# National Pollutant Discharge Elimination System

## 700-PM Permit Renewal Fact Sheet

Oregon Department of Environmental Quality
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**Permit action**: 700-PM NPDES general permit renewal

**Permit category**: NPDES General Permit

**Source Location**: Statewide

# Activities covered under this permit

This general permit provides coverage under the National Pollutant Discharge Elimination System for four kinds of discharges from in-water placer mining:

Discharges from **motorized** suction dredges not exceeding 30 horsepower and suction hoses with inside diameters no larger than four inches in diameter that **do not operate in essential salmon habitat**. Operators seeking coverage for this type of discharge must apply for registration under the permit and registration must be approved by DEQ.

Discharges from gravity or siphon suction dredges with suction hoses with inside diameters no larger than six inches in diameter that **do not operate in essential salmon habitat**. Operators seeking coverage for this type of discharge must apply for registration under the permit and registration must be approved by DEQ.

Discharges from gravity or siphon suction dredges with suction hoses with inside diameters no larger than four inches in diameter that **operate in essential salmon habitat**. Operators seeking coverage for this type of discharge must apply for registration under the permit and registration must be approved by DEQ.

Discharges from other **in-water, non-motorized mining equipment or devices**. Operators seeking coverage for this type of discharge are not required to apply for registration but are required to comply with all applicable permit terms.

All other mining activities that discharge from a point source to surface waters of the state are not authorized by this general permit although some activities can be authorized by an individual permit.

**NOTE:** Hand panning is not considered to be a point source and is exempt from permitting requirements.

# Table of contents

# 1. Introduction

The Oregon Department of Environmental Quality is renewing the 700-PM NPDES general permit This permit is set to expire on April 30, 2025.

The following revisions are included in the permit.

- Coverage and Eligibility Section is now a main topic heading that is divided into subsections. These subsections contain the following information:
    - Discharges authorized by this permit
    - Discharges not authorized by this permit.,
    - Suction dredge registration and other requirements
    - Suction dredge renewal
    - In-water non-motorized equipment permit coverage and other requirements
- Waldo Lake and its associated wetlands (OAR 340-041-0345(7)) and Crater Lake (OAR 340-041-0185(6)) are added to the list of Outstanding Resource Waters. Permit coverage for discharges do not extend to all waters of the State. This general permit does not authorize a discharge to Outstanding Resource Waters associated with Waldo Lake and Crater Lake.
- Other minor revisions are for clarity

Suction dredge mining and in-water non-motorized mining equipment are commonly used for in-water placer mining operations. A person may not discharge from a suction dredge or in-water non-motorized mining equipment without a permit under the federal Clean Water Act National Pollutant Discharge Elimination System. DEQ has been delegated the authority by the U.S. Environmental Protection Agency to issue NPDES permits in Oregon. This is a general permit issued by order under Oregon Administrative Rule 340-045-0033. General permits cover activities with similar operations, similar wastes and similar monitoring conditions.

This 700-PM NPDES general permit allows and regulates the discharge of pollutants, including turbid water. Turbid water is a cloudy or muddy looking discharge consisting of stream water and bed material. It is discharged back into the receiving water from equipment used in state waters for recovering precious metals or minerals from stream deposits. Suction dredge and in-water non-motorized mining equipment are defined in the permit.

Placer mining can increase turbidity (reduce water clarity) in streams. Suction dredging in streams and other state waters that are impaired for toxics can disturb stream-bottom sediments and lead to the release of toxic pollutants into the water column.

All other mining activities that discharge to surface waters of the state are prohibited unless authorized by an individual permit, except for hand panning which is exempt from NPDES permitting requirements.

Discharges under this general permit are not authorized in certain areas. The section of the permit *“DISCHARGES NOT AUTHORIZED BY THIS PERMIT”* includes these restrictions.

Persons operating suction dredges in Oregon waters must register to obtain coverage under this permit or seek coverage under an individual permit.

