitting a complete permit application. The form states that during this period of time, the Division will use its enforcement discretion where such a CAFO has a discharge outside of a 25-year, 24-hour storm. The Commission encourages the Division to work with such CAFOs to allow them to meet permit requirements and to use its enforcement discretion, while ensuring that surface waters are protected.

The Commission adopted permit application deadlines specific to an AFO that makes a change that causes it to be defined as a CAFO after the effective date of the regulation currently being adopted. An example of such a scenario is where an AFO increases its beef cattle numbers (e.g., in response to market prices) to 1,000 or more, for 45 days or more. Such an operation must apply for a permit within 90 days after becoming defined as a CAFO. The revised Federal regulation provides an exception to this 90-day deadline for an AFO that makes a change and where such a change would not have caused the

operation to be defined as a CAFO if the change had occurred prior to the effective date of the regulation currently being adopted. For example, dry poultry operations were not defined as CAFOs in previous regulations. Where a dry poultry operation, sometime after the effective date of today's revised Regulation #61, adds animals and exceeds the threshold for becoming defined as a CAFO, it must apply for a permit by April 14, 2006. This is the same deadline for dry poultry operations that, on the effective date of the regulation currently being adopted, already exceeded the threshold number of poultry to be defined as a CAFO (i.e., they did not become a CAFO by adding poultry numbers after the effective date of the regulation currently being adopted).

The Commission is aware that the Federal language requires that a complete permit application be submitted at least 180 days prior to animals being placed on some operations (such as a new or new source operation), and is aware that the Division could issue a permit to the operation prior to the end of the 180 day period. Therefore, the Commission clarifies that once a permit is issued, an operator is authorized to commence operation, even if the 180-day period has not ended.

Duty to Maintain Permit Coverage. The adopted regulation includes as section 61.17(5)(c) "duty to maintain permit coverage" language from 40 CFR 122.23(h) of the Federal regulations. To these provisions was added language that provides for a designated or defined Small or Medium CAFO to not need to continue to seek permit coverage where the conditions that caused the facility to be a CAFO have been corrected. Page 7232 of the preamble of the Federal regulations provides states the flexibility to provide this opportunity.

Effluent Limitations. The Commission included as section 61.17(6) effluent limitation requirements from the revised Federal regulations for both existing and new sources of Large CAFOs and duck CAFOs with 5,000 or more ducks. The requirements also indicate that effluent limitations for Small and Medium CAFOs will be determined by the Division using Best Professional Judgment.

No Potential to Discharge Determination: The Commission is aware that the Federal regulations [40 CFR 122.23(f)] allow for the State to make a case-specific determination that a Large CAFO has "no potential to discharge", in response to a request of the Division for such a determination. The Commission finds that some CAFOs in the State may be able to meet "no determination to discharge" standards and not be required to hold a permit and, therefore, finds it appropriate to include in today's adopted regulation language pertaining to "no potential to discharge" criteria and the request and determination processes. Examples of "no discharge" facilities are operations that: 1) are in a location that are in a self-contained bowl or depression; and 2) are in a location where runoff from land application sites and production areas cannot reach surface water.

The Commission also finds it appropriate to clarify the criteria and standards by which "no potential to discharge" determinations should be made by including the following selected language from pages 7202 and 7203 of the preamble of the revised Federal regulations. "EPA's intention is that the term "no potential to discharge" is to be narrowly interpreted and applied by permitting authorities. This provision is intended to be a high bar that excludes those Large CAFOs from having a permit only where the CAFO can demonstrate to a degree of certainty that they have, without qualification, no potential to discharge to surface waters. The no potential to discharge status is intended to provide relief where there truly is not potential for a CAFO's manure or process wastewater to reach surface waters under any circumstances or conditions. Such circumstances would include, for example, CAFOs that are located in arid areas and far from any water body or those that have completely closed cycle systems for managing their manure and process wastewater, and that do not land apply their manure and process wastewater. It is the CAFO's responsibility to provide appropriate supporting information that the permitting authority can use when reviewing the demonstration. The supporting information should include, for example, a detailed description of the types of containment used for manure and process wastewater, focusing on the attributes of the containment that ensure no discharges will occur. In addition, there may be instances where after preliminary review of the demonstration, the permitting authority may require the submission of supplemental information to assist in making a determination."

40 CFR 122.23(f)(1) of the Federal rule states that "in no case may the CAFO be determined to have "not potential to discharge" if it has had a discharge within the 5 years prior to the date of the request submitted …" Hence, any history of discharges within this period of time shall assist in guiding the Division's decision upon such "no potential to discharge" requests.

Process wastewater Storage Capacity Standards: The adopted regulations include the Federal baseline storage requirements for Large CAFOs. The adopted regulations also include the Federal storage requirements for new source CAFOs, including the requirement that new source swine, poultry, and veal calf operations have storage for a 100-year, 24-hour storm. In addition, the Commission also included language that allows for Large CAFOs and duck CAFOs with 5,000 or more ducks to have evaporation impoundments. The design of such impoundments was taken from the existing Regulation #81 and was amended to require that such impoundments be designed to be capable of storing runoff from a 25-year, 24-hour storm or 100-year, 24-hour storm, depending on the point source category of the operation. This amendment was made in order to ensure that the design standard is at least as stringent as that required in the Federal regulation.

The adopted baseline storage standard refers to CAFOs storing the volume of process wastewater and manure loading. The Commission clarifies that this language means a CAFO must store the total volume of process wastewater produced (e.g., from milking parlors) during the months in which no land application can or will occur, plus the process wastewater, manure loading, and direct rainfall resulting from the applicable storm event.

The baseline standard does not specify that storage designs include the capacity to retain direct precipitation from the applicable storm event, since impoundments are required to maintain at least two feet of freeboard. This freeboard is sufficient to contain the three to four inches of direct rainfall that is typically received with a 25-year, 24-hour storm or 100-year, 24-hour storm. Where an operator requests that an alternative freeboard level be approved, such a request shall include evidence that direct precipitation from the applicable storm event will be contained.

Stakeholders expressed a desire that tank overflow water not be defined as process wastewater since it is drinking water that is minimally contaminated by cattle drinking the water and is captured separately from process wastewater and reused. The Commission recognizes that recycling of water is a desirable tool for conserving a valuable resource. Therefore, tank overflow is defined in the regulation as "livestock drinking water in constant-flow cattle watering troughs that overflows into in-trough drain pipes and is retained separately from process wastewater storage." As such tank overflow does not need to be accounted for as process wastewater in sizing impoundments and tanks. Structures that store only tank overflow do not need to have depth markers and be inspected as part of the requirements of section 61.17(8)(g)(vii)(C), but such structures are not exempt from the requirement of daily inspections of water lines, pursuant to section 61.17(8)(g)(vii)(B). In addition, tank overflow cannot be discharged from the production area to surface water outside of effluent limitation standards that are applicable to the operation.

The Commission is aware that calculations of water quality-based effluent limitations may not be feasible for discharges from CAFOs, which are typically uncontrolled and unpredictable (i.e., discharges occur as the result of storm events at CAFOs that properly operate under permit conditions). 40 CFR 122.44(k)(3) allows the State permitting authority to substitute best management practices requirements for protecting surface water quality when numeric effluent limitations are infeasible. Therefore, the Commission finds it appropriate to include language in today's adopted regulation that provides the Division discretion and authority to require storage capacities that may be in excess of the Federal baseline standards (e.g., a chronic storm instead of a 25-year, 24-hour storm), as a best management practice for where water quality-based effluent standards are not appropriate for a permit. While the Commission adopted a definition of chronic storm, it finds it appropriate to give the Division flexibility to require storage of runoff from other types of storms for use as a best management practice, based on the frequency of expected discharges and the associated need to protect quality of surface water.

Stakeholders expressed concern that use by the Division of its flexibility in defining storm events that must be used as a best management practice can result in a moving target for CAFOs and significant expense where a newly defined storm event results in the need for CAFOs to increase storage capacity. The Commission is aware that the existing CAFO general permit requires storage for runoff from a 25-year, 24-hour storm or chronic storm, whichever is greater. Therefore, the Commission believes it is appropriate to have this existing storage standard continue to be used, unless the Division has significant reason that would warrant a change in the standard.

Voluntary Alternative Performance Standards: The revised Federal regulations (40 CFR 412.31 and 40 CFR 412.46) allow for certain Large CAFOs to meet voluntary discharge performance standards relative to the baseline storage and discharge standards. Large Dairy Cow, Cattle, and Existing Source Swine, Poultry, and Veal Calf CAFOs must achieve a quantity of pollutants discharged from the production area equal to or less than the quantity of pollutants that would be discharged as the result of the area receiving in excess of a 25-year, 24-hour storm. In contrast, new source Large Swine, Poultry, and Veal Calf CAFOs must achieve superior environmental performance standards that take into account discharges from all environmental media, including to air.

The Commission finds it appropriate to include in today's adopted regulations language that provides the opportunity for a CAFO to voluntarily develop and install new technologies and management practices that result in the pollutant quality of discharges being equal to or better than those resulting from baseline requirements. The adopted regulation reflects the revised Federal regulatory and preamble language, some requirements desired by the Division, and a requirement that a CAFO submit to the Division additional information that will allow the Division to determine if a permit should be issued to include voluntary permit effluent limitations, and what those limitations should be (pursuant to 40 CFR 412.31(a)(2)(ii)). Such additional information may be in the form of a site inspection of the CAFO applicant. Because new technologies are in infancy development stages, the Commission is aware that alternative effluent limitation permits issued by the Division will likely have to be individual permits. The Commission encourages use of this option in order to foster development of improved technologies that will reduce the impact of discharges from CAFOs on surface waters.

40 CFR 412.31(a)(2)(i)(D) of the revised Federal regulations states that supporting documentation for site specific pollutant data for voluntary alternative performance standards shall include N, P, BOD_5, and TSS. The Commission is aware that numeric standards for TDS exist for discharges to the Colorado River System. In addition, subsection 61.4(2)(g)(i)(A) requires every outfall for manufacturing, commercial, mining, and silviculture discharges to be sampled for Chemical Oxygen Demand (COD), Total Organic Carbon (TOC), ammonia (as N), temperature, and pH. Finally, the Commission is aware that water quality standards exist for fecal coliform and *Escherichia coli*. Therefore, the Commission adopted requirements in the regulation adopted today, that fecal coliform, *Escherichia coli*, ammonia (as N), COD, TOC, temperature, pH, and TDS (for discharges to the Colorado River System only) be provided as supporting documentation.

For the purpose of a new source Large Dairy Cow and Cattle (other than veal calves) CAFO determining site-specific pollutant data where process wastewater does not yet exist, the Commission is aware that process wastewater storage systems vary in terms of number of impoundments (e.g., one-cell versus two-cell) and function (e.g., some CAFOs have manure settling basins that are upgradient to impoundments). In a two-cell system, higher concentration process wastewater is treated in the first cell before lower concentration process wastewater is transferred to the second cell. Therefore, the Commission finds it appropriate to specify baseline impoundment systems, and the impoundment from which baseline pollutant data must be calculated for discharges from such new sources. For dairy cow operations, the Commission adopted a two-cell layout as the baseline impoundment system, with the second-cell (i.e., the downgradient cell) being the discharging impoundment. For beef cattle, and dairy cow operations, the Commission adopted a one-cell layout as the baseline impoundment system.

Where an alternative performance standard results in discharges that are outside of a CAFO receiving a 25-year, 24-hour or 100-year, 24-hour storm, as applicable, the Commission finds it appropriate to require in the adopted regulations that water quality standards-based effluent limits be identified for the

discharges, and that the monitoring, recording, and reporting requirements of subsection 61.8(4) be met, in order for such discharges to be treated consistently with other permitted waste discharges.

Spillways. The Commission is aware that the integrity of impoundments may be significantly disturbed by overflowing process wastewater such that the required storage capacity no longer exists after a storm event. Therefore, the Commission finds it appropriate to require that a spillway be placed in each impoundment that discharges to surface waters. The Commission finds it appropriate to have the operator determine the most suitable elevation of a spillway and that would protect the impoundment during an overflow. For example, some operators value the significant capability of the area above the two-foot freeboard level for retaining process wastewater in quantities above baseline storage requirements. Retaining this extra volume could reduce the frequency of discharges, thereby providing additional protection of water quality.

The Commission understands that a spillway is not necessary for some discharging impoundments for the purpose of preventing erosion of its structural integrity, such as where the top of the structure is flush with the ground surface. Therefore, the adopted regulation provides an operator the opportunity to request approval from the Division that not spillway be required for an impoundment.

Nutrient management plan. The Commission included language in subsection 61.17(8)(c) regarding nutrient management plans, which are required in the revised Federal regulations. The Commission recognizes that the Federal regulations do not provide that NMPs be approved. Pursuant to 40 CFR 122.42(e)(2)(ii) of the revised Federal regulations, the regulation requires that a copy of a CAFO's nutrient management plan ("NMP") be maintained on-site and be made available to the Division upon request. Since the Federal regulation does not require that NMPs be approved, section 61.17(8)(c) specifies that NMPs be submitted to the Division only upon request. As a result, the Commission emphasizes that it is incumbent upon the operator to ensure that its NMP complies with regulatory requirements.

The regulation includes a requirement that an impoundment be operated to maintain a minimum of two (2) feet of freeboard for the purposes of protecting structural integrity of an impoundment and minimizing the risk of overflows to surface water caused by factors such as wind. The Commission is aware that some impoundments may be constructed and operated to not have two feet of freeboard while satisfying the stated purposes of the freeboard. Therefore, language was included in the regulation that allows for an operator to justify to the Division that an alternative freeboard level is appropriate. The Commission intends that alternative freeboard levels be granted for only the unusual situations that warrant such an alternative.

Page 7209 and 7210 of the preamble of the revised Federal regulations allows the State to establish technical standards for nutrient management that minimize phosphorus and nitrogen transport to surface water. As a result, the Commission established best management practices, language regarding assessment of phosphorus and nitrogen transport risk to surface water, and methods for determining agronomic rate of application.

The Commission added six best management practices as technical standards: 1) solid manure must be incorporated as soon as possible after application, unless the application site has perennial vegetation or is no-till cropped, or except where the nutrient management plan adequately demonstrates that surface water quality will be protected where manure is not so incorporated; 2) process wastewater from furrow irrigation must be prevented from entering surface waters; 3) sprinkler-applied process wastewater shall not exceed the soil water holding capacity; 4) prohibition of applications of process wastewater to frozen or flooded land application sites; 5) manure shall be applied as uniformly as possible with properly calibrated equipment; and 6) prohibition of applications of process wastewater and manure that exceed the capacity of soil and crops to assimilate nitrate-nitrogen within twelve (12) months of being applied.

The Commission added language that requires that phosphorus transport risk assessments be made using a screening tool approved by the Division and that is current, readily available, peer-reviewed, and appropriate for use in Colorado. The Commission is aware that one evaluation tool, the Colorado Phosphorus Index Risk Assessment published by the United States Department of Agriculture – Natural

Resources Conservation Service ("P Index"), exists for phosphorus transport risk assessments and that this tool is useful and applicable to Colorado agronomic conditions. This tool rates transport risks as low, medium, high, or very high. Therefore, the Commission added language to section 61.17 that specifies that assessments of phosphorus transport risk be made using a screening tool that results in a risk score of low, medium, high, or very high. The Commission intends that the most current P Index be the preferred assessment tool, unless the Division has approved an equivalent or better tool.

