STATE OF COLORADO

Dedicated to protecting and improving the health and environment of the people of Colorado

4300 Cherry Creek Dr. S.
Denver, Colorado 80246-1530
Phone (303) 692-2000
TDD Line (303) 691-7700
Located in Glendale, Colorado

http://www.cdphe.state.co.us

Colorado Department of Public Health and Environment

For Agency Use Only

Permit Number Assigned

CO_____

Date Received ____/____/____
Month Day Year

COLORADO DISCHARGE PERMIT SYSTEM (CDPS)

CPDS DOMESTIC WASTEWATER TREATMENT PLANT PERMIT APPLICATION

PHOTO COPIES, FAXED COPIES, PDF COPIES, or EMAILED COPIES WILL NOT BE ACCEPTED

Please print or type. **Original signatures are required**. This application must be considered complete by the Division prior to initiation of permit processing. The Division will notify you if additional information is needed to complete the application. (If more space is required to answer any question, please attach additional sheets to the application form.) Applications must be submitted by certified mail or hand delivered to:

Colorado Department of Public Health and Environment
Water Quality Control Division
4300 Cherry Creek Drive South
WQCD-P-B2
Denver, Colorado 80246-1530

Any additional information that you would like the Division to consider in developing the permit should be provided with the application. Examples include data and/or modeling regarding receiving water characteristics, data and/or modeling regarding effluent characteristics, and planned pollutant removal strategies and their implementation timeframe. Please indicate any types of additional information that are provided with this application below.

PERMIT INFORMATION

Reason for Application: ☐ NEW CERT

☐ RENEW CERT EXISTING CERT #_____

Applicant is: ☐ Property Owner ☐ Contractor/Operator

☐ Surface Water Discharge complete this form up to and including Section IX, as required.

Ground-Water Discharge

☐ Impoundment Complete all sections and APPENDICIES D & D-1;

☐ Land Application Complete pages 1-8 and one copy only of SECTION IX, APPENDICIES D & D-2;

☐ Septic System > 2000 gpd Complete all sections and APPENDICIES D & D-3.

If both surface water and ground water discharge are checked, then complete the following questions:
Complete all sections and, APPENDIX D and the appropriate subsection (D-1, D-2 D-3).

A. Contact Information

Permittee (If more than one please add additional pages)

Organization Formal Name: _____

1. **Permittee** the person **authorized to sign and certify** the permit application. This person receives all permit correspondences and is **legally responsible** for compliance with the permit.

Responsible Position (Title): _____

Currently Held By (Person): _____

Telephone No:_____

email address_____

Organization: _____

Mailing Address: _____

City:_____ State: _____ Zip: _____

This form must be signed by the Permittee to be considered complete.

Per Regulation 61: In all cases the permit application shall be signed as follows:

a) In the case of corporations, by a responsible corporate officer. For the purposes of this section, the responsible corporate officer is responsible for the overall operation of the facility from which the discharge described in the application originates.
b) In the case of a partnership, by a general partner.
c) In the case of a sole proprietorship, by the proprietor.
d) In the case of a municipal, state, or other public facility, by either a principal executive officer or ranking elected official

2. **DMR Cognizant Official (i.e. authorized agent)—**the person or position authorized to **sign and certify** reports required by permits including Discharge Monitoring Reports [DMR's], Annual Reports, Compliance Schedule submittals, and other information requested by the Division. The Division will send pre-printed reports (e.g. DMR's) to this person. If more than one, please add additional pages. ☐ Same as 1) Permittee

Responsible Position (Title): _____

Currently Held By (Person): _____

Telephone No:_____

Email address_____

Organization: _____

Mailing Address: _____

City:_____ State: _____ Zip: _____

Per Regulation 61: All reports required by permits, and other information requested by the Division shall be signed by the permittee 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 the permittee;
(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.

3. **Site/Local Contact**—contact for questions regarding the facility & discharges authorized by this permit
☐ Same as Permittee—Item 1

Responsible Position (Title): _____

Currently Held By (Person): _____

Telephone No:_____

Email address_____

Organization: _____

Mailing Address: _____

City:_____ State: _____ Zip: _____

4. **Operator in Responsible Charge** ☐ Same as Permittee—Item 1

Responsible Position (Title): _____

Currently Held By (Person): _____

Telephone No:_____

Email address_____

Organization: _____

Mailing Address: _____

City:_____ State: _____ Zip: _____

Certification Type_____Certification Number_____

5. **Billing Contact** (if different than the permittee)

Responsible Position (Title): _____

Currently Held By (Person): _____

Telephone No:_____

Email address_____

Organization: _____

Mailing Address: _____

City:_____ State: _____ Zip: _____

6. Other Contact Types (check below) Add pages if necessary:

Responsible Position (Title): _____

Currently Held By (Person): _____

Telephone No:_____

Email address_____

Organization: _____

Mailing Address: _____

City:_____ State: _____ Zip: _____

- ☐ **Pretreatment Coordinator**
- ☐ **Environmental Contact**
- ☐ **Biosolids Responsible Party**
- ☐ **Property Owner**
- ☐ **Inspection Facility Contact**
- ☐ **Consultant**
- ☐ **Compliance Contact**
- ☐ **Stormwater MS4 Responsible Person**
- ☐ **Stormwater Authorized Representative**
- ☐ **Other** _____

B. Permitted Project/Facility Information

1. Project/Facility Name _____

Street Address or cross streets_____

City, State and Zip Code _____County _____

Type of Facility Ownership

☐ City Government ☐ Corporation ☐ Private ☐ Municipal or Water District

☐ State Government ☐ Mixed Ownership _____

Legal Description

Directions from nearest major cross streets

2. Facility Latitude/Longitude—List the latitude and longitude of the excavation(s) resulting in the discharge(s). If the exact excavation location(s) are not known, list the latitude and longitude of the center point of the construction project. I**f using the center point, be sure to specify that it is the center point of construction activity**.

