MONTANA POLLUTANT DISCHARGE ELIMINATION SYSTEM

FACT SHEET

Construction Dewatering General Permit

FACILITY:	Construction Dewatering Projects
PERMIT NO.:	MTG070000
LOCATION:	Statewide (Except for Indian Reservations)
CONTACT:	Applicant
RECEIVING WATER:	Statewide

I. Status of Permit

The Construction Dewatering General Permit (CDGP) was first issued in 1983. The most recent renewal became effective on September 1, 2015 (2015-issued CDGP). The 2015-issued CDGP and the associated authorizations to discharge shall expire at midnight, February 29, 2020.

The major changes proposed with this renewal include:

- NOI package changes including the requirement for Sage Grouse and turbidity monitoring information and clarification that the Dewatering Control Plan must be prepared prior to submittal of the NOI package.
- Permit flexibility in two cases when ambient conditions may change (flowing water for authorizations under Category A.2 Dry intermittent and no ambient flow for Category C Real-time Demonstration).
- Addition of monthly average effluent turbidity limit "cap" of 100 NTU for outfalls authorized as Category C.
- Provisions for linear project permitting.

II. Coverage

A. Area of Coverage

The CDGP applies to all areas in the State of Montana, except within the boundaries of Indian Lands.

B. Description of Discharge and Discharging Activities

Construction dewatering is the action of pumping or actively removing ground water and/or surface water from a construction site. The CDGP applies to discharge of construction dewatering effluent to state surface water, with increased sediment and turbidity as the primary pollutants of concern. Any dewatering discharge that is land-applied so that it can be infiltrated and evaporated, and does not reach state surface waters, does not require coverage by this Montana Pollutant Discharge Elimination System (MPDES) permit.

Regulated construction dewatering activities include:

- *In-stream dewatering*: cofferdams, drill hole or pylon development;
- *Surface area dewatering*: water pumped from disturbed surface areas (trenches, excavation pits, sumps, or other excavations associated with construction where sediment-laden ground water or surface water/storm water inflow must be removed); and
- *Ground water dewatering*: water discharged from well development, well pump tests, or pumping of ground water from a construction area. Common methods of ground water dewatering from a construction area include sumps and wells, generally described as follows:
    - *Sumps:* locally lowers ground water levels near the construction area. Dewatering through sumps consists of pumping ground water out of a lower collection point(s) typically gravity-fed by local ground water.
    - *Wells:* drilled wells, including bored/augured, driven, or jetted, which use vacuum or pumping to lower the ground water at greater depths than sumps. The two most common types of wells used for dewatering ground water are:
        - *Wellpoints:* small-diameter shallow wells which are connected via a header pipe. A pump creates a vacuum in the header pipe.
        - *Deep Wells* larger-diameter holes, drilled relatively deep (typically greater than 10 feet), pumped by submersible electric pumps.

      A dewatering well located within an active area of disturbance is subject to the CDGP. However, CDGP authorization is <u>not</u> required for dewatering performed through a wellpoint or deep well that is installed prior to the initiation of construction activities in an undisturbed area (*i.e.* an area not within a construction zone), as long as the discharge is solely unaltered ground water. Because this exemption applies to unaltered groundwater, the owner/operator needs to control the first flush/initial purge so that sediment-laden water is not discharged into surface water.

Pollutants

Construction dewatering has the potential to contain suspended sediment that must be settled out prior to discharge to state surface waters. The sediment concentrations and turbidity in construction dewatering effluent can vary greatly depending upon project-specific details such as soil type, topography, type and extent of construction activity, implementation of best management practices, and location of construction activity relevant to state surface waters. In certain situations, the permittee may need to use coagulants or flocculants to reduce the effluent turbidity.

Oil and grease may also be present in dewatering water if construction equipment at the site is leaking fuel or hydraulic fluid. Other petroleum-based materials used at construction sites could also be spilled and enter state waters.

Construction dewatering discharges authorized under the CDGP are not allowed to contain process wastewater, contamination, or any pollutants other than those pollutants regulated through the CDGP. **The presence of other pollutants in the effluent makes the activity ineligible for coverage under the CDGP, and will need MPDES coverage under a different permit.** For instance, dewatering of contaminated ground water from a leaking fuel tank may be permitted under either an individual MPDES permit or the petroleum clean-up general permit. Dewatering in areas potentially impacted by contamination under this CDGP are only allowed if the requirements in Section V.D of this Fact Sheet (Part II.C.4 of the permit) are met.

Overview of Facilities Authorized under the 2015-issued CDGP

Between the effective date of the 2015-issued CDGP and August 1, 2019, the Montana Department of Environmental Quality (DEQ) issued 166 CDGP authorizations. Facilities were authorized under one of three categories, as follows:

- **Category A** (Minimal Impact for Turbidity)

  Since the effective date of the 2015-issued CDGP, there were 84 facilities with outfalls authorized under Category A. Although these facilities had a total of 855 months of turbidity records reported in NetDMR, there were no facilities that exceeded the daily maximum turbidity limit of 100 NTU. Therefore, DEQ determined that reducing the turbidity readings from the 2015-issued CDGP's requirement of one a week to the proposed twice per month is reasonable.