The Commission is aware that a published tool suitable for assessing nitrogen transport risk does not currently exist. Therefore, it finds that use by operators of the six BMPs stated above, in conjunction with the requirements that process wastewater and manure be applied at agronomic rates for nitrogen or phosphorus, and that application sites be evaluated for phosphorus runoff risk, will result in nitrogen and phosphorus transport to surface waters being minimized, and is equivalent to the Federal requirement that application sites be evaluated for nitrogen transport to surface waters. The effectiveness of these practices in adequately controlling phosphorus and other pollutants from reaching surface waters is affirmed by language on Page 7210 of the preamble of the revised Federal regulations.

The Commission is aware that an evaluation of the risk of phosphorus and nitrogen runoff from application sites has not heretofore been a requirement when land applying process wastewater and manure, and that some application sites may have a very high risk of such runoff. Under today's adopted regulations, such sites cannot receive manure or process wastewater even though these materials are continually produced. Therefore, pursuant to page 7210 of the preamble of the revised Federal regulations, the Commission adopted language that provides for a 3 year phased implementation of phosphorus-based nutrient management

Regarding soil sampling protocols, the Commission clarifies that the appropriate soil sampling depth be governed by commonly accepted nutrient budget methodologies, such as Colorado State University Cooperative Extension fertilizer recommendations or a nutrient management plan that meets United States Department of Agriculture – Natural Resources Conservation Service standards. Where a methodology indicates that a certain sampling depth is necessary and a deeper depth is preferred, sampling to the former depth meets the intent of these regulations.

Page 7209 of the revised Federal regulations specifies that phosphorus content in soils be analyzed at least once every five (5) years by Large Dairy, Beef Cattle, Swine, Poultry, and Veal Calf CAFOs. In keeping with this language, the Commission approved language in the currently adopted regulation that requires soil phosphorus analysis every five years. Since soil phosphorus analysis is a required component of phosphorus transport risk assessments, the Commission also approved language requiring phosphorus transport risk assessments being made every five years. The Commission does not believe it is reasonable to require annually an assessment of nitrogen transport risk since soil and agronomic practices do not typically change annually. Therefore, the Commission adopted language that requires transport risk assessments be made every five years, but that assessments be made more frequently where an agronomic management change is made that could reasonably result in an increase in a transport risk assessment score, or where a risk assessment results in a high score.

Regarding nutrient requirements for crops, the regulation presently being adopted provides that application rates must be calculated using a method approved by the Division that is appropriate and that protects surface water quality. The Commission recognizes that fertilizer suggestions published by Cooperative Extension are commonly accepted and are based on extensive research. The Commission also is aware that the joint USDA-EPA Animal Feeding Operation Strategy finalized in 1999 expresses a goal that all animal feeding operations hold a Comprehensive Nutrient Management Plan that meets United States Department of Agriculture – Natural Resources Conservation Service (USDA-NRCS) standards. As a result, the Commission adopted provisions for Large Dairy, Beef Cattle, Swine, Poultry, and Veal Calf CAFOs that nutrient needs for crops can be calculated using the most current published fertilizer suggestions of Cooperative Extension in Colorado or adjacent states, the method provided in a current and completed Comprehensive Nutrient Management Plan, or the most current nutrient management planning guidelines for Colorado as published by the USDA-NRCS. The Commission finds that use of fertilizer suggestions from adjacent states is appropriate since it is aware that Cooperative

Extension in Colorado does not have such suggestions for all crops that are grown, or can be grown, in the State. The Commission also recognizes that a situation may exist where calculating nutrient requirements using the above methods may not be possible or appropriate and, therefore, included a provision that provides a CAFO the opportunity to submit to the Division for approval an alternative calculation method.

For Large Dairy, Beef Cattle, Swine, Poultry, and Veal Calf CAFOs, the revised Federal regulation specifies that land application equipment be inspected for leaks. The Commission finds it appropriate for the purpose of ensuring protection of surface waters to add language that specifies that such inspections be made within the six-month period prior to the first application of manure or process wastewater in any given year. In addition, such equipment shall be inspected at least once daily when applying process wastewater.

Recordkeeping: The regulation presently being adopted includes language for recordkeeping that is from the revised Federal regulations [40 CFR 122.42(e)(2) and 40 CFR 412.37]. Regarding weather conditions, the Commission believes that it is potential runoff as the result of precipitation before and after land application that is a concern relative to water quality. Therefore, recording of precipitation (whether it be no precipitation or some measurable amount) is appropriate for indicating weather conditions.

Transfer of manure to third parties: The regulation presently being adopted includes language for where manure or process wastewater is transferred to third parties that is verbatim from the revised Federal regulations [40 CFR 122.42(e)(3)].

Annual reporting: The regulation presently being adopted includes language for annual reporting that is from the revised Federal regulations [40 CFR 122.42(e)(4)].

Operation and maintenance requirements: The Commission found it appropriate to specify certain operation and maintenance requirements that CAFOs are subject to, and that emphasize the requirement for protecting surface waters.

Production area best management practices: The regulation presently being adopted includes best management practices (BMPs) for production areas that must be established and maintained by Large Dairy, Beef Cattle, Swine, Poultry, and Veal Calf CAFOs. The language is equivalent to the revised Federal regulations [40 CFR 412.37], except for addition of language requiring depth markers to also indicate the two-foot freeboard elevation, or other approved freeboard elevation.

One of the BMPs requires that deficiencies found as the result of visual inspections be corrected as soon as possible. 40 CFR 412.37(b)(3) specifies that records must be kept documenting that, where deficiencies were not corrected within 30 days, an explanation must be provided of the factors that prevented immediate action. Therefore, the Commission finds it appropriate to amend the Federal language by stating that corrective action shall be taken by no later than 30 days of a deficiency having been identified, unless factors preventing correction within 30 days have been documented.

One of the BMPs requires visual inspections of water lines. The Commission would expect that such inspections be primarily of water lines that have potential to add process wastewater to any impoundment or that, if leaking, would result in a discharge to surface water. The Commission also would expect that the Division use common sense and sound judgment in determining what is or is not a leak.

One of the BMPs requires visual inspections of impoundments. The Commission finds it appropriate to clarify the scope of such inspections by including the following language from page 7216 of the preamble of the revised Federal regulations. Impoundments must be inspected weekly to ensure structural integrity. For surface and liquid impoundments, the berms must be inspected for leaking, seepage, wind or water erosion, excessive vegetation, unusually low or high liquid levels, reduced freeboard, depth of the manure and process wastewater in the impoundment as indicated by the depth marker, and other signs of structural weakness.

Federal language regarding depth markers was revised to specify that such markers are required only in open surface impoundments, and to specify that the markers must be marked in maximum depth increments of one foot, and that each marker must show the required two-foot freeboard elevation, or other approved freeboard elevation. The Commission is aware that process wastewater is captured, diverted, and retained through the use of a series of impoundments (e.g., a cascading series). Where such a system exists, the Commission finds it reasonable to require depth markers only for those impoundments in the series that are necessary to hold process wastewater resulting from the required storm event.

Closure requirements: The revised Federal regulation specifies in 40 CFR 122.23(h) that a permitted CAFO need not continue to seek permit coverage if the permittee has demonstrated to the satisfaction of the permitting authority that there is no remaining potential for a discharge of manure or process wastewater that was generated while the operation was a CAFO. The regulation presently being adopted includes this language. The Commission is aware that this closure standard can be met in various ways. For example, closure standards for animal feeding operations have been published by the United States Department of Agriculture – Natural Resources Conservation Service. In addition, livestock pens should be cleaned and scraped of manure, where applicable. As a result, the Commission adopted the Federal language and encourages the Division to use common sense in determining whether no remaining potential exists for a discharge of pollutants.

The Commission clarifies that a CAFO is closed where it has ceased operation and for which a permit is not in effect. It also clarifies that is not the intent of this regulation to define a CAFO as closed where it has ceased operation but intends to sell the facility within a reasonable amount of time, or where the facility will restock animals within two years, or within some other reasonable period of time.

PARTIES TO THE RULEMAKING HEARING

1. Colorado Livestock Association, the Livestock Government Affairs Project, the Colorado Cattleman's Association, Dairy Farmers of America, the Colorado Farm Bureau, the Colorado Corn Growers Association and the Colorado Horse Council (Colorado Livestock Association, et al.)
2. R. Dean Jarrett, Jr. and/or M Sue Jarrett
3. AGPROfessionals, LLC
4. City of Grand Junction, Department of Public Works and Utilities
5. Seaboard Farms, Inc.
6. Heritage & Mountain Prairie
7. Brink, Inc.
8. Colorado Pork Producers Councils
9. Manuello's Inc.
10. Veeman Dairy
11. ContiBeef, LLC.

61.55 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE - MARCH 2005 RULEMAKING HEARING

The provisions of sections 25-8-202(1)(d), (1)(I) and 25-8-501 to -504, C.R.S., provide the specific statutory authority for adoption of the revisions to Regulation 61. The Commission also adopted, in compliance with sections 25-4-103(4) and 25-8-202(8)(a), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

A. SUMMARY

In this proceeding, the Commission considered proposed revisions to delay until June 12, 2006 the current March 10, 2005 deadline for the submission of applications for stormwater discharge permits for

small oil and gas construction activities. The Commission decided to extend the deadline until June 30, 2005.

B. ADOPTION OF REQUIREMENTS MORE STRINGENT THAN FEDERAL

On March 10, 2003, the United States Environmental Protection Agency (EPA) finalized a rule postponing until March 10, 2005 the deadline for obtaining NPDES stormwater permits for oil and gas construction activity that disturbs at least one acre, but less than five acres of land. The Commission revised the Colorado Discharge Permit System Regulations, Regulation #61 (5 CCR 1002-61), to add section 61.4(3)(a)(xv), establishing a new Colorado deadline that reflected the then new federal deadline.

EPA postponed the federal rule permitting deadline in order to further evaluate (1) the significantly-higher-than-expected numbers of small oil and gas construction sites that will be affected by the rule, (2) the appropriate Best Management Practices (BMPs) for small oil and gas construction sites, and (3) the potential costs of implementing the BMPs for small oil and gas construction sites. On January 18, 2005, EPA issued a proposal to further delay until June 12, 2006 construction permit requirements for oil and gas activities that disturb between one and five acres of land. EPA proposed the delay because it has not completed its evaluation. On March 9, 2005, EPA finalized its proposed rule and delayed until June 12, 2006 its deadline for obtaining stormwater discharge permits for oil and gas activities that disturb between one and five acres of land. 70 Fed. Reg. 11560 (March 9, 2005).

Section 25-8-202(8)(a) of the Colorado Water Quality Control Act allows the Commission to adopt rules more stringent than corresponding enforceable federal requirements only if it is demonstrated at a public hearing, and the Commission finds, based on sound scientific or technical evidence in the record, that the more stringent state rule is necessary to protect the public health, beneficial use of water or the environment of the state.

The federal rule and the proposed state rule address precisely the same requirements for small oil and gas construction activities. The proposed state rule thus is directly related to a corresponding federal requirement for the purposes of section 25-8-202(8)(a). The Commission postponed the deadline for applications for these permits from March 10, 2005 to June 30, 2005. The permit applications will be due under state law approximately one year earlier than under federal law. Because the applications will be due when permit coverage otherwise would not be required under federal law, the rule adopted is more stringent than the corresponding federal requirement for the purposes of section 25-8-202(8)(a).

The Commission makes the following findings and conclusions regarding the requirements of section 25-8-202(8)(a). In making its determination, the Commission relied upon the entire record before it, but took specific note of the following evidence.

- Evidence produced by Gunnison County demonstrated that, if not properly managed, discharges from construction activity can impact the biological, chemical and physical integrity of receiving waters. This evidence includes EPA's analysis of water quality impacts from small construction sites in general (FR Vol. 64, No. 235, 68724-68731) and evidence of potential water quality impacts from specific oil and gas construction sites in Colorado. Sediment yields from smaller construction sites are as high or higher than the 20 to 150 tons/acre/year measured from larger sites. Siltation is clearly a significant cause of impairment in water quality in rivers and lakes. EPA, Report to Congress on the Phase II Storm Water Regulations, EPA 833-R-99-001, October, 1999, pp. 1-4. The Commission regards sediment deposition as a significant problem affecting water quality in the state.

- At the 2004 rate of permit issuance by the Colorado Oil and Gas Conservation Commission, a fifteen-month delay in stormwater permit requirements could result in substantial additional acreage disturbed by oil and gas construction activities that would not be covered by CDPS permits for stormwater discharges. That delay could have a significant impact on water quality

that implementation of the stormwater permit program, along with appropriate planning and BMPs, could mitigate.

- Finally, Division staff stated that there are no significant differences in oil and gas construction sites versus other types of construction sites that would affect the potential sediment yield from such disturbed areas. Although the oil and gas industry has asked EPA to consider the short time frame for actual construction at most oil and gas sites, this does not take into account the time it can take (up to several years) for revegetation of disturbed areas in Colorado. In addition, no evidence was presented that the potential impacts on public health, beneficial use of water or the environment from oil and gas construction activities are significantly different from other small construction sites so as to warrant special consideration. Other small construction sites are already subject to the application deadline in the Commission's Regulation 61 to avoid adverse water quality impacts. EPA's postponement of the permitting deadline for oil and gas construction activity disturbing one to five acres, from March 10, 2005, to June 12, 2006 (70 Fed. Reg. 45, March 9, 2005) was not based on any concern that these sites pose any less threat to health, beneficial uses, or the environment than other small construction sites. The postponement was, instead, implemented in order to allow EPA to further evaluate (1) the economic impacts of the rule; (2) the legal and procedural implications associated with several options that the Agency is considering with regard to regulation of stormwater discharges from oil and gas-related construction sites; and (3) best management practices available to control stormwater discharges from these activities.

The Commission concluded that the record for this rulemaking provides sound scientific or technical evidence that establishing a deadline for stormwater discharge permit applications for oil and gas construction activities disturbing between one and five acres earlier than that established by EPA is necessary to protect the public health, beneficial use of water or the environment of the state.

C. ECONOMIC REASONABLENESS

Section 25-8-102(5) and 25-8-202(2), C.R.S., direct the Commission to consider the economic reasonableness of a regulatory action. In addition to its findings related to section 25-8-202(8)(a), the Commission concluded, based on the record of this proceeding, that implementing the permit program for small oil and gas construction sites without further delay is economically reasonable.

A representative of the oil and gas industry testified that oil and gas construction activities are already subject to requirements that result in implementation of controls that should avoid adverse stormwater impacts. To the extent that this is correct, there should be no substantial additional cost of control measures for meeting stormwater discharge permit requirements.

The testimony at the hearing also indicated that adequate information is now available about appropriate best management practices for small oil and gas construction activities. Division staff testified that the BMPs applicable to these sites do not differ substantially from BMPs for other construction activities.

