COLORADO DISCHARGE PERMIT SYSTEM (CDPS)
FACT SHEET TO PERMIT NUMBER COG603000
GENERAL PERMIT FOR
DISCHARGES ASSOCIATED WITH SUBTERRANEAN DEWATERING OR WELL DEVELOPMEN

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I. TYPE OF PERMIT

Master General, NPDES, Surface Water and Groundwater, Second Renewal, Statewide.

II. SCOPE OF THE GENERAL PERMIT

A. SIC Code:

- 1799 Special Trade Contractors, Not Elsewhere Classified
- 1629 Heavy Construction, Not Elsewhere Classified

B. MAJOR CHANGES FROM LAST PERMIT VERSIONS

The current general permit, which expired on December 31, 2012 and has been administratively extended by the Water Quality Control Division (Division), provides coverage for approximately 93 facilities with Subterranean Dewatering and 10 facilities with well development discharges. This renewed general permit is needed to continue to provide coverage for these established dischargers and for new subterranean dewatering or well development discharges. The Division conducted a stakeholder process that included a Pre-Public Notice Meeting on May 1, 2013 and submittal of written input. The purpose of this stakeholder outreach was to increase awareness of the renewal process for the general permit, discuss the major areas of review, and obtain input for development of draft permit conditions. The Division considered the stakeholder input received during the meeting, and written input received after the meeting.

Major changes from last renewal include the following:

- The permit only authorizes the discharge of the source water drawn from the specific area that is identified by the permittee in the application or subsequent notification to the Division.
- Discharges cannot be authorized by the permit if there is a reasonable potential for a pollutant to be present in the source water at a concentration that is greater than a numeric water quality standard of the receiving water. An exception to this limitation is allowed for discharges with a reasonable potential for Benzene, Toluene, Ethylbenzene, and Xylene when the applicant can demonstrate that the subterranean or well development dewatering source water does not have concentrations of Benzene, Toluene, Ethylbenzene, or Xylenes that are greater than the water quality standard of the

receiving water. The result of this exception is that a discharge can be authorized as long as it can be shown that treatment is not needed to meet the effluent limitations for Benzene, Toluene, Ethylbenzene, and Xylenes.

- If the well development discharge includes drilling fluid and/or drilling mud, an individual or alternative general permit is required for the activity.
- If the discharge includes pollutants associated with well cleaning, and the intent of the well cleaning is to strip the well of metals accumulation, then an individual or alternative general permit is required for the activity.
- An acute flow limitation is included in the permit, as required by CCR 1002-61.(2)(i)The acute flow limit will be equal to twice the maximum flow rate provided in the permit application. If the discharge flow rate exceeds the maximum flow rate requested in the application, the permittee is required to submit a notification as required by Part II.A.2. of the Permit. As required by CCR 1002-62.5(7), the flow-measuring device must indicate values within ten percent of the actual flow being measured. The Division specifically solicited comment during the public notice of this permit on the feasibility of compliance with a numeric effluent limitation for flow, and the feasibility of the required measurement, accuracy, and reporting for the limitation. Note that the Division had indicated during the pre-public notice stakeholder process, that a flow limitation would not be included in the permit. However, subsequent review of the regulations cited above identified that a flow limit is required, unless determined to be infeasible and addressed by best management practices, in accordance with regulation CCR 1002-61.(2)(i)
- The method for measuring flow rates authorizes estimates.
- E. coli and Total Coliform limitation will be required for subterranean structure (basement, foundation, footer drains, etc.) dewatering and/ or well development dewatering discharges that are in proximity to septic disposal systems, and/ or other sewage disposal conveyances or vessels and the Division has made a qualitative reasonable potential determination that E. coli or Total Coliform will be present in the discharge.
- The pollution control practices implemented to meet the effluent limitations contained in the permit must be selected, designed, installed, implemented and maintained in accordance with good engineering, hydrologic and pollution control practices. The Division has determined that this new requirement is necessary to ensure compliance with the effluent limitations.
- The monitoring conditions for existing subterranean structure dewatering discharges may be reduced from monthly to quarterly if, after collecting and submitting twelve (12) months of discharge monitoring data, the permittee can demonstrate compliance with all numeric effluent limitations and monitoring requirements for all outfalls for that reporting period upon effective date of the permit renewal.
- The permit clarifies the process by which the permittee can inactivate permit coverage for a subterranean structure discharge in accordance with Water Quality Policy 1 (WQP-1), "Permit Inactivation Policy Where a Discharge Remains." The intent of the policy is to provide consistency to permit inactivations where a discharge continues following the inactivation, but where water quality standards and beneficial uses are met without the need for treatment. WQP-1 requires that the site be "visited" by Division staff to confirm the conditions for inactivation have been met. Part I.E.2.d.iv identifies that this requirement can be met when a field inspection is conducted by the permittee and documented by facility photographs that are submitted to the Division to allow for review of site conditions without a Division field inspection. Due to the nature of the discharges authorized under this permit, it is anticipated that in most cases, this process will be adequate to meet the requirement of WQP-1. This is not a deviation from WQP-1and is consistent with Division procedures that have identified review of information in the office as equivalent to a site visit in

some cases. The Division may conduct field inspections, or require additional information to meet the requirements of Part I.E.2.d.iv, as necessary. However, at this time the Division cannot ensure field resources to conduct site visits for each facility to verify that site activity has ceased and that no treatment is required to meet the applicable water quality standards and beneficial uses of the receiving stream.

The Division has proposed using WQP-1 for the subterranean structure dewatering discharges instead of a Low Risk Discharge Policy and guidance document for uncontaminated groundwater discharges to surface water because WQP-1is currently in place and effective.

C. Facilities Covered:

This general permit authorizes discharges of source water from subterranean structures (basement, foundation, footer drains, etc.) and/ or well development water to waters of the State in Colorado. The permit only authorizes the discharge from the source water from the specific area(s) that has been identified in the permittee's application, or in subsequent notifications to the Division. Subterranean structure dewatering discharges are long-term dewatering, and are typically conducted to prevent groundwater from causing structural property damage. Well development discharges are typically temporary batch discharges necessary for well construction and testing. Both types of activities discharge relatively shallow groundwater to the surface and release this groundwater to waters of the state.

The following discussion outlines the permits available for discharges of groundwater and differences between the Discharges Associated with Subterranean Dewatering or Well Development General Permit, the Construction Dewatering General Permit, the Remediation Activities General Permit, and the Low Risk Discharge Policy for Uncontaminated Groundwater Discharges to Ground. Additional information is included in the specific permit or low risk guidance.

1. Background

The Subterranean Dewatering or Well Development general permit authorizes the discharge of source water from subterranean structures (basement, foundation, footer drains, etc.) and/ or well development water. Basement, foundation, or footer drains may be necessary to collect and remove groundwater to help prevent damage to a buildings structure. Typically, dewatering during the construction phase of the structure or building is permitted under the Construction Dewatering Discharge General Permit. Once construction of the structure or building is complete and long-term foundation dewatering is necessary, an application for the Subterranean Dewatering or Well Development General Permit must be submitted to the Division. Once the Subterranean Dewatering or Well Development certification is issued, then a Notice of Termination form must be submitted to the Division in order to terminate the Construction Dewatering certification.

Prior to 2007, the Division permitted discharges from sources covered under this general permit under the Minimum Industrial Discharge (MINDI) general permit (COG-600000). The MINDI general permit was created in 1995 to create an opportunity for discharges of either a relatively small volume, discharged over a short period of time, and that had pollutants which were amenable to control through low level treatment technologies or best management practices, to efficiently obtain permit coverage. The MINDI was created to respond to an increase in inquiries about whether sources were subject to NPDES permitting requirements and whether permit coverage could be obtained through a more streamlined administrative process. By 2006 the MINDI permit had grown to cover more than 500 discharges that included a wide range of sources. In 2007 the Division decided to not renew the MINDI permit and to instead create more specific categories of discharges to be covered under separate general permits in order to stay aligned with regulatory requirements

for general permits and better characterize the class of discharges and effluent limits to be applied in each general permit. The Division found that there were approximately 100 discharges associated with subterranean dewatering and well development previously covered under the MINDI and as such this category of discharges was defined as a subset that could be covered under a new general permit.