- **Category B** (Discharge Turbidity Limited to Prevent Impact)

  Since the effective date of the 2015-issued CDGP, there were 58 facilities with outfalls authorized as Category B. Although these facilities had a total of 720 months of turbidity records reported in NetDMR, there were only six facilities that had a total of eight exceedances of the daily maximum turbidity

limit of 20 NTU. Specifically, there was one high turbidity of 225 NTU and the remaining seven exceedances ranged from 23 – 45 NTU. Therefore, DEQ determined that reducing the turbidity readings from the 2015-issued CDGP's requirement of five days per week to the proposed three days a week is reasonable.

- **Category C** (Real Time Turbidity Demonstration)

  There were 32 facilities with outfalls authorized as Category C since the effective date of the 2015-issued CDGP. These facilities had a total of 158 months of turbidity records reported in NetDMR (60 months with discharge the other months with no discharge). There were no exceedances of the 'no greater than background' limit.

Five of these facilities had outfalls in more than one category.

Dewatering may be intermittent or continuous over the duration of the project. Construction dewatering projects are generally temporary by nature. Ten authorizations from the 2010-issued CDGP were renewed for the 2015-issued CDGP; all except one were terminated within 18 months. As of August 2019, there were 45 effective authorizations. The average duration of an authorization under the 2015-issued CDGP (excluding MTG070644 which has been authorized the entire period) was 21 months.

C. Regulatory Authority

Wastewater discharged from construction dewatering activities are point source discharges subject to MPDES permitting requirements. They include operations that:

- Are the same or are substantially similar,
- Discharge the same types of wastes,
- Require the same effluent limitations or operating conditions,
- Require the same or similar monitoring requirements,
- Are more appropriately controlled under a general permit than under individual permits.

D. Sources Excluded from Coverage under the CDGP

1. DEQ may deny a CDGP request for discharge for the following:
   a) The specific source applying for authorization appears unable to comply with the following requirements:
      - effluent limitations or other terms and conditions of the permit;

- water quality standards; or
- discharges that the regional administrator has objected to in writing.

b) The discharge is different in degree or nature from discharges reasonably expected from sources or activities within the category described in the CDGP.

c) An MPDES permit or authorization for the same operation has previously been denied or revoked.

d) The discharge is also included within an application or is subject to review under the Major Facility Siting Act.

e) The discharge will be located in an area of unique ecological or recreational significance. Such determination must be based upon considerations of Montana stream classifications, impacts on fishery resources, local conditions at proposed discharge sites, and designations of wilderness areas or of wild and scenic rivers.

2. DEQ may deny a CDGP request for discharge from dewatering activities at or near a hazardous waste or other type of remediation site. If the dewatering activity is proposed to be located near a known contamination area, or the permittee has reason to believe that the site or site's groundwater might be contaminated, they must demonstrate that there are no pollutants from the waste site in the dewatering effluent in accordance with this permits' Special Conditions Part II.C.4.

E. Continuing Authorizations under the 2020-issued CDGP

All existing facilities with effective coverage under the 2015-issued CDGP are eligible for coverage under the 2020-issued CDGP unless they are excluded according to the criteria outlined in Part I.B of this permit. Permittees must submit a complete application package for renewed coverage to continue discharge after the expiration date of the 2015-issued CDGP. A complete renewal application consists of:

1. Construction Dewatering Notice of Intent (NOI) Form (NOI-07);
2. Fee for each outfall;
3. Maintain the Dewatering Control Plan (*submittal of the plan is not required*); and
4. A copy of the consultation letter from the Montana Sage Grouse Habitat Conservation Program (if applicable).

After receipt of a complete renewal application package, DEQ will review the application package and issue a new authorization letter to these facilities for coverage under the 2020-issued CDGP, or notify the applicant of deficiencies (or

denial). The applicant must receive the authorization letter before continuing to discharge to any state surface waters after the effective date of the renewed General Permit.

If the request is denied, DEQ may process the application as an individual permit after payment of additional fees; the applicant may withdraw the request; or the applicant may modify the operation to meet the conditions of the 2020-issued CDGP and re-apply for coverage under the General Permit with a new application fee.

F. New Authorization under the 2020-issued CDGP

New dischargers seeking to obtain coverage to discharge under the 2020-issued CDGP must submit a complete application package at least 30 days prior to commencing operation, including:

1. Construction Dewatering NOI Form (NOI-07);
2. Fee for each outfall;
3. Preparation of the Dewatering Control Plan (*submittal of the plan is not required*); and
4. A copy of the consultation letter from the Montana Sage Grouse Habitat Conservation Program (if applicable).