The industry representative testified that the principal concern for oil and gas operators was the permitting burden associated with the stormwater program. Staff members of the Water Quality Control Division testified that dischargers are required to complete a two-page application, and that the Division's normal turnaround time for reviewing applications is ten days. There is no annual reporting requirement. Frequent inspections of the construction activity for compliance with the stormwater management plan are required only during active construction. Inspection frequency is reduced to once monthly after construction is completed. In order to make any costs for permitting more reasonable, the Division commonly allows stormwater discharge permit applicants to request permits for all facilities in a gas field rather than for each site independently.

No evidence was submitted quantifying unreasonable transaction costs of stormwater permitting in Colorado for this industry. Evidence was submitted by the Colorado Oil and Gas Association providing an

estimate of national costs of compliance with stormwater regulations. However, no analysis of these costs was provided regarding the permitting costs specific to Colorado oil and gas operators. For example, the oil and gas industry representative stated that additional costs would be incurred due to requirements for consultation under the federal Endangered Species Act (ESA). However, those additional costs would not in fact be incurred because ESA consultation requirements do not apply to the issuance of a state stormwater discharge permit.

Evidence submitted by Gunnison County reflected a low stormwater permitting cost for industry compared to the other costs of oil and gas development and compared to the water quality benefits of prompt implementation of the permitting program.

Finally, the industry representative testified that rules promulgated by the Colorado Oil and Gas Conservation Commission (COGCC) intended to prevent erosion from these construction activities provide sufficient protection for water quality. The Commission concluded that those rules do not provide an equivalent level of protection to the stormwater permit program. Specifically, the Commission believes that the applicable COGCC rules do not necessarily address all water quality effects of these construction activities. In addition, the Commission strongly believes that the discharge permit program established under the Colorado Water Quality Control Act provides more effective protection of water quality in the state.

D. COLORADO APPLICATION DEADLINE

Although the Commission concluded that prompt implementation of the stormwater program for oil and gas construction activities is appropriate, the Commission also believes that it is appropriate to provide a reasonable time for affected parties to prepare and submit applications for stormwater discharge permits. Therefore, the Commission extended the application deadline until June 30, 2005. Because this new deadline will not become effective under state law until May 30, 2005, the Commission intends that the Division will exercise its enforcement discretion with respect to the period between the March 10, 2005 application deadline and the effective date of the June 30, 2005 deadline.

PARTIES TO THE RULEMAKING HEARING

1. The Board of County Commissioners of the County of Gunnison, Colorado
2. West Slope Water Network

61.56 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE – JUNE 2005 RULEMAKING HEARING – TEMPORARY MODIFICATIONS, EFFECTIVE DECEMBER 31, 2005

The provisions of 25-8-202(1)(d) and (2), 25-8-401, 25-8-501.2 and 25-8-504, C.R.S., provide the specific statutory authority for the amendments to the regulation adopted by the Commission. The Commission has also adopted, in compliance with 24-4-103(4) C.R.S., the following statement of basis and purpose

BASIS AND PURPOSE

The Commission revised subsection 61.8(1)(e) to provide a consistent approach with Regulation 31 with respect to the requirements for compliance schedules in permits that discharge to waters where a temporary modification has been adopted.

The Commission also revised subsection 61.8(2)(c)(iii) to provide consistency between the provisions of section 31.14 of Regulation No. 31 and the CDPS regulations. Modifications were made to eliminate an inconsistent approach to setting effluent limits in permits for discharges to impaired waters within subsection 61.8(2)(c)(iii). The Commission also added a provision, parallel to that in subsection 31.7(14)(15), which requires the Division to reopen discharge permits within a reasonable time to incorporate wasteload allocations from EPA-approved TMDLs. In this regard, permits should normally be

reopened within six to nine months of the adoption of the underlying standard. However, the Commission intends that the Division have flexibility in its interpretation of this provision so that situations, such as where a permit will expire in twelve months, can be taken into account.

In modifying section 61.8(2)(c)(iii) the Commission removed language that referred to nonpoint source loading. Removing this language does not signal a change in policy. The Commission intends that the Division continue with its practice to never require point sources to reduce the concentration of their effluent below the level of the underlying standard, unless it is in the context of an antidegradation-based limit. Point sources are not to be asked to make up for contributions by nonpoint sources by removing additional load.

PARTIES TO THE RULEMAKING HEARING

1. Town of Paonia
2. Town of Collbran
3. Colorado Water Congress Special Project on Basic Water Quality Standards
4. The Supervisory Committee of the Littleton/Englewood Wastewater
5. The City of Colorado Springs and Colorado Springs Utilities
6. Trout Unlimited
7. The City of Pueblo
8. Chatfield Watershed Authority
9. Bear Creek Watershed Association
10. City of Boulder
11. Town of Hotchkiss
12. Town of Olathe
13. Colorado Wastewater Utility Council
14. Upper Gunnison River Water Conservancy District
15. Colorado River Water Conservation District
16. Atlantic Richfield Company
17. The City of Westminster
18. The Board of Water Works of Pueblo, Colorado
20. Western Slope Water Network
21. High Country Citizens' Alliance
22. The City of Grand Junction
23. City of Black Hawk
24. Colorado Rock Products Association
25. Parker Water and Sanitation
26. Sky Ranch Metropolitan District No. 2
27. Eastern Adams County Metropolitan District
28. City of Loveland
29. The Board of County Commissioners of the County of Gunnison, Colorado
30. City and County of Denver acting by and through its Board of Water Commissioners
31. Gunnison County Stockgrowers Association, Inc.
32. Colorado Division of Wildlife
33. Pioneer Natural Resources USA Inc.
34. The Northern Colorado Water Conservancy District
35. Metro Wastewater Reclamation District
36. Tri-State Generation and Transmission
38. City and County of Denver
39. The Southwestern Water Conservation District
40. The South Adams County Water and Sanitation District
41. North Front Range Water Quality Planning Association
42. Shell Frontier Oil & Gas Inc
44. The Farmer's Reservoir and Irrigation Company
45. Hot Springs Lodge and Pool
46. U.S. Environmental Protection Agency Region VIII

47. The Denver Regional Council of Governments
48. The Northwest Colorado Council of Governments

61.57 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE (Hearing August, 2005, Adopted October 11, 2005, Effective date of November 30, 2005)

The provisions of 25-8-202(1)(d) and (1)(i) and (2); and 25-8-501 to 504 C.R.S. (1989 Repl. Vol. 11A and 1992 Supp.) provide the specific statutory authority for this amendment to the Colorado Regulations for State Discharge Permit System, adopted by the Commission. The Commission has also adopted, in compliance with 24-4-103(4) C.R.S. (1988 Repl. Vol. 10A and 1992 Supp.), the following statement of Basis and Purpose.

BASIS AND PURPOSE

The Commission modified section 61.14(1)(a) to add a new subsection (v) that exempts land application of reclaimed water from the requirement to obtain a CPDS discharge permit provided that the activity is covered by a Notice of Authorization issued pursuant to Regulation 84.6. This change was made to provide an option for entities using reclaimed water for landscape irrigation to avoid having to obtain a discharge permit under Regulations 61 and obtain a Notice of Authorization under Regulation 84 for the same activity. The addition to section 61.14(1)(a) and the associated changes to Regulation 84 at section 84.6(A)(3) and the addition of section 84.6(A)(9) are intended to eliminate any overlapping requirements. The Commission found this change to be appropriate given the substantial existing and newly added water quality protection provisions in Regulation 84 that will ensure that impacts to ground water from this activity will be minimal.

The Commission modified § 61.14(1)(b) to add a new subsection (ix) that exempts an on-site landscape irrigation system located on a domestic wastewater treatment plant site using treated effluent applied at an agronomic rate from coverage under the ground water discharge regulations. This addition was made to clarify that the historic practice of irrigating landscaping with treated effluent at a domestic wastewater treatment plant site does not need a ground water discharge permit. The Commission found this exemption to be appropriate because the irrigated areas are relatively small and irrigation at agronomic rates will ensure that there is no adverse impact to the environment.

PARTIES TO THE RULEMAKING HEARING

1. RMWEA/RMSAWWA Water Reuse Joint Committee
2. Platte River Power Authority
3. Plum Creek Wastewater Authority
4. Dominion Water & Sanitation District
5. Eastern Adams County Metropolitan District
6. The City of Aurora
7. Xcel Energy

61.58 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE – STORMWATER - JANUARY 2006 RULEMAKING HEARING; FINAL ACTION FEBRUARY 13, 2006; REVISIONS EFFECTIVE MARCH 30, 2006

The provisions of sections 25-8-202(1)(d), (2) and (8); 25-8-302; 25-8-401 and 25-8-501, C.R.S., provide the specific statutory authority for adoption of these revisions to Regulation 61. The Commission also adopted, in compliance with sections 25-4-103(4) and 25-8-202(8)(a), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

A. SUMMARY

In this proceeding, the Commission considered whether, in view of the provisions of the federal Energy Policy Act of 2005 (the Energy Bill), any revisions should be adopted to current Colorado requirements regarding stormwater discharge permits for oil and gas construction activities. The Commission decided to:

- Leave unchanged the current stormwater discharge permit requirements for oil and gas construction activities;

- Modify section 61.3(2)(c), which concerns applicability, to clarify that "the term 'oil and gas exploration, production, processing or treatment operations or transmission facilities' does not include construction activities associated with such operations or facilities." This will make plain the Commission's intent that the oil and gas exemption under section 61.4(3)(b)(i)(C) is not meant to apply to construction related to oil and gas operations; and

- Modify section 61.3.(2)(e)(ii)(A) for consistency.

The Commission directs the Division to collaborate with the Colorado Oil and Gas Conservation Commission (COGCC) on improving the regulation of oil and gas construction sites and minimizing their impacts on waters of the state, and to involve other stakeholders to the extent practicable.

The Commission plans to hold an informational hearing in early 2007, to review the status of these efforts and to assess whether any further actions by the Commission are appropriate to protect water quality.

B. AUTHORITY AND NEED TO REGULATE

Some representatives of the oil and gas industry have argued that the Energy Bill preempts Colorado's ability to regulate stormwater discharges from oil and gas construction activities. Based on advice from the Attorney General's Office and the analysis of other parties to this proceeding, the Commission disagrees. Although Congress has eliminated most federal regulation of stormwater discharges from oil and gas construction activities, Congress has not stated that such activities cannot be regulated by state governments.

The Colorado Discharge Permit System Regulations' stormwater discharge permit provisions have applied to oil and gas construction activities disturbing five or more acres since October 1, 1992. These regulations have applied to all oil and gas construction activities disturbing one or more acres since March 2, 2001. As adopted at that time, the regulations required activities disturbing one or more but less than five acres to apply for a discharge permit by July 1, 2002. That application deadline was later changed to March 10, 2005, and subsequently to June 30, 2005.

Section 25-8-202(8)(a) of the Colorado Water Quality Control Act allows the Commission to adopt rules more stringent than corresponding enforceable federal requirements only if it is demonstrated at a public hearing, and the Commission finds, based on sound scientific or technical evidence in the record, that the more stringent state rule is necessary to protect the public health, beneficial use of water or the environment of the state. The 2005 federal Energy Bill conditionally exempts most oil and gas construction activities from the EPA stormwater discharge permit program under the federal Clean Water Act. Accordingly, the federal NPDES stormwater requirements for such activities are limited to those oil and gas construction sites that have had a discharge of a certain level of pollutants (a "reportable quantity"), or have contributed to a violation of a water quality standard. This is less strict than the Division's regulation, in that a narrower category of sites is covered.

The Commission makes the following findings and conclusions regarding the requirements of section 25-8-202(8)(a). In making its determination, the Commission relies upon the entire record before it, but takes specific note of the following evidence.

• If not properly managed, discharges from construction activity can impact the biological, chemical and physical integrity of receiving waters. Evidence for this includes EPA's analysis of water quality impacts from large construction sites (FR Vol. 55, No. 222, Nov. 16, 1990, pp. 48033-48036) and small construction sites (FR Vol. 64, No. 235, Dec. 8, 1999, pp. 68724-68731), as well as EPA's Report to Congress on the Phase II Storm Water Regulations (EPA 833-R-99-001, October, 1999, pp. 1-4).

o The runoff generated while construction activities are occurring has potential for serious water quality impacts and reflects an activity that is industrial in nature. Where construction activities are intensive, the localized impacts of water quality may be severe because of high unit loads of pollutants, primarily sediments. Construction sites can also generate other pollutants such as phosphorus, nitrogen and nutrients from fertilizers, pesticides, petroleum products, construction chemicals, and solid wastes. FR Vol. 55, No. 222, Nov. 16, 1990, pp. 48033.

o Sediment yields from smaller construction sites are as high or higher than the 20 to 150 tons/acre/year measured from larger sites. Siltation is clearly a significant cause of impairment in water quality in rivers and lakes. EPA, Report to Congress on the Phase II Storm Water Regulations, EPA 833-R-99-001, October, 1999, pp. 1-4.

• Evidence was provided by Division staff and parties to the hearing regarding potential water quality impacts from specific oil and gas construction sites in Colorado. The Commission regards sediment deposition as a significant problem affecting water quality in the state.

• In 2004, the COGCC permitted 2,917 oil and gas wells. As of December 28, 4,290 well permits have been issued in 2005. Development of such wells usually includes road and pipeline construction as well. At this rate of development, oil and gas construction activities in Colorado pose a substantial risk of water quality impacts if not managed appropriately.

• The evidence does not demonstrate any significant differences in oil and gas construction sites versus other types of construction sites that would reduce the potential sediment yield from such disturbed areas. Although the oil and gas industry has noted the short time frame for actual construction at most oil and gas sites, this does not take into account the time it can take (up to several years) for revegetation of disturbed areas in Colorado's semi-arid environment. In addition, the Commission found that the potential impacts on public health, beneficial use of water or the environment from oil and gas construction activities are not significantly different from other construction sites so as to warrant lesser scrutiny. Other construction sites – small and large – are subject to the stormwater discharge permit provisions of Regulation 61 to prevent adverse water quality impacts.

The Commission concluded that the record for this rulemaking provides sound scientific or technical evidence that continuing to apply stormwater discharge permit requirements for oil and gas construction activities disturbing one acre or more is necessary to protect the public health, beneficial use of water or the environment of the state.

In December 2005, the COGCC amended its Rule 1002.e. requirements to strengthen a section on Surface Disturbance Minimization by specifying that best management practices must be used to minimize erosion and offsite sedimentation by controlling stormwater runoff, and by adding examples of typical best management practices. The amendment adds specific requirements for management practices needed to prevent environmental impacts from stormwater discharges, and is a good step in the review of the COGCC's regulations and the proposal of changes where needed. Industry representatives have argued that there is no need for oil and gas construction activities to be subject to stormwater

discharge permit requirements administered by the Division because such activities are already subject to environmental protection requirements under the permitting regulations of the COGCC. However, the COGCC requirements, even with this addition, still do not constitute a full stormwater management program; i.e., there are still no equivalent requirements for preparation and implementation of a Stormwater Management Plan (SWMP) or for inspections of stormwater controls, and COGCC rules do not contain the more detailed requirements in the Division's permit that could be cited in potential compliance assurance actions.