Operators of in-water non-motorized small scale mining equipment are required to obtain a copy of the permit and follow the applicable requirements; however, registration under the permit is not required. Under 40 CFR 122.28(b)(2)(v) and OAR 340-045-0033(3)(a), DEQ can determine that the submittal of an application to register is not necessary after evaluating the type of discharge, the volume, availability of other means to identify the dischargers and estimated number of discharges to be covered under the permit. While the number of these types of operations is not exactly known, current estimates from the Department of State Lands annual reports indicate that from 2020 to 2025 there were 31 general authorizations issued for non-motorized mining in streams designated as essential salmon habitat. The total number of these operations including streams outside of essential salmon habitat is greater. Suction dredge and the other in-water non-motorized small-scale mining equipment operations have the same gravity separation and metal/mineral extraction process and same discharge of pollutants. In considering whether to include in-water non-motorized equipment in the registration process, DEQ has determined that the in-water non-motorized means of mining moves less material over time than the suction dredges and that there are alternative means other than permit registration to identify hand sluice operators through reported information required by state law, such as requirements already contained in DSL regulations.

# 2. Description of activity

Placer mining is the recovery of precious metal or minerals from stream deposits. Miners normally target gold-bearing placer or deposits of streambed material and former fluvial deposits of a meandering stream. The in-water placer mining covered by this permit typically occurs for a period ranging from 2 to 8 hours a day and is limited to seasonal in-water work periods authorized by Oregon Department of Fish and Wildlife. In general, the activity moves a small amount of material, and it is common for multiple mining activities to occur along the same stream. The table below provides information on product specifications. The amount of material moved is also dependent on the type of streambed material encountered and the number of operators working the site. Less streambed material is moved in areas with rocky substrate compared to a gravel substrate. (California Department of Fish and Game, 2011). An operation that includes more people can increase the amount of material moved. (Milch, Ceasar J., 5 Inch Dredge Model 5109H, Product Report, No Date)

**Table 1: Amount of material moved**

| Equipment | Cubic Yards |
|---|---|
| Non-motorized hand sluice | Typical amount of material processed is 5 cubic yards per year. |
| Proline Maximum Specifications (motorized) | |
| Suction dredge 2-inch | 2 cubic yards per hour |
| Suction dredge 3-inch | 8 cubic yards per hour |
| Suction dredge 4-inch | 12 cubic yards per hour |
| Suction dredge 6 -inch | 20 cubic yards per hour |
| Keene Maximum Specifications (motorized) | |
| Suction dredge 2-inch | 1.4 cubic yards per hour |
| Suction dredge 3-inch | 3 cubic yards per hour |

| Equipment | Cubic Yards |
|---|---|
| Suction dredge 4-inch | 5.2 cubic yards per hour |
| Suction dredge 6 -inch | 17 cubic yards per hour |

Dredge operators will move cobble rocks by hand and/or use the suction dredge to remove streambed material (waste material or overburden above a targeted mineral bearing zone) to reach gold deposits in areas near the top of bedrock. Miners also target material collected behind boulders and streambed deposits immediately above barriers that block downward migration of gold. Bedrock acts as a barrier to downward migration of gold. Miners often dig and suction the irregular surface and crevices of the bedrock for gold. In general, placer material is conveyed from the stream bottom through the suction hose to the sluice box on a floating platform where the power source and pump is also mounted. Dredgers often use breathing air supplied by a compressor powered by the dredge engine in addition to the suction pump. The sluice box processes the placer material where the heavier gold and minerals like magnetite (black sand) or hematite are caught and separated by means of metal riffles, metal screens and textured synthetic matte material. Waste rock and sediment passes through the sluice box. Waste material is deposited off the back end of the sluice box on the stream bottom and pollutants, including turbidity, sediments and, in some cases toxics, are introduced to the water column.

Suction dredge discharge often appears as a turbid plume of varying lengths and cloudiness depending on the characteristics of placer material processed. This permit does not provide coverage in waterbodies impaired for toxics unless expressly allowed by a Total Maximum Daily Load, however, elemental mercury from past mining practices may still be captured in sluice boxes. This material should be properly disposed of as discussed in DEQ's guidance for proper disposal of such mercury. Miners often capture lead fishing sinkers and other metal items. DEQ encourages the recycling of these materials.

Persons using in-water non-motorized equipment like a hand sluice box may move overburden to gather material from gold bearing zones with shovels and other tools and then bring targeted placer material back to the sluice box positioned in shallow water with optimum angle and stream flowing through it to catch the gold and minerals in the riffles of the sluice box. Gold and minerals are captured by the sluice box and waste material and pollutants are discharged.

Placer mining is focused in areas where gold or other precious metals may be present. In western Oregon, suction dredging and non-motorized mining typically occur in Applegate, Chetco, Coquille, Illinois, Sixes, Rogue, Umpqua and Upper Willamette and Santiam (Quartzville Creek) River basins. In eastern Oregon, suction dredging activity is prevalent in the Burnt and Powder River basins, and John Day River basin.

DEQ's authority to regulate discharges from mining arises from both the federal Clean Water Act (33 USC Section 1251 et. seq.) and Oregon Revised Statutes Chapter 468B. DEQ is authorized to require a water quality permit with limitations for point sources (such as suction dredges and sluice boxes) that discharge to waters of the state and that may cause water quality problems such as elevated turbidity. Best management practices and other conditions in this permit protect and maintain the quality of the waters of the state for public water supplies, the propagation of wildlife, fish and aquatic life, and domestic, agricultural, industrial, municipal, recreational and other beneficial uses as authorized by ORS 468B.020 and consistent with the policies in ORS 468B.015 and ORS 468B.116.

## 2.1 Land use issues

When the permit was reissued in 2005, DEQ and the EQC made findings and determined that registration under the 700-PM permit is not a program affecting land use and that a land use compatibility statement is not required for registration under the permit. This determination is carried forward in this permit.

## 2.2 Other federal and state laws

There are other federal laws such as the Federal Endangered Species Act and state laws that apply to placer mining activities. U.S. Army Corps of Engineers under Section 404 of the Federal Clean Water Act regulates the discharge of dredged material, and Oregon DSL under ORS 196.795 regulates the fill or removal of materials from waters of the state.

A Removal Fill permit is required by DSL for any placer mining operation that alters, removes or fills more than fifty (50) cubic yards of material per year in any waterway. In some cases, a general authorization may be required for operations involving less than fifty cubic yards per year in essential salmon habitat.

DEQ's water quality regulations and permit requirements apply in addition to any other requirements imposed by the U.S. Army Corps of Engineers or Oregon DSL. A permit from DSL does not eliminate the requirement for a DEQ permit.

Highbanker/power sluice and combination suction dredge/highbanker discharges to state waters including operating below the ordinary high water mark are not covered by this permit and would require an individual NPDES permit. Out-of-stream mining, operating above ordinary high water mark with no wastewater discharge to surface waters, for example a highbanker/power sluice and combination suction dredge/highbanker, requires DEQ 600 WPCF General permit coverage, which allows disposal of wastewater by evaporation or seepage. Off-stream mining and ore processing with a wastewater discharge to surface waters of the state requires an individual NPDES permit. If the WPCF 600 General permit is not applicable, an individual WPCF permit would be required for out-of-stream mining and ore processing activities with land disposal of wastes and no discharge to state waters.

# 3. Protecting quality of receiving waters

This is a statewide general permit. General permit conditions are established to be protective of water quality standards statewide so that DEQ can administer permit coverage efficiently.

The permit ensures that placer mining activities do not cause or contribute to exceedances of water quality standards. The Environmental Quality Commission adopts water quality standards to protect beneficial uses in waters of the state. Some of these standards include numeric criteria and some include narrative criteria. Beneficial uses protected by water quality standards are:

- Public domestic water supply
- Industrial water supply
- Irrigation
- Livestock water
- Anadromous fish passage
- Salmonid fish rearing
- Salmonid fish spawning

- Resident fish and aquatic life
- Wildlife and hunting
- Fishing
- Boating
- Water contact recreation
- Aesthetic quality
- Hydro power
- Commercial navigation and transportation

To the extent data is available, DEQ regularly assesses whether water bodies are meeting the water quality standards applicable to each water body. DEQ lists water bodies not meeting applicable standards as being impaired on the "303(d) list." As data dictates and resources allow, DEQ develops a TMDL or other strategy to address the impairment. DEQ's current 2022 303(d) list of water quality limited waters (approved or established by EPA in December 2022) can be found on DEQ's Water Quality Assessment web page.

This permit does not authorize permit coverage for discharges to water bodies that are impaired for sedimentation, turbidity or toxics other than chlorine.

This permit is not for water quality limited waters listed in categories 4 and 5 on Oregon's EPA approved or established 303(d) list for turbidity, sedimentation or toxics other than chlorine, that is in effect as of Jan. 1 of each year except when a TMDL has been established for that water that provides for placer mining under a permit.

A TMDL is required by the federal Clean Water Act for streams that do not meet water quality standards. A TMDL considers pollution from all sources in a basin and may provide a wasteload allocation to a point source or group of point sources. NPDES permits covering point sources with a wasteload allocation under a TMDL may allow discharges of the pollutant with permitted effluent limits. General permits issued will incorporate any applicable wasteload allocation from a TMDLs.

The 2019 EPA Willamette Basin Mercury TMDL is a pollution reduction plan that takes into account pollution from all sources in the basin. It contains reductions necessary to improve water and fish in streams impaired for mercury. This TMDL does not provide a waste load allocation for a discharge from suction dredging in areas with known mercury contamination to improve water quality in Dorena Reservoir. Dorena Reservoir is listed on the 303(d) list of impaired water and has fish consumption advisories in place for mercury.

Pollution reduction requirements contained in the 2019 EPA Willamette Basin Mercury TMDL do not provide for a discharge from suction dredging in streams that flow from the former Bohemia Mining District and are tributary to Dorena Reservoir. Some of these streams include Row River, Brice Creek, Sharps Creek and Champion Creek.

Suction dredging in an area with known mercury contamination has a high potential to mobilize and convert mercury to various forms. Impacts of mercury mobilization are expected to occur downstream in areas more conducive to methylation such as a reservoir.

Mercury has significant public health and wildlife impacts, primarily from consumption of mercury-contaminated fish. It can permanently affect fetal and child development and can damage the brain, kidneys and lungs. Whereas mercury released into the environment is primarily inorganic or elemental by nature, when in the environment, it is converted by bacteria to a methylated or organic form, which is the most toxic and bioaccumulative form of mercury. Once formed, methyl mercury can be readily passed through the food chain.

If a TMDL does not provide a wasteload allocation for mining activities under the 700-PM permit, discharges are not authorized.

This permit includes special conditions applicable to federal wilderness areas established prior to 1972 as required by OAR 340-013-0020(1)(A). These wilderness areas are Diamond Peak, Kalmiopsis, Eagle Cap, Gearhart Mountain, Mount Hood, Mount Jefferson, Mount Washington, Mountain Lakes, Oregon Islands, Strawberry Mountain, Three Arch Rocks and Three Sisters wilderness areas.

This permit does not authorize suction dredge mining in State Scenic Water Ways (ORS 390.805 to 390.925) or in waters that are on or constitute boundaries to tribal lands.

Enacted Senate Bill 3 in 2017 provided a regulatory framework for suction dredging in areas with sensitive species. This bill was codified at ORS 468B.112 to 468B.118. ORS 468B.116 restricts the size of a suction hose to no larger than four inches on a motorized suction dredge and ORS 468B.114 prohibits motorized in stream placer mining in essential salmon habitat. Essential salmon habitat is defined in ORS 468B.112. Gravity or siphon suction dredges with inside diameters larger than four inches may operate outside of essential salmon habitat under this permit.

Practices associated with operation of suction dredges and in-water non-motorized mining can impact beneficial habitat and stream channel structure that are interrelated with water quality parameters. Best management practices associated with operation of suction dredge and in-water non-motorized mining protect stream function associated with water quality.

## 3.1 Antidegradation analysis

DEQ's antidegradation rules and policies are in place to protect existing water quality when existing water quality meets or exceeds standards and to restore water quality limited water. Antidegradation requires the protection and maintenance of existing uses and the level of water quality necessary to protect those uses and limits when new or increased pollutants may be allowed. The conditions in this permit are consistent with rules, policies and memos. EPA's August 2013 review of DEQ's antidegradation approach for general permits is available on DEQ Antidegradation and Outstanding Resource Waters web page. This general permit excludes water bodies from areas of coverage in part to ensure antidegradation requirements are met without additional review. Permit conditions ensure compliance with narrative and numeric criteria for pollutants of concern and protection of designated and existing beneficial uses of water.

DEQ has assigned permit coverage to 85 registrants since the permit was issued in 2020.

DEQ works with state and federal agencies to identify suction dredging operations throughout Oregon. Estimates of placer mining operations are based on claims, DSL records, registration to this general permit and the annual report for this general permit.

Through registration, DEQ has a record of the number of registrants, upstream and downcurrent mining locations and size of dredge. Registration information for 2020-2025 indicates approximately 30% of mining locations are in eastern Oregon and about 70% are in western Oregon. In prior years, most of the mining locations were also located western Oregon.

This permit requires annual reporting to confirm number of operations, dates and location of operations. Annual reporting can be used to look at the number of registrants versus reports received to determine that mining did occur, but more importantly annual reports will be used to quantify total number of suction dredge operations in a waterbody. This permit contains a

provision for electronic reporting within the permit term. More information is available in the permit in the section on *Schedule B - Monitoring and Reporting Requirements*.

Permit limits and best management practices were developed to be protective of water quality standards in waters of the state. The permit does not result in the lowering of water quality in waters that are considered “high quality” or “water quality limited” for purposes of the state’s antidegradation policy.

This general permit does not authorize discharges in “high quality” Outstanding Resource Waters: the North Fork Smith River, its tributaries and associated wetlands (OAR 340-041-0305(4)); Waldo Lake and its associated wetlands (OAR 340-041- 0345(7)) and Crater Lake (OAR 340-041-0185(6)). Waldo Lake and its associated wetlands and Crater Lake were added as Outstanding Resource Waters in 2021 and are added in this permit renewal. The designation provides special protections to maintain the exceptional water quality of these lakes.

This permit does not authorize discharges to impaired waterbodies from suction dredges operating on any stream segment that is listed as water quality limited in categories 4 and 5 on Oregon’s EPA approved or established 303(d) list. The 303(d) list as approved or established by EPA that is in effect as of January 1 of each year will be used to determine if coverage is available for specific waters. Suction dredges will be required to operate 500 feet upstream of impaired water listed as water quality limited in categories 4 and 5 for sedimentation, turbidity or toxics other than chlorine on Oregon’s EPA approved or established 303(d) list to protect water quality. A distance of 500 feet includes operation of a dredge, the 300 feet mixing zone and additional space for protection of impaired water.

DEQ evaluated pollutants associated with suction dredging activities in a March 15, 1999, memorandum, which is an addendum to the July 25, 1996 fact sheet and part of the record for renewal of this permit. Turbidity and sediments, toxic pollutants, dissolved oxygen, temperature and pH were evaluated. Findings determined that turbidity, sediments and toxic pollutants are pollutants of concern. Permit conditions were developed to address pollutants associated with the recovery of precious metals and minerals from stream deposits.

As part of those findings, visible turbidity was limited to 300 feet to minimize and localize turbidity from suction dredging. A prohibition for suction dredging in waters listed for turbidity protects impaired streams. A condition prohibiting suction dredging in streams listed as water quality limited for toxics prevented the release of toxic pollutants associated with sediments into the water column. To ensure dissolved oxygen is not a problem for vulnerable life stages of anadromous fish, a condition aligned suction dredging to ODFW’s in stream work schedule. Suction dredging was found not to adversely affect stream temperature and included a condition to prevent activities from creating obstructions that could cause ponding and a localized temperature increase. DEQ has not found any new studies that relate in-stream turbidity from suction dredging to an increase in temperature. The protection of the habitat structure in the best management practices will protect the riparian areas that provide shade. Best management practices also provide protection from erosion that can contribