

**COLORADO DISCHARGE PERMIT SYSTEM (CDPS)  
FACT SHEET TO PERMIT NUMBER COG316000  
GENERAL PERMIT FOR DISCHARGES FROM REMEDIATION ACTIVITIES TO  
GROUND WATER**

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**I. TYPE OF PERMIT**

Master General, State Only Permit, Ground Water, First Issuance, Statewide

**II. SCOPE OF THE GENERAL PERMIT**

- A. SIC Code:** 1799 Special Trade Contractors, Not Elsewhere Classified  
1629 Heavy Construction, Not Elsewhere Classified

**B. Rationale for Developing the New General Permit:**

The previous ground water remediation general permit (COG315000), which expired on October 31, 2010 and was subsequently administratively extended by the Water Quality Control Division (Division), provided authorization to discharge remediated ground water to surface water and ground water. Upon renewal of the remediation general permit, the Division decided to issue two remediation activity permits, one for discharges to surface water and a second for discharges to ground water. This was a deliberate action by the Division to specifically identify discharges to surface water and discharges to ground water in order to apply the appropriate discharge limitations and to identify whether the discharges to ground water are being permitted by the appropriate regulating agency based on the method of discharge.

The previous ground water remediation general permit provided coverage for 2 facilities with remediation activities discharging to ground water. This newly issued general permit is needed to continue to provide coverage for these established dischargers and for new ground water remediation facilities that are operating throughout Colorado and wish to discharge to ground water.

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Major changes from the previous general permit include the following:

- Inclusion of requirements to develop, document, and implement a Remediation Discharge Activities Management Plan in accordance with good engineering, hydrologic and pollution control practices to ensure compliance with effluent limitations and other permit conditions.
- Inclusion of a provision that requires dischargers to contain the initial effluent until analyses have confirmed that all numeric effluent limitations have been met. The Division has been including this condition in certifications under the current permit
- Quarterly influent screen for Base, Neutral, Acids, Volatile Organic Compounds, and Metals to detect changes in discharge
- Inclusion of practices required for discharges in exceedance of water quality standards
- Limitations on coverage to exclude discharges to surface water, ground water that is hydrologically connected to surface water, surface impoundments, or to Class V Injection Wells.

**C. Facilities Covered:**

This general permit is to authorize discharges from Remediation Activities to ground water within Colorado. Only facilities with activities that meet the definition of Remediation Activities are eligible for coverage under the general permit.

Table II-1 lists the 2 entities currently covered under the administratively extended Groundwater Remediation General Permit. The Division has received renewal applications for these 2 facilities.

**Table II-1—Inventory of Facilities with Certifications under the Current General Permit**

Certification	Permittee	Facility	Discharge Flow Rate	Receiving Stream(s)
COG315233	Public Service of Colorado	Mesa to Skylake Project	200 GPM	Ground Water
COG315244	Public Service of Colorado	West Main Pipeline Integrity Management Program	200 GPM	Ground Water

**D. Limitations on Coverage:**

The Division included a limitation of coverage related to having representative data of the contaminated source water in order to characterize the waste stream and to identify all parameters which will require monitoring and/or numeric effluent limitations.

There are some discharges from Remediation Activities that cannot be covered under this general permit and must apply for coverage under another general permit, an individual permit, or through another regulating agency such as the EPA or Hazardous Materials Waste Management Division, Solid Waste Program. These exclusions include discharges from Remediation Activities that:

- are discharged to surface waters, or
- are discharged to ground water that is hydrologically connected to surface water, or
- are discharged to ground and need the use of the land for treatment (land treatment), or
- are discharged to Class V Injection Wells, or
- are discharged to surface impoundments or other engineered units, or
- are discharged to ground water, but regulated by one of the implementing agencies under Senate Bill 181.

Discharges to surface water are excluded from this permit. Remediation Facilities wanting to discharge to surface water should apply for coverage under the Remediation Activities general permit, COG-315000

Discharges to ground water that are hydrologically connected to state surface waters are excluded from this permit since surface water numeric effluent limitations must be applied in lieu of the ground water standards in order to protect the beneficial uses of the state surface water ultimately receiving the discharge. Therefore discharges to ground water that hydrologically connected to state surface waters are more appropriately covered under a separate general permit. Remediation Facilities wishing to discharge to ground water that is hydrologically connected to state surface waters should apply for coverage under the Remediation Activities general permit, COG-315000.