To further clarify its intent regarding regulation of oil and gas construction activities, the Commission revised the stormwater "Applicability" section of the regulation to add a new sentence to subsection 61.3(2)(c). This sentence clarifies and reconfirms the Commission's and Division's longstanding practice and interpretation of the regulatory exclusion for "oil and gas exploration, production, processing or treatment operations or transmission facilities". As reflected by the fact that stormwater discharge permit requirements in Colorado have applied to oil and gas construction activities since 1992, this exclusion has consistently been interpreted and applied in Colorado as not covering such construction activities. In view of congressional action in the Energy Bill adopting a definition of this term that now excludes construction activities for purposes of federal stormwater discharge regulation, the Commission decided to add new language to clarify, reinforce and continue the established interpretation and application of this provision in Colorado.

On December 30, 2005, EPA signed a proposed rule for publication in the Federal Register. This proposal seeks to implement the provision of the Energy Policy Act of 2005 that exempts most stormwater discharges from oil and gas construction activities from the requirement to obtain NPDES permit coverage. If the draft EPA regulation were adopted, it would have led to a conflict in Colorado Regulation #61 between subsection 61.3(2)(e)(ii)(A), and the new language in subsection 61.3(2)(c).

Subsection 61.3(2)(e)(ii)(A) stated that the term "stormwater discharges associated with industrial activity" did not include "discharges from facilities or activities excluded from the NPDES program under 40 C.F.R. Part 122 …" The Commission has chosen to continue to regulate oil and gas construction sites of one acre or more under the Division's CDPS stormwater discharge program, while such sites are anticipated to be mostly exempt from NPDES permits under the federal regulations. Therefore, Subsection 61.3(2)(e)(ii)(A) has been changed to allow for this difference, by adding the following clause to the beginning of the second sentence of subsection 61.3(2)(e)(ii)(A): "Except for the provision of 61.3(2)(c) that addresses construction activities associated with oil and gas operations or facilities…"

Some parties argued that EPA's proposal precludes Regulation #61 from addressing these activities. However, the Commission believes that the EPA proposal is consistent with the revisions adopted here, and indeed confirms that Congress did not intend to preempt States from regulating such activities.

C. <u>REGULATED CONSTRUCTION ACTIVITIES</u>

For oil and gas construction activities disturbing five or more acres ("large" construction sites), the Commission left in place the stormwater discharge permit requirements that have been in effect since 1992. Therefore, activities in this category will not be subject to any new or different requirements, but will continue to be subject to the same requirements that have been applicable for the last thirteen years. For oil and gas construction activities disturbing at least one but less than five acres ("small" construction sties), the Commission left in place the stormwater discharge permit requirements that have been in effect since June 30, 2005.

Currently, there are approximately 192 active certifications of coverage under the Division's general permit for oil and gas construction activities disturbing one or more acres. Because many of these certifications apply to multiple contiguous well sites within a well field, this represents hundreds or possibly several thousand individual well pads.

In calculating the number of acres of land disturbed to determine the applicability of stormwater discharge permit requirements, section 61.3(2)(e)(iii)(J) of the Colorado Discharge Permit System Regulations

provides that all "clearing, grading and excavation" associated with the activity is included. For an oil and gas construction activity, this includes not only the drill pad but also any production facility, any roads constructed to provide access to the pad area, and any pipelines constructed for transmission of product for transport, storage or processing. This subsection of the regulation also provides that all disturbed land area "that is part of a larger common plan of development or sale" will be included in the acreage calculation. For the oil and gas industry, a "common plan of development" generally is interpreted to mean development of several well pads and/or related infrastructure (i.e., roads, pipelines, pumping stations, etc.) in a contiguous area either during the same time period or under a consistent plan for long-term development. "Contiguous" is interpreted to mean sites up to ¼ mile apart and/or having the area between the sites disturbed (i.e., connected by a road or pipeline). Multiple well pads developed by the same company within a single well field will often fall under this provision.

Taking these considerations into account, the Commission anticipates that many oil and gas construction activities will exceed the five-acre threshold, and most will exceed the one-acre threshold. The differentiation in the Division's requirements between small and large construction sites is primarily important only when considering the applicability of the Division's erosivity waiver. This waiver is generally for sites that will be completed and stabilized in a few months and during dry times of the year. It is anticipated that the waiver may be used mostly for small construction projects in agricultural areas on the eastern plains, as the criteria for final stabilization are less strict for projects on land that will be returned to agricultural use (e.g., cropland).

The Commission determined that the continuation of existing stormwater discharge permit requirements for oil and gas construction activities is necessary and appropriate considering:

- The potential water quality impacts from such construction activities, as noted above;

- The large number of oil and gas construction activities currently in place in Colorado;

- The large number of additional oil and gas construction activities expected to occur in Colorado in the future; and

- The extremely limited federal regulation of the potential water quality impacts from stormwater runoff at such activities, as a result of the 2005 federal Energy Bill.

D. <u>ECONOMIC REASONABLENESS</u>

Sections 25-8-102(5) and 25-8-202(2), C.R.S., direct the Commission to consider the economic reasonableness of a regulatory action. In addition to its findings related to section 25-8-202(8)(a), the Commission concluded, based on the record of this proceeding, that continuing to apply Colorado stormwater discharge permit requirements to oil and gas construction activities that disturb one or more acres is economically reasonable.

For oil and gas construction activities disturbing five acres or more, the result of this proceeding is to continue the stormwater discharge permit program requirements that have been in place for over 13 years. The Commission found that compliance with these requirements has not created an unreasonable economic burden on the oil and gas industry or significantly harmed the productivity of that industry. This proceeding does not create any new or additional economic burden for this category of activities.

For oil and gas construction activities disturbing one or more but less than five acres, the result of this rulemaking is to reaffirm their coverage under the stormwater discharge permit program. The final effective date for this coverage was June 30, 2005. The evidence submitted does not demonstrate that the economic impact of compliance for one to five acre sites will be different in nature or magnitude than that for five acre and larger sites. This requirement does not create a significant new economic burden.

In addition, the Commission notes that adequate information is now available about appropriate best management practices (BMPs) for managing stormwater runoff from oil and gas construction activities. The evidence submitted indicates that the BMPs applicable to these sites do not differ substantially from BMPs for other construction activities.

E. NEXT STEPS FOLLOWING THIS RULEMAKING

The Commission intends to schedule a public Informational Hearing for early 2007, to review the status of implementation of these provisions for oil and gas construction activities disturbing one or more acres, to assess whether any further actions by the Commission are appropriate to protect water quality.

The Division has stated that it intends to initiate a joint effort with the COGCC, inviting participation from industry, local government and the public, to:

- Examine current stormwater management practices for oil and gas construction activities in Colorado; and

- Explore options to assure that implementation of the Commission's stormwater permitting requirements and the COGCC regulations will be coordinated in a manner to avoid adverse water quality impacts from these activities while minimizing the administrative burden on these agencies and the regulated community.

The Commission supports and encourages this effort. The Commission also specifically requests that the Division's efforts include exploration of options for waivers or other forms of flexibility for activities that present a low risk of adverse water quality impacts. The information gathered should be extremely beneficial in informing future Commission decisions about appropriate stormwater discharge permit regulations for these activities. As part of this effort, the Commission specifically encourages examination of opportunities for coordination between this regulation and the COGCC regulations regarding erosion control and stormwater runoff.

PARTIES TO THE RULEMAKING HEARING

1. Colorado Oil and Gas Association
2. City of Grand Junction
3. County of Gunnison
4. County of San Miguel
5. Colorado River Water Conservation District
6. West Slope Water Network
7. Northwest Colorado Council of Governments
8. Noble Energy
9. Colorado Petroleum Association
10. Bureau of Reclamation Western Colorado Area
11. Northern Colorado Water Conservancy District
12. Boulder County
13. Shell Frontier Oil and Gas
14. Cordilleran Compliance Services Inc.
15. Garfield County

61.59 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: OCTOBER 10, 2006 RULEMAKING HEARING EFFECTIVE DATE OF NOVEMBER 30, 2006– CONCENTRATED ANIMAL FEEDING OPERATIONS REGULATIONS

The provisions of sections 25-8-202(1)(d) and (2) and 25-8-501 to 25-8-504, C.R.S., provide the specific statutory authority for the amendments to this regulation adopted by the Water Quality Control

Commission (Commission). The Commission has also adopted, in compliance with section 24-4-103(4) C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

A. APPLICABILITY

The provisions in Commission Regulation No. 61, 5 CCR 1002-61 (Regulation 61) section 61.17 apply to permits for concentrated animal feeding operations (CAFOs).

B. PURPOSE OF AMENDING THE STATE PROGRAM

In February of 2003, the U.S. Environmental Protection Agency (EPA) promulgated regulations for CAFOs which expanded the number of operations covered by the CAFO regulations and included requirements to address the land application of manure from operations. The 2003 CAFO rule (CAFO Rule) more fully developed a framework for state National Pollutant Discharge Elimination System (NPDES) CAFO programs, including a duty for most CAFOs to apply for a NPDES permit and to develop and implement a nutrient management plan (NMP).

On February 28, 2005, the Second Circuit Court of Appeals in Waterkeeper Alliance et al., v. EPA, 399 F. 3d 486 (2nd Cir. 2005) (Waterkeeper), vacated the requirement for CAFOs to apply for a NPDES permit or otherwise demonstrate no potential to discharge, as well as remanded portions of the CAFO Rule back to EPA for further revision and clarification. EPA has not yet revised the CAFO Rule in response to the Waterkeeper decision, with the exception of minor modifications to certain compliance deadlines.

On February 10, 2006, EPA finalized a rule change revising certain compliance dates to allow the EPA more time to revise the CAFO Rule to comply with the Second Circuit Court's ruling in Waterkeeper. The February 10, 2006 final rule: 1) extends the date by which operations defined as CAFOs as of April 14, 2003, who were not defined as CAFOs prior to that date, must seek permit coverage from February 13, 2006 to July 31, 2007; 2) extends the deadline for operations which became defined as CAFOs after April 14, 2003, and that are not new sources, to seek permit coverage from April 13, 2006 to July 31, 2007; and 3) extends the deadline by which permitted CAFOs are required to develop and implement NMPs from December 31, 2006 until July 31, 2007.

Section 25-8-504(2), C.R.S., of the Colorado Water Quality Control Act (WQCA) and Commission Regulation 61.3(1)(c), prohibit the Commission and Division from imposing permit terms for animal or agricultural waste on farms and ranches which are more restrictive than those mandated by the federal Clean Water Act (CWA). The Commission's existing Regulation section 61.17 may currently be more stringent than federal law as it presently includes the following: 1) the duty for a CAFO to apply for a NPDES permit absent a showing of actual discharge, which the Court in Waterkeeper vacated; 2) different compliance deadlines than the EPA's February 10, 2006 rule, and 3) certain permit terms and conditions that differ from Waterkeeper or the EPA's February 10, 2006 rule.

The current CAFO general permit is based on the CAFO Rule and may contain permit terms and conditions that are more stringent than federal law. As a result, the Division is not able to issue any certifications under the general permit until the regulation and general permit are revised to reflect the current federal law.

To this end, the Commission removed in section 61.17, corresponding portions of the CAFO Rule vacated by the Second Circuit Court in Waterkeeper, including the duty for a CAFO to apply for a NPDES permit and the requirement that CAFOs demonstrate no potential to discharge. In addition, the Commission revised certain compliance deadlines according to EPA's February 10, 2006 rule that will be reflected in the Colorado Discharge Permit System general permit for CAFOs.

C. DISCUSSION OF AMENDED SECTIONS

Scope and Purpose
The Commission modified section 61.17(1)(a) to make clear that section 61.17 also contains the revised compliance dates for NMPs and newly defined CAFOs as reflected in EPA's February 10, 2006 rule.

Specific Applicability
The Commission added section 61.17(2)(b) to clarify that any discharge from a CAFO requires a permit except those that are agricultural storm water discharges.

Duty to Apply
The Commission deleted section 61.17(5)(a) as the "duty to apply" for a CAFO permit was one of the portions of the CAFO Rule vacated by the Court in Waterkeeper.

Permit Application Deadlines

The permit application deadlines in this section were revised to be applicable only to CAFOs that discharge.

Sections 61.17(5)(b)(ii)(B) and (C) [now section 61.17(5)(a)(ii)(B) and (C)] were revised to reflect a permit application deadline of July 31, 2007, for newly defined CAFOs.

Section 61.17(5)(c) [now section 61.17(5)(b)] was modified by: 1) deleting sections 61.17(5)(c)(i) and (ii) since it is now up to each CAFO to determine if they wish to continue permit coverage with the understanding that a permit is required to discharge; and 2) revising the section to state that a CAFO that plans to continue with permit coverage should submit a new permit application at least 180 days before the existing permit expires.

Permit Application Requirements

The Commission deleted section 61.17(5)(d)(xv) [now section 61.17(5)(c)(xv)] as the majority of CAFOs will be authorized under a general permit to discharge to any waters of the U.S. without associated water quality-based effluent limitations for receiving waters. For CAFOs not eligible for coverage under a general permit, the Division will work with the applicant to identify the specific receiving waters for which effluent limitations will need to be identified for inclusion in an individual permit.

No Potential to Discharge

The Commission deleted sections 61.17(5)(b)(v) and 61.17(8)(a) as the "no potential to discharge" determination was one of the portions of the CAFO Rule vacated by the Waterkeeper decision.

NMP Development and Implementation Deadline

The Commission modified sections 61.17(5)(d)(xiv) [now section 61.17(5)(c)(xiv)] and 61.17(6)(a)(iii)(B) to reflect a deadline of July 31, 2007, which is the revised date by which CAFOs are required to develop and implement NMPs. In addition, the Commission modified section 61.17(8)(c) [now section 61.17(8)(b)] to reflect that the deadline for NMP development and implementation for existing source CAFOs is July 31, 2007 or upon the date of permit coverage, whichever is later, and to clarify that new source CAFOs must develop and implement a NMP upon the date of permit coverage. The specific language "or upon date of permit coverage, whichever is later" was added by the Commission to address a deadline "gap" the Commission believes existed in the February 10, 2006 rule for CAFOs that seek to obtain coverage under a permit prior to July 31, 2007, but are not certified under a permit by that date.

Administrative Revisions

The Commission modified sections 61.17(5)(b)(ii)(A) [now section 61.17(5)(a)(ii)(A)] and 61.17(5)(d)(vi) [now section 61.17(5)(c)(vi)] to make the existing language consistent with the CAFO Rule. Regarding

the request in the application for the number of animals at the CAFO, the Commission clarifies that the number provided should be the maximum number of animals that the CAFO intends to stock at any one time, which may or may not be the maximum capacity of the facility.

The Commission modified sections 61.17(5)(b)(i) and (iv) [now sections 61.17(5)(a)(i) and (iv)] to reference the correct subsections.

The Commission modified section 61.17(5)(b)(ii) [now section 61.17(5)(a)(ii)] to clarify that June 30, 2004 is the effective date that is referred to.

The Commission modified section 61.17, as appropriate, where dates in the regulation have elapsed.

PARTIES/MAILING LIST TO THE RULEMAKING HEARING

1. The Colorado Livestock Association
2. The Colorado Farm Bureau

61.60 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: NOVEMBER 13, 2007 RULEMAKING HEARING, EFFECTIVE DATE OF DECEMBER 30, 2007 – CONCENTRATED ANIMAL FEEDING OPERATIONS REGULATIONS

The provisions of sections 25-8-202(1)(d) and (2) and 25-8-501 to 25-8-504, C.R.S., provide the specific statutory authority for the amendments to this regulation adopted by the Water Quality Control Commission (Commission). The Commission has also adopted, in compliance with section 24-4-103(4) C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

A. APPLICABILITY

The provisions in Commission Regulation No. 61, 5 CCR 1002-61 (Regulation 61) section 61.17 apply to permits for concentrated animal feeding operations (CAFOs).