001A Latitude _____ **.** _____ Longitude _____ **.** _____ (e.g., 39.703°, 104.933°')
degrees (to 3 decimal places) degrees (to 3 decimal places)

or

001A Latitude _____ º _____' _____" Longitude _____ º _____' _____" (e.g., 39°46'11"N, 104°53'11"W)
degrees minutes seconds degrees minutes seconds

Horizontal Collection Method: ☐ GPS Unspecified ☐ Interpolation Map – Map Scale Number_____

Reference Point: ☐ Project/Facility Entrance ☐ Project/Facility Center/Centroid

Horizontal Accuracy Measure (WQCD Requires use of NAD83 Datum for all references)_____
(add additional pages if necessary)

C. Service Area and Population

Location Map Defining the legal boundaries of the service area. A north arrow shall be shown.
This map must be on paper 8-1/2 x 11 inches.

Breakdown of Number and Type of existing taps in the Service Area

Type of Tap	Number	Description (attach list if necessary)	Total Estimated Flow
Residential			
Industrial			
Commercial			
Other: Specify			

All facilities with a design flow of 1 MGD or greater shall provide a list of non-residential customers which includes the name, address and type of business.

Population of Service Area_____

Municipalities or Areas Served

Identify any agreements, for the acceptance and treatment of wastewater, with connector systems, districts, subdivisions, counties, cities, or other agencies or persons within or outside the defined service area.

D. Flows and Discharges

Influent Flows: Provide the following data on influent flows to the facility during the past calendar year. Effluent flow data may be substituted where that is no influent flow measuring and recording or totalizing device.

Average daily flow (MGD) during the three minimum flow months. month_____ month_____ month_____
flow_____ flow_____ flow_____

Average daily flow (MGD) during the three maximum flow months. month_____ month_____ month_____
flow_____ flow_____ flow_____

Maximum peak hourly flow (MGD)_____

Surface Water Discharge Points indicate the type of discharge (continuous, intermittent, seasonal, etc.), legal description (1/4 of 1/4 Section, Township, Range) and the name and description of the receiving water

Outfall Number	Legal Description (T, R, S, 1/4, 1/4)	Typical Months Of Discharge	Receiving Water	Latitude/Longitude	Method Used **
001A					

** Horizontal Collection Method: GPS Unspecified or Interpolation – Map

Horizontal Accuracy Measure (WQCD Requires use of NAD83 Datum for all references)

D. Flows and Discharges continued

Will the discharge go to a ditch storm sewer, or any other type of conveyance? ____ **YES** ____ **NO**

If YES include
- any agreement with the ditch owner which authorizes the discharge
- the notification to the owner that this application is being made and a copy sent to the Division.

Does facility accept septage? ____ **YES** ____ **NO** If yes, provide description of procedures and quantities. (attach additional pages if necessary)

Will land application of any wastewater be practiced? ____ **YES** ____ **NO**

If YES Provide the information requested in Appendix D and D-2.
The Division may request additional information before the permit can be issued.

Bypassing and Overflow Points for Surface Water discharges and for Ground-Water discharges, as appropriate.

A. On a separate sheet, provide a diagram/map illustrating 1) the location of any bypass and/or constructed overflow point(s), 2) the receiving water, and 3) a description of any bypass and/or constructed overflow point(s) at the treatment facility that are not described in a current permit for the facility. Also provide this information for any lift station or any point in the collection system.

B. Include a general discussion of what conditions would cause a discharge from any such point to occur.

Location Map Defining the facility property and discharge points. A north arrow shall be shown. Any public water supply intakes within a 5 mile radius of the facility shall also be identified. **This map must be on paper 8-1/2 x 11 inches.**

Diagram of the site showing appurtenant facilities . (buildings, ponds, diversion ditches, treatment processes, etc.), the stream location, numbered discharge points, influent monitoring and effluent compliance sampling points, bypass points and flow monitoring points. **This map must be on paper 8-1/2 x 11 inches.**
A separate treatment process flow schematic may also be submitted.

E. Receiving Water Information

Provide a copy of any studies or other analyses which you feel may help the Division in its development of effluent limitations for your facility. This would include sampling data for pH and temperature, instream sampling and analyses upstream or downstream of the discharge, modeling results, or data for other parameters not currently required by your permit.

Is additional data being submitted for the following categories?

Effluent Data ____ **YES** ____ **NO**
Sample Upstream of the discharge point ____ **YES** ____ **NO**
Sample downstream of the discharge point ____ **YES** ____ **NO**

IF YES for any of these, please submit data on a CD in an excel spreadsheet format.

F. Treatment Facilities and Sewer System

Treatment Facility Design Capacity

A. Provide design calculations and other engineering data which define the organic and hydraulic capacity of each unit process and the facilities as a whole. If this information was provided with the application for an existing permit, then provide information on any changes or additions at the facility since that time. Plans and specifications and engineering design studies must be certified by a registered professional engineer.

B. When did the facility first begin operating?

C. If this is a lagoon system, please provide verification that the lagoons are lined and provide information pertaining to the liner. Do these lagoons meet the allowable seepage rate requirement of less than or equal to 1 x 10-6 cm/sec? If the lagoons do meet the allowable seepage rate, please submit documentation showing this information. (Also, see Appendix D and D1 of this application.)