2. Scope of this General Permit

This general permit continues to be appropriate for discharges that have pollutants which are amenable to control through low level treatment technologies or best management practices. The majority of the discharges authorized under this permit are associated with subterranean dewatering, and are discharges of shallow or alluvial groundwater. Consistent with the construction dewatering general permit, this general permit is targeted for areas where groundwater is not contaminated. Many of the discharges implement filtration, separation, or sand filters to remove solids and settleable/filterable pollutants. Discharges found to consist of contaminated groundwater have been required to apply for coverage under an alternate permit, either an individual permit or a general permit that specifically authorizes the discharge of treated contaminated groundwater.

In implementing this permit it has become important to be able to distinguish discharges that are contaminated from those that are not, and the terminology and information used to make that determination has evolved over time. In reviewing applications for coverage under this general permit, and previously under the MINDI permit, the Division has always and continues to assess the potential for groundwater contamination in the vicinity of the project. The general permit terminology under the previous permit term provided very general language limiting coverage to facilities where the "source water should have no evidence of contamination." The Division reviewed the application materials to ensure that the effluent limits included in the general permit met the regulatory direction that the permit "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" (5 CCR 1002-61.8(2)(b)(i)(A). Additional information, including water quality data, would be requested by the Division to ensure that the application contained adequate information for the Division to make this determination.

The scope of this general permit also includes discharges associated with well development, and the source water for these discharges can be alluvial groundwater or deep groundwater. For deep groundwater the scope of the permit is limited to well development since the source water is generally of potable quality, and the discharges are of a relatively small volume discharged over a short period of time and as such are expected to be discharges that can meet water quality standards through low level treatment technologies or best management practices. The scope of the permit does not include other deep groundwater discharges such as those associated with natural resource extraction activities.

In the current permit that is being renewed through this action, the Division provided increased clarity by identifying limitations in permit coverage necessary to ensure the applicable effluent limits meet the regulatory standard. In addition, the requirement to provide information in the application, or as a supplement to the application, on a case-by-case basis, was clarified in the permit and fact sheet. The Division encourages applicant to submit data with the application when available, and requires data to be submitted following the initial application review in cases where it is needed to finalize a reasonable potential determination.

More recently, the Division has received increased questions regarding naturally occurring pollutants, and whether they are or are not considered contaminants. Within the Clean Water Act framework, both anthropogenic and naturally occurring pollutants that may be present in a discharge are subject to effluent

limitations as needed to protect water quality standards. If flexibility is appropriate due to factors such as limits of technology, ambient conditions, and economic impacts, relief can be considered under the water quality standards framework of the Clean Water Act (e.g., modifications or variances to stream standards), in contrast to being within the authority of a permit determination.

In general, the permit is intended to authorize discharges for which all pollutants discharged will meet stream standards without the need of advanced treatment beyond removal of suspended solids. Coverage under this permit is not for discharges for which the Division has determined that there is a reasonable potential for a pollutant to be present in the source water at a concentration that is greater than a numeric water quality standard of the receiving water.

The Division has determined it is appropriate and feasible to authorize discharges under this permit for which a limited set of specific contaminants (i.e., Benzene, Toluene, Ethylbenzene, Xylene, E. coli, and Total Coliform, as discussed below) have the reasonable potential to be present in the source water in excess of the receiving water standards, but for which treatment is not necessary to meet effluent limitations. This allowance expands the number of discharges eligible for coverage without overly complicating the permitting process and adding significant additional terms and conditions. For the remaining discharges that require additional evaluation during the authorization process and additional permit terms and conditions, general permit coverage is still available in most cases under the Remediation Activities Discharge General Permits. These general permitting options enable the Division to provide permit coverage for the majority of facilities with discharge types covered under this permit, in a more timely and efficient manner and with fewer terms and conditions.

In this permit renewal, the Division is specially stating that coverage is allowed in situations where the construction dewatering operation is in an area of potential contamination with Benzene, Toluene, Ethylbenzene, and Xylene (BTEX), and if the applicant can demonstrate, through submission of data, that the the discharge source water can meet the appropriate water quality standards without additional treatment for these pollutants. The result is that the permit can authorize discharges where the source water has the reasonable potential to contain BTEX in excess of the receiving water standards, but for which the actual exceedance has not occurred. This scenario occurs for many permitted facilities due to the common occurrence of leaking underground storage tanks at commercial gas stations and other sources of petroleum pollution of soils and groundwater. When facilities are in proximity to these locations of contamination, there is a potential that the contaminants can be drawn into the source water based on many variables that may be difficult to fully evaluate at the time of application, including frequency and actual flow rate of discharge, location of the contaminated groundwater, and groundwater hydrology. By allowing the discharge to be covered under this permit for these reasonably common scenarios, the Division allows flexibility for the operator to simplify permitting under this permit, as compared to a Remediation Activities general permit or individual permit. The permittee can decide, based on an evaluation of the site at the time of the application, to seek permit coverage under a Remediation Activities Discharge general permit or an individual permit which would authorize the discharge with treatment for BTEX if required to meet water quality standards. A similar determination has also been made for E. coli and Total Coliform. The permit authorizes discharges where the source water has the reasonable potential to contain E.coli or Total Coliform (as appropriate for discharges to surface and groundwater respectively) in excess of the water quality standard, but for which the actual exceedance has not occurred. The Division will likely make a qualitative reasonable potential determination that E. coli or Total Coliform may exceed standards in the source water when the associated facility is in proximity to septic disposal systems and or other sewage disposal conveyances or vessels. In these cases, the potential is based on the possibility for leaks or spills. By authorizing discharges with such potential, the permit allows operator to comply with the permit limitations by avoiding sources of E. coli or Total Coliform.

3. Other permit or low-risk options

The Construction Dewatering Discharge General Permit authorizes the discharge of construction dewatering to surface water and/ or groundwater. In general, the permit is intended to authorize discharges for which all pollutants discharged will meet stream standards without the need of advanced treatment beyond basic filtering (e.g., filter bags), settling (e.g., tanks), or other systems designed to remove suspended solids.

The Remediation Activities General Permits authorize the discharge from Remediation Activities (e.g., treatment and/or remedial activities of groundwater, alluvial water, stormwater, and/or surface water). The discharges are typically contaminated, or have the reasonable potential to be contaminated, from specific industrial sources that may include former dry cleaners, gasoline stations, industrial manufacturing facilities, or contaminated from an unknown sources. They may also have contamination from naturally occurring constituents at concentrations that trigger water quality based effluent limits for discharges to surface water based on a Reasonable Potential Analysis. The Remediation Activities general permits require influent screening of the groundwater to help the Division characterize the groundwater contamination associated with the discharge.

The State of Colorado also has a Low Risk Discharge Policy for Uncontaminated Groundwater Discharges to Ground. The Low Risk Policy is intended for discharges of groundwater to land that are not expected to contain pollutants in concentrations that are toxic, or in concentrations that would cause or contribute to a violation of a water quality standard for groundwater. These types of discharges would not have pollutants or pollutant parameters above any water quality standard for the receiving groundwater.

4. Stormwater Permitting Options for Subterranean Structure Dewatering

There are discharges from subterranean structure dewatering (basements, foundations, footer drains, etc.) that may not require permit coverage or for which coverage is available under other permits, in particular stormwater permits.

a. *Discharges authorized under an Industrial Stormwater Permit or Stormwater Discharges for which permit coverage is not required*

   i. If a discharge from subterranean structure dewatering is authorized under an industrial stormwater permit, separate permit coverage under the Subterranean Dewatering permit may not be required, as described below.