B. PURPOSE OF AMENDING THE STATE PROGRAM

In response to a February 28, 2005 Second Circuit Court of Appeals decision in Waterkeeper Alliance et al., v. EPA, 399 F. 3d 486 (2nd Cir. 2005) (Waterkeeper), that vacated the requirement for CAFOs to apply for a National Pollutant Discharge Elimination System (NPDES) permit or otherwise demonstrate no potential to discharge, as well as remanding portions of the CAFO Rule back to EPA for further revision and clarification, the EPA finalized a rule change revising certain compliance dates to allow the agency sufficient time to revise the CAFO Rule to comply with this decision. The February 10, 2006 final rule: 1) extended the date by which operations defined as CAFOs as of April 14, 2003, who were not defined as CAFOs prior to that date, must seek permit coverage from February 13, 2006 to July 31, 2007; 2) extended the deadline for operations which became defined as CAFOs after April 14, 2003, and that are not new sources, to seek permit coverage from April 13, 2006 to July 31, 2007; and 3) extended the deadline by which permitted CAFOs are required to develop and implement NMPs from December 31, 2006 until July 31, 2007.

Because EPA is continuing to work on a final rule in response to the Waterkeeper decision, and did not complete the rulemaking prior to the July 31, 2007 deadline set by EPA's February 10, 2006 rule, EPA finalized a second rule change revising all of the above compliance dates from July 31, 2007 to February 27, 2009.

The Commission agrees with the staff recommendation that it is appropriate to revise the deadlines in section 61.17 of Regulation No. 61 to be consistent with the new EPA deadlines.

To this end, the Commission revised certain compliance deadlines according to EPA's July 24, 2007 rule that will be reflected in the Colorado Discharge Permit System general permit for CAFOs.

C. DISCUSSION OF AMENDED SECTIONS

Scope and Purpose
The Commission modified section 61.17(1)(a) to make clear that section 61.17 contains the revised compliance dates for NMPs and newly defined CAFOs as reflected in EPA's July 24, 2007 rule.

Permit Application Deadlines
Sections 61.17(5)(a)(ii)(B) and (C) were revised to reflect the new permit application deadline of February 27, 2009, for newly defined CAFOs.

NMP Development and Implementation Deadline
The Commission modified section 61.17(5)(c)(xiv) and 61.17(6)(a)(iii)(B) to reflect the new deadline of February 27, 2009, which is the revised date by which CAFOs are required to develop and implement NMPs. In addition, the Commission modified section 61.17(8)(b) to reflect that the deadline for NMP development and implementation for existing source CAFOs is February 27, 2009 or upon the date of permit coverage, whichever is later.

61.61 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE: MARCH 11, 2008 RULEMAKING HEARING, EFFECTIVE DATE OF APRIL 30, 2008

The provisions of section 25-8-202(1)(d) and (i) and (2); and sections 25-8-501 to -504, C.R.S. provide the specific statutory authority for this amendment to the Colorado Discharge Permit System Regulations. The Commission has also adopted, in compliance with section 24-4-103(4), C.R.S., the following Statement of Basis and Purpose.

BASIS AND PURPOSE

The proposal considered by the Commission during this rulemaking proceeding began with a dialogue between EPA Headquarters and the Water Quality Control Division (Division) regarding EPA's nation-wide "Permitting for Environmental Results" initiative, which included a review of various aspects of the delegated states' discharge permit programs. As a component of that initiative, EPA evaluated the states' legal authority for consistency with EPA's requirements. In review of Colorado's statute and regulations, EPA identified several items which it considered to not meet the requirement for NPDES program delegation because they are not consistent with or not as stringent as the respective EPA requirement. Around the same time, the Division and EPA Region 8 were involved in discussions about possible delegation of the pretreatment and biosolids programs, during which the Region identified many of the same issues that Headquarters had noted.

The Division and EPA Region 8, through subsequent discussions, reached agreement that most of the EPA (Headquarters and Region 8) issues could be resolved through changes to the permitting regulations or statements from the Attorney General's Office. There were two issues that must be addressed which will first require changes to the Water Quality Control Act before regulatory amendments may be sought. Assuming the necessary statutory changes are made, the Division has agreed to bring a proposal to the Commission later this year to address the remaining deficiencies noted by EPA.

The Division believed this was also a good opportunity to address other aspects of Regulation No. 61 that were in need of revision, so it asked staff to make suggestions and it organized an external workgroup under the auspices of the Water Quality Forum, as well, to discuss other possible revisions. A workgroup

was formed and began meeting on a monthly basis beginning in January 2007. The workgroup is comprised of representatives from industrial operations, domestic wastewater treatment facilities, local governments, and one environmental group.

The Division shared with the workgroup EPA's concerns and the Division's suggested proposals to address that set of issues. The members of the workgroup also contributed several proposals of their own, in addition to the EPA issues. The Division and the workgroup determined that regulatory changes were not necessary to address many of the proposals raised by Division staff and the workgroup. Rather, certain issues would more appropriately be addressed through permit implementation or guidance/policy documents.

The revisions adopted by the Commission as part of this rulemaking hearing generally fall into two categories: (1) revisions for consistency with the federal requirements to address EPA's delegation concerns; and (2) changes suggested by Division staff and workgroup members to streamline or clarify certain provisions, and to address issues that have arisen over the past few years in the context of permit implementation. Minor typographical and editorial revisions were also made throughout the Regulation.

Changes for Consistency with Federal Requirements

The Commission revised the following sections of the Regulation in response to EPA's concerns for consistency with the federal requirements:

- Section 61.4(1)(e) regarding application signatory requirements (revised language).

- Section 61.4(3)(a) and (b) regarding stormwater group applications (deleted language).

- Section 61.4(6) regarding permit application requirements for POTWs, specifically, whole effluent toxicity tests (replaced existing language).

  The Commission understands that a member of the workgroup was concerned that adoption of the language may have unintended consequences on how Colorado implements WET testing, specifically in regard to whether sub-lethal endpoints are required as enforceable permit limits. The Commission was also made aware that the group discussed the concern and agreed that the most appropriate place for Colorado to establish implementation protocol, such as what specific endpoints would be used as permit limits, is the Division's Biomonitoring Guidance. The Commission's intent in adopting the federal language is to parallel federal requirements in regards to permit application requirements for POTWs. The Commission is not intending to adopt new or revised water quality standards related to toxicity. Therefore, the Commission adopted the federal language essentially verbatim and will leave it to the Division, through a stakeholder process, to determine what, if any, revisions may need to be made to the Biomonitoring Guidance in the future.

- Section 61.8(1)(b) regarding prohibitions against issuing permits (added language).

- Section 61.8(3)(n) regarding deadlines for compliance schedules (revised language).

- Section 61.8(8)(b), (c), (d) and (j) regarding permit modification, suspension, revocation, and reissuance and termination (revised existing language and added language).

- Section 61.16(a) regarding Division Director's potential conflicts of interest (added language).

Changes Based upon Division and Workgroup Recommendations

The Commission revised Section 61.1(4) to allow the Division to issue permits for permit terms shorter than five years. The Division will normally issue permits for the maximum allowable term. This results in a ten year permit term for state-only permit programs (e.g., groundwater) and a five-year term for federally-delegated programs. The Commission found, however, that the Division needs flexibility in certain situations to issue permits for a shorter period. For example, a shorter term may be appropriate where a temporary modification would expire prior to a "traditional" five-year permit term. The Commission understands that in some of these situations, coordinating a permit's expiration with the expiration of the temporary modifications at-issue will aid the Division and the permittee by allowing consideration of the Commission's most recent determinations regarding the temporary modifications and underlying standards in question.

The Housed Commercial Swine Feeding Operation (HCSFO) statute, section 25-8-501.1, C.R.S., includes a definition of "agronomic rate of application" that requires the use of the fertilizer suggestions of Colorado State University Cooperative Extension. The Commission revised Section 61.2(2) to provide that the requirement to use fertilizer suggestions of the Colorado State University Cooperative Extension applies only to HCSFOs and not to other permitted activities. The Commission made this change to provide flexibility to use other scientific sources, as appropriate, in non-HCSFO permits, such as groundwater permits for land application.

The Commission revised Section 61.2 to include a definition of "practical quantitation limit" (PQL). The definition is consistent with that being used in the draft guidance document being developed by the Water Quality Forum PQL workgroup. The Division has been directed to use PQLs in permits in lieu of method detection limits (MDLs), based on previous revisions to Regulation Nos. 31 and 61.

The Commission revised the definitions of "throughput" and "treatment capacity" in Section 61.2 to clarify that the identified domestic wastewater treatment works planning and expansion requirements apply to the hydraulic loading as well as the organic loading.

The Commission revised Section 61.4(1)(b) to allow the Division to waive the requirement for the owner to sign a permit application when the discharge is short-term or intermittent. Examples of types of discharges for which this waiver may be appropriate include stormwater discharges associated with construction activity, wastewater discharges associated with minimal industrial activity, and wastewater discharges associated with construction dewatering. The Commission found that it is appropriate to provide flexibility for these types of discharges because they are typically authorized under general permits in short time frames, and because there are often complex owner/operator relationships.

The Commission clarified Section 61.8(2)(b)(ix) to allow the Division to address situations, such as temperature, where the water quality standard specifies durations other than daily average (acute) or 30-day average (chronic). Changes were also made to this section as discussed in the following paragraph.

The Commission modified section 61.8(2)(g)(ii) which requires, unless impracticable, water quality-based effluent limitations for Publicly Owned Treatment Works (POTWs) to be expressed as average weekly and average monthly limitations. The language contained in this section is consistent with the federal requirements at 40 CFR 122.45(d)(2). Other regulatory provisions including those at Section 61.8(2)(b)(ix), and in Regulation No. 31, at Sections 31.5(2) and 31.16(1), could be interpreted to be in conflict with the provision at Section 61.8(2)(g)(ii). The Commission understands that members of the workgroup requested that any necessary changes be made to Regulation Nos. 31 and 61 to allow the Division to express effluent limits for acute water quality standards as average weekly limits for POTWs, for pollutants such as ammonia and nitrate. The Commission is also aware of the Division's current practice to implement acute water quality standards for ammonia and nitrate as daily maximum effluent limits. The use of the term "unless impracticable" as used in Section 61.8(2)(g)(ii), however, provides latitude for the Division to allow alternate ways of expressing effluent limits. The Commission finds that the interpretation of "impracticable" is most appropriately made on a case-by-case basis through issuance of discharge permits. Therefore, the Commission made changes to Section 61.8(2)(b)(ix) to ensure consistency with the requirements of Section 61.8(2)(g)(ii). The Commission understands and accepts the recommendation of the Division and the workgroup that changes to Regulation No. 31 would not be

pursued as a part of this hearing, but could be considered at the next triennial review for that regulation. In the interim, the Commission directs that the provisions of Regulation No. 61 will govern for the purpose of setting effluent limits for POTWs.

The Commission modified the requirements for facility expansion at Section 61.8(7)(a) to provide, upon application by the permittee, an option for the Division to waive the requirement for planning and/or expansion of the facility where the permittee demonstrates that flows and/or loadings caused by a single event, such as an extraordinary storm or illegal dumping, are not representative of the actual loading to the facility.

Section 61.10(e) allows for new information and correction of certain mistakes to be bases for an exemption from the antibacksliding requirements for technology-based effluent limits. The Commission revised the antibacksliding provisions contained at Section 61.10(f) to allow the same approach for water quality-based effluent limits. This change is consistent with the federal requirements.

The Commission revised the language at Section 61.14(1)(a)(v) to clarify that a groundwater discharge permit is not required even if there are return flows associated with land application of reclaimed water occurring under the provisions of a Notice of Authorization issued pursuant to Regulation No. 84.

The Commission revised Section 61.14(1)(b)(vi) to clarify that a groundwater discharge permit is not required for the beneficial use of biosolids through land application, as this activity falls under the Commission's Biosolids Regulation, Regulation No. 64. The Commission also added language to clarify that a groundwater discharge permit is not required for the beneficial use of septage through land application pursuant to the federal regulations at 40 CFR 503.

The Commission revised Section 61.14(2) to add the Division of Oil and Public Safety of the Department of Labor and Employment as an implementing agency because it administers the Resource Conservation and Recovery Act's (RCRA) underground storage tank (UST) program.

The Commission revised Section 61.15(e) to provide that permit fees will not be refunded where a permit associated with non-fixed facilities or short-term or intermittent discharges is terminated. Examples of types of discharges for which this may be appropriate include stormwater discharges associated with construction activity, wastewater discharges associated with minimal industrial activity, and wastewater discharges associated with construction dewatering. The Commission finds that this is appropriate in that the fees for these activities are relatively small and, due to the significant numbers of these permits that are terminated in a year, providing refunds for termination of these permits places a significant administrative burden on the Division with little gain for the permittee. In addition, the Commission added a provision to limit the amount of any prorated fee to $75, as this represents the cost for the State to process such requests.

PARTIES TO THE RULEMAKING HEARING

1. Metro Wastewater Reclamation District
2. Colorado Wastewater Utility Council
3. City and County of Denver
4. City of Pueblo
5. City of Colorado Springs and Colorado Springs Utilities

61.62 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE: FEBRUARY 9, 2009 RULEMAKING HEARING, EFFECTIVE DATE OF MARCH 30, 2009

The provisions of section 25-8-202(1)(d) and (i) and (2); and sections 25-8-501 to -504, C.R.S. provide the specific statutory authority for this amendment to the Colorado Discharge Permit System Regulations.

The Commission has also adopted, in compliance with section 24-4-103(4), C.R.S., the following Statement of Basis and Purpose.

BASIS AND PURPOSE

The proposal adopted by the Commission during this rulemaking proceeding is the second of a two-hearing approach, to address issues that began with a dialogue between EPA Headquarters and the Water Quality Control Division (Division) regarding EPA's nation-wide "Permitting for Environmental Results" initiative, which included a review of various aspects of the delegated states' discharge permit programs. As a component of that initiative, EPA evaluated the states' legal authority for consistency with EPA's requirements. In review of Colorado's statute and regulations, EPA identified several items which it considered to not meet the requirement for NPDES program delegation because they are not consistent with or not as stringent as the respective EPA requirement. Around the same time, the Division and EPA Region 8 were involved in discussions about possible delegation of the pretreatment and biosolids programs, during which the Region identified many of the same issues that Headquarters had noted.

The Division and EPA Region 8, through subsequent discussions, reached agreement that most of the EPA (Headquarters and Region 8) issues could be resolved through changes to the permitting regulations or statements from the Attorney General's Office. There were two issues, however, which first required changes to the Water Quality Control Act before regulatory amendments could be sought. Therefore, the Commission adopted many of the necessary revisions in a March 2008 rulemaking hearing, while deferring action on the two issues that required statutory change. Because the necessary statutory changes were effective on July 1, 2008 through enactment of HB 08-1099, the Division brought a second proposal to the Commission to address the remaining deficiencies noted by EPA.