After receipt of a complete renewal application package, DEQ will review the application package and issue an authorization letter to these facilities for coverage under the 2020-issued CDGP, or notify the applicant of deficiencies (or denial). The applicant must have the authorization letter from DEQ prior to initiating dewatering discharge to any state surface waters.

If the request is denied, DEQ may process the application as an individual permit after payment of additional fees; the applicant may withdraw the request; or the applicant may modify the operation to meet the conditions of the 2020-issued CDGP, and re-apply for coverage under the General Permit with a new application fee.

G. Modifications to Authorizations under the 2020-issued CDGP

Permittees requiring a modification to an authorization under the 2020-issued CDGP (including adding or changing outfall locations) must submit a complete NOI-07 package to DEQ. The NOI-07 package must consist of:

1. Construction Dewatering NOI Form (NOI-07);
2. Fee for each modified outfall;
3. Updating of the Dewatering Control Plan (*submittal of the plan is not required*); and

4. A copy of the modified consultation letter from the Montana Sage Grouse Habitat Conservation Program (if applicable).

If the regulated industrial activity is within designated sage grouse habitat, any modification due to a change in location requires verification from the Montana Sage Grouse Habitat Conservation Program that may require a consultation letter and/or updates to a consultation letter. If the modification request is outside of sage grouse habitat, no consultation is required.

H. Terminate Permit Coverage

Once covered, permittees are authorized to operate for the duration of the 2020-issued General Permit (until the General Permit has expired) or until DEQ receives a request to terminate coverage. To terminate coverage, the permittee must submit a written request to DEQ (either a letter or a complete Request for Termination (RFT) Form) indicating the construction dewatering discharge activity has ceased and they no longer require permit coverage. The written request must be signed and certified by the responsible signatory.

After the first year, annual fees will be invoiced in arrears for an authorization open during any part of the previous calendar year. To avoid the accrual of annual fees, the permittee should request to terminate coverage once dewatering has been completed.

In addition to the ability to request a termination, the owner or operator of a facility covered under this General Permit may request to be excluded from coverage under this General Permit by applying for and obtaining an individual MPDES permit. If an individual MPDES permit is issued to the owner or operator of the facility, coverage under this General Permit is terminated on the effective date of the final individual MPDES permit.

I. Transfer Permit Coverage

The owner or operator of a facility covered under this CDGP may request to transfer their authorization coverage to a new owner or operator. To transfer coverage, the permittee must submit a complete Permit Transfer Notification (PTN) Form to DEQ at least 30 days prior to the effective date of the proposed transfer. The PTN constitutes written notice to DEQ that the new owner or operator assumes responsibility and liability for all the terms and conditions in the permit, including permit fees. The PTN form may not be used to transfer permit coverage to a new or different site location or to modify the terms and conditions of the permit.

J. Other Permitting Requirements

Authorization to discharge under this general permit does not eliminate a permittee's obligation to obtain other necessary permits. Specifically, this permit does not address:

- Storm water discharges associated with construction activities. Additional authorization under the *General Permit for Storm Water Discharges Associated with Construction Activity* is required if the disturbance exceeds one acre of total disturbance or is a part of a common plan of development that exceeds one acre.
- 318/401 turbidity permitting requirements for stream-related construction activities, other than the dewatering operations authorized by the CDGP (i.e., cofferdam or other in-stream construction dewatering operations).

III. Effluent Limits

There are two types of effluent limits that control the release of pollutants: technology-based effluent limits (TBELs) that specify the minimum level of treatment or control; and water quality-based effluent limits (WQBELs) that attain and maintain applicable numeric and narrative water quality standards. TBELs are based on implementing available technologies to reduce or treat pollutants while WQBELs are designed to protect the beneficial uses of the receiving water.

A. Technology-based Effluent Limits

TBELs may be national technology standards established by EPA or, where EPA has not established an applicable Effluent Limit Guideline (ELG), the permit writer is required to establish technology-based treatment requirements on a case-by-case basis using Best Professional Judgement (BPJ).

EPA has not adopted a specific ELG for construction dewatering; however, EPA has promulgated Construction and Development (C&D) Effluent Guidelines. The C&D Guidelines include the following requirement:

> "*Dewatering*. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, are prohibited **unless managed by appropriate controls**."

DEQ finds that "appropriate control" technologies will vary site-by-site, because dewatering discharge activities and site conditions are variable. Therefore, the CDGP includes the requirement for Owner/Operators to develop and implement site-specific Best Management Practices (BMPs) as part of a Dewatering Control Plan (see Part V.B. of this Fact Sheet).