D. Has there been an expansion or rerating of the facility since the last permit was issued? _____ **YES** _____ **NO**

E. Date(s) and Number(s) of the original **site approval** for the facility and any amendments._____

F. Treatment Facilities and Sewer System continued

Collection System-Infiltration/Inflow

A. Does the 30-day average flow to the facility exceed 120 gallons/capita-day during any month? ☐ **YES** ☐ **NO**
If so, attach a discussion of the extent of the problems (quantities, sources, etc.) and any ongoing or proposed correction programs (including scope and budget of programs). Attach a copy of the pertinent portions of any I/I studies which have been completed.

B. Attach a description of any ongoing sewer system maintenance/repair/rehabilitation programs.

C. Attach a description of any ongoing interceptor flow monitoring programs if such data is collected. Include a description of monitoring techniques, the locations of monitoring points and any pertinent data.

Improvements Are any facility or collection system (I/I reduction) expansions or improvements planned during the next five years? If so, describe the extent of the expansions/improvements and list any proposed schedules for planning, design and construction.

Lift Stations Provide the following information for all lift stations in the service area:

Lift Station Name/No.	Wet Well Volume	# of Pumps and Capacities (gpm and Hp)	Current Peak Daily Flow (MGD)

Include a map that shows the locations of the lift stations. The service area map requested in Item 4 of this application may be used in place of a separate map.

Describe the emergency systems in place (alarms, dual grid power feed, generators, holding ponds, etc.) which will be used to prevent a discharge from any lift station.

G. Operation and Management

***Provide the following information for the facility**. A current plan of operation which includes this information may be substituted.

A. A copy or description of the staffing plan for the facility, including the number of operators and their certification levels, and operating personnel coverage of the facility during weekdays, weekends, and holidays.

B. A discussion or outline of the emergency response program used at the facility. This discussion should include:

l. A description of alternate power sources.
2. A discussion of alarm systems installed at the facility, including any remote transmission of alarms.
3. A description of the chain of command in emergency situations.
4. Provide any other information for emergency response.

Provide these details on separate sheets. If information is not available for any of these items please indicate that this is the case and provide a brief explanation of why the item cannot be discussed or described.

C. Attach a list of any chemicals which are used in the operation of the treatment facility. This includes chemicals added directly to the treatment process (chlorine, copper sulfate, other algicides, alum, etc.) as well as chemicals which are used adjacent to unit processes (ponds, basins, etc.) which may be carried into the treatment system by storm events, snowmelt, etc. MSDS sheets shall be included for any name-brand (Aquashade, Round-Up, etc.) products.

G. Operation and Management (cont.)

Monitoring & Testing

D. Describe the method of flow measurement for the influent flow to the facility and for each discharge (i.e., V-notch weir, 3-inch Parshall flume, calibrated pumping rate with run-time meter, none, etc.). Also, describe the "range" (minimum-maximum) of any flow metering and recording equipment associated with these devices.

Monitoring Point	Type of Device	Size	Range of Flows Measured	Type of Recorder/ Meter (if any)
300 I (influent)				
001A (effluent)				

E. Describe procedures and tests used to determine the accuracy of the flow measuring and recording devices and note how often the devices are calibrated.

Device	Method	Frequency

F. Attach a description of approved analytical procedures which are used, or will be used, for analyzing each influent and effluent parameter in order to meet the reporting requirements of the permit. Also, describe the location where each analysis is or will be completed and the requirement used for each method not done in the lab. (i.e., BOD_5-Method 5210B from Standard Methods, etc.) Is a commercial or other WWTP laboratory used? If so, identify the laboratory and submit their analytical methods for each parameter.

G. ****GROUNDWATER** applicant is required to identify which **total coliform** analytical method will be used at the laboratory performing sample analyses. The analytical methods for total coliform are found in the Eighteenth Edition (or newer) of "Standard Methods for the Examination of Water and Wastewater". The choices of total coliform methods are as follows:

Membrane Filter Technique (Method 9222B) _____ or

Multiple Tube Fermentation Technique (Method 9221B)_____

If this application is for renewal of an existing permit and any violations of effluent limits occurred during the period of such a permit, are there any administrative, design, operational, or financial deficiencies which would prevent the applicant from eliminating such violations prior to the issuance of the renewal permit?

_☐_ **YES** _☐_ **NO**

The applicant shall answer yes if any such deficiencies were previously identified (engineering report, Division inspection, etc.) and have not been eliminated at this time.

If the answer to the above question is yes, then a written report must be included which describes how and when the deficiencies will be eliminated.

H. Biosolids Handling – Beneficial Use or Disposal

- If facility is a lagoon, last time solids were removed? _____ Month _____Year

  Will biosolids be removed within the next 1-5 years? _____ **YES** _____ **NO**

  Anticipated date of removal:_____Year

- For a mechanical facility, please attach a short narrative description of the type of treatment (i.e. Class A or Class B), beneficial use (i.e. land application, composting) as described in EPA 503 Regulations/Colroado Biosolids Regulations #64, or disposal method(s) (i.e. landfill, transported to another facility) which are to be utilized.
- Are biosolids being stored at the facility? _____ **YES** _____ **NO** For how long?_____
- Will a contract hauler be utilized?

  If yes, please give name and frequency used._____
- Please attach a short narrative description on contingency plan for biosolids beneficial use and or disposal practice(s).
- Describe the handling and final disposal method of screenings, grit and any other similar types of material at the facility (i.e. landfill, surface disposal, certificate of designation, storage).

I. Industrial Contributors and Pretreatment

- Are industrial wastes, which contain any of the toxic pollutants or hazardous substances listed in Appendix A or B or are from any categorical industry listed in Appendix C, discharged to the sewer system?

  _____ **YES** _____ **NO**
- Are there any facilities for acceptance of wastes, other than domestic septage, by rail, truck or dedicated pipeline?

  _____ **YES** _____ **NO**
- If the answers to these questions are no, then answer question.B. only.

A. On a separate sheet, list any of the pollutants found in Appendix A and B which you know or have reason to believe are present in or may be present in the influent to the facility. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data (influent or effluent) in your possession (use separate sheets). If this information has been previously submitted to the Division, please indicate the date of the submittal and who in the Division it was sent to.

B. Has a list of industrial contributors, including both those referenced in Appendix C and any non-categorical industries, been previously submitted?

   _____ **YES** _____ **NO**

   Identify any industries contributing industrial process wastewater that were not covered by previous submittals.

   Provide procedures for identifying new industrial/commercial dischargers.

I. Industrial Contributors and Pretreatment continued

C. Has an assessment of the quantity and quality of any industrial process wastewater contribution been previously submitted?

_____ **YES** _____ **NO**

- If no assessment has been submitted and is presently available, please provide the data on an attached sheet.
- Has any additional data for industrial wastewaters been compiled which was not previously submitted?

  _____ **YES** _____ **NO** If yes, please provide the data on an attached sheet.
- If not previously submitted to the Division, provide the following on separate sheets:

  1. A discussion of pretreatment provided by each significant industrial user and/or specific treatment, if any, provided at the domestic treatment plan for any industrial waste received.
  2. The estimated degree of reduction in the domestic facility of any relevant pollutant listed in Appendices A and B.
  3. A summary or outline of the procedures for monitoring and testing of industrial pollutants generated in the service area.
  4. A copy of any pretreatment ordinances and user charge schedules applicable to industrial contributors.
  5. A discussion of any problems encountered with contributed industrial wastes and how these problems have been handled.

J. Other Environmental Permits

Does this facility currently have any environmental permits, or is it subject to regulation, under either of the following programs?

Permit Name	Yes	No	Applied For, Date	Permit No.
a. Colorado Division of Reclamation, Mining and Safety— permit anniversary:				
b. Underground Injection Control				
c. Clean Water Act (CWA) Section 404 (Army Corps of Engineers)				
d. Resource Conservation and Recovery Act (RCRA)				
e. CDPS Stormwater				
f. Colorado State Air Pollution Emission				
g. Other				

K. CERTIFICATION Required Signatures

Signature of Applicant: The applicant must be either the owner and/or operator of the construction site. Refer to Part B of the instructions for additional information. The application must be signed by the applicant to be considered complete. In all cases, it shall be signed as follows:

a) In the case of corporations, by a principal executive officer of at least the level of vice-president or his or her duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge described in the application originates.
b) In the case of a partnership, by a general partner.
c) In the case of a sole proprietorship, by the proprietor.
d) In the case of a municipal, state, or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee if such representative is responsible for the overall operation of the facility from which the discharge described in the form originates.

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

Signature of **Owner** (submission must include original signature) Date Signed

Name (printed) Title

Signature of **Applicant** (submission must include original signature) Date Signed

Name (printed) Title

Signature of **Operator** (submission must include original signature) Date Signed

Name (printed) Title

APPENDIX A

Toxic Pollutants And Hazardous Substances
Organic Toxic Pollutants in Each of Three Fractions in
Analysis by Gas Chromatography/Mass Spectroscopy (GC/MS)

Volatiles

Acrolein
Acrylonitrile
Benzene
Bromoform
Carbon Tetrachloride
Chlorobenzene
Chlorodibromomethane
Chloroethane
2-Chloroethylvinyl Ether
Chloroform
Dichlorobromomethane
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethylene
1,2-Dichloropropane
1,2-Dichloropropylene
Ethylbenzene
Methyl Bromide
Methyl Chloride
Methylene Chloride
1,1,2,2-Tetrachloroethane
Tetrachloroethylene
Toluene
l,2-Trans-dichloroethylene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethylene
Vinyl Chloride

Acid Compounds

2-Chlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
4,6-Dinitro-o-cresol
2,4-Dinitrophenol
2-Nitrophenol
4-Nitrophenol
P-chloro-m-cresol
Pentachlorophenol
Phenol
2,4,6-Trichlorophenol

Pesticides

Aldrin
Alpha-BHC
Beta-BHC
Gamma-BHC
Delta-BHC
Chlordane
4'4'-DDT
4'4'-DDE
4'4'-DDD
Dieldrin
Alpha-Endosulfan
Beta-Endosulfan
Endosulfane Sulfate
Endrin
Endrin Aldehyde
Heptachlor
Heptachlor Epoxide
PCB-1242
PCB-1254
PCB-1221
PCB-1232
PCB-1248
PCB-1260
PCB-1016
Toxaphene
Lindane
Mirex
Demeton

Base/Neutral

Acenaphthene
Acenaphthylene
Anthracene
Benzidine
Benzo(a)anthracene
Benzo(a)pyrene
3,4-Benzofluoranthene
Benzo(ghi)perylene
Benzo(k)fluoranthene
Bis(2-chloroethoxy)methane
Bis(2-chloroisopropyl)ether
Bis(2-ethylhexyl)phthalate
4-Bromophenyl phenyl ether
Butylbenzyl phthalate
2-Chloronaphthalene
4-Chlorophenyl phenyl ether
Chrysene
Dibenzo (a,h) anthracene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
3,3-Dichlorobenzidine
Diethyl phthalate
Dimethyl phthalate
Di-n-butyl phthalate
2,4-Dinitrotoluene
2,6-Dinitrotoluene
Di-n-octyl phthalate
1,2-Diphenylhydrazine (as azobenzene)
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorcyclopentadiene
Hexachloroethane
Indeno(1,2,3-cd) pyrene
Isophorone
Naphthalene
Nitrobenzene
N-Nitrosodimethylamine
N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine
Phenanthrene
Pyrene
1,2,4-Trhichlorobenzene
bis(2-chloroethyl)ether