The Division believed this was also a good opportunity to address other aspects of Regulation No. 61 that were in need of revision, so it asked staff to make suggestions and it organized an external workgroup under the auspices of the Water Quality Forum, as well, to discuss other possible revisions. A workgroup was formed and began meeting on a monthly basis beginning in January 2007. The workgroup is comprised of representatives from industrial operations, domestic wastewater treatment facilities, local governments, and one environmental group.

The Division shared with the workgroup EPA's concerns and the Division's suggested proposals to address that set of issues. The members of the workgroup also contributed several proposals of their own, in addition to the EPA issues. Many issues that were raised by the Division or the workgroup were addressed though revisions adopted by the Commission in the March 2008 hearing. Other issues that were raised by the Division or the workgroup were deferred to this second rulemaking hearing to allow more time for consideration. For that subset of issues, the Division and the majority of the workgroup determined that changes to Regulation 61 were not necessary to address many of these issues. Furthermore, the workgroup agreed that certain issues are more appropriately addressed through permit implementation or guidance/policy documents. The Commission supports this approach and encourages the parties to continue to work together to try to resolve them, preferably as part of a separate permit implementation workgroup process through the Water Quality Forum.

All but one of the revisions adopted by the Commission as part of this rulemaking hearing are for consistency with the federal requirements. The remaining revision is a change suggested by Division staff to address an issue that has arisen over the past few years in the context of permit implementation.

Changes for Consistency with Federal Requirements

The Commission revised the following sections of the Regulation in response to EPA and stakeholder concerns for consistency with the federal requirements:

- Section 61.5(1)(c) regarding review of an application. EPA took issue with the former regulatory language which automatically deemed a permit application complete upon failure of the Division

to advise an applicant to the contrary. Because similar language was contained in the Colorado Water Quality Control Act, changes to the statute needed to be made in advance of this rulemaking hearing. The language adopted by the WQCC in Regulation 61 mirrors the language revised in the Act through the enactment of HB 08-1099. That language was developed during the legislative session in coordination between the Division, EPA, and external stakeholders.

- Section 61.8(1)(b) regarding prohibitions on issuing a permit. A stakeholder noticed that the state language differed from the federal language in the paragraph dealing with issuance of permits to new sources and new dischargers that will cause or contribute to the violation of water quality standards. The paragraph formerly required applicants to make certain demonstrations when discharging into segments where the Division had not performed a total maximum daily load. The consensus of the work group was to strike the word "not" from the paragraph, with the end result now being that the state language mirrors the federal.

- Section 61.9(2)(b)(iv) regarding administration of general permits. The provision automatically authorizing the approval of discharges under general permits in the absence of Division action was removed as it was determined that this provision was not consistent with the federal regulations.

- Section 61.5(3)(b) regarding notice of public meetings. The amount of advance notice required was revised from fifteen to thirty days to be consistent with federal requirements. This mirrors changes made to the Colorado Water Quality Control Act through the enactment of HB 08-1099.

Change Based upon Division Recommendation

The Commission revised Section 61.15(e) to provide an exemption from fee proration for new permits issued to non-fixed facilities or short-term or intermittent dischargers. The Commission found that fee proration is not appropriate for activities that have relatively small fees and for which the Division issues significant number of permit certifications each year, such as stormwater discharges associated with construction activity, wastewater discharges associated with minimal industrial activity, and wastewater discharges associated with construction dewatering. Providing refunds upon termination of these permits places an administrative burden on the Division that exceeds any monetary benefit that would accrue to the permittee.

PARTIES TO THE RULEMAKING HEARING

1. Metro Wastewater Reclamation District

61.63 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: AUGUST 10, 2009 RULEMAKING – HB 09-1330 IMPLEMENTING REGULATIONS, EFFECTIVE DATE OF SEPTEMBER 30, 2009

The provisions of sections 25-8-202(1)(d) and (2); 25-8-401; and 25-8-501 to 25-8-504, C.R.S., provide the specific statutory authority for the amendments to this regulation adopted by the Water Quality Control Commission (Commission). The Commission has also adopted, in compliance with section 24-4-103(4) C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

House Bill 09-1330 was passed by the Colorado General Assembly in the 2009 legislative session. Effective July 1, 2009, the legislation increases annual fees assessed by the Department of Public Health and Environment on permitted housed commercial swine feeding and concentrated animal feeding operations and adds a new administrative fee for non-permitted concentrated animal feeding operations under the Colorado Water Quality Control Act. The bill also transfers certain funds from the Water Quality Control Fund to a newly created Animal Feeding Operation Fund. In addition, the bill requires the

Department of Public Health and Environment to report annually to a joint session of the Senate Agriculture and Natural Resources Committee and the House of Representatives Agriculture, Livestock and Natural Resources Committee on or before March 31st of each year.

In this written-comment-only rulemaking hearing, the Commission adopted revisions to the Colorado Discharge Permit System Regulation #61 (5 CCR 1002-61) and to the Animal Feeding Operations Control Regulation #81 (CCR 1002-81) as needed. In particular, the specific annual fee and additional explanatory information included in sections 61.13(5)(a) and (b) of Regulation #61 were revised to generally cite the section of the Colorado Revised Statute, section 25-8-502(1)(b)(I), C.R.S., and to reference the general provisions included in section 61.15 that are applicable to Housed Commercial Swine Feeding Operations. In addition, a new section, 81.7(4), was added to Regulation #81 to clarify that non-permitted concentrated animal feeding operations are subject to a new administrative fee as set forth in section 25-8-502(1)(g), C.R.S. Also included in this section were additional process-related billing requirements associated with the Division's collection and proration of non-permitted concentrated animal feeding operation registration fees.

61.64 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE: JULY 12, 2010 RULEMAKING, EFFECTIVE DATE OF AUGUST 30, 2010 - HOUSED COMMERCIAL SWINE FEEDING OPERATION FINANCIAL ASSURANCE REQUIREMENTS

The provisions of section 25-8-202(1)(d) and (i) and (2); and sections 25-8-501 to -504, C.R.S. provide the specific statutory authority for this amendment to the Colorado Discharge Permit System Regulations. The Commission has also adopted, in compliance with section 24-4-103(4), C.R.S., the following Statement of Basis and Purpose.

BASIS AND PURPOSE

A. APPLICABILITY

The provisions in Commission Regulation No. 61, 5 CCR 1002-61, subsection 61.13(4)(h) apply to financial assurance requirements for housed commercial swine feeding operations (HCSFOs). In this rulemaking hearing, the Commission also adopted a new regulation, Regulation No. 66, which specifies the criteria for certain financial assurance instruments that HCSFOs can use to provide financial assurance. Therefore, HCSFOs are subject to the financial assurance provisions of both Regulation No. 66 and subsection 61.13(4)(h) of Regulation No. 61.

B. BACKGROUND AND PURPOSE

The proposal considered by the Commission during this rulemaking hearing is the adoption of revisions to subsection 61.13(4)(h) of Regulation No. 61. The proposal is the result of a stakeholder process that was initiated in November 2008 for the purpose of establishing a guidance document for the financial test and guarantee financial assurance mechanism for HCSFOs, in accordance with subsection 61.13(4)(h)(viii) of Regulation No. 61. A proposed guidance document was brought before the Commission at an informational hearing in November 2009. In response to statements from the Division and HCSFO producers at the hearing, the Commission agreed that, in lieu of continuing the hearing on the guidance document, a rulemaking hearing would be set to consider putting into regulation the criteria for all financial assurance instruments. As a result, the Division met with stakeholders to develop the proposal for today's rulemaking.

As discussed above in the "Applicability" section, the Commission also adopted in today's rulemaking hearing a new regulation, Regulation No. 66, which specifies the criteria for certain financial assurance instruments that HCSFOs can use to provide financial assurance. Because these criteria do not exist in the current subsection 61.13(4)(h) of Regulation No. 61, the Commission adopted revisions to this subsection that accomplish the following outcomes:

- Removes language rendered obsolete by the placement of financial assurance instrument criteria in Regulation No. 66.
- Adds language that makes reference to the provisions of Regulation No. 66.
- For consistency, revises "financial assurance mechanism" to be "financial assurance instrument."
- Adds language and restructures existing language for the purposes of providing clarity, segregating discrete provisions, and making needed connections to other provisions in subsection 61.13(4)(h).
- Adds a new subsection that addresses the release of an approved financial assurance instrument.
- Adds a new subsection that establishes submittal requirements for a permitee's annual update and review of financial assurance instruments.
- Renumbers the subsections as a result of adding three new subsections.

C. DISCUSSION OF REVISED PROVISIONS

Subsection 61.13(4)(h)(iii): This subsection was revised to clarify that the monetary value of financial assurance instruments can also be required to be the amount resulting from the interim financial assurance provisions of section 61.13(4)(h)(vi)(B)-(C). In addition, the phrase, "and shall use wording approved by the Division", was removed because financial assurance instrument criteria is now specified for six specific instruments in the new Regulation No. 66. For the purpose of having the phrase still apply to an alternative financial assurance instrument approved by the Division, the phrase was placed in new subsection 61.13(4)(h)(x)(B)(V).

New subsection 61.13(4)(h)(iv): This new subsection was added to refer to the financial assurance instrument criteria in subsection 61.13(4)(h) and to the six instruments in Regulation No. 66.

Subsection 61.13(4)(h)(v): This is subsection 61.13(4)(h)(iv) in the current regulation. The language was revised to add the word "instruments" after "financial assurance", and to refer to the financial instrument requirements of subsections 61.13(4)(h)(iii)-(iv).

Subsection 61.13(4)(h)(vi): This is subsection 61.13(4)(h)(v) in the current regulation. The language was revised to provide clarity, to add the word "instruments" after "financial assurance", and to refer to the financial instrument requirements of subsections 61.13(4)(h)(iii)-(iv).

Subsection 61.13(4)(h)(vii): This is subsection 61.13(4)(h)(vi) in the current regulation. The language was revised to refer to "approved" financial assurance instruments, and to segregate discrete provisions into new subsections (B) and (C). In addition, subsection (B) was revised to provide clarity and to refer to the financial instrument requirements of subsections 61.13(4)(h)(iii)-(iv).

The existing regulation requires that permittees annually review and update their financial assurance instruments in a specified manner. However, the regulation does not provide for a permittee to verify to the Division that it conducted the review and update. Therefore, the Commission adopted a new subsection (A) that requires a permittee to annually submit to the Division a report documenting the permittee's update and review of financial assurance instruments.

Subsection 61.13(4)(h)(viii): This is subsection 61.13(4)(h)(vii) in the current regulation. The language was revised to segregate discrete provisions into new subsections (A) and (B). In addition, subsection

(A) was revised to provide clarity and to refer to the financial instrument requirements of subsections 61.13(4)(h)(iii)-(iv).

Subsection 61.13(4)(h)(ix): This is subsection 61.13(4)(h)(viii) in the current regulation. The language was revised to add the word "instruments" after "financial assurance", and to delete all language after the first sentence. Most of the deleted language pertained to requirements for financial assurance instruments and is now obsolete because of the addition of Regulation No. 66. The deleted language pertaining to the specific financial assurance instruments that a permittee must use was moved to new subsection 61.13(4)(h)(x).

New subsection 61.13(4)(h)(x): This new subsection received the language from the current subsection 61.13(4)(h)(viii) pertaining to the specific financial assurance instruments that must be used by a permittee. Also, because of the new Regulation No. 66, the existing criteria pertaining to all financial assurance instruments was moved to subsections 61.13(4)(h)(x)(B)(I)-(V), where they now pertain only to an alternative instrument approved by the Division. With regard to subsection (IV), the Commission is aware that the process of acquiring a financial assurance instrument, such as a letter of credit or bond, is rigorous and time-consuming. Therefore, the number of days of written notice that must be given prior to an issuing institution cancelling an instrument was revised from 60 days to 90 days in order to allow more time for a permittee to acquire a substitute instrument.

Subsection 61.13(4)(h)(xi): This is subsection 61.13(4)(h)(ix) in the current regulation. The language was revised to provide clarity and to segregate discrete provisions into new subsections (A), (B), and (C). In addition, subsection (A) was revised to add the word "instrument" after "financial assurance", and subsection (B) was revised to have language that refers to requirements of subsection 61.13(4)(h)(xi).

New subsection 61.13(4)(h)(xii): The Commission adopted this new subsection to establish provisions that address the release of an approved financial assurance instrument prior to closure activities being initiated. The adopted language includes a provision requiring that an instrument be released when the relevant conditions of Regulation No. 66 for the instrument have been met.

Subsection 61.13(4)(h)(xiii): This is subsection 61.13(4)(h)(x) in the current regulation. Language was added to this subsection to clarify that this subsection pertains to the release of financial assurance requirements when closure actions are complete or "partially complete." This differentiates the purpose of this subsection from that of subsection 61.13(4)(h)(xii). In addition, the provision in existing subsection (A) was deleted. This provision, which addressed the prior written notice requirement for cancelling a financial assurance instrument, is now included for the six instruments in Regulation No. 66, and, for other instruments approved by the Division, is now required under subsection 61.13(4)(h)(x)(B)(IV).

The language in existing subsection (B) was deleted because it exists earlier in the subsection. As a result, existing subsections (I)-(IV) were revised to be new subsections (A)-(D).

The Commission adopted a new subsection (E) that requires the release of financial assurance when a reimbursement provision(s) in Regulation No. 66 has been satisfied, as applicable to the permittee's approved financial assurance instrument(s).

Subsection 61.13(4)(h)(xiv): This is subsection 61.13(4)(h)(xi) in the current regulation. Subsection (B) was revised to change the word "may" to "will", prior to the phrase "direct the expenditure of forfeited funds…"

PARTIES TO THE RULEMAKING HEARING

1. Colorado Livestock Association (CLA)
2. Mountain Prairie, LLC
3. Murphy-Brown of Yuma

4. M. Sue Jarrett
5. Seaboard Foods, LLC

61.65 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE – AUGUST 2011 RULEMAKING HEARING; EFFECTIVE SEPTEMBER 30, 2011

The provisions of 25-8-202(1)(d) and (2), 25-8-401, 25-8-501.1, and 25-8-504, C.R.S., provide the specific statutory authority for the amendments to this regulation adopted by the Commission. The Commission has also adopted, in compliance with 24-4-103(4) C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

A. BACKGROUND

In February of 2003, the United States Environmental Protection Agency (EPA) promulgated regulations for CAFOs which expanded the number of operations covered by the CAFO regulations and included requirements to address the land application of manure from these operations. The 2003 CAFO rule (CAFO Rule) more fully developed a framework for state implementation of National Pollutant Discharge Elimination System (NPDES) CAFO programs. The 2003 CAFO Rule included a duty for most CAFOs to apply for a discharge permit and to develop and implement a nutrient management plan (NMP). In an April 2004 rulemaking, the Commission adopted regulatory provisions that closely followed the language of the revised 2003 federal regulations.

On February 28, 2005, the United States Court of Appeals for the Second Circuit in Waterkeeper Alliance et al., v. EPA, 399 F. 3d 486 (2nd Cir. 2005) (Waterkeeper), vacated the requirement for CAFOs to apply for a NPDES permit or otherwise demonstrate no potential to discharge, and remanded portions of the CAFO Rule back to EPA for further revision and clarification.