In addition to BMPs, DEQ has historically recognized that the minimum level of control (TBEL) for any construction dewatering discharge was 100 NTU. Review of the 166 facilities authorized under the 2015-issued CDGP shows that only two reported a maximum turbidity greater than 100 NTU (one was 225 NTU and the other 170 NTU). DEQ proposes that all authorizations under the CDGP will have, at a minimum, the following TBEL requirements:

- Dewatering Control Plan; and
- Average monthly effluent turbidity limit of 100 NTU.

B. Water Quality-based Effluent Limits

1. Description of Receiving Waters and Applicable Standards

Permits must include Water Quality-based Effluent Limits (WQBELs) when DEQ determines a discharge has the reasonable potential to exceed any state water quality standard and TBELs are determined not to be sufficient. Water quality standards apply to all state waters, which are defined as any body of water, irrigation system or drainage system either on the surface or underground. The definition of state waters includes ephemeral, intermittent, and perennial drainages; isolated ponds; lakes; and other water bodies.

Discharges into any state surface waters are not allowed an increase above naturally occurring concentrations of sediment or suspended sediment (except as permitted in 75-5-318, MCA - short-term water quality standards for turbidity resulting from stream-related construction), settleable solids, oils or floating solids, which will or are likely to create a nuisance or render the water harmful, detrimental or injurious to public health, recreation, safety, welfare, livestock, wild animals, birds, fish or other wildlife.

Turbidity standards under Subchapter 6 *Surface Water Quality Standards and Procedures* are meant to be long-term indicators to protect the beneficial use of each waterbody, and not necessarily instantaneous limits. The specific turbidity standards for each waterbody classification are:

a. A-Closed or A-1 – no increase above naturally occurring turbidity allowed.
b. B-1 and C-1 – allow an increase of 5 NTUs above naturally occurring turbidity.
c. B-2, B-3, C-2, or C-3 – allow an increase of 10 NTUs above naturally occurring turbidity.
d. Classification I – allow no detrimental increase in turbidity.
e. Ephemeral streams – discharges in ephemeral waterbodies are subject to the minimum treatment standards, but ephemeral waterbodies are not subject to

the specific water quality standards in ARM 17.30.620 through ARM 17.30.629.

In addition, surface waters must be free from substances attributable to discharges that will create floating debris, scum, a visible oil film [or be present in concentrations at or in excess of 10 milligrams per liter (mg/L)] or globules of grease or other floating materials.

2. Water Quality-based Effluent Limits

Pollutants present in construction dewatering discharges potentially include Total Suspended Solids (TSS), sediment, and suspended solids represented by turbidity; oil and grease and other petroleum products such as gasoline; and potentially coagulants/ flocculants. Based on the potential pollutants, DEQ has determined that applicants requesting coverage under the 2020-issued CDGP must meet the following WQBELs:

a. **Turbidity.**

Beginning with the 2015-issued CDGP, owners/operators were required to select the appropriate category for their discharge. This will be continued as part of the 2020-issued CDGP, with minor changes. The following describes each category:

i. *Category A Minimal Impact*.

Turbidity limits for these discharges, after all control, are 100 NTU daily maximum and monthly average. The following are the specific subcategories under Category A:

- *A.1 - Discharge to ephemeral waterbodies and storm sewer systems*.
- *A.2 - Discharge to dry intermittent segments*, where the dewatering discharge will dissipate and will not reach any visible surface waters. This includes discharge to dry irrigation canals and dry intermittent streams.
- *A.3 - Discharge to a large river*. Discharge to a large river segment listed in Department Circular DEQ-12A Table E-1 (i.e., perennial rivers with an annual base flow greater than 1,500 cfs), which are the following eight rivers: Big Horn, Clark Fork, Flathead, Kootenai, Madison, Missouri, South Fork Flathead, or Yellowstone Rivers.

However, this category does not include discharge to waters classified as A-1 or A-closed, except in conformance with 75-5-318, MCA (short-term water quality standards for turbidity resulting from stream-related construction).

ii. *Category B: Discharge Turbidity Limited to Prevent Impact*

This category is the most restrictive, to ensure protection of all receiving waters, including: perennial and flowing intermittent rivers; lakes; reservoirs; and wetlands. Turbidity limits for discharges to various receiving waters, after all control, are 20 NTU maximum daily and 10 NTU average monthly.

However, this category does not include discharge to waters classified as A-1 or A-closed, except in conformance with 75-5-318, MCA (short-term water quality standards for turbidity resulting from stream-related construction).

iii. *Category C: Real-time Turbidity Demonstration.*

This category is the most flexible for projects that may occur during periods with more turbid receiving water, and applies as long as there is ambient water flowing. Turbidity limits for dischargers in this category are based on 'no increase above background,' although the average monthly discharge is limited to 100 NTU based on TBELs. The permittee is required to monitor both upstream and discharge turbidity, to demonstrate 'no increase above background.'

This category may best apply to temporary projects in waters classified as A-1 or A-closed; or situations where the receiving water body is expected to have high sediment load to begin with (i.e., spring runoff).