Discharges to land that need the use of the land to treat the effluent are excluded from this permit. Remediation Facilities wishing to utilize land treatment shall apply for an individual permit, since a site specific evaluation is needed when permitting these types of discharges.

Discharges to Class V Injection Wells are excluded from this permit since the EPA—Region 8 is the regulating authority for these methods of discharges within in the state of Colorado.

Discharges to land that fall under the regulating authority of implementing agencies under Senate Bill 181 are excluded from this permit. These include discharges regulated by the Division of Reclamation and Mining Safety of the Department of Natural Resources, the State Engineer of the Department of Natural Resources, the Oil and Gas Conservation Commission of the Department of Natural Resources, the Division of Oil and Public Safety of the Department of Labor and Employment, and the Hazardous Materials and Waste Management Division of the Department of Public Health and Environment.

According to the Memorandum of Agreement for the Implementation of Senate Bill 181 Amendments to the Colorado Water Quality Control Act, the Hazardous Materials Waste Management Division (HMWMD)/Solid Waste Program will regulate facilities that are discharging wastewaters into surface impoundments and associated pipelines or other engineered units, even those designed for purposeful seepage (e.g. no liner or a seeping liner).

### **E. Application Requirements:**

Remediation facilities 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 45 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.

Existing facilities with certifications under the administratively extended Groundwater Remediation General Permit (COG-315000) that have submitted renewal applications and qualify for coverage under the new general permit will automatically be transferred. Coverage will be transferred to the new general permit without a lapse of coverage (i.e. discharging without a permit) and without loss of fee payments.

The CDPS general permit for Construction Dewatering activities (COG-070000) authorizes discharges from similar activities as this general permit, but for which Remediation Activities are not conducted. As part of the Division's review of an application for coverage under COG-070000, 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 V.A.2.h) due to the presence of contaminants in the source water.

Coverage under COG-070000 will not be authorized by the Division if remediation activities will be conducted for the discharge based on these water quality based effluent limits. If the applicant wishes to obtain coverage under the Remediation Activities general permit for the discharge, the following information must be submitted to the Division:

- a statement requesting that the information received in the Construction Dewatering application be applied towards the Remediation Activities Permit application,
- source water characterization data,
- a description of the treatment utilized in order to meet limitations,
- a description of the land application method(s), and
- additional information as requested by the Division

All information must be submitted by the permit applicant legal contact and signed in accordance with Part I.E.7 of the permit.

### **III. SECTOR DESCRIPTION**

#### **A. Industry Description**

Facilities with Remediation Activities in Colorado can be described as facilities engaged in Remediation Activities of ground water, alluvial water, stormwater, and/or surface water (the source water) that will be discharged to ground water and that is:

- Contaminated from specific industrial sources to include former dry cleaners, gasoline stations, industrial manufacturing facilities, etc.
- Contaminated from an unknown sources
- Contaminated with naturally occurring constituents at concentrations above the ground water standards that cause an increased risk to public health, crops, or livestock as noted in Regulation 41.5.B.5

#### **B. Chemical Usage**

Facilities potentially use a variety of chemicals during the treatment process for discharges from Remediation Activities. For this general permit the Division has required applicants to submit a list of proposed chemicals, including dosage rates, used in the treatment 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 certification. Additional sampling and monitoring requirements may be imposed based on the chemicals used.

The permittee shall notify the Division of any change in chemical usage associated with the permitted discharge in accordance with Part I.C.8 and Part II.A.2 of the Permit.

### **IV. COMPLIANCE HISTORY**

There are currently two remediation facilities that have permit coverage under COG-315000 that authorize discharges to ground water. Neither of these facilities has discharged under their existing permit, therefore it is

difficult to discern compliance history for remediation activities discharging to ground water. However, there are 25 facilities that have permit coverage for remediation activities discharging to surface water and the Division feels the compliance history of these facilities would be worth mentioning since the activities resulting in the discharge and the treatment employed to remediate the effluent is similar.

The Division reviewed DMR data for the 25 facilities covered under general permit, COG315000. Some facilities received compliance advisories for failure to submit DMRs. A few facilities have continual numeric effluent limitation violations. The Division will evaluate whether these facilities will have to modify their treatment and contain their effluent until the modified treatment has confirmed that the effluent limitations have been met. Coverage under this renewed general permit may not be certified for a current permittee if compliance information from the previous permit term indicates that effluent limits in accordance with the permit do not ensure compliance with applicable water quality standards, control regulations, and the State and federal acts.