On February 10, 2006, EPA finalized a rule change revising certain compliance dates to allow the EPA more time to revise the CAFO Rule to comply with the Second Circuit Court's ruling in Waterkeeper. The February 10, 2006 rule established a July 31, 2007 deadline for compliance.

Section 25-8-504(2), C.R.S., of the Colorado Water Quality Control Act (WQCA) and Colorado Water Quality Control Commission Regulation No. 61, section 61.3(1)(c), prohibit the Commission and Division from imposing permit terms for animal or agricultural waste on farms and ranches which are more restrictive than those mandated by the federal Clean Water Act (CWA). As such, effective November 30, 2006 the Commission removed in section 61.17, corresponding portions of the CAFO Rule vacated by the Second Circuit Court in Waterkeeper and revised certain compliance deadlines according to EPA's February 10, 2006 rule.

Because EPA did not complete a rulemaking in response to the Waterkeeper decision prior to the July 31, 2007 deadline, EPA finalized a second rule change revising all of the above compliance dates from July 31, 2007 to February 27, 2009. To this end, the Commission revised certain compliance deadlines according to EPA's July 24, 2007 rule.

In response to the Waterkeeper decision, on December 4, 2008 the EPA promulgated revisions to the federal CAFO Rule under the National Pollutant Discharge Elimination System (NPDES). The revisions became effective on December 22, 2008. Revisions were made to the permitting requirements (40 CFR 122) and to the effluent limitation guidelines (40 CFR 412). Pursuant to page 70457 of the preamble to the revised federal CAFO Rule, delegated states, such as Colorado, were required to revise applicable state CAFO permit regulations within one year of the date of promulgation of the revised rule, where no amended or enacted statute is necessary.

In 2009, the federal CAFO Rule was challenged by numerous livestock producer and environmental organizations. Multiple legal petitions were consolidated in the United States Court of Appeals for the Fifth Circuit to capture challenges from industry. The industry challenge was subsequently delayed, with oral arguments extending into 2010. Based on the history of rule promulgation, judicial annulments, rule revision, and compliance date extensions experienced during appeal of the 2003 CAFO Rule, the Commission postponed this rulemaking beyond the one year anniversary of the federal rule promulgation date in order minimize further changes.

During the stakeholder process leading up to this rulemaking, the United States Court of Appeals for the Fifth Circuit issued a ruling on March 15, 2011, in National Pork Producers Council, et al., v. EPA, vacating portions of the 2008 CAFO Rule. Specifically, the court vacated the requirement for CAFOs that "propose to discharge" to apply for a NPDES permit. Because neither the commission nor the division can be more stringent than federal requirements (25-8-504, C.R.S.) these provisions were removed from this regulatory revision. As a result, only those CAFOs that discharge are required to apply for a permit. The Court's decision upheld the requirement to include the terms of a CAFO's nutrient management plan as terms of the CAFO's NPDES permit.

In this rule revision, the Commission has adopted regulatory provisions that closely track the language of the revised federal regulations and the Fifth Circuit Court decision. Revisions are incorporated in section 61.13 and section 61.17. Additional detail and clarifications have been added where appropriate to allow for effective implementation of the new requirements.

The final rule modifies the requirement to apply for a permit by specifying that a CAFO that discharges must apply for a NPDES permit. The rule also requires CAFOs seeking permit coverage to submit nutrient management plans (NMPs) with an application for either an individual permit or with the notice of intent to be authorized under a general permit. The Division is required to review the NMPs and provide the public with an opportunity for meaningful public review and comment. The terms of the NMPs must be incorporated as NPDES permit conditions.

Additionally, the provision that allowed CAFOs to use a 100-year, 24-hour containment structure to fulfill the no discharge requirement for new source swine, poultry, and veal calf operations has been removed. Instead, upon request by such CAFOs that are new sources, permit writers can establish best management practice (BMP) no discharge effluent limitations when the facility demonstrates that it has designed an open containment system that will comply with the no discharge requirement.

B. DISCUSSION OF AMENDED SECTION 61.13 (HCSFO REGULATIONS)

Scope and Purpose [61.13(1)]: Dates have been updated to reflect recent changes per the federal rule.

Specific Applicability [61.13(2)]: Citations updated to reflect changes in this revision.

Applications and Required Plans [61.13(3)]: The Commission revised the language in 61.13(3)(d)(i)(C) for additional clarification. The Commission removed past compliance dates from 61.13(3)(f) associated with previous rule revisions. For the purpose of having the housed commercial swine feeding operation (HCSFO) regulations (section 61.13) be at least as stringent as the federal regulations, the Commission has added specificity to the requirements associated with Swine Waste Management Plans (SWMPs). Specificity has been added to capture all of the requirements of CAFO nutrient management plans.

New language was added to this section [61.13(3)(f)(vi)] that requires each crop planted and the crop rotation for each field to be identified within the SWMP. Subsequent subsections in 61.13(3)(f) were renumbered as a result of this addition.

This rule revision specifies the procedures that HCSFOs must follow to make changes to their swine waste management plans. The terms of the SWMP must be incorporated as permit conditions. Therefore, changes to the SWMP require review by the Division and an opportunity for meaningful public review and

comment. The Commission has added new language in this section [61.13(3)(f)(xix)] that details the process for submitting SWMP changes to the Division for review, the types of changes that would necessitate a permit change, and the public notification requirements associated with the review and approval process.

Requirements for Housed Commercial Swine Feeding Operations [61.13(4)]: The previous citation in 61.13(4)(b)(i) to subsection 61.14(4)(a) was incorrect. The citation was corrected to read 61.13(4)(a).

The Commission has removed the provision that allowed HCSFOs to use a 100-year, 24-hour containment structure to fulfill the no discharge requirement. HCSFOs that are new sources may now meet the no discharge effluent limitations by using best management practices (BMPs) based on a rigorous site-specific technical evaluation as detailed below. Language referring to 100-year, 24-hour storm containment has been removed throughout section 61.13(4)(c) and replaced with the requirement to meet the technical evaluation requirements now specified in 61.13(4)(d)(xvi)(B).

The acronym HCSFO has been added to 61.13(4)(d)(xvi) for clarification and consistency. In section 61.13(4)(d)(xvi)(A)(ii), the Commission removed past compliance dates associated with a previous rule revision.

New language that prescribes the methods for performing technical evaluations in support of best management practice effluent limitations for no discharge has been added in 61.13(4)(d)(xvi)(B). HCSFOs that are new sources can satisfy the no discharge requirement by using BMPs based on a defensible technical evaluation. The HCSFO must demonstrate that it has designed its open containment system to comply with the no discharge requirement through the use of the most recent version of United States Department of Agriculture, Natural Resource Conservation Service (NRCS) Animal Waste Management (AWM) software, or equivalent, and the most recent version of the NRCS Soil Plant Air Water (SPAW) Hydrology Tool, or an equivalent model. The Commission added language in 61.13(4)(d)(xvi)(B)(I)(1)(c) to allow facilities to use climate data from the most proximate weather stations, such as those utilized by the Colorado Climate Center or the National Oceanic and Atmospheric Administration, in the absence of site specific data for use in site-specific modeling.

The Commission added the provisions for upset/bypass conditions, as provided in 61.8(3)(i) and (j), to apply to a new source subject to 61.13(4)(d)(xvi)(B).

The Commission removed the language in 61.13(4)(d)(xvii)(B), regarding Voluntary Alternative Performance Standards for new source HCSFOs, as these standards are no longer allowable under the federal rule. Subsequent subsections in 61.13(4)(d)(xvii) were renumbered as a result of this deletion.

The Commission corrected a typographical error in 61.13(4)(g)(ii) and updated citations in 61.13(4)(j) to reflect changes created by this revision.

The previous citation in 61.13(4)(k)(viii) to subsection 61.13(4)(j)(i), (ii), and (v) was incorrect. The Commission corrected the citation to read 61.13(4)(k)(i), (ii), and (v).

C. DISCUSSION OF AMENDED SECTION 61.17 (CAFO REGULATIONS)

Scope and Purpose [61.17(1)]: Dates have been revised to reflect recent changes per the federal rule.

Specific Applicability [61.17(2)]: On page 70427 of the preamble to the revised federal regulations, the EPA strongly recommends that CAFOs that have any doubt about their ability to operate under all circumstances without discharging seek NPDES permit coverage. The Commission has adopted the federal language that requires the owner or operator of a CAFO to seek coverage under a permit if the CAFO discharges.

As detailed on page 70423 of the preamble of the revised federal regulations, the 2008 federal CAFO rule calls for a case-by-case evaluation by the CAFO as to whether the CAFO discharges from its production area or land application area based on actual design, construction, operation and maintenance of the facility. The preamble further clarifies that discharge is not limited to continuous discharges, but also includes intermittent, sporadic, or occasional discharges which may in fact be the norm for many CAFOs. Such non-continuous discharges are still prohibited unless authorized under the terms of a permit.

Definitions [61.17(3)]: The Commission deleted a definition that is no longer applicable, and moved definitions to correct previously incorrect alpha-numeric ordering. For example, the definition of "25-Year, 24-Hour Storm" was moved to 61.17(3)(a). As a result, previous paragraphs (a) through (c) were moved to (b) through (d), respectively. The Commission moved the definition of "Freeboard" to paragraph (d), which was not previously used.

Regarding the definition of "Land Application Site" in section 61.17(3)(e), the Commission in the Statement of Basis, Specific Statutory Authority, and Purpose from the February and April 2004 Rulemaking Hearing (section 61.54), clarified that a land application site is under the control of a CAFO where it is owned or leased by the CAFO, where cropping and/or nutrient budget decisions for the site are made by the CAFO, or where the CAFO land applies process wastewater or manure to such land. The Commission amended the definition of "Land Application Site" to incorporate this clarification.

The Commission deleted the definition of "100-Year, 24-Hour Storm" from paragraph (i), as this design standard was removed from federal requirements and therefore, the definition no longer has relevance in Colorado's regulation. Previous paragraphs (j) through (l) were moved to (i) through (o), respectively. The definition of "100-Year, 24-Hour Storm" was not removed from section 61.2, as discussed above.

Permit Applications [61.17(5)]: The Commission amended the language in 61.17(5)(a)(i) and (ii), to incorporate comments received from EPA Region 8 and to remove past compliance dates. Subsequent subsections in this section were renumbered as a result of these deletions. The Commission updated citations in 61.17(5)(c)(ix)(B), (E) and (F) to reflect changes created by this revision.

The paragraph header "Permit Renewal" was added to 61.17(5)(b).

In order to more accurately follow the federal language, the Commission revised the language in 61.17(5)(c)(ix)(F) requiring that clean water be diverted from CAFO production areas, manure stockpiles, and composting areas, as appropriate.

The Commission revised the language in 61.17(5)(c)(xiv) requiring that a complete nutrient management plan be submitted to the Division for review as part of the permit application.

40 CFR 122.23(h) of the federal CAFO rule specifies the procedures for CAFOs seeking coverage under a general permit. The Commission included these procedures in 61.17(5)(d) under the header "Permit Review and Processing". Since the federal rule does not prescribe the procedures states must follow with regards to nutrient management plans, the Commission finds it appropriate to establish alternative processes and time periods for public comment and hearing requests that may differ from those specified in section 61.5. Flexibility with NMP public notice procedures and timelines will allow the state to more efficiently and effectively inform the public using real-time technologies (i.e., Internet, social media, etc.) without impeding a CAFO's cropping decisions that may require expeditious processing of a NMP amendment.

Under the federal rule, incorporation of the terms of a particular CAFO's NMP into that CAFO's certification under a general permit is not considered a modification of the general permit itself. The Commission found it appropriate to include federal language in 61.17(5)(d)(i) for clarification to this effect.

Effluent Limitation Requirements For Concentrated Animal Feeding Operations [61.17(6)]: The Commission revised the paragraph header for 61.17(6)(a), from "Existing Operations" to "All Existing

CAFOs", for clarification and ease of reference. The requirements specified in 61.17(6)(a)(iii)(A)(I) have been categorized into subparagraphs 1) and 2) for ease of reference. The Commission removed language in 61.17(6)(a)(iii)(B) referring to past compliance dates.

The Commission revised the paragraph header for 61.17(6)(b), from "New Source Operations" to "New Source CAFOs". The Commission added "publicly owned treatment works" to 61.17(6)(b)(ii)(B) to clarify the acronym POTW. Past compliance dates were removed from 61.17(6)(b)(iii)(B).

The Commission revised the effluent limitations for new source large swine, poultry and veal calf CAFOs in 61.17(6)(b)(iv) to reflect the federal revisions. This language is very similar to the requirements for new source HCSFOS. In this section the Commission removes the provision that allowed new source large swine, poultry and veal calf CAFOs to use a 100-year, 24-hour containment structure in conjunction with best management practices (BMPs) to fulfill the no discharge requirement. New source large swine, poultry and veal calf CAFOs must now meet the no discharge effluent limitations by using BMPs based on a rigorous site-specific technical evaluation like those described for new HCSFOs. Language referring to 100-year, 24-hour storm containment has been removed throughout section 61.17 and replaced with the requirement to meet the technical evaluation requirements now specified in 61.17(6)(b)(iv) where appropriate.

New language that prescribes the methods for performing technical evaluations in support of best management practice effluent limitations for no discharge was added in 61.17(6)(b)(iv). Large swine, poultry, and veal calf CAFOS that are new sources can satisfy the no discharge requirement by using BMPs based on a defensible technical evaluation. Such a CAFO must demonstrate that it has designed its open containment system to comply with the no discharge requirement through the use of the most recent version of the NRCS Animal Waste Management (AWM) software, or equivalent, and the most recent version of the NRCS Soil Plant Air Water (SPAW) Hydrology Tool, or an equivalent model. The Commission added language in this section to allow facilities to use climate data from the most proximate weather stations, such as those utilized by the Colorado Climate Center or the National Oceanic and Atmospheric Administration, in the absence of site specific data for use in site-specific modeling.

The Commission added the provisions for upset/bypass conditions, as provided in 61.8(3)(i) & (j), to apply to a new source subject to 61.17(6)(b)(iv)(A)(III). The Commission removed redundant language 61.17(6)(b)(iv)(B) and past compliance dates were removed from 61.17(6)(b)(v).

<u>Voluntary Alternative Performance Standards 61.17(7)</u>: The Commission removed all of the prior language in 61.17(7)(b) regarding Voluntary Alternative Performance Standards for new source large swine, poultry and veal calf CAFOs, as these standards are no longer allowable under the federal rule. Subsequent subsections 61.17(7)(c) and (d) were renumbered as a result of this deletion.

<u>Additional Requirements For Concentrated Animal Feeding Operations 61.17(8)</u>:

The Commission made revisions to the introductory language of subsection 61.17(8)(a)(i)(B) to provide clarity and consistency with federal regulations. The Commission removed the provision in 61.17(8)(a)(i)(B)(I) that allowed new source swine, poultry or veal calf CAFOs to use a 100-year, 24-hour containment structure to fulfill the no discharge requirement. Such CAFOs that are new sources may now meet the no discharge effluent limitations by using best management practices (BMPs) based on a rigorous site-specific technical evaluation as detailed above. Language referring to 100-year, 24-hour storm containment has been removed throughout section 61.17(8)(a) and replaced with the requirement to meet the technical evaluation requirements now specified in 61.17(6)(b)(iv).

In order to more closely follow the federal language, the Commission revised the language in 61.17(8)(a)(iv) requiring that clean water be diverted from CAFO production areas, manure stockpiles, and composting areas, as appropriate.

The Commission included language in subsection 61.17(8)(b) regarding nutrient management plans, which are required in the revised federal rule. For clarity and ease of reference section 61.17(8)(b) has been restructured to capture the new requirements. The nutrient management plan (NMP) must now be reviewed and approved by the Division prior to issuing a permit. The terms of the NMP become terms of the permit. As such, the terms of the NMP must be made available to the public for review and comment along with the rest of the permit before the permit is finalized.

The Commission is aware that the federal rule allows two possible approaches for establishing the terms of a CAFOs nutrient management plan, the “linear approach” and the “narrative rate approach”. The Commission added the specific requirements associated with only the narrative rate approach to section 61.17(8)(b), as this approach is the most common and allows CAFOs the most flexibility in managing their operations while maintaining permit compliance without the need for frequent revisions. In 61.17(8)(b)(xii)(C) the Commission makes an allowance for those CAFOs that prefer to use the linear approach for establishing the terms of the NMP.

The stakeholder comment record shows that stakeholder discussion was devoted to understanding both approaches acceptable under the federal rule. The linear approach articulates the field-specific maximum rates of application in terms of the amount of nitrogen and phosphorus from manure and process wastewater allowed to be applied. Under the linear approach the terms of the NMP include maximum application rates for each year of permit coverage, for each crop, for each field. This approach is considered ‘‘linear’’ because it is based on only those crops included in the planned crop rotations in the NMP, the amounts of nitrogen and phosphorus from manure and process wastewater to be land applied according to the planned schedule for land application, and the projected values for plant available nitrogen and phosphorus from other sources. Under the linear approach, a single set of field-specific rates of application would be established, based on the predicted sequence of activities the CAFO plans to follow in implementing its NMP, and a CAFO would be required to follow the sequence identified in the NMP for each field-specific crop rotation and each planned step for land application of manure or process wastewater.

The narrative rate approach for establishing NMP terms prescribes how to calculate the amount of manure and process wastewater allowed to be applied on a field-specific basis. The NMP terms include the maximum amounts of nitrogen and phosphorus from all sources of nutrients, for each crop, in pounds per acre, for each field. The narrative rate approach accommodates changes in field conditions or practices at a CAFO, including those that alter the projected levels of plant available nitrogen and phosphorus in the soil or in the manure over the period of permit coverage, by allowing a CAFO to compensate for changes by adjusting the application rates accordingly without the need for a permit modification. In the second and subsequent years of the permit term, this approach provides an accurate and verifiable means of achieving production goals while minimizing transport of phosphorus and nitrogen from the fields.

The Commission believes, based on stakeholder consensus, it is reasonable to include the specific requirements for only the narrative rate approach within the revised language. For those CAFOs that choose to pursue the linear approach, the Division will review such permit applications and NMPs pursuant to the requirements specified in 40 CFR 122.42(e)(5)(i).

The Commission removed the prior language in 61.17(8)(b) and added the permit requirement to implement an NMP as of the date of permit coverage in 61.17(8)(b)(i) and (ii). Previous paragraphs (i) through (x) were moved to (iii) through (xii), respectively. The Commission added language to paragraph 61.17(8)(b)(iv) for clarification with regards to the requirements for handling animal mortalities. Paragraph 61.17(8)(b)(xii) details the required terms of the NMP. The Commission added the specific terms that must be detailed using the narrative rate approach in 61.17(8)(b)(xiii)(B)(1) through (7). Within this section the Commission included some existing language that references the use of USDA - Natural Resource Conservation Service and Colorado State University Cooperative Extension reference materials for establishing nitrogen and phosphorus application recommendations.

The Commission added the projections that must be included in the NMP, but are not terms of the NMP, to 61.17(8)(b)(xiii). The Commission added the calculations that must be performed, at least annually, as part of the NMP to 61.17(8)(b)(xiv).

The Commission found it appropriate to include language that describes changes to nutrient management plans and how such changes must be reviewed and processed as part of the permit. This language is included in 61.17(8)(b)(xv).

The CAFO owner or operator must provide the Ag Program with the most current version of the CAFO's nutrient management plan and identify changes from the previous version. If the terms of the NMP do not require revision, the CAFO may implement the revised nutrient management plan upon notification from the Division.

If the changes to the NMP necessitate revision to the terms of the NMP incorporated into the permit, the Division must determine whether such changes are substantial changes to the permit issued to the CAFO. If the Division determines that the changes are not substantial, the Division must make the revised NMP publicly available and include it in the permit record, the terms of the NMP must be revised, and the Ag Program must notify the CAFO and inform the public of any changes to the terms of the NMP that are incorporated into the permit.

If the changes to the NMP are substantial changes, the Division must notify the public and make the proposed changes and the information submitted by the CAFO available for public review and comment. Substantial changes to the NMP must be incorporated into the terms of the permit. Changes that would be considered substantial changes are detailed in 61.17(8)(b)(xv)(A)(III).

The Commission found it appropriate to move the language detailing the requirement to inspect land application equipment from 61.17(8)(b) to 61.17(8)(f) with other operation and maintenance requirements. The Commission also finds it appropriate to move the language detailing the setback requirement for land application of wastewater from 61.17(8)(b) to 61.17(8)(f).

The Commission restructured the headings in sections 61.17(8)(c) and (d) for clarity and ease of reference. Citations in each section were updated to reflect changes in this revision. The Commission added annual reporting requirements associated with planted crops, actual yields, NMP calculations and soil testing to 61.17(8)(e) to reflect new requirements in the federal rule.

The Commission found it appropriate to delete paragraphs (i), (ii), and (iv) through (vii) in 61.17(8)(f), as these are redundant to requirements stated elsewhere in the regulation. Paragraph (iii) was renumbered to (i) and paragraph (vii) was renumbered to (ii).

The language detailing the requirement to inspect land application equipment from 61.17(8)(b) has been added as 61.17(8)(f)(iii) and the language detailing the setback requirement from 61.17(8)(b) has been added as 61.17(8)(f)(iv). The Commission revised the language in 61.17(8)(f)(iv)(B) regarding an alternative setback requirement to more closely follow the federal requirement. Associated references to the revised paragraphs in 61.17(8)(f) have been updated throughout section 61.17.

PARTIES TO THE RULEMAKING HEARING

1. The Colorado Livestock Association

61.66 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE – DECEMBER 12, 2011 RULEMAKING HEARING; EFFECTIVE DATE JANUARY 30, 2012

The provisions of 25-8-202(1)(d) and (2), 25-8-401, 25-8-501.1, and 25-8-504, C.R.S., provide the specific statutory authority for the amendments to this regulation adopted by the Commission. The

Commission has also adopted, in compliance with 24-4-103(4) C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

In this rule revision, the Commission removed references to outside materials that raised incorporation by reference concerns under Colorado law, C.R.S. § 24-4-103(12.5).

On September 20, 2011, the Division met with stakeholders to discuss this rulemaking approach. Consensus was reached on the approach used in today's rulemaking to address concerns related to the technical requirements incorporated by reference. In addition, the Commission notes that this rulemaking does not remove the requirements for new source concentrated animal feeding operations (CAFOs) and housed commercial swine feeding operations (HCSFOs) to perform certain evaluations related to the design and adequacy of impoundment structures, or to follow certain published nutrient management planning guidelines. Instead, applicable CAFOs and HCSFOs can choose from a number of equivalent technical resources and request approval for use by the Division.

Revised Provisions

Subsections 61.13(4)(d)(xvi)(B)(I)(1) and 61.17(6)(b)(iv)(A)(I): The Commission adopted provisions requiring the design of open surface impoundments or tanks and open manure storage structures to use procedures and/or software approved by the Division, such as the most recent version of the USDA – NRCS Animal Waste Management (AWM) software, or equivalent.

Subsections 61.13(4)(d)(xvi)(B)(I)(1) and 61.17(6)(b)(iv)(A)(I): the Commission adopted provisions requiring that the adequacy of the open surface impoundments or tanks and manure storage structures be evaluated using simulations approved by the Division, such as the USDA, NRCS Soil Plaint Air Water (SPAW) Hydrology Tool, or equivalent.

Subsection 61.17(8)(b)(xii)(B)(IV)(5): The Commission adopted provisions requiring that the methods used to prepare recommendations for nitrogen and phosphorus use be approved by the Division, and included examples of methods considered approvable.

61.67 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE – DECEMBER 8, 2014 RULEMAKING HEARING; EFFECTIVE DATE JANUARY 30, 2015

The provisions of 25-8-202(1)(d) and (2), 25-8-401, 25-8-501.1, and 25-8-504, C.R.S., provide the specific statutory authority for the amendments to this regulation adopted by the Water Quality Control Commission (Commission). The Commission has also adopted, in compliance with 24-4-103(4) C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

In 2008, the U.S. Environmental Protection Agency (EPA) revised the federal Concentrated Animal Feeding Operation (CAFO) Rule in response to federal litigation and added a requirement for the terms of the nutrient management plan to be incorporated into the terms of the permit. In August 2011, the Commission adopted revisions to Regulation #61 in response to changes made to the 2008 federal CAFO rule by EPA. After review of the provisions adopted in 2011, the Attorney General's Office concluded that, although required by the permits, the current housed commercial swine feeding operations (HCSFO) regulatory provisions do not require that terms of the nutrient management plans [i.e., swine waste management plan (SWMP)] be incorporated into permits.

In order to ensure that the provisions of Regulation #61 are as stringent as the provisions of the federal CAFO Rule, the Commission adopted revisions in subsection 61.13(3)(f) requiring that any permit issued to a HCSFO must require compliance with the terms of the HCSFO's site-specific SWMP.

61.68 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE – APRIL 13, 2015 RULEMAKING HEARING; EFFECTIVE DATE JUNE 30, 2015

The provisions of 25-8-202(1)(d) and (2), 25-8-401, 25-8-501, and 25-8-504, C.R.S., provide the specific statutory authority for the amendments to this regulation adopted by the Water Quality Control Commission (Commission). The Commission has also adopted, in compliance with 24-4-103(4) C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

In coordination with the development of Regulation #86, the commission adopted an exemption from the ground water discharge provisions of Regulation #61 for certain graywater treatment works. The commission believes that graywater subsurface irrigation systems with a design flow of 2,000 gallons per day or less pose a similar risk to ground water as on-site wastewater treatment systems with a design capacity of 2,000 gallons per day or less, which currently has an exemption from ground water permitting in Regulation #61, and that a similar exemption for graywater treatment systems is appropriate as a matter of policy.

61.69 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE – JUNE 13-14, 2016 RULEMAKING HEARING, EFFECTIVE DATE DECEMBER 31, 2016

The provisions of sections 25-8-202(1)(d)(1) and 25-8-501 to 25-8-504, C.R.S., provide the specific statutory authority for the amendments to this regulation adopted by the Water Quality Control Commission (commission). The commission has also adopted, in compliance with section 24-4-103(4) C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

As part of the hearing on Regulation #31, the Basic Standards and Methodologies for Surface Water, the commission made substantial changes to section 31.14, "Implementation in Discharge Permits." The commission determined that it was appropriate to make four conforming changes to Regulation #61.

First, the cross reference to 31.14(15) contained in 61.8(1)(e) was eliminated since 31.14(15) is being deleted. While the provision formerly contained at section 31.14(15) is being moved to 31.9 the commission found that a cross reference was unnecessary.

Second, the statements contained in the former section 31.14(4) regarding how effluents limits are to be derived was moved to 61.8(2)(b)(i)(F)(I) to replace and eliminate the need for a cross-reference. The commission continues to find that in circumstances where the division establishes effluent limits in accordance with 61.8(2)(b)(i)(F)(I), that upon the request of any interested person, the Commission may hold a rulemaking hearing to consider the adoption of a numerical standard, which would then be binding.

Third, a cross reference contained at 61.8(2)(c) was modified since the provision will no longer be contained in section 31.14.

Fourth, a provision formerly contained at section 31.14(5) that addressed the integration of innovative solutions or management approaches into discharge permits was moved to a new section 61.8(3)(u).

The commission determined that this provision is more appropriately included in Regulation #61. This new provision is an appropriate complementary regulatory tool to the existing section 61.8(3)(r), which authorizes the use of best management practices in discharge permits to control or abate the discharge of pollutants.

Since Regulation #61 was opened for the Regulation #31 hearing, the commission took the opportunity to update the incorporation by reference date in section 61.1(2). The effect of this change is to include the most recent versions of the federal materials that are already incorporated within Regulation #61, while maintaining consistency with the State Administrative Procedures Act, which requires that a rule incorporating materials by reference must indicate that later amendments or editions of the incorporated material are not part of the rule.

PARTIES TO THE RULEMAKING

1. Metro Wastewater Reclamation District
2. Colorado Parks and Wildlife
3. Environmental Protection Agency
4. Arkansas Fountain Coalition for Urban River Evaluation
5. Colorado Monitoring Framework
6. Littleton/Englewood Wastewater Treatment Plant
7. Eagle Park Reservoir Company
8. Eagle River Water and Sanitation District
9. City of Steamboat Springs
10. Upper Eagle Regional Water Authority
11. City of Colorado Springs and Colorado Springs Utilities
12. Northern Colorado Water Conservancy District
13. Southwestern Water Conservation District
14. Dolores Water Conservancy District
15. Aurora Water Department
16. South Adams County Water and Sanitation District
17. Town of Fraser
18. Trout Unlimited
19. City of Boulder
20. City of Fort Collins
21. City of Pueblo
22. Seneca Coal Company
23. Suncor Energy (U.S.A.)
24. Colorado Wastewater Utility Council
25. Climax Molybdenum Company
26. Public Service Company
27. Tri State Generation and Transmission Association, Inc.
28. Plum Creek Reclamation Authority
29. Centennial Water and Sanitation District
30. City of Black Hawk and Black Hawk/Central City Sanitation District
31. Northwest Colorado Council of Governments (NWCCOG) and NWCCOG Water Quality/Water Quantity Committee
32. Colorado Wildlife Federation
33. Rocky Mountain Chapter of the Sierra Club
34. Pueblo County
35. Towns of Hotchkiss, Olathe and Ridgway
36. North Front Range Water Quality Planning Association
37. Colorado River Water Conservation District
38. XTO Energy, Inc.
39. Parker Water and Sanitation District
40. Dominion Water and Sanitation District

61.70 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE – OCTOBER 11, 2016 RULEMAKING HEARING; EFFECTIVE DATE DECEMBER 31, 2016

The provisions of 25-8-202(1)(d) and (2), 25-8-401, 25-8-501, 25-8-501.1, and 25-8-502, C.R.S., provide the specific statutory authority for the amendments to this regulation adopted by the Water Quality Control Commission (Commission). The Commission has also adopted, in compliance with 24-4-103(4) C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

The Commission decided to modify Section 61.15(e) to reflect current changes in the Water Quality Control Act regarding fee sectors and to delete provisions referencing fee proration. The statute does not require fee proration and recent changes to the statute require a permit application fee which in effect prorates a portion of the fee to allow the Division to begin work on a permit action. The Commission decided to remove the proration portion of the regulation with the understanding the Division has the discretion to waive fees where appropriate.