   - Discharges composed entirely of stormwater associated with industrial activity may be eligible for coverage under a stormwater discharge permit that authorizes such discharges. 5 CCR 1002-61.3(2) identifies point source discharges of stormwater that require discharge permit coverage, including specifically defined discharges categories (e.g., based on SIC code or a narrative description) as well as those designated as requiring a permit based on a determination that the discharge contributes to a violation of a water quality standard or is a significant contributor of pollutants to state waters. The Division has previously, and continues to, interpret that stormwater runoff that is captured in structures or infiltrates and then is dewatered still meets the definition of stormwater. Therefore, where the source water for the dewatering is composed entirely of stormwater runoff, the requirement to obtain permit coverage is typically based on whether the point source discharge of stormwater is required to have permit coverage in accordance with 5 CCR 61.3(2), as discussed above; if an industrial stormwater discharge permit certification is

already held by the facility where dewatering is conducted, the dewatering discharge must be consistent with the effluent limitations, terms, and condition of the industrial stormwater permit.

It is the Division's current practice to determine that a dewatering discharge includes groundwater, and therefore is not composed entirely of stormwater runoff, when the discharge is drawn from below a groundwater table, including as a result of seasonal or precipitation driven increases in the groundwater table elevation. This may require site-specific considerations in some cases.

- Discharges from foundation and footing drains where the source water is uncontaminated groundwater and flows are not contaminated with process materials, may be an allowable non-stormwater discharge authorized under industrial stormwater permits. Facilities with industrial stormwater permit coverage that also have foundation and footing drain discharges can obtain coverage for such discharges in accordance with the requirements of the stormwater industrial permit as long as the discharge can be controlled as necessary to meet water quality standards.

ii. A discharge composed entirely of stormwater for which there is no duty to apply for permit coverage, because it is not identified as a "stormwater discharge associated with industrial activity" in 5 CCR 1002-61.3(2), is not required to obtain permit coverage to discharge as long as the discharge is not designated for permit coverage by the Division or EPA based on the discharge contributing to a violation of a water quality standard or being a significant contributor of pollutants to state waters.

b. Discharges of Stormwater eligible for coverage under the Remediation Activities General Permit

Subterranean dewatering discharges composed entirely of stormwater that have been significantly impacted by industrial activity and cannot be adequately controlled to meet water quality standards without treatment may be eligible for coverage under the remediation activities general permit. This may include situations when materials have leaked from a vessel or conveyance, or other additional production materials have added pollutants to the captured stormwater runoff. In practice these discharges are typically collected and disposed of appropriately at a disposal facility, or connected to the sanitary sewer system in accordance with the requirements of the wastewater treatment facility.

c. Residential Subterranean Structure Dewatering

In general, residential structure subterranean dewatering is presumed to be in direct response to precipitation events and composed entirely of stormwater (e.g., single family home sump pump discharges). Some large residential structures such as multi-family complexes with underground parking structures where the dewatering discharge includes groundwater have been covered under this permit. The Division will consider providing coverage for structure subterranean dewatering from smaller residential structures (e.g., houses and multi-plexes) with groundwater contributions if the discharge has been identified as a significant contributor of pollutants

D. Limitations on Coverage

There are some discharges from subterranean structure (basement, foundation, footer drains, etc.) dewatering and/ or well development operations that cannot be covered under this general permit and must apply for coverage under another general permit or an individual permit. These exclusions are listed in Part I.A.2 of the permit.

E. Application Requirements:

Subterranean structure (basement, foundation, footer drains, etc.) dewatering and/ or well development operations can apply for coverage under this general permit upon the issuance and effective date of the permit by submitting a complete and accurate application at least 30 days prior to the anticipated discharge. Following review of the application, the Division may request additional information. Upon receipt of the additional information, the Division shall have additional time to issue or deny the authorization to discharge.

Permit coverage for existing facilities with certifications under the administratively extended Discharges Associated with Subterranean Dewatering or Well Development General Permit (COG-603000), that have submitted renewal applications and qualify for coverage under the renewed general permit, will automatically be transferred to the renewed permit. Permit coverage will be transferred without a lapse of coverage (i.e. discharging without a permit) and without loss of fee payments.

The CDPS general permit for Remediation Activities Discharging to Surface Water and CDPS general permit for Remediation Activities Discharging to Surface Water (COG-315000) authorizes discharges of groundwater similar to this general permit, but for which Remediation Activities may be conducted. As part of the Division‘s review of an application for coverage under COG-603000 or based on the availability of new information for facilities with existing coverage, the Division will assess the potential for various sources of contamination to be present in the discharge. Water quality based effluent limits may be required based on a Reasonable Potential Analysis (see Part VI.A.2.g) due to the potential presence of contaminants in the source water. The Division will also review any MSDS for each chemical proposed for use during well development. The Division will not authorize coverage under COG-603000 if the discharge meets the limitations in Part I.A.2.a, or if treatment is required to remove pollutants resulting from the chemical addition. If the applicant wishes to obtain coverage under one of the Remediation Activities general permits for the discharge, the applicant must submit to the Division a statement requesting that the information received in the subterranean dewatering or well development application be applied towards the Remediation Activities general permits application.

III. RECEIVING STREAM

The Division has identified the stream segment(s) to which the facilities with current certifications under the general permit discharge. The Division expects to continue coverage for these facilities under this general permit since the stream standards and designations are consistent with the limitations on coverage in the permit (i.e., none of the segments are designated as outstanding waters). The Division will also evaluate discharges to stream segments with established TMDLs, discharges to 303(d) listed waters, and other receiving water information as appropriate. Stream segments will be identified in the permit certification when issued under this permit.

IV. SECTOR DESCRIPTION

A. Industry Description

This permit covers subterranean structure dewatering of groundwater (i.e., basement or foundation under drains), well development (i.e., pump test water or dewatering), and monitoring and observation wells (i.e., penetration into the upper aquifer only). These activities bring relatively shallow groundwater to the surface and release this groundwater to waters of the state. The coverage for discharges of groundwater from basement or foundation under drains is intended to apply to commercial buildings (i.e., office buildings,

parking garages, apartment buildings) and not to apply to single-family, residential structures. The Division will consider providing coverage for single-family, residential structures, if the owner submits an application.

B. Chemical Usage

Subterranean structure dewatering covered under this general permit typically uses passive treatment Best Management Practices to meet the Effluent Limitations and monitoring requirements outlined in the permit certification. The primary pollutant of concern for subterranean structure dewatering is Total Suspended Solids and therefore, the use of chemicals is not expected at these facilities. The discharge of drilling fluid and /or drilling mud and well cleaning with the intent of stripping the well of metals accumulation, is not authorized under this general permit. However, there may be other types of well development activities that use chemicals during testing and cleaning. The Division has required applicants to submit a list of proposed chemicals used in the process. Additionally, a MSDS for each chemical proposed for use must be provided so that the Division can determine the appropriate effluent limitations and conditions to include in the permit certification. If the chemicals proposed have constituents of concern, for which numeric permit effluent limitation included in Part I.2. Table B.1., Table B.2., Table B.3., and Table B.4. of the general permit are not sufficient to provide limitations to control the discharge of pollutants or pollutant parameters above any water quality standard for the receiving water, the Division may determine that coverage under the Discharges Associated with Subterranean Dewatering or Well Development permit is not appropriate. In most cases, coverage under one of the Remediation Activities general permits will likely be applicable for such discharges.

V. COMPLIANCE HISTORY

The Division reviewed DMR data for previously permitted subterranean structure (basement, foundation, footer drains, etc.) dewatering and/ or well development operations between September 30, 2010 and March 31, 2013. DMR data is available prior to this period, but was not entered into a database that would facilitate review and analysis of the data. During this time period, 103 facilities had active dewatering permits. Of those facilities, 79 facilities had an active discharge and submitted sampling and monitoring data to the Division in the form of Discharge Monitoring Reports (DMR). Of those 79 facilities, 75 facilities were discharging subterranean structure (basement, foundation, footer drains, etc.) dewatering. Of those 75 facilities with subterranean structure dewatering, 19 are located in the mountains, while the rest are in the Front Range urban areas.