APPENDIX B

Toxic Pollutants And Hazardous Substances

Inorganic Toxic Pollutants

Asbestos

Hazardous Substances

Acetaldehyde
Allyl alcohol
Allyl chloride
Amyl acetate
Aniline
Benzonitrile
Benzyl chloride
Butyl acetate
Butylamine
Captan
Carbaryl
Carbofuran
Carbon disulfide
Chlorpyrifos
Coumaphos
Cresol
Crotonaldehyde
Cyclohexane
2,4-D(2,4-Dichlorophenoxy acetic acid)
Diazinon
Dicamba
Dichlobenil
Dichlone
2,2-Dichloropropionic acid
Dichlorvos
Diethyl amine
Dimethyl amine
Dinitrobenzene
Diquat
Disulfoton
Diuron
Dodecylbenzenesulfonate
Epichlorohydrin
Ethanolamine
Ethion
Ethylene diamine
Ethylene dibromide
Formaldehyde
Furfural
Guthion
Isoprene
Isopropanolamine
Keithane
Kepone
Malathion
Mercaptodimethur
Methoxychlor
Methyl mercaptan
Methyl methacrylate
Methyl parathion
Mevinphos
Mexacarbate
Monoethyl amine
Monomethyl amine
Naled
Napthenic acid
Nitrotoluene
Parathion
Phenolsulfanate
Phosgene
Propargite
Propylene oxide
Pyrethrins
Quinoline
Resorcino
Strontium
Strychnine
Styrene
2,4,5-T(2,5-Trichlorophenoxy acetic acid)
TDE (Tetrachlorodiphenylethane)
2,4,5-TP[2-(2,4,5-Trichlorophenoxy propanoic acid)
Trichlorofan
Triethylamine
Trimethylamine
Uranium
Vanadium
Vinyl Acetate
Xylene
Xylenol
Zirconium

APPENDIX C

CATEGORICAL INDUSTRIES

Adhesives and Sealants
Aluminum Forming
Auto and Other Laundries
Battery Manufacturing
Coil Coating
Copper Forming
Electrical and Electronic Components
Electroplating
Explosives Manufacturing
Foundries
Gum and Wood (all subparts except D and F)
Subpart D - tall oil rosin
Subpart F - rosin-based derivatives
Inorganic Chemicals Manufacturing
Iron and Steel Manufacturing
Leather Tanning and Finishing
Mechanical Products Manufacturing
Nonferrous Metals Manufacturing
Ore Mining (applies to the base and precious metals/Subpart B)
Organic Chemicals Manufacturing
Paint and Ink Formulation
Pesticides
Petroleum Refining
Pharmaceutical Preparations
Photographic Equipment and Supplies
Plastic and Synthetic Materials Manufacturing
Plastic Processing
Porcelain Enameling
Printing and Publishing
Pulp and Paperboard Mills
Rubber Processing
Soap and Detergent Manufacturing
Steam Electric Power Plants
Textile Mills (Subpart C - Greige Mills are Exempt From This Table)
Timber Products Processing

APPENDIX D

ADDITIONAL REQUIREMENTS FOR DISCHARGES TO GROUND WATER

IMPOUNDMENTS, LAND APPLICATION AND SEPTIC SYSTEMS >2000 GPD

GENERAL REQUIREMENTS

(1) **FACILITY MAPPING**: A location map of the facility and surrounding area, based on the USGS 7.5 minute quadrangle topographic map series or comparable map, shall be submitted with the following information: (a) facility location; (b) drinking water wells within a one mile radius of the facility in an urban area, or the drinking water wells within a five mile radius in a rural area; (c) the irrigation wells within one mile radius of the facility and indicate the estimated area of influence for each irrigation well.; (d) topography; (e) any known surface area contamination or ground water contamination area; and (f) a North arrow. Map must be no larger than 11 X 17 inches.

(2) **FACILITY SKETCH**: A legible sketch of the site shall be submitted and will include buildings, roads, ditches, ponds, streams, drains, impoundment(s), land application areas, any septic systems and monitoring well locations (indicate if in place or proposed). This sketch may be the same as in surface water discharge permit if no additional information is needed. The sketch will be on 8.5 X 11 inch paper.

(3) **SITE STUDIES/INFORMATION**: Provide a copy of any studies, geological reports, consultant reports, water quality analyses pertinent to your facility/site which you feel may help the Division in the development your ground-water permit. Include such reports/studies that address such areas of interest as ground-water quality analyses that establish ambient (existing ground-water quality prior to your ownership of the property), all Material Safety Data Sheets (MSDS) for each chemical used at your facility (an example MSDS is available from the Ground Water Unit), well driller's logs and pumping information of the local aquifer, any computer modelling results that have been performed for the immediate area, U. S. Geological Survey (USGS) reports for the area, etc.

(4) **GEOLOGY/HYDROGEOLOGY OF SITE**:
(a) Describe the local geology of the site. Identify and describe all lithologic units from the ground surface to the first impermeable stratigraphic unit. Provide the estimated thickness of each unit. Include a geologic map or cross sections, if necessary. Maps will be on 8.5 X 11 paper.

(b) Describe the hydrogeology of the site. Describe in detail the relationship of this site to any alluvial or bedrock water bearing formations (unconfined, confined, or perched) and surface water (lakes, ponds, ditches or streams). Identify aquifer name or formation name for each water bearing formation and provide the depth to water (include water elevation) for each. Describe any unusual geologic or hydrologic features that could affect ground water rate of movement or direction of movement (i.e. faults, fractures).