DEQ expects that enforcing appropriate turbidity limits in each category will be protective of the narrative sediment standard. The permittee will be required to meet the selected category's turbidity effluent limits and associated monitoring for the duration of the authorization, with two exceptions when the chosen scenario unexpectedly changes as detailed under Part III.B.3.b (Temporary Category Change Due to Changing Ambient Conditions):

- If the permittee finds that there is receiving water flowing in a Category A.2 Dry Intermittent Waterbody, or
- If the permittee finds that there is no receiving water flowing in a Category C Real-Time Turbidity Demonstration.

A mixing zone for both Category A.3 "Large Rivers and Category B "Discharge Turbidity Limited to Prevent Impact" is established for turbidity and sediment, and is accounted for in the effluent limits. The length of the mixing zone for authorizations under this category shall extend downstream from the discharge location for a distance of 10 times the stream width at the discharge location.

b. **Oil & Grease**. Surface waters must be free from substances attributable to discharges that will create … a visible oil film (or be present in concentrations at or in excess of 10 mg/L). No mixing zone for oil and grease will be allowed because the water quality standard for oil and grease applies throughout the receiving stream.

A daily visual observation of the discharge is included in the monitoring requirements and will ensure oil and grease is controlled in the discharge. If a visual sheen is observed on the discharge, the permittee must take an oil and grease sample and cease dewatering discharge until the source of the oil and grease has been eliminated.

c. **Coagulant/flocculant**. Any use of coagulant/flocculant under the 2020-issued CDGP is restricted to use of non-ionized polymers, such as anionic polyacrylamides. The permittee is required to use such coagulant/flocculant in accordance with manufacturer's specifications and in conformance with Part II.A.3 of the General Permit.

3. Final Effluent Limits

a. **Turbidity**: For the 2020-issued CDGP, owners/operators will be required to select the appropriate category for their discharge as presented in **Table 1**:

Table 1: Proposed Turbidity WQBEL Categories

Receiving Water *at Time of Discharge* (1)		Effluent Turbidity Limit (NTU)	
		Maximum Daily	Monthly Average
A	**Minimal Impact:** 1. Ephemeral and storm sewer systems, 2. Dry Intermittent: no receiving water upstream of the outfall at the time of discharge (2), or 3. Large Rivers: Big Horn, Clark Fork, Flathead, Kootenai, Madison, Missouri, South Fork Flathead, or Yellowstone	100	100
B	**Discharge Turbidity Limited to Prevent Impact**: turbidity effluent limit for discharge to rivers, lakes, wetlands	20	10
C	**Real-Time Turbidity Demonstration**: discharge turbidity is no greater than the receiving water turbidity	(2,3)	100 (2,3)

Footnote:
(1) Any discharge to waterbodies classified as A-1 or A-closed in ARM 17.30 Subchapter 6 (other than to dry drainages) must comply with Category C "Real-Time Demonstration."
(2) If there is an unexpected change in the ambient conditions (i.e. the receiving waters are dry when expected flow or flow when expected dry), the limits will automatically change as described in Part II.A.2 of this permit.
(3) The discharge turbidity limit for this category will change based on the relative turbidity of the receiving water (i.e., the effluent regulated under Category C must always be at or below the upstream turbidity.) The average monthly effluent quality must meet whichever is more stringent: the average monthly background turbidity (no change) or 100 NTU.

b. **Temporary Category Change Due to Changing Ambient Conditions**

When the ambient conditions of one of two chosen scenarios unexpectedly changes, the limits and monitoring for that permitted outfall will automatically change as follows:

- **Category A.2** *Dry Intermittent Waterbody*: if this subcategory is chosen and the stream flow conditions change during periods of discharge so that the effluent is discharged into running surface water, the permittee must indicate the condition in the comment field of the NetDMRs, document the change in the Daily Log including date and time, and comply with Category B turbidity limits and associated monitoring.
- **Category C** *Real-Time Turbidity Demonstration*: If this category is chosen and there is no ambient stream flow, the permittee must indicate the condition in the comment field of the NetDMRs, document the change in the Daily Log including date and time, and comply with Category A.2 turbidity limits and monitoring.

c. **Oil & Grease.** No visible oil film (or be present in concentrations at or in excess of 10 milligrams per liter). If a visual examination of the discharge indicates the presence of hydrocarbons, by sheen, odor, or other sign, the permittee is required to take corrective action as specified under the Special Conditions Part II Section C.3 of this permit, including analyzing a grab sample of the discharge under 40 CFR 136 and ceasing discharge until the source is eliminated.

d. No chemicals, other than anionic polymer coagulants and/or flocculants used in accordance with manufacturer's specifications, are allowed to be added to, or discharged with, the construction dewatering effluent. The use of anionic coagulants or flocculants must be included in the facility's Notice of Intent (NOI).