DMR review indicated that there were exceedances for various parameters including Selenium, Iron, Vinyl Chloride, Tetrochloroethene, Sulfide, Total Dissolved Solids (TDS) and Total Suspended Solids (TSS). The site-specific parameters such as Selenium, Iron, Vinyl Chloride, Tetrochloroethene, and Sulfide were applied in less than 10% of the permitted facilities and the facilities with these violations may demonstrate reasonable potential for the pollutant to be present in the source water at a concentration that is greater than a numeric water quality standard. The Division may contact these facilities, and permitting under the Remediation Activities general permit or an individual permit may be required. The TDS standard for discharges to groundwater found in Regulation 41 <u>The Basic Standards for Ground Water</u> is implemented on a sliding scale. The sliding scale allows for a twenty-five percent increase for all ground waters with a background TDS concentration greater than 500 mg/l. If the background concentration is less than 400 mg/l then the maximum allowable concentration of TDS is 500 mg/l. The majority of the facilities with a numeric water quality standard for TDS did not supply background concentration data and therefore the more stringent maximum allowable concentration of 500 mg/l was applied in the permit certification. If background data is available for the facilities, the Division can implement the appropriate standard based on the scale.

Because activities associated with discharges under this permit do not have a potential to elevate TDS concentrations, if the discharge is back to the same aquifer, TDS limitations will not be applied based on the determination that there is no potential to exceed background levels.

VI. TERMS AND CONDITIONS OF PERMIT

A. Discussion of Effluent Limitations

1. Technology Based Limitations

   a. Federal Effluent Limitation Guidelines – There are no Federal Effluent Limitation Guidelines for this category of discharge.

   b. Regulation 62: Regulations for Effluent Limitations – These Regulations include effluent limitations that apply to all discharges of wastewater to State waters. These regulations are applicable to the discharge from Subterranean Dewatering or Well Development.

      i. Total Suspended Solids - The Division's current permit includes numeric technology-based limits for TSS based on Regulation 62. The Division has retained those more stringent requirements in this renewal permit for all dischargers as required by the anti-backsliding provision in CWA § 402(o). These limitations are the same as those contained in the previous permit and are imposed upon the effective date of this permit.

      ii. Oil and Grease – The oil and grease limitations from the Regulations for Effluent Limitations are applied as they are the most stringent limitations. These limitations are the same as those contained in the previous permit and are imposed upon the effective date of this permit.

      iii. pH - The pH limitation specified in the Regulations for Effluent Limitations is not the most stringent and thus is not used. pH limitations for discharges to unclassified surface waters are generally 6.0-9.0, per Regulation 62. However, to maintain consistent effluent limitations under the general permit, the permit includes a pH limitation of 6.5-9.0 for all discharges to surface waters.

2. Water Quality Regulations, Policies, and Guidance Documents

   a. Antidegradation – As stated in The Basic Standards and Methodologies for Surface Water, Section 31.8, an antidegradation (AD) analysis is required for all discharges to waters designated "reviewable", except in cases where the regulated activity will result in only temporary or short-term changes in water quality. Therefore, short-term and intermittent discharges will be considered a temporary impact and exempted from the AD review. The AD review is applicable to discharges subject to water quality-based effluent limits for surface water discharges. Limitations to coverage in part I.A.2 exclude most discharges from coverage that would requires water quality based effluent limits, with the exception of Benzene, Toluene, Ethylbenzene, Xylene, and E. Coli when those pollutants may be present, but not at levels requiring treatment to remain below water quality standards at the point of discharge. It is anticipated that in almost all cases, these limitation on permit coverage will result in discharges with temporary impacts, since discharges with the potential for the long term presence of these pollutants would be expected to not meet the conditions for coverage under this permit.

If a discharge is identified as requiring the implementation of additional or modified water quality based effluent limitations than are included in this permit, the Division will require the discharge be covered under the CDPS general permit for Remediation Activities Discharging to Surface Water or an individual permit, and terminate permit coverage under this permit in accordance with II.B.5.a(iv).

b. Antibacksliding – The Division has retained the more stringent TSS numeric effluent limit in this renewal permit for all dischargers as required by the anti-backsliding provision in CWA § 402(o).

c. Determination of Total Maximum Daily Loads (TMDLs) – Upon reissuance of the renewal certifications and for new subterranean dewatering or well development permit applications under this revised general permit, the Division will assess whether or not any permitted facility discharges to segments for which a TMDL has been completed. The Division has included a provision in the general permit that authorizes the inclusion of additional effluent limits and other terms and conditions in a certification for discharges to segments for which a TMDL has been completed. The determination whether compliance with numeric effluent limitations will be required will be made on a case-by-case basis.

d. Determination of Discharges to 303(d) Listed Waters— Upon reissuance of the renewal certifications and for new subterranean dewatering or well development permit applications under this revised general permit, the Division will assess whether or not any permitted facility discharges to segments on the 303(d) list of impaired waters. The Division has included a provision in the general permit that authorizes the inclusion of additional effluent limits and other terms and conditions in a certification for discharges to segments that are on the 303(d) list of impaired waters.

e. Colorado Mixing Zone Regulations – For this general permit, mixing zone regulations will not apply for discharges from Remediation Activities as all limitations are assigned as end of pipe limits based on the Water Quality Standards and Technology Based Limitations. The rationale for not applying mixing zone regulations is due to Division resource limitations and the time required to conduct a thorough analysis of the receiving stream and its‘ assimilative capacity. In addition, this level of analysis is more appropriate for the individual permit process in order to include public notice and comment opportunities. Not applying the mixing zone regulations is consistent with the previous iteration of the permit.

f. Total Phosphorus – as noted in the general permit, the Division will implement effluent limitations and monitoring conditions in the certification in accordance Phosphorus Control Regulations (Regulations, 71, 72, 73, and 74).

g. Reasonable Potential Analysis –An analysis must be performed to determine whether to include WQBELs in the permit. This reasonable potential (RP) analysis is based on the Determination of the Requirement to Include Water Quality Standards-Based Limits in CDPS Permits Based on Reasonable Potential, dated December, 2002. This guidance document utilizes both quantitative and qualitative approaches to establish RP depending on the amount of available data.

3. Pollutants Limited by Water Quality Standards –

a. pH – This parameter is limited by the water quality standards of 6.5-9.0 s.u., as this range is more stringent than the range specified under the Regulations for Effluent Limitations. This limitation is the same as that contained in the previous permit and is imposed effective immediately.

b. E. coli- This parameter is limited by the water quality standards found in Regulation 31, The Basic Standards and Methodologies for Surface Waters. E.coli criteria and resulting standards for individual water segments are established as indicators of the potential presence of pathogenic organisms. Regulation 31 provides chronic standards (expressed as a two-month geometric mean) for the beneficial uses of Class E, Class P, and Class N recreational use and domestic water supply. In accordance with the WQCD Policy Concerning Escherichia coli versus Fecal Coliform Effluent Limitations, the Division will use twice the chronic limit for establishing "acute" E.coli effluent limits; unless and until acute E. coli standards are promulgated.

c. Temperature- The Division decided not to include monitoring for temperature on a permit-wide basis, as facilities generally do not add heat during their processes. However, a case-by-case determination will be made as whether to include monitoring for temperature for facilities that containerize the effluent for extended periods of time causing the potential for temperature to be a pollutant of concern

d. Metals—A case-by-case determination will be made as to whether or not metals are potential pollutants of concern that must be limited and/or monitored to protect the classified uses assigned to the receiving water. The case-by-case determination will be made based on the source water for the subterranean dewatering or well development discharge, chemicals used in the remedial process, concentrations of naturally occurring metals, the potential for the characterization of the source water to change due to locations of contaminant plumes, and data supplied with the permit application used to characterize the potential source water. Concentrations of naturally occurring metals, and data supplied with the permit application used to characterize the potential source water. The limitations for metals are based upon the water quality standards and will come directly from the basin regulations (Regulations 32-38) and the Basic Standards and Methodologies for Surface Water (Regulation 31). Standards for metals in the basin regulations that are shown as Table Value Standards (TVS) must be derived from equations that depend on the receiving stream hardness or species of fish present. These equations can be found in the basin regulations (Regulations 32-38).

e. Volatile Organic Compounds (VOCs) and Semi-Volatile Organic Compounds (SVOCs)—A case-by-case determination will be made as to whether or not VOCs and/or SVOCs are potential pollutants of concern that must be limited and/or monitored to protect the classified uses assigned to the receiving water. The case-by-case determination will be made based on the chemicals used in the treatment process and data supplied with the permit application used to characterize the potential source water. The limitations for VOCs and SVOCs are based upon the water quality standards that come directly from the Basic Standards and Methodologies for Surface Water (Regulation 31). The numeric effluent limitations implemented are dependent on the beneficial use of the receiving stream.