(c) Describe aquifer characteristics (transmissivity or permeability, porosity and storage capacity) of these water bearing formations. State the source(s) of this information.

(d) Provide potentiometric surface (ground water level) map(s) of the water bearing formations. Document information source(s), if obtained from published data. If water levels are contoured from site data, control points must be annotated with water table elevation and time period of measurements indicated in legend. Map must be legible and no larger than 11 X 17 inches.

(e) Discuss any hydrogeologic investigations or ground-water modeling conducted at this site.

(5) **Water Quality Sampling Requirements** The Discharge Regulations require Domestic Wastewater Treatment works to characterize the raw and effluent wastewater quality related to each discharge at the facility. The Division's quality assessment requirements are listed below. In addition, the Division is requiring an existing ground-water quality characterization, which is found in paragraph (a), below.

(a) Each applicant must submit (i) a description of the ground water in the sample prior to filtration [i.e. clear, murky, cloudy, etc.]; (ii) the below listed analytical data used to document (A) ambient ground water near the impoundment, land application and/or leach field, and (B) the upgradient gr

Total Coliforms	Biochemical Oxygen Demand (BOD)	Total Ammonia
Temperature	Ph	Nitrate as N

CHARACTERIZATION OF GROUND WATER (Measured as dissolved concentration)

Sodium (Na)	Chloride (Cl)
Calcium (Ca)	Bicarbonate (HCO_3)
Magnesium (Mg)	Sulfate (SO_4)
Potassium (K)	Carbonate (CO_3)
Iron (Fe)	Total Dissolved Solids

(b) Each applicant must sample, analyze and report to the Division any of the below listed pollutants he/she knows or has

reason to believe may be present in the influent to the facility's treatment system or is in the ground water below his/her property:

(i) TABLE II OF APPENDIX D, PART 122, TITLE 40 OF THE CODE OF FEDERAL REGULATIONS; ORGANIC TOXIC POLLUTANTS IN EACH OF THE FOUR FRACTIONS IN ANALYSIS BY GAS CHROMATOGRAPHY/MASS SPECTROSCOPY (GC/MS)--CONSIDER ALL POLLUTANTS LISTED FOR EACH FRACTION FOR A CONTRIBUTING CATEGORICAL INDUSTRY, AS INDICATED IN APPENDIX C OF THIS APPLICATION:

The list of organic toxic pollutants in each of four fractions -"Volatiles, Base/Neutral, Acid and Pesticides" - is found in "Appendix A - Priority Pollutants". Measure the dissolved concentration for each of the parameters listed that you know or believe will be present at your facility.

(ii) TABLE V OF APPENDIX D, PART 122, TITLE 40 OF THE CODE OF FEDERAL REGULATIONS; TOXIC POLLUTANTS AND HAZARDOUS SUBSTANCES.

The list of toxic pollutants and hazardous substances is found in "Appendix B", above. If you believe your influent contains any of the listed toxic/hazardous substances or it is likely that they will be present at your facility, measure the dissolved concentration for each parameter.

(c) Each applicant is required to report whether 2,3,7,8 Tetrachlorodibenzo-P-Dioxin (TCDD) or one of the below listed compounds is used/stored at the site, and, therefore, may be present in the soil or ground water.

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

(ii) 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5-TP) (CAS #93-72-1);

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

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

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

(vi) Hexachlorophene (HCP) (CAS #70-30-4).

D-1 SPECIFIC REQUIREMENTS FOR IMPOUNDMENTS

COMPLETE THIS PORTION OF THE APPLICATION FOR IMPOUNDMENTS DISCHARGING TO GROUND WATER

1) Provide detailed Plan and Side View sketches of the impoundment, include liner thickness (if lined), type of liner and depth to ground water.

2) Provide technical information on liner type, materials used in construction, thickness, expected permeability and how the liner was installed.

3) Provide results of "in situ" permeability testing of the clay liner or the expected permeability of the synthetic liner for the bottom and sides of the impoundment.

4) If the facility has existing monitoring wells, please include the driller's well completion and pump installation report that provides the the exact location of each well (i.e. XXXX feet from the South Section line and YYYY feet from the East Section line); the maximum sustained yield; the well log of the material (clay, sand, shale, etc.) and thickness of each of these layer; the casing record (size, kind and length); the perforated casing (size, kind and length); the grouting record (material, intervals and placement method); the gravel pack (size and interval); the Static Water level and the final pumping level; and the total depth plus the water elevation. Please provide the surveyed elevation of the monitoring well's measuring point.

5) Provide below requested information for other permits that pertain to this facility (See APPENDIX E for a list of likely permits for your facility.):

   (a) Issuing Agency and the Date permit application was made to this agency;
   (b) Permit number;
   (c) Respond to the relevant questions in Appendix E for Resource Conservation and Recovery Act (RCRA) Subtitle "C","D" or "I" sites.

D-2 - SPECIFIC REQUIREMENTS FOR LAND APPLICATION

(1) Analytical data used to document ambient ground-water quality should be submitted for the following parameters (Unless otherwise indicated, determine the dissolved concentration of each of the following):

Aluminum	Beryllium	Arsenic	Silver
Boron	Cobalt	Barium	Cadmium
Copper	Lithium	Chromium	Cyanide (Weak Acid Dissociable)
Nickel	Vanadium	Fluoride	Lead
Mercury		Zinc	
Nitrite		Selenium	
Manganese		Color	
Copper		Corrosivity	
Foaming Agents		Odor	
Gross Alpha (excl. Radon/Uranium)			
Beta and Photon Emitters			

(2) Provide a description of the A and B soil horizons mapped at this site by the U. S. Soil Conservation Service.

(3) Describe the existing vegetative cover at the site. Include plans for any proposed disturbance or planting.

(4) Does this land application plan use the root zone for attenuation of effluent components? If so, explain in detail. Include a report of the vadose zone modelling, if performed.

(5) Provide all information pertaining to precipitation, evapotranspiration, and infiltration for this site (supplemental irrigation, solar and wind evaporation, plant uptake, infiltration tests).

(6) Describe the proposed rate and schedule of application and its expected effects on ground water levels.

(7) The following parameters should be determined from soil samples taken at one foot intervals to a depth of five feet. It is preferred that these soil samples be collected in the spring and analyzed as total available [Parameters are to be measured as Total concentrations [using the AB-DPTA extraction—Contact Jim Self at the CSU Soil Laboratory), as appropriate.]. These results are to be provided to the Division, when they are available.

aluminum	copper	nitrate residuals	zinc
iron	nickel	ammonia residuals	
arsenic	lead	phosphorous	
cadmium	mercury	potassium	
chromium	molybdenum	selenium	

(8) Describe the effluent storage capacity during inclement weather and/or frozen ground.

(9) Provide below requested information for other permits that pertain to this facility (See APPENDIX E for a list of likely permits for your facility.):

(a) Issuing Agency and the Date permit application was made to this agency;
(b) Permit number;
(c) Respond to the relevant questions in Appendix E for Resource Conservation and Recovery Act (RCRA) Subtitle "C","D" or "I" sites.

D-3 - SPECIFIC REQUIREMENTS FOR SEPTIC SYSTEMS

1) FACILITY

Circle "Facility Type" and indicate the Design Capacity of the septic system plus whether the facility also has impoundment(s) or land application associated with it.

"Facility Type"
Industrial/Domestic Wastewater (a) Business; (b) Ski Area; (c) Campground/R.V. Park; (d) Motel/Hotel/Dude Ranch; (e) Community System; (f) School; (g) Church; (h) Hardrock Mining/Milling / Placer Mining / Coal Mining; (i) Sand and Gravel Production; (j) Construction Dewatering; (k) Ground Water Cleanup of Gasoline/Diesel

SEPTIC SYSTEM DESIGN CAPACITY = _____gpd

Circle the appropriate components of the septic system:

TWO STAGE SYSTEM:

FIRST STAGE	(a) SEPTIC TANK	
	(b) AERATION SYSTEM	
SECOND STAGE	(a) BED	(1) PIPE & GRAVEL
		(2) GRAVELLESS CHAMBERS
	(b) TRENCH	(3) GRAVELLESS PIPE

THREE STAGE SYSTEM:

FIRST STAGE	(a) SEPTIC TANK	
	(b) AERATION SYSTEM	
SECOND STAGE	SAND FILTER	
THIRD STAGE	(a) BED	(1) PIPE & GRAVEL
		(2) GRAVELLESS CHAMBERS
	(b) TRENCH	(3) GRAVELLESS PIPE

Indicate whether there are impoundments and/or land application at this facility:

IMPOUNDMENT ___(Y)___(N) #_____ Wetted Surface Area of Each _____ft^2 _____ ft^2 _____ft^2

LAND APPLICATION ___(Y)___(N) Type_____

If the response is "Yes" to either the impoundment or land application question, please refer to D-1 OR D-2, RESPECTIVELY.

2) OTHER PERMIT(S) FOR THIS FACILITY:

ARE THERE "PERMITS"/"ACTION PLANS" IN PLACE FOR THIS PROPERTY?
_____ YES _____ NO

(a) REFER TO APPENDIX E FOR SUGGESTIONS AS TO WHAT ARE INCLUDED AS "OTHER PERMIT(S)"

(b) IF THE ANSWER IS "YES" TO THE ABOVE QUESTION, ATTACH ADDITIONAL PERMIT INFO AS AN ATTACHMENT TO THIS APPENDIX.

APPENDIX E

ENVIRONMENTAL PERMIT INFORMATION

TYPES OF PERMITS AVAILABLE FOR FACILITIES:

1. USEPA UNDERGROUND INJECTION CONTROL PERMIT;

2. COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT STORMWATER PERMIT;

3. COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT AIR POLLUTION EMISSION PERMIT;

4. COLORADO DIVISION OF MINERALS AND GEOLOGY PERMIT;
   (Please include the mined land reclamation board permit anniversary date.)

5. RESOURCE CONSERVATION AND RECOVERY ACT (RCRA)
   - I. RCRA SUBTITLE C HAZARDOUS WASTE:
     - i) PROVIDE YOUR RCRA EPA ID NUMBER;
     - ii) PROVIDE YOUR STATE RCRA PERMIT NUMBER;
     - iii) DO YOU NOW HAVE OR HAVE YOU IN THE PAST HAD INTERIM STATUS?
   - II. RCRA SUBTITLE D SOLID WASTE:
     - i) HAS A CERTIFICATE OF DESIGNATION (CD) FOR SOLID WASTE DISPOSAL BEEN ISSUED FOR THIS SITE?
     - ii) ARE YOU DISPOSING OF YOUR OWN WASTE ON YOUR OWN PROPERTY?
     - iii) DO YOU HAVE AN APPLICATION FOR A CD PENDING?
     - iv) IF THIS FACILITY IS A MINING OPERATION, ARE YOU DISPOSING OF MINE WASTE ON YOUR OWN PROPERTY?
     - v) HAVE YOU DONE ANY RECYCLING AT THIS SITE?
     - vi) IS THERE BENEFICIAL USE OR DISPOSAL OF BIOSOLIDS OR SEPTAGE AT THIS PROPERTY?
     - vii) IS YOUR PROPERTY USED AS A TRANSFER STATION?
   - III. RCRA SUBTITLE I UNDERGROUND STORAGE TANKS
     - i) ARE THERE EITHER ABOVE GROUND OR BELOW GROUND TANKS ON THIS PROPERTY?
     - ii) HAS THERE BEEN A RELEASE FROM THE TANK SYSTEM?--IF YES, THEN RESPOND TO "iii)".
     - iii) HAS ASSESSMENT WORK BEEN PERFORMED?--IF YES, THEN RESPOND TO "iv)".
     - iv) HAS A CORRECTIVE ACTION PLAN BEEN APPROVED OR PERFORMED?

6. COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT URANIUM MILLS TAILINGS REMEDIAL ACTION PROGRAM (UMTRAP):
   IS THERE A REMEDIAL ACTION PLAN PENDING OR IN PLACE AT THIS PROPERTY?
   - i) IS THERE A SURFACE DISCHARGE PERMIT?
   - ii) IS THERE AN AIR EMISSIONS PERMIT?

7. COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT (CERCLA):

   IS THIS PROPERTY LISTED AS A SUPER FUND SITE?

APPENDIX F

LOCAL RESOURCES OF INFORMATION

U.S. Geological Survey Library — Telephone: 303/236-1000
Building 20
Denver Federal Center *

U.S. Geological Survey Map Sales — Telephone: 303/236-7476
Building 810
Denver Federal Center *

* Located in Lakewood between Sixth Avenue and Alameda Boulevard, Kipling Street and Union Boulevard

Office of the Colorado State Engineer — Telephone: 303/866-3581
1313 Sherman Street
Room 818
Denver, Colorado

Soil Survey Maps are located at:
Soil Conservation Service — Telephone: 303/236-2897
655 Parfet Street
Room E 200 C
Lakewood, Colorado 80215-5517

US EPA Region VIII — Telephone: 303/293-1430
Underground Injection Control Program
999 18th St.
Suite 500
Denver, Colorado 80202-2466

Air Pollution Control Division — Telephone: 303/692-3100
Hazardous Materials and Waste Management Division — Telephone: 303/692-3300
Radiation Control Division — Telephone: 303/692-3030
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

Laboratory Division at the — Telephone: 303/692-3090
Colorado Department of Public Health and Environment
8100 Lowry Blvd.
Denver, Colorado 80220-6928

INFORMATION TO BE SAVED FOR OTHER USE

(i) TABLE III OF APPENDIX D, PART 122,TITLE 40 OF THE CODE OF FEDERAL REGULATIONS; OTHER TOXIC POLLUTANTS (METALS AND CYANIDE) AND TOTAL PHENOLS (UNLESS INDICATED OTHERWISE, ANALYZE THE FOLLOWING FOR THE DISSOLVED CONCENTRATION):

ANTIMONY	ARSENIC
BERYLLIUM	CADMIUM
CHROMIUM	COPPER
LEAD	TOTAL MERCURY
NICKEL	SELENIUM
SILVER	THALLIUM
ZINC	CYANIDE
TOTAL PHENOLS??	

A detailed summary of the design criteria for the land application processes including groundwater quality criteria to be met at an

identified point of compliance. Include process utilized for treatment (nutrient removal, coliform removal, etc.), storage (including evaporation and percolation data), and/or disposal of wastewater effluent, such as exfiltration ponds, impoundments, underground injection, underground percolation, landscape irrigation etc. Also, provide a diagram which shows the land application site(s) and monitoring device (well, lysimeter, etc.) locations, construction details (materials, etc.) and their depths.

C. Provide any operating data (application rates, nutrient loadings, groundwater quality, etc.) for existing land application systems.

Dear Permittee/Applicant

The Water Quality Control Division of the Colorado Department of Public Health and Environment is using a geographic information system to update the way we organize data. One of the most important pieces of data the Permits Unit tracks is the location of the facility and, in particular, the location of each discharge point. From our permittees, we will need the best possible locational data for their discharge points. Please fill out the form on the reverse side of this page and return it to the address below as soon as possible or with your application. The better the locational information we receive, the more timely the work on your application/renewal/amendment can proceed. Delay in processing your permit may result if poor information is received.

A GPS unit is a hand-held instrument that uses satellite signals to pinpoint the users location in terms of longitude and latitude. If you do not own a GPS unit and do not wish to purchase one, one may be borrowed from a sportsman (GPS units of good quality are sold in sporting goods stores for hunting or hiking). Surveyors or engineers that are working on the project may have one. If maps are used, please send the whole topo map including the margins, legend and scale. Please mark the Discharge point(s) clearly and accurately.

Thank you for providing this information. It will help us provide better and more timely assistance to our customers as well as aid in decision making internally.

Colorado Department of Public Health and Environment
Water Quality Control Division
WQCD-P-B2
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530
(303)+692-3500

The following choices for the data acquisition are listed in order of preference. Please check the box that applies to the method used for collection of the locational data of your **Discharge points**.

Global Positioning System (GPS) unit accurate to within 30 yards.

Global Positioning System (GPS) unit accurate to greater than 30 yards.

Point on original USGS topographic map.

Point on good quality city street map (if point is in city).

Engineering drawing/plan with latitude and longitude reference.

Point on copy of USGS topographic map.

Point on copy of city street map (if point is in city).

Other. Explain

Name of facility

Permit Number (if renewal or amendment

Facility contact name

Contact phone Number