

Guide for Dewatering Uncontaminated Storm and Meltwater from Oil Well Pads, Oil Transload Facilities and Secondary Containment Structures (December 2023)

PERMIT NOT REQUIRED

A permit is not required to dewater uncontaminated stormwater or meltwater from an oil well pad, oil transload facility, or secondary containment structure for the following reasons:

1. Stormwater and meltwater are not considered process wastewater, contact water, or contaminated water and do not require a wastewater discharge permit.
2. A temporary dewatering permit is not required for and does not cover the discharge of uncontaminated water.
3. A stormwater discharge permit is not required for the facility, either by exemption, or because the facility is not considered a regulated point source.
4. Dewatering uncontaminated stormwater and meltwater is not expected to violate a state water quality standard (N.D.A.C. Chapter 33.1-16-02.1).

PRE-DEWATERING PROCEDURE

Follow the steps below before dewatering stormwater or meltwater. The steps will help ensure stormwater or meltwater is not contaminated prior to dewatering and will not require a permit from the North Dakota Department of Environmental Quality.

1. Have a laboratory analyze the stormwater or meltwater for the following parameters and obtain the results before dewatering (see step 3 for in-field testing):
 - Oil and grease (*only necessary if a visible sheen is present*)
 - pH
 - Chlorides (*This may not be necessary for facilities outside of oil-producing areas or for facilities that do not handle production water from oil wells, i.e., oil well brine/saltwater.*)
 - Benzene
 - Total BTEX (*benzene-toluene-ethylbenzene-xylene*)
 - TPH (*total petroleum hydrocarbons*)
2. The results of the parameters analyzed in step 1 must meet the conditions below. Results that do not meet these conditions indicate a potential violation of a water quality standard. If this is the case, the stormwater or meltwater cannot be dewatered.
 - Oil and grease: ≤ 10 ppm (mg/L)
 - pH: Between 6.0 and 9.0 S.U.
 - Chlorides: ≤ 250 ppm (mg/L)
 - Benzene: ≤ 5 ppb ($\mu\text{g/L}$)

- Total BTEX: ≤100 ppb (µg/L)
- TPH: ≤1 ppm (mg/L) (*within a source water protection area¹*)
- ≤10 ppm (mg/L) (*outside of a source water protection area*)

3. Use of in-field testing instead of laboratory analyses. In-field testing methods such as specific conductance, colorimetric chloride or hydrocarbon testing, PID (photo ionization detector) or visual observation of a sheen may be used if:
 - A correlation between in-field readings and laboratory results is established using multiple samples analyzed using both methods.
 - A sample is collected and preserved so that it can be later analyzed by a laboratory to show compliance if there are concerns.

Note that the North Dakota Department of Environmental Quality may use both in-field and laboratory testing to verify compliance.

4. Stormwater or meltwater also must meet the following conditions:
 - Dewatering may occur from areas where a spill occurred (e.g., oil or produced water) that was remediated and meets the conditions outlined in step 2.
 - Dewatering may not occur in areas where a spill has not been remediated (a temporary dewatering permit is required to dewater remediation activity).
 - For oil wells, water must not have been in contact with drill cuttings, reserve pits, drilling fluid, drilling mud, crude oil, produced water, hydrofracturing fluid, hydrofracturing flowback water or other possible contaminants.
5. Water can be discharged from a secondary containment system or drip pan at a transload facility if the water meets the first three requirements of steps 1 and 2.
6. Contact the landowner or neighbors to inform them that you will be dewatering stormwater or meltwater. For an oil well pad, contact the North Dakota Industrial Commission, Oil and Gas Division, at 701-328-8020 for any additional requirements.
7. Stormwater or meltwater must be discharged using best management practices to minimize erosion.
8. If the water cannot be discharged, then the following disposal options may be available:
 - Disposal at a Class II injection well (or saltwater disposal well).
 - Hydraulic fracturing.
 - Using a reputable disposal company.

¹ A source water protection area is a defined area for protecting the source of a public drinking water supply — both groundwater and surface water.

Note that landfills and city sanitary sewer systems will not accept liquid waste.

CONTACT

For further information, contact the North Dakota Department of Environmental Quality, Division of Water Quality, at 701-328-5210, or visit the division website at deq.nd.gov/wq.