5. Salinity Regulations – In compliance with the Colorado River Salinity Standards and the Colorado Discharge Permit System Regulations, the permittee shall monitor for total dissolved solids on a monthly basis.

6. Economic Reasonableness Evaluation – Section 25-8-503(8) of the revised (June 1985) Colorado Water Quality Control Act required the Division to "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 impacts to the public and affected persons, and are in furtherance of the policies set forth in sections 25-8-192 and 25-8-104."

   The Colorado Discharge Permit System Regulations, Regulation No. 61, further define this requirement under 61.11 and state: "Where economic, environmental, public health and energy impacts to the public and affected persons have been considered in the classifications and standards setting process, permits written to meet the standards may be presumed to have taken into consideration economic factors unless:

   a. A new permit is issued where the discharge was not in existence at the time of the classification and standards rulemaking, or

   b. 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."

   The evaluation for this permit shows that the Water Quality Control Commission, during their proceedings to adopt the basin regulations, considered economic reasonableness.

   Furthermore, no new information has been presented regarding the classifications and standards. Therefore, the water quality standard-based effluent limitations of this permit are determined to be reasonably related to the economic, environmental, public health and energy impacts to the public and affected persons and are in furtherance of the policies set forth in Sections 25-8-102 and 104. If a party that desires coverage under this general permit disagrees with this finding, pursuant to 61.11(b) (ii) of the Colorado Discharge Permit System Regulations, they should submit all pertinent information to the Division during the public notice period.

B. Terms and Conditions Necessary to Assure Compliance

Regulation 61.8(3)(f) includes a requirement for permits to include 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.

C. Monitoring

Effluent monitoring will be required as shown in the general permit. Monitoring locations will be authorized in the permit certification. Facilities wanting to request a reduction in monitoring frequency must request so through the modification process. The Division will evaluate if a reduction in monitoring frequency can be made in accordance with the Monitoring Policy. Subsequently, upon permit renewal, facilities that have previously been granted a reduction in monitoring frequency will be re-evaluated against the criteria set forth in the Policy to determine if monitoring reductions can continue.

D. Reporting

1) Discharge Monitoring Report – Facilities authorized under this general permit must submit Discharge Monitoring Reports (DMRs) on a quarterly basis to the Division. These reports should contain the required summarization of the test results for all parameters and monitoring frequencies shown in Part I.B of the permit. See the permit, Part I.B, C, D and/or E for details on such submission.

2) Special Reports – Special reports are required in the event of an upset, bypass, or other noncompliance. Please refer to Part II.A. of the permit for reporting requirements. Submittal of these reports to the US Environmental Protection Agency Region VIII is no longer required.

E. Spills

Spill requirements apply to materials spilled that result in their presence in the discharge authorized under this permit. Spills that may cause pollution of state waters that are not discharged through an outfall authorized under this general permit are not within the scope of this general permit and are required to be reported in accordance with the Colorado Water Quality Control Act 25-8-601(2), since the Division views these actions as not authorized under the scope of a discharge permit. Additional information regarding reporting of unauthorized spills is contained in the Divisions Guidance for Reporting Spills.

F. Compliance Schedules

Compliance schedules are authorized to be included in certifications as needed. All information and written reports required by a compliance schedule should be directed to the Permits Section for final review unless otherwise stated.

G. Additional Terms and Conditions

Signatory and Certification Requirements – Signatory and certification requirements for reports and submittals are discussed in Part I.E.7. of the permit.

Permit Writer
Maura McGovern
June 12, 2013

VII REFERENCES

A. Colorado Department of Public Health and Environment, Water Quality Control Division Files, for CAAPFs currently authorized under this permit.

B. Basic Standards and Methodologies for Surface Water, Regulation No. 31, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective November 30, 2009.

C. Colorado Discharge Permit System Regulations, Regulation No. 61, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective September 30, 2009.

D. Regulations for Effluent Limitations, Regulation No. 62, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective March 30, 2008.

E. Colorado River Salinity Standards, Regulation No. 39, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective August 30, 1997.

F. Antidegradation Significance Determination for New or Increased Water Quality Impacts, Procedural Guidance, Colorado Department of Public Health and Environment, Water Quality Control Division, effective December 2001.

G. Memorandum Re: First Update to (Antidegradation) Guidance Version 1.0, Colorado Department of Public Health and Environment, Water Quality Control Division, effective April 23, 2002.

H. Determination of the Requirement to Include Water Quality Standards-Based Limits in CDPS Permits Based on Reasonable Potential Procedural Guidance, Colorado Department of Public Health and Environment, Water Quality Control Division, effective December 2002.

I. The Colorado Mixing Zone Implementation Guidance, Colorado Department of Public Health and Environment, Water Quality Control Division, effective April 2002.

J. Baseline Monitoring Frequency, Sample Type, and Reduced Monitoring Frequency Policy for Domestic and Industrial Wastewater Treatment Facilities, Water Quality Control Division Policy WQP-20, May 1, 2007.

K. Policy for Conducting Assessments for Implementation of Temperature Standards in Discharge Permits, Colorado Department Public Health and Environment, Water Quality Control Division Policy Number WQP-23, effective July 3, 2008.

VIII PUBLIC NOTICE COMMENTS

The draft general permit and associated fact sheet were noticed for public comment on June 14, 2013 and the 30 day comment period ended on July 15, 2013. Comments and questions were received from The City of Glendale, Colorado Stormwater Council (CSC), City of Longmont, Denver Department of Environmental Health, and Public Service Company of Colorado, PSCo (dba Xcel Energy). Summaries of these comments and questions and the Division‘s responses are provided below and organized by the permit and fact sheet section. The full comments and supporting documents are contained in the permit file and available upon request from the Division‘s Records Center. Some comments and questions received during the 30 day comment period were outside the scope of the general permit and the Division responded directly to the commenter.

General Comments

Comment 1, City of Longmont
Why has the permit eligibility shifted from no evidence of contamination to ground and/or surface waters to potential for the source water to have concentrations of pollutants above stream standards?

Response 1— *Part II.C of the Fact Sheet was revised to include additional discussion on discharges eligible for coverage under this Permit. The limitations for permit coverage under this renewal are consistent with the practices for authorizing coverage under the previous permit. Coverage is limited if there is a*

reasonable potential for a pollutant to be present in the source water at a concentration that is greater than a numeric water quality standard of the receiving water. This limitation is intended to provide clarity to the language in the previous permit term stating that the source water should not be contaminated, and the Division's practice of requiring permit coverage under a Remediation Activities general permit or individual permit when additional effluent limitations are required to address reasonable potential. The limitations applied in this general permit are intended to allow for a streamlined permitting approach for a majority of the subterranean and well development discharges while still protecting the quality of receiving state water. The Division's general permits for Remediation Activities include additional application requirements, monitoring requirements and effluent limitations determined necessary for discharges that do not qualify for coverage under this permit.

Comment 2, City of Longmont
Requested that permit coverage eligibility and limitations be based on exceedance of stream standards in the receiving water and not the source water.

Response 2—*The permit applies water quality standards at the end of pipe and does not account for dilution of pollutants by the receiving water, which would necessitate the calculation and inclusion of facility specific numeric effluent limitation(s) that incorporate mixing. The required data and calculation that would be needed for such an approach would also significantly extend the time to process applications, beyond the current 30 days identified for this permit. In addition, it is the Divisions' determination that facility specific numeric effluent limitation(s) based on dilution should be subject to public notice and comment, and would be inconsistent with the regulations for issuing general permits in 5 CCR 61.9(2)(a)(ii). Facilities desiring such considerations may apply for coverage under an individual permit.*

Comment 3, City of Longmont and CSC
Requested clarification if all subterranean dewatering is covered under this permit, particularly with the inclusion of a definition for Intermittent Discharge. Asked for a discussion in the Fact Sheet about the applicability of this permit to different types of subterranean discharges. And if this permit does not apply to all subterranean dewatering, clarify within the permits which are applicable.

Response 3—*The general permit authorizes discharges from subterranean structures (basement, foundation, footer drains, etc.). Permit coverage is not limited to subterranean dewatering discharges that are intermittent but the Division does recognize that many of these subterranean dewatering discharges are seasonal and therefore considered intermittent. Part I.A.2. Limitations on Coverage section of the permit provides discussion on what types of subterranean and well development discharges are not eligible for coverage under this permit. In addition, a discussion was added to Part III.C of the Fact Sheet regarding stormwater and single family residential discharges for which permit coverage may not be necessary under this Permit.*

Comment 4, City of Longmont and CSC
Commented that many commercial structures have basements with sump pumps or foundation drains that are connected to a storm sewer that conveys the discharge to surface waters and requested explanation on where the Division would expect the permittee to monitor and sample- at the connection to the storm sewer or at the discharge to the surface water? In addition, many of these discharges are intermittent; and asked if the Division have a recommendation on how an owner is to know when a discharge may be occurring and able to sample?

Response 4—*The general permit requires the discharge point to be designed or modified so that samples can be obtained at a point after treatment and prior to discharge into state waters. The samples are required to be representative of the effluent or discharge and therefore before the effluent joins or is diluted*

by any other waste stream, this would include off-site stormwater in a storm sewer. The permittee can determine how they intend to sample and monitor their discharge but may need to install an internal outfall in order to collect a sample that meets the requirements. The permittee can also determine how they intend to identify when a discharge occurs. The permit does not require flow meters or automated sampling devices however that may be an option.

Comment 5, CSC
Questioned why well development is included in this permit?

Response 5—*TheDivision may issue general permits to cover a category of discharges, involve the same or substantially similar types of operations, discharge the same types of wastes, require the same effluent limitations or operating conditions, require the same monitoring, and are more appropriately controlled under a general permit than under individual permits. The Division believes that subterranean and well development operations meet the above criteria.*

Comment 6, Denver Department of Environmental Health
Questioned how this General Permit is applicable to development and purging of ground water monitoring wells when discharges from this source are short duration and low volume? Is a discharge permit necessary in all cases for developing and purging monitoring wells or is there a de minimus amount for which permitting is not required for discharges to the ground?

Response 6—*Permit coverage is required regardless of the amount of water discharged to surface water or to the ground. However, the Division does have a Low Risk Discharge Policy for Uncontaminated Groundwater Discharges to Ground. If a subterranean or well development dewatering discharges meets all the provisions in the Low Risk document a permit would not be required by the Division and the discharge would be covered under the Low Risk Policy.*

<u>Permit Part I.</u>

Comment 1, City of Longmont— Part I.A.1
Requested clarification within the permit that this permit does not apply to single-family residential structures. What circumstance would the Division provide coverage for a single family residence if the owner submitted an application?

Comment 2, CSC— Part I.A.1
Requested clarification within the permit that this permit does not apply to single-family residential structures.

Comment 3, City of Glendale— Part I.A.1
Requested clarity within the permit that this permit is not intended to apply to single family residential structures?

Response 1, 2, and 3— *A discussion was added to Part II.C of the Fact Sheet regarding stormwater and single family residential discharges for which permit coverage may not be necessary under this Permit. In general, the Division has not pursued permitting for structure subterranean dewatering of groundwater associated with single-family residential sources.*

Requirements for what discharges are required to obtain permit coverage are not determined by permit actions, and limiting the applicability of a permit would not result in excluding a discharge from permitting requirements. Regulation 61, <u>Colorado Discharge Permit System Regulations</u> requires permitting for any

discharge of a pollutant into any state water from a point source. The Division has determined it is appropriate to continue to authorize dewatering discharges from single family structures under this general permit in the limited case that a facility may seek such permit coverage.

Comment 4, Denver Department of Environmental Health—Part I.A.2.a.
Questioned if issuance of this General Permit impacts or modify any existing General Permit for discharges from subterranean foundation dewatering?

Response 4— *The renewed general permit is needed to continue to provide coverage for these established dischargers. The Division will renew any existing subterranean dewatering discharge permit for which a renewal application has been submitted and for which the discharge qualifies for coverage under the general permit. The renewal permit certification will reflect the terms and conditions of the renewal permit.*

Comment 5, City of Glendale. —I.2.c.
Commented that in the past, well cleaning activities have been covered under this permit. Would well cleaning for other purposes apply under this permit? If not, does the Division plan to issue individual permits for well cleaning activities?

Response 5— *The renewal permit specifically does not authorize well cleaning that is intended to strip a well of metal accumulation. The Division has made this determination based on this type of well cleaning activity reasonable potential to add pollutants to the discharge source water that are outside the scope of the general permit's numeric effluent limitations and monitoring requirements. However, some types of well cleaning may be permitted under this general permit if they meet the terms and conditions of the renewal permit. Discharges that do not qualify for coverage under this permit may be able to meet conditions for coverage under a Remediation Activities general permit, or may apply for coverage under an individual permit.*

Comment 6, Xcel Energy —Part I.A.2.a.second bullet
We suggest revising as follows "Naturally occurring pollutants that potentially exist in the source water that are at concentrations greater than the numeric water quality standard of the receiving water".

Response 6— *The language has been added to the permit.*

Comment 7, Denver Department of Environmental Health—Part I.A.2.a.
Commented on clarifying that this paragraph is intended to mean that even in those circumstances where there is a "reasonable potential" for BTEX to be present in the groundwater at a concentration exceeding the water quality standard, coverage under this General Permit is allowed so long as the applicant can demonstrate that the discharged water does not contain BTEX above the standards.

Response 7— *Part III.C of the fact sheet was revised to clarify this issue.*

Comment 8, Colorado Stormwater Council and City of Longmont—Part I.A.2.a.
Requested clarification on why Benzene, Toluene, Ethylbenzene, and Xylene (BTEX) are only contaminants called out specifically for an exemption from reasonable potential if the discharger can show that BTEX are not in the effluent? Commented that dischargers should be eligible for this permit if they can show that any pollutant is not in the effluent, even if there is reasonable potential for it to be there. Clarification was requested

that if a potential permittee could provide data that shows the discharge does not contain the pollutant, then this general permit can be issued.

Response 8— *The limitations in Part I.A.2.a are intended to allow for a streamlined permitting approach for the majority of construction dewatering discharges. Coverage is not limited based on the reasonable potential for a pollutant to be present, but is limited if there is a reasonable potential for a pollutant to be present in the source water at a concentration that is greater than a numeric water quality standard of the receiving water. The Division general permits for Remediation Activities include additional application requirements, monitoring requirements, and effluent limitations determined necessary for discharges that do not qualify for coverage under this permit.*

The Division revised the Fact Sheet to better describe why the specific permit terms and conditions were included in this permit renewal. The Fact Sheet also explains the exception for BTEX and that limitations for BTEX may be included in the permit.

Comment 9, Denver Department of Environmental Health — Part I.A.2.f.ii
Requested clarification that this limitation does not apply to discharges to stormwater detention basins.

Response 9— *The permit was revised to address that some impoundments are not subject to solid waste rules, and therefore discharges to such impoundments would not be subject to this limitation.*

Comment 10, Denver Department of Environmental Health— Part I.B.1
Commented on the use of the term outfall instead of "discharge point" because the permit certification does not list a specific outfall rather the certification refers only generally to a receiving State water or segment.