DMR review indicated that there were exceedances for various parameters including: Manganese, Iron, 1,4 Dioxane, Oil and Grease, MTBE, pH, Vinyl Chloride, 1,1,2,2-Tetrachloroethane, Chloroform, 1,2-Dichloroethane, Methylene Chloride, Carbon tetrachloride, Bromodichloromethane, 1,2-Dichloropropane, N-Nitrosodi-N-propylamine, Whole Effluent Toxicity Testing, Methyl tert-butyl ether, and Total Suspended Solids.

The Division had determined that a root cause for the high rate of exceedances of effluent limits in certifications under the previous permit was the implementation of treatment systems inadequate to remove pollutants as necessary to comply with those effluent limits. The Division has determined that for facilities covered under this permit, relying only on design calculation to determine if a facility will be capable of complying with effluent limits is inadequate to ensure compliance with applicable water quality standards, control regulations, and the State and federal acts. This iteration of the permit therefore requires containment of an initial batch of effluent until analyses have confirmed that all numeric effluent limitations have been met.

## V. TERMS AND CONDITIONS OF THE PERMIT

### A. Discussion of Numeric Effluent Limitations

RA facilities certified under this general permit must comply with the effluent limitations specified in Part I.B.2 of the permit and in the permit Certification. The following parameters for RA facilities are regulated under The Basic Standard for Ground Water, (Regulation 41), Site-Specific Water Quality Classifications and Standards for Ground Water, (Regulation 42), and Regulations for Effluent Limitations, (Regulation 62), and shall be monitored as specified in the permit and Certification.

#### 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 the Remediation Activities.
  - i. 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.

## 2. Water Quality Regulations and Guidance Documents

- a. Flow—Continuous effluent flow monitoring is required to ensure proper operation of the treatment system.
- b. pH – pH was determined to be a potential pollutant of concern for discharges from Remediation Activities based on the occurrence for groundwater to be contaminated by a variety of pollutant sources resulting in altered pH levels that do not meet ground water standards. Additionally, the variety of chemicals used in the treatment process that can result in further modification of pH levels.

This parameter is established to protect ground water quality in accordance The Basic Standards for Ground Water, Regulation 41. The pH standard in Regulation 41 has a range from 6.5 s.u. to 8.5 s.u. The pH limits are an instantaneous minimum and maximum, respectively. It should be noted that pH limitations are also provided in Regulation No. 62 – Regulations for Effluent Limitations; however, the ground water standards provided in Reg. No. 41 is designed to be protective of ground water.

- c. 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 of the ground water. The case-by-case determination will be made based on the source water for the remedial activity 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 source water.

The limitations for metals are based upon the classified uses of the ground water. The classified uses of ground water and any site specific water quality standards will come directly from Site-Specific Water Quality Classifications and Standards for Ground Water, Regulation 42. All non-site specific ground water standards will come directly from the Basic Standards for Ground Water, Regulation 41. When a ground water has a multi-use classification, the most restrictive standard for a parameter shall apply.

- d. 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 ground water. The case-by-case determination will be made based on the source water for the remedial activity discharge, chemicals used in the remedial process, 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 source water.

The limitations for Organics are ‘statewide standards’ and will come directly from the Basic Standards for Ground Water, Regulation 41, unless alternative, site-specific standards for these substances have been adopted by the Commission.

- e. Total Dissolved Solids (TDS)—The determination whether or not sampling and monitoring for TDS will be required for discharges to ground water will be made respective to where the source water is pulled and where the discharge is land applied. The rationale for this is based on how TDS is limited in Regulation 41.

According to Regulation 41, the Maximum Allowable TDS Concentrations (that can be in a discharge) vary depending on the background TDS values. Specifically, background TDS Values (in mg/l) of 0-500 require a limitation of 400 mg/l or 1.25 times the background level, whichever is least restrictive; background TDS Values of 501-10,000 require a limitation of 1.25 times the background value; background TDS Values of 10,001 or greater require no limitation.

Scenario 1—Does not require sampling and monitoring for TDS.

If the source water being treated during the remedial activity (RA) is being discharged to the same aquifer from which it was pulled AND provided that concentrations of TDS are not added during the RA, sampling and monitoring for TDS will not be required.

Scenario 2—Requires sampling, monitoring and compliance with TDS Limitation of 400 mg/l. If the source water being treated during the RA is discharged to a different aquifer from which it was pulled, sampling, monitoring and compliance with the TDS limitation of 400 mg/l will be required. If the permittee would like consideration of background TDS levels for the aquifer being discharged to, the permittee can submit TDS sampling data with the permit application.

- e. Total Phosphorus – As noted in the general permit, the Division will implement effluent limitations and monitoring conditions in the certification in accordance with the Phosphorus Control Regulations (Regulations, 71, 72, 73, and 74).
- f. Whole Effluent Toxicity (WET) Testing—WET testing is not applicable for discharges to ground water.
- g. Temperature—Temperature monitoring is not applicable for discharges to ground water.
- h. 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.

## **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. The Division has determined that the following conditions are necessary for discharges authorized by this permit.

1. Containing Discharge to Ensure Numeric Effluent Limits Can Be Met: Due to the variability of the source water being treated, Part I.C.3 of this permit requires containment of the initial batch of the effluent until analyses have confirmed that all numeric effluent limitations have been met. If the initial sample exceeds any limitations, additional treatment shall be completed prior to discharge to ensure compliance with the limitations. An additional sample must be collected, post-treatment, to confirm compliance with the limitations. Additional sampling and treatment shall be repeated, and all water shall be collected and retained, until monitoring results for the treated effluent verify compliance with the numeric effluent limitations identified in the permit certification.
2. Remediation Activity Practices: Regulation 61.8(3)(r) includes a requirement for permits to include conditions for best management practices to control or abate the discharge of pollutants when the practices are reasonably necessary to achieve effluent limitations and standards. Part I.C.4 of the permit includes a requirement that management practices be implemented in accordance with good engineering, hydrologic and pollution control practices during field inspections at Remediation Facilities. The permit specifically identifies the need to ensure that control mechanisms are designed, implemented, and maintained with proper hydraulic and pollutant removal capacities. This requirement would make it a violation for a structural pollutant removal control to be operated in such a way that is outside of its design tolerances intended to ensure compliance with the numeric effluent limits. Examples would included failure to operate at the proper flow rate, maintain necessary capacity and holding time, apply proper rates and quantities of chemicals, and replace filters as necessary for proper function. Failure to properly implement and maintain practices can result in variations in pollutant removal ability of controls such that exceedance of numeric effluent limits may not be identified by the intermittent sampling required by the permit and therefore the requirement to implement practices is necessary to ensure ongoing compliance with numeric effluent limits. The specific requirement that remediation activity practices to be implemented in with good engineering, hydrologic and pollution control practices removal is intended to require consistent pollutant removal through proper operation of treatment controls.
3. Remediation Activities Management Plan: Part I.C.5 of this of the permit includes a requirement to develop, document, and implement a Remediation Activities Management Plan (Plan). The requirement for the Plan ensures that the practices implemented at the site are documented so that it is clear to the permittee, operator, and Division how the remediation practices at the site are to be implemented to maintain compliance with the permit. The plan is also required to describe practices that will be implemented to meet additional conditions of the permit, and to enable effective compliance oversight of the permitted facility.
4. Discharge Log: Discharges authorized by this permit often occur irregularly. This irregular nature can result in confusion for both the permittee and the Division in determining monitoring frequency and the application of both daily and averaged effluent limitations. A discharge monitoring log is therefore required by Part I.C.6 of the permit to identify when discharges are occurring from permitted outfalls. This requirement applies to all dischargers but is intended to not result in a significant tracking and record keeping burden for those discharges that are on-going.
5. Practices for Discharges in Exceedance of Applicable Water Quality Standards: Pollutant concentrations in the influent for discharges authorized by this permit can change significantly over time. These changes can be impossible to predict and therefore makes it likely that the permittee will not be able to notify the Division of the change in discharge as required by Part II.A.2 of the permit prior to the change occurring. Without this notification and the ability to respond proactively, the Division does not have the ability to determine if the altered discharge is consistent with the

conditions of the permit and whether or not the permit continues to ensure compliance with applicable control regulations, water quality standards, and the state and federal Act.

The previous iteration of this permit, which covered discharges to surface water and ground water, addressed this concern by not authorizing any pollutant not identified in the permit certification. The Division has determined that this requirement is infeasible since it would result in a violation for pollutants that were present even when there is no potential for an exceedance of a water quality standard or when the permittee is unaware of the pollutants' presence. Therefore, Part I.C.7 of the permit includes requirements for the permittee to respond to changes in discharge only when the permittee becomes aware that pollutant concentrations in the discharge exceed any applicable water quality standards for the receiving water for a pollutant not subject to an effluent limitation in the permit certification. The permit also provides additional conditions that would allow a discharge to continue in compliance with the permit if the permittee can prevent the exceedance at the outfall. However, notification to the Division is required. The occurrence of an exceedance of a water quality standard at the outfall for a pollutant without an effluent limitation will likely result in the Division requiring a new or revised permit application and shall follow the procedures specified in Sections 61.5 through 61.6, and 61.15 of the Colorado Discharge Permit System Regulations.

### C. Monitoring

1. Effluent Monitoring – Effluent monitoring will be required as shown in the general permit. The monitoring frequencies for some parameters deviate from the Baseline Monitoring Frequency, Sample Type, and Reduced Monitoring Frequency Policy (Monitoring Policy). However, according to the Monitoring Policy, intermittent type discharges such as batch type discharges are not subject to the Monitoring Policy. Since discharges permitted under this general permit have the potential to be both continuous and of batch type, the Division established the monitoring frequencies based on the variability of the source water and type of activity resulting in the discharge to State waters. However, the monitoring frequencies are consistent with the previous iteration of the permit.

Monitoring locations will be authorized in the permit certification. Facilities with continuous discharges 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.

2. Influent Monitoring—Since the source water being discharged under this general permit has the high potential to change based on proximity to groundwater contaminant plumes and groundwater flow, quarterly influent monitoring is required. The Division established the influent monitoring frequency based on potential for variability of the source water and the type of activity producing the discharge.

### D. Reporting

1. Discharge Monitoring Report – Facilities authorized under this general permit must submit Discharge Monitoring Reports (DMRs) on a **monthly** 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. The Division anticipates that a compliance schedule may be appropriate for implementation of the more restrictive Antidegradation limitations for example. 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**

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

**Nicole Rolfe**  
**April 14, 2011**

## **VI. REFERENCES**

- A. Colorado Department of Public Health and Environment, Water Quality Control Division Files, for facilities currently authorized under this permit.
- B. The Basic Standards for Ground Water, Regulation No. 41, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective November 30, 2009.
- C. Site Specific Water Quality Classification and Standards for Ground Water, Regulation No. 42, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective March 30, 2006.
- D. Colorado Discharge Permit System Regulations, Regulation No. 61, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective September 30, 2009.

- E. Regulations for Effluent Limitations, Regulation No. 62, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective March 30, 2008.
- F. 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.
- G. 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.
- H. Memorandum of Agreement for the Implementation of Senate Bill 181 Amendments to the Colorado Water Quality Control Act, Water Quality Control Commission, effective July 2008.
- I. Class V Shallow Disposal System/Well Document, United States Environmental Protection Agency-Region 8. <http://www.epa.gov/region8/water/uic/classv.html>

## VII. PUBLIC NOTICE COMMENTS

The City and County of Denver (CCoD) provided the only written comments during the Public Notice Period. Summaries of these comments and the Division’s response are provided below. The full comments and supporting documents are contained in the permit file and available upon request from the Division’s Records Center.

### **Comment 1**—Part I.A, Coverage Under This Permit

The first paragraph notes that, “RA facilities discharge to ground water through uncontained land application methods...” Please include a definition for ‘uncontained’.

*Response 1*— Part I.A was revised to define “uncontained land application methods” as “not discharged into a surface impoundment “

### **Comment 2**—Part I.B.3, Monitoring Frequencies and Sample Types for Influent Parameters

The requirement that a permittee seeking relief from influent sampling substantiate that constituents are not present in influent at concentrations more than one half the underlying surface water standard seems unreasonable and excessive. The text should clarify that this requirement applies only to constituents that are not already in the permit.

*Response 2*—Because the source of the discharge authorized under this general permit is highly variable due to changes in ground water flow from the pumping of ground water, the Division does not consider this requirement to be unreasonable or excessive. Contrary, the Division feels this requirement is necessary in order to maintain compliance with Part I.C.6 of the permit. The permit requires influent monitoring and reporting for parameters listed in Table B.3 (See Part III of the permit for each listed parameter) including those parameters with a numeric effluent limit in the permit (certification). Monitoring of constituents in the influent with a numeric effluent limit in the permit (certification) is required to identify changes that could result in the necessity for revised treatment and to meet the intent of Part II.A.2 of the permit to identify any changes that could result in an altered discharge.

### **Comment 3**—Part I.B.3, Monitoring Frequencies and Sample Types for Influent Parameters

The permit should include a provision allowing the permittee to demonstrate that constituents in influent that are not included in the permit will not result in an exceedance of a ground water standard. The permittee could then petition the Division for relief from influent monitoring requirements. The permit should allow the Division 45 days to either accept or reject the petition. If the Division fails to act on the petition within 45 days, the petition would assumed to be approved.

**Response 3**—*The permit was not written to include the use of ground water monitoring wells to determine if ground water standards are being met at the property line. All effluent limitations in the permit are assigned as end of pipe limits based on the Ground Water Standards. If the permit applicant wishes to use other methods such as modeling or ground water monitoring wells to demonstrate compliance with the ground water standards (at the property line), the applicant should apply for an individual permit. The permit includes a provision allowing the permittee to request relief from the influent monitoring if four quarters of influent data substantiates constituents are not detected in concentrations more than one half the ground water standard. CCoD’s suggested provision language will not be added to the permit.*

**Comment 4**— Part I.B.3, Monitoring Frequencies and Sample Types for Influent Parameters

The reference should be made to groundwater standards rather than surface water standards; this reference is appropriate throughout the document.

**Response 4**—*The permit was corrected to include the appropriate references to Regulation 41, The Basic Standards for Ground Water.*

**Comment 5**—Part I.B.3, Monitoring Frequencies and Sample Types for Influent Parameters

Section 3 is confusing. Clarification is needed on influent monitoring frequency.

**Response 5**—*The Division reworded the footnotes to state that the influent must be monitored once per quarter and in accordance with Part I.B.3. of the permit.*

**Comment 6**—Part I.C.7, Chemical Additions

The proposed revised permit states that no chemicals are to be added to the discharge unless the WQCD first grants permission. Please define at which point in the treatment system that the water is considered ‘discharge’.

**Response 6**—*The Division reworded the language to clarify that the requirement addresses chemicals that have the potential to be present in the permitted discharge. This would include, but is not limited to, chemical additions at any point in the treatment system.*

**Comment 7**—Part I.D, Definition of Terms

The definition for Dissolved (D) Metal Fraction references surface water standards. CCoD requests that groundwater standards be referenced.

**Response 7**—*Within the ‘Definitions’ section of Regulation 41, The Basic Standards for Ground Water, there isn’t a listed definition for Dissolved Metals. However, there is a footnote within Regulation 41 Tables, footnote (d), that provides a definition for Dissolved Metals. This definition is consistent with the dissolved metals definition outlined in Regulation 31, The Basic Standards and Methodologies for Surface Water. Since the definitions are consistent and the definition within Regulation 31 is explicitly called out, the Division did not change the reference to Regulation 31.*

**Comment 8**—Part I.D, Definition of Terms

The definition for Potentially Dissolved Metal Fraction references surface water standards. Since the groundwater standards do not reference potentially dissolved metals, CCoD requests removing this definition.

*Response 8*—*The inclusion of the definition for Potentially Dissolved Metals does not cause conflict with any part of the permit, therefore the definition has not been removed.*

**Comment 9**—Part I.D, Definition of Terms

For the definition of Total Metals, CCoD requests that the groundwater standards be referenced.

*Response 9-- Within the 'Definitions' section of Regulation 41, The Basic Standards for Ground Water, there isn't a listed definition for Total Metals. The reference for the total metals definition listed in the permit is appropriate and has not been changed.*

**Comment 10**—Part I.E.3, Analytical and Sampling Methods for Monitoring

The analytical sampling text on calculation of average concentrations does not appear to be consistent with the definitions of “seven day average” and “thirty day average” and should be modified to avoid confusion.

*Response 10*—*The Division reworded the language within Part I.E.3 as it pertains to calculating average concentrations. Text within the “Seven (7) day average” and “Thirty (30) day average” definitions pertaining to calculating the Seven (7) day and Thirty (30) day averages was removed and language referencing Part I.E.3 (Analytical and Sampling Methods for Monitoring and Reporting) was added.*

**Comment 11**—Part I.D, Definition of Terms

The definitions for “seven day average” and “thirty day average” refer the reader to a definition for the “geometric mean”. Please include a definition for the geometric mean.

*Response 11*—*Within the “seven day average” and “thirty day average” definitions, the reference to the geometric mean is only applicable to calculating the averages for Fecal Coliform and E. Coli bacteria. Since neither Fecal Coliform nor E. Coli bacteria are parameters of concern associated with discharges to ground water, the ‘geometric mean’ definition is not necessary.*

**Comment 12**— Part I.E.3, Analytical and Sampling Methods for Monitoring

The text states that the table of PQL limits applies to total recoverable or the potentially dissolved fraction of metals. However, Regulation 41 provides standards for dissolved and total metals. CCoD requests that the PQLs reference and reflect the groundwater standards.

*Response 12*—*The Division added language, stating the PQL table is applicable to Potentially Dissolved, Dissolved, Total, and Total Recoverable fraction of metals.*

**Comment 13**—Part II.A.5, Other Notification Requirements

The text notes that manufacturing, commercial, mining, and silvicultural dischargers must notify the Division when certain criteria are or are expected to be reached. CCoD recommends removing the text as it does not appear to be relevant to this permit.

**Response 13**—*Part II.A.5 is boiler plate language which exists in all CDPS industrial general permits. Since the language does not cause any conflict with the permit requirements, the language will not be removed.*

**Comment 14**—Will the changes in the new permit be implemented through permit revisions or will existing permits remain unchanged until the permit is renewed?

**Response 14**—*Existing permit certifications will remain unchanged until the permit becomes issued and effective. All existing permittee's wishing to continue permit coverage under the revised permit were required to have filed a permit renewal application. Once the revised permit is issued, each existing permittee with a renewal application on file will be issued a new permit certification with an effective date set to that of the effective date of the revised general permit. Where a permit certification has new or more stringent limitations, where necessary and in accordance with Regulation 61, the facility will be given a schedule for compliance that will include specific deadlines for the facility to achieve compliance with the new or more stringent limitation(s) as soon as possible.*

**Comment 15**—What will be the agency's response time to new permits and requested modifications? CCoD recommends that the current 30 day review time remain in place so as not to delay development projects or redevelopment of Brownfields sites and subsequently potentially affecting the economics of the projects.

**Response 15**—*As stated in Part I.A.3 of the permit, the Division has changed the application deadline from 30 days to 45 days before the anticipated date of discharge. The longer review period is necessary for the Division to complete the certification issuance process.*

**Comment 16**—It seems that the proposed revised permit treats all sites the same as a water treatment facility regardless of size, including the need for a certified operator to run the treatment facility. If that is WQ's intent, that may not be appropriate for all types of discharges from remediation activities. It is not clear how the proposed permit requirements can be practically, or cost effectively, implemented for smaller remediate projects. CCoD recommends that CDPHE WQCD propose and implement a subset of the permit requirements for smaller projects.

**Response 16**—*It is the Division's intent to treat all sites (regardless of size) the same that are discharging treated or remediated ground water, alluvial water, stormwater, and /or surface water. The nature of a general permit is to regulate a category of discharge and is not based on the quantity of discharge. According to Regulation 61, Colorado Discharge Permit System Regulations, the general permit shall be written to regulate a category of point sources if the sources all a) involve the same or substantially similar types of operations; b) discharge the same types of wastes; c) require the same effluent limitations or operating conditions; d) require the same or similar monitoring; and e) in the opinion of the Director, are more appropriately controlled under a general permit than under individual permits.*

**Comment 17—General Comment**

Please provide a description of if and how the CDPS permit would overlap with the EPA Underground Injection Control Permit Process.

**Response 17**—*As described in Part I.A.2.b of the permit, discharges to Class V Injection Wells within the state of Colorado are regulated by the Environmental Protection Agency (EPA), Region 8, through the Underground Injection Control (UIC) program and not subject to a CDPS permit. In accordance with of Colorado Discharge Permit System Regulations Section 61.14(1)(b)(vii), facilities operating under a permit*

*issued pursuant to the UIC provisions are specifically exempt from coverage under the ground water discharge provisions of Regulation 61.*

**Nicole Rolfe**  
**July 26, 2011**