IV. Monitoring and Reporting Requirements

Monitoring of the effluent must be representative of the volume and nature of the discharge. Effluent quality will be monitored at the discharge location (outfall) after all treatment has occurred, prior to entering the receiving water. Monitoring is only required during periods of discharge to state surface waters.

Monitoring results shall be noted on the daily log beginning the effective date of the authorization. In addition, the monitoring results are required to be reported to DEQ on Discharge Monitoring Reports (NetDMRs) by the 28th of the following month. If no discharge occurs, the permittee shall indicate "no discharge" on the monthly NetDMRs.

Samples shall be collected, preserved, and analyzed in accordance with approved procedures listed in 40 CFR Part 136 and the analysis must meet any Required Reporting Values (RRVs) listed in Circular DEQ-7 unless otherwise specified. **Grab samples of the discharge must be either sent to a laboratory for analysis or there must be access to a turbidity meter.** By certifying the NOI-07 package is complete, the applicant is certifying that there is a turbidity meter or testing laboratory available to monitor the discharge turbidity.

The specific monitoring requirements for each outfall will depend on the category that was selected from **Table 1**, and will be indicated on the authorization letter sent to the permittee. Monitoring requirements for each of the three categories are presented in **Tables 2 to 4**, as follows:

Table 2 Category A "Minimal impact"

Table 3 Category B "Discharge turbidity limited to prevent impact"

Table 4 Category C "Real-time turbidity demonstration"

Table 2: Category A "Minimal Impact" - Monitoring Requirements

Parameter	Sample Location	Unit	Sample Frequency (1)	Sample Type	Reporting Requirement
Flow	Upstream	Y/N	1/Day (2)	Visual	--
Turbidity	Effluent	Y/N	1/Day (3)	Visual	--
		NTU	2/Month (4)	Grab	Daily Max and Monthly Avg
Oil and grease	Effluent	Y/N (5)	1/Day	Visual	--
		mg/L	(5)	Grab	Daily Max

Footnotes:

1) Monitoring is required *during any periods with dewatering discharge that reaches state surface water*.
2) Upstream flow monitoring only required for **Category A.2** *(dry intermittent)*. If the permittee is authorized to discharge under Category A.2, but the waterbody has flow during a discharge period, then the permittee must record a "Yes" for the visual observation and must comply with Category B requirements.
3) Turbidity "Yes" indicates a visual observation of elevated turbidity that is suspected to be above the numeric NTU limit. This situation requires the permittee to take and analyze a grab sample of the discharge and take corrective action as specified under the Special Conditions Part II Section C.3 of this permit.
4) Turbidity grab samples of the discharge must be taken for analysis the first four (4) hours of discharge, then at least twice a month (at least one week apart) thereafter. Samples must be taken at times representative of the site's construction activity and the nature of the discharge.
5) If a visual examination of the discharge indicates the presence of hydrocarbons, by sheen, odor, or other sign, the permittee is required to take corrective action as specified under the Special Conditions Part II Section C of this permit, including analyzing a grab sample of the discharge under 40 CFR 136.

Table 3: Category B "Discharge Turbidity Limited to Prevent Impact" Monitoring Requirements

Parameter	Sample Location	Unit	Sample Frequency (1)	Sample Type	Reporting Requirement
Turbidity	Effluent	Y/N	1/Day (2)	Visual	--
		NTU	3/Week (3)	Grab	Daily Max and Monthly Avg.
Oil and grease	Effluent	Y/N (4)	1/Day	Visual	--
		mg/L	(4)	Grab	Daily Max

Footnotes:

1) Monitoring is required during any periods with dewatering discharge that reaches state surface water.
2) Turbidity "Yes" indicates a visual observation of elevated turbidity that is suspected to be above the numeric NTU limit. This situation requires the permittee to take and analyze a grab sample of the discharge and take corrective action as specified under the Special Conditions Part II Section C of this permit.
3) Turbidity grab samples of the discharge must be taken for analysis the first four (4) hours of discharge, then at least three times per week (at least one day apart) thereafter, as well as when the visual observation indicates elevated turbidity. Samples must be taken at times representative of the site's construction activity and the nature of the discharge.
4) If a visual examination of the discharge indicates the presence of hydrocarbons, by sheen, odor, or other sign, the permittee is required to analyze a grab sample of the discharge under 40 CFR 136, cease discharge until the oil and grease is eliminated, and take corrective action as specified under the Special Conditions Part II Section C of this permit.

Table 4: Category C "Real-Time Turbidity Demonstration" - Monitoring Requirements					
Parameter	Sample Location	Unit	Sample Frequency (1)	Sample Type	Reporting Requirement
Receiving Water Flow	Upstream	Y/N (2)	1/Day	Visual	--
Turbidity	Effluent	Y/N	1/Day (3)	Visual	--
	Effluent	NTU	2/Month (4)	Grab	Daily Max and Monthly Avg
	Upstream			Grab	
	Difference (4)			Calculated	
Oil and grease	Effluent	Y/N (5)	1/Day	Visual	--
		mg/L	(5)	Grab	Daily Max

Footnotes:

1) Monitoring is required during any periods with dewatering discharge that reaches state surface water.
2) If the permittee is authorized to discharge under Category C, but the waterbody has no flow during a discharge period, then the permittee must record a "No" for the visual receiving water flow observation and must comply with Category A.2 requirements.
3) Turbidity "Yes" indicates a visual observation of elevated turbidity that is suspected to be above the numeric NTU limit. This situation requires the permittee to take and analyze a grab sample of the discharge and take corrective action as specified under the Special Conditions Part II Section C.3 of this permit.
4) Turbidity grab samples of the ambient (upstream) condition and the discharge must be taken for analysis the first four (4) hours of discharge, then at least twice a month (at least one week apart) thereafter, as well as when the visual observation indicates elevated effluent turbidity. Samples must be taken at times representative of the site's construction activity and the nature of the discharge.
5) The turbidity difference is calculated by subtracting the upstream turbidity minus the effluent turbidity, and must be at or above 0 NTU.
6) If a visual examination of the discharge indicates the presence of hydrocarbons, by sheen, odor, or other sign, the permittee is required to analyze a grab sample of the discharge under 40 CFR 136, cease discharge until the oil and grease is eliminated, and take corrective action as specified under the Special Conditions Part II Section C of this permit.

V. Proposed Special Conditions

A. Daily log. Facilities are required to maintain an observation log during periods of dewatering activities (or dewatering discharge) in accordance with the schedule listed in the monitoring requirements table for the activity. When there is no dewatering discharge that reaches state waters, the owner/operator must indicate "NA" or "no discharge." The observation log can be paper or electronic.

An example log is included in Attachment #1. The log must contain: date and time of observations, identification of the person recording the observation, monitoring results (visual or grab sample), inspection observations as identified in the site's Dewatering Control Plan (see below), any problems observed, and any corrective action performed. The permittee must maintain records, including the daily log, for a period of at least three years and make these records available to DEQ upon request. The daily log is considered a method for the permittee to ensure good operating practices as well to demonstrate compliance with the effluent limitations.

B. Dewatering Control Plan (Dewatering Plan). Any permittee covered under the CDGP is required to develop and implement a written site-specific Dewatering Plan to certify that they have a complete NOI-07 package. The plan must be maintained and available for inspection on-site in either paper or electronic format, and must include:

1. Evaluation, installation, and maintenance of Best Management Practices (BMPs), including but not limited to:
    i. Run-on prevention and/or ground water exclusion methods;
    ii. Erosion control to prevent surface water/storm water contamination of site (i.e. soil roughening, riprap, mulching, geotextiles, etc.) Excavated material must be transported and stockpiled in such a manner as to prevent its erosion returning to the receiving stream;
    iii. Dewatering pump process treatment (i.e., filtering sump, wrapping submersible pump in filter fabric);
    iv. Sediment control for dewatering discharge (i.e. constructed settling pond, dewatering bags, fiber rolls, vegetated buffers, etc); and
    v. Proper use of anionic flocculants and coagulants, if needed (including maintaining MSDSs and following manufacturers' recommendations).
2. Measures taken to prevent first flush/initial purge discharges from entering state surface waters.
3. Measures taken to prevent spilled or leaking fuels and lubricants from entering the watercourse.
4. Measures taken to minimize erosion from the discharge flow dissipation devices such as rip rap, baffles, or other methods, as necessary. The discharge shall not cause or result in erosion to the area of the discharge or the surrounding stream banks.
5. Discharge monitoring procedures for the site to ensure that monitoring is effective, and covers all times of discharge (including weekends and holidays if applicable). The Dewatering Plan must include an identification of the person(s) responsible, monitoring frequency, any necessary equipment and its maintenance, including calibration materials, and record-keeping in the daily log.
6. BMP inspection procedures to prevent breakdowns or failures of the control equipment. The permittee must include the inspection frequency, person(s) responsible, and extent of the inspections (including erosion prevention, dewatering operations, dewatering treatment, and discharge quality), and record-keeping in the daily log. The permittee must also

include names/numbers for off-hours notification of responsible personnel in the event of an emergency.

7. Corrective action protocol.

C. Corrective Action. Upon any visual observations of BMP failure, inadequate BMPs, elevated turbidity, or an oil sheen, the following steps must be conducted:

- Take a grab sample for analysis anytime there is an observation of elevated turbidity and/or oil and grease, and/or other potential contaminants.
- Cease discharge of dewatering effluent until the issue is resolved.
- Conduct a site-wide inspection to observe operating conditions and BMP maintenance
- Address any BMP failures by determining whether there was a failure in design, installation, or maintenance and perform the appropriate measures to fix the failure, including determining whether BMPs should be modified or if additional measures must be taken.
- Document the issues and resolutions in the monitoring log and update the Dewatering Plan.
- Include a report with the next DMR submittal.

D. Potential Contamination. All applicants must determine whether the proposed dewatering activity may be in or near a known area of contamination. Any dewatering within such an area is assumed to transfer contaminants into the receiving water, and is not allowed under this CDGP unless the applicant provides:

1. written documentation that the relevant regulatory program (typically within DEQ's Waste Management & Remediation Division) has been consulted. Any jurisdictional remediation program recommendations must be implemented; and

2. laboratory analysis for the potential contaminants from a pre-discharge groundwater sample. If this is not possible at the time of application, the applicant may work with DEQ to provide the best concentration estimate available through available hydrologic assessments and then, if authorized, conduct sampling within the first four hours of dewatering discharge with expedited laboratory results. The pre-discharge sample may be taken after treatment (i.e. carbon adsorption or other treatment), but details on the treatment system used (including pilot system and full-scale) must be included with the NOI.

   DEQ will process the CDGP authorization request if the pre-discharge laboratory results for any relevant parameters (either Reporting Level or Method Detection Level) show either:

- non-detect at concentrations meeting the Required Reporting Values (RRV) as provided in Circular DEQ-7, or
- detection at levels at or below the RRV.

The permittee shall include a copy of the lab results with the NOI package submittal. If the laboratory MDL is "nondetect" but is not capable of detecting down to the RRV, a detailed explanation of why the results cannot achieve the required detection level must be included with the analysis. DEQ may require additional information including, but not limited to, additional testing during dewatering.

DEQ may require additional or increased expedited monitoring which will be detailed within the authorization letter. If additional tests performed during discharge of dewatering effluent result in concentrations above the RRV, the dewatering discharge to surface water must cease until a solution is found. The permittee must notify DEQ's Water Protection Bureau verbally within 24 hours of the elevated concentration, and follow-up in writing within five days. The permittee cannot resume discharging dewatering effluent into state surface waters until DEQ issues a written authorization.

If contaminants are found in any pre-discharge samples at concentrations above the RRV, or in any required dewatering monitoring if a solution cannot be found to reduce below the RRV, the discharge is not eligible for coverage under the CDGP.

E. Linear Projects. Permittees proposing to dewater as part of a linear project may group discharges to similar waterbody types within each category (A.1, A.2, A.3, B, and/or C). The permittee must include a list of outfalls for any category grouping, and include the latitude/ longitude of each outfall, and it's receiving water body name. Fees (authorization request, annual, and renewal fees) will be based on the number of Categories within the project.

After authorization, the permittee shall maintain the outfall list, by category. For any change in outfall locations, the permittee shall re-submit the updated list prior to commencing any discharge to surface waters from a new or changed outfall. DEQ may require the permittee submit a modification request; at a minimum the permittee must submit a modification package if they are requesting authorization of a new category.

Monthly NetDMR reporting will combine the monitoring for all dewatering discharges within a given category (the average turbidity will be the average of all outfalls in that Category, for example).

The required Dewatering Control Plan can be generic, if there is sufficient detail to determine the activities planned for any given location.

F. Record-keeping. The permittee must maintain the following records onsite (hard-copy or electronic):

- 2020-issued CDGP;
- A copy of the completed and signed NOI-07 form including modification submittals;
- A copy of DEQ's authorization letter;
- Discharge Monitoring Reports;
- Monitoring Records;
- Daily visual log;
- Copies of all reports and reports of noncompliance; and
- The Sage Grouse consultation letter, as applicable.

These documents are to be made available at the site immediately upon request from a DEQ representative, EPA official, or local official. These records are to be maintained by the permittee for a period of three years.

VI. Nondegradation

Ephemeral waters that flow less than 90 days per year are not considered high quality waters and are therefore exempt from Nondegradation rules. Discharge to perennial waters and surface waters that flow more than 90 days per year are subject to Nondegradation rules.

Any activity that is nonsignificant because of its low potential for harm to human health or the environment and its conformance with the guidance found in 75-5-301(5)(c), MCA are not subject to the provisions of Montana's Nondegradation Policy. DEQ has determined construction dewatering discharges are nonsignificant because: 1) there is low potential for harm to human health or the environment, 2) the quantity and strength of the pollutant (turbidity) is low and controlled through the requirements specified in the site's authorization letter, 3) construction dewatering activities are generally short-term, and 4) turbidity generated from construction dewatering activities is generally not persistent in the environment.

In addition, DEQ has determined that compliance with the terms of the CDGP authorizations will ensure that these short-term operations are not significant as defined under ARM 17.30.715(1)(f). By maintaining BMPs and operating within the turbidity limits, these short-term authorizations are protective of the beneficial uses of the receiving water.

Prepared by Christine Weaver, September 2019

Attachment #1 – Daily Log

Attachment #2: Notice of Intent (NOI-07)