Response 10—*All permit certifications under this permit will identify the permitted outfall(s).*

Comment 11, Xcel Energy —Part I.B.1, B.2, B.3, B.4,
Commented on updating the "sample type" for flow to reflect the language described in the fact sheet.

Response 11—*The language in Note 1 of the permit has been updated*

Comment 12, Denver Department of Environmental Health, City of Longmont, CSC, and City of Glendale — Part I.B, Table B.3,
Commented that the column heading for "Monitoring Frequency" is marked with a double asterisk (**); however, there is no note for a double asterisk (**).

Response 12—*A note has been added to Table B.3.*

Comment 13, City of Longmont—Part I.B.2, Tables B.1, B.2., B.3, B.4,
Commented that pH monitoring in these tables should not be limited to in-situ when it can be performed according to EPA approved methods at a lab.

Response 13—*The tables have been updated to reflect the allowance of grab or in-situ sampling method for pH. The Permit requires that sampling is performed according to specified methods in 40 C.F.R. Part 136; methods approved by EPA pursuant to 40 C.F.R. Part 136; or methods approved by the Division, in the absence of a method specified in or approved pursuant to 40 C.F.R. Part 136. 40 CFR Part 136 Table II Sample Collection, Preservation Techniques, and Holding Times requires a maximum holding time for pH as "within fifteen minutes" and therefore in-situ will likely be the sampling method used.*

Comment 14, Denver Department of Environmental Health
Question on Table B.3 for continuous discharges to surface water, and questioned if a permitted outfall has an installed treatment system to mitigate the discharge of oil and grease, does Note 2 and the sampling frequency still apply?

> ***Response 14—****The technology standards applied in the permit will remain even if treatment is installed and the outfall complies with the limitation. However a reduced monitoring frequency may be implemented if the permittee can demonstrate they meet the terms and conditions necessary for reduced monitoring, see Part I.E.2., of the permit.*

Comment 15, Denver Department of Environmental Health, City of Longmont, CSC, and Xcel— Part I.B.2, Tables B.1, B.2., B.3, B.4,
Commented on Note 2, "a visual observation … must be made once a week"; however, Table 1 and Table 2 state "2x/discharge" and Tables 3 and 4 say "Monthly". Please clarify.

> ***Response 15—The requirement of*** *"2x/discharge" will be applied for discharges associated with well development, and a requirement for "monthly" will be applied for discharges of subterranean dewatering.*

Comment 16, Xcel—Notes for Tables B.1, B.2, B.3, and B4,
Commented that the requirement to collect composite samples for oil and grease does not seem to be necessary for the permit due to the intermittent or temporary nature of the discharge. A grab sample type is suggested and in addition the Sample Type for Oil and Grease listed in Table Tables B.1, B.2, B.3, and B4 is grab.

> ***Response 16—****The language in Note 2 of the permit has been updated to reflect the requirement of a grab sample for oil and grease.*

Comment 17, Denver Department of Environmental Health— Part I.B.2, Note 4
Commented on Note 4 and suggested adding "of the state" after the word "waters" in the second sentence.

> ***Response 17—****The language in Note 4 has been updated to reflect the requested language.*

Comment 18, City of Longmont and CSC — Part I.B.2, Note 5
Requested clarification on the term "sewage conveyance" as discussed in Note 5 and the reference to the sanitary sewer collectors and how the Division will know whether the facility is in close proximity to a "sewage conveyance" in order to make a reasonable potential determination?

> ***Response 18—****The Division will make this determination based on the nature and location of the facility described in the permit application, and a qualitative determination of the reasonable potential for sewage to contribute pollutants to the discharge that results in the reasonable potential for E. coli or Total Coliform to be present in the source water at a concentration that is greater than a numeric water quality standard of the receiving water.*

Comment 19, Denver Department of Environmental Health
Commented on Note 6, suggest revising the last sentence as follows: See Part I A.2.a. of the permit regarding <u>an exception to the</u> limitations of permit coverage associated with Benzene, Toluene, Ethylbenzene, and Xylene.

Response 19—*The Division did not update the language because the reference listed in the permit discusses the exception. Permit certifications will identify the applicable effluent limitations for a discharge and reduce the potential for confusion.*

Comment 20, City of Longmont and CSC— Part I.B.2, Note 1
Provided comment that groundwater is variable and actual flows will not be known until dewatering actually begins. If there is a limit on flow there might be overestimation at the time of application. Why would the Division double the maximum estimated flow for the certification and also want the permittee to notify the Division when maximum flow on the application is exceeded?

Response 20— *The permit limitation for flow is set at double the rate identified in the application to reduce the need for permit modifications resulting in variations in flow rate. However, notification is required by the permit when the rate identified in the application is exceeded since the Division's determinations for qualitative reasonable potential are based on that identified flow rate and may need to be reevaluated if the rate changes. This combination of a limitation and notification requirement provides for a reasonable limitation on the variation from the identified flow rate (i.e., double) without requiring a modification.*

Comment 21, City of Longmont — Part I.B.2, Note 8:
Commented that the note states that TDS will not be required provided that the "remediation activity" is not contributing to TDS concentrations. The note should reference subterranean dewatering and well development, not remediation.

Response 21—*The language in Note 8 of the permit has been updated*

<u>Permit Part I.C.Terms and Conditions</u>

Comment 1, City of Longmont —Part I.C.4
Commented that this section restates the same sentence already included in Part 1.C.1 Practice Based Requirements and should be removed:
"All waters shall be discharges in a manner to prevent erosion, scouring, or damage to stream banks, streambeds, or ditches."

Response 1—*The duplicative language has been removed from Part I.C.1.*

Comment 2 City of Longmont, CSC and City of Glendale—Part I.C.5
Commented that the permit should require the permittee to notify local jurisdictions of discharges to their storm sewer system or watercourses.

Response 2— *Requirements for such notifications would be in accordance with the applicable agencies requirements and not under the authority of the Division to require directly in the permit. In addition, not all such agencies require notification. The Division will advise permittees that such notification may be required in the permit application. The Division will evaluate the language referenced and used in other permits at the time of their renewals.*

Comment 3, Denver Department of Environmental Health—Part I.C.6
Commented that the reference to "end of pipe limits" is not consistent with the concept of "reasonable potential" from other pollutant sources as defined in this General Permit.

Response 3— *All numeric effluent limits and reasonable potential determination under this general permit are consistent in that they do not take into consideration dilution and are based on preventing the discharge from exceeding standards.*

Comment 4, Xcel Energy —Part I.C.7,
Suggested that the language in this section is changed to "Discharges to State Waters for which an approved or established TMDL has been developed for a specified pollutant(s) that has the potential to be in the subterranean and well development dewatering project discharge, may be authorized provided there are sufficient remaining waste load allocations in the approved or established TMDL*."*

Response 4 —*The language in this section has been updated to reflect the requested change.*

Comment 5, Denver Department of Environmental Health —Part I, Section C.8.
Commented that the paragraph is ambiguous. How would this apply to a pollutant such as selenium?

Comment 6, City of Longmont —Part I, Section C.8.
Commented that Selenium (Se) is a naturally occurring contaminant that has a state-wide potential for being in the source water and is very difficult and expensive to treat. What analysis has been done on the previous DMR data for Se? Please provide more detailed discussion about how Se will be evaluated for reasonable potential and also how it will be handled through permit limitations or requirements.

Response 5 and 6— *Discharges authorized by this permit may include report-only requirements for Selenium. This will typically only occur to facilitate the collection of additional data when a discharge is to a segment listed on the Division 303(d) list as impaired for selenium. Where there is a reasonable potential for Selenium to be present in the source water at a concentration that is greater than a numeric water quality standard of the receiving water, permit coverage is required under another general permit (i.e., a remediation activities general permit) or under an individual permit. The Division does consider the nature of the pollutant in making a reasonable potential determination. For example for pollutants like benzene that are not naturally occurring, the Division will make a qualitative determination of reasonable potential based on published groundwater contamination information that indicates a pollutant source is in the vicinity of the project, without requiring project specific groundwater sampling data to be submitted to confirm the determination. Additional information can be voluntarily submitted by the applicant to support a no RP decision as appropriate. For Selenium, reasonable potential will typically be evaluated based on site-specific data, or data from nearby facilities that are determined to be representative of the data and a yes RP decision is typically made only where more localized information confirm the presence of the pollutant. Under the previous permit the Division's practice for selenium where there was not site-specific data was to make a qualitative monitor only decision where the receiving water is impaired. The Division's review of this data has shown that selenium exceeded the receiving water quality in 6 of 17 facilities between 2009 and 2012. Although this shows that RP for selenium does occur in areas where the Division had only qualitative impairment information upon which to the base the decision, it also shows that impairment alone does not correlate to an expectation that the discharge will exceed stream standards in the majority of the cases. Therefore, the Division drafted this master general permit with the expectation that effluent limits for selenium determinations would continue to be made based on local site specific data only. This is because there is known water quality problem, however given the nature of selenium, its presence in many ambient waters and a monitor only decision is made where local data are not available to continue to inform future decisions. The Division acknowledges the challenges associated with treating for selenium; however discharges containing Selenium remain subject to the requirements of 5 CCR 61. requiring that effluent 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.

Permit Part I.D. Definitions

Comment 1, Denver Department of Environmental Health—Part I.D.20
Commented that #20 – "Stormwater" definition refers to "stormwater runoff" but this term is not defined.

Response 1 *—"Stormwater runoff" does not have a specific regulatory definition that differs from the common definition.*

Comment 2, City of Longmont and CSC —Part I.D.7
Commented on the definition for Good Engineering, Hydrologic and Pollution Control Practices: This definition should have been developed through discussions with other permit stakeholders like the MS4s, Non-Standards, and Construction Contractors. This definition applies to many more permits than just the subterranean dewatering and well development permit. The definition should be removed until all appropriate stakeholders have been included and the definition has had adequate review for all applicable uses. At minimum, the criteria in the definition should be linked with "or" instead of "and."

Response 2— *The definition is only applicable to the terms and conditions of the permit, and therefore the public process for issuance of this permit was appropriate for seeking stakeholder comment. The Division does not agree that the criteria in the definition should be met when only one criterion is met. The criteria where drafted to be jointly applicable in order to set a standard that would result in appropriate control of pollutants.*

Comment 3, Colorado Stormwater Council— ***Part I.D,***
Surface Impoundment is referenced in I.A.2.f.ii as being regulated by the Hazardous Materials Waste Management Division (HMWMD), Solid Waste Program. Please include the definition of surface impoundment in the permit.

Response 3— "*Waste impoundment or impoundment" is defined in Colorado Solid Waste Regulations 6 CCR 1007-2, and may be subject to change and therefore is not appropriate to define in this permit.*

Permit Part I.E. General Monitoring, Sampling and Reporting Requirements

Comment 1, Denver Department of Environmental Health and Xcel— Part I.E.1
Questioned the reference to monthly DMRs when the intent of the permit's reporting requirement to submit quarterly DMRs?

Response 1*— The DMR reporting requirement remains quarterly for this permit. The reference to monthly has been changed to quarterly to reflect this.*

Comment 2, Denver Department of Environmental Health— Part I.E.2.b
Requested clarity on reduced monitoring and if it is available to existing subterranean and well development discharges that are currently permitted as well as new discharges that will be permitted under this General Permit. Is reduced monitoring available only for continuous discharges or is reduced monitoring also available for intermittent discharges?

Response 2*—The Reduced Monitoring and Inactivation Where a Discharge Remains Section of the permit will apply to existing as well as new discharges that can meet the terms and conditions of this section. They will also be applied to both continuous and intermittent discharges if the discharge can demonstrate compliance with all numeric effluent limitations and monitoring requirements for all outfalls for the specified reporting period.*

Comment 3, Xcel Energy —Part I.E.2.d.
Stated that PSCo appreciates the Division including this section into the general permit and believes some discharges covered by this general permit meet the intent and criteria of Water Quality Policy 1.

Comment 4, City of Longmont —Part I.E.4
Commented on Analytical and Sampling Methods for Monitoring and Reporting: Do flow estimation methods, as discussed in Part I.E.7, comply with the requirements in the Analytical and Sampling Methods for Monitoring and Reporting section (Part I.E.4) or is an exemption needed in Part I.E.4?

Response 4— *The requirements of Part I.E.4 are not applicable to flow limitations*

Comment 5, City of Longmont and CSC —Part I.E.7
Commented that this section refers to a discharge log according to I.C.1.e but I.C.1.e does not exist in the permit. The reference to the discharge log should be removed.

Response 5— *This reference has been removed because a discharge log is not a requirement of this permit.*

<u>Permit Part II</u>

Comment 1, City of Longmont —Part II.A.3
Commented that the outline format needs to be corrected.

Response 1*— The outline format has been corrected.*

Comment 2, Denver Department of Environmental Health, CSC, City of Longmont, and Xcel Energy — Part II.A.4.a
Questioned the requirement to provide noncompliance notification to the Division and EPA?

Response 2*—The Division agrees that the inclusion of EPA is in error and the requirement to provide notification to the EPA has been removed*

Comment 3, City of Longmont—Part II
Commented that language in Part II.B that is not directly applicable to discharges authorized by the permit should be removed.

Response 3— *This language is applied in all permits for constancy with 5 CCR 61 and between permits, and has not been removed*

<u>Fact Sheet</u>

Comment 1, Xcel Energy —Part II.B

Commented that in their situation at the two facilities that have a subterranean dewatering permit, a flow limitation could be met as the flow is fairly constant and does not fluctuate. Water is pumped so we would rely on pump capacity to report flow. However, because the flow rate and volume is generally constant we believe that we could meet the accuracy requirements.

> ***Response 1****— The inclusion of a flow limitation will remain in the permit.*

Comment 2, City of Longmont and CSC — Part II.C, Facilities Covered
Requested clarity on how DMR data for Construction Dewatering will be used in the reasonable potential determination for Subterranean Dewatering. If monitoring during construction shows no concentrations of pollutants above stream standards, is the Subterranean Dewatering Permit still required?

> ***Response 2****— If a permanent subterranean dewatering discharge was previously permitted during the construction phase under the Construction Dewatering permit the Division may review the DMR data submitted with the Construction Dewatering discharge for the reasonable potential analysis. If monitoring during the construction phase of the project shows no concentrations above the receiving stream standards a subterranean permit would still be necessary. After sufficient data has been submitted under this Permit, that is representative of the steady state discharge instead of the construction activities discharge the facility may qualify for reduced monitoring or Inactivation Where a Discharge Remains based on the relative conditions of the permit. .*

Comment 3, City of Longmont and CSC— Part II.C, Facilities Covered
Commented on the reference to construction dewatering; is it meant to refer to this permit?

> ***Response 3****— The reference has been updated to state "subterranean dewatering."*

Comment 4, City of Longmont and CSC— Part II.C
Requested a discussion about how individual permits are used and applied.

> ***Response 4****— The facility has the ability to apply for and request an Individual Permit at any time. An Individual permit may be necessary if mixing considerations are necessary in order for the subterranean or well development discharge to meet the numeric effluent limitation of the receiving stream. An Individual permit may also be required by the Division if the subterranean or well development discharge is substantially different, requires different effluent limitations based on facility operating conditions, or the Division believes the discharge is more appropriately controlled under an individual permit.*

Comment 5, City of Longmont, CSCS, and Excel— Part VI.B.1
Commented that the following sentence refers to materials handling and spill prevention and discharge log requirements that are not included in the permit. These references should be deleted. Also, the phrase "have been added to the permit" is repeated. "Pollutant Control Practices, Materials Handling and Spill Prevention, and Discharge Log requirements have been added to the permit have been added to the permit (Part I. C.1 and Part I C.2.)."

> ***Response 5****— These references have been removed from the Fact Sheet.*

Permit Writer
Maura McGovern
August 22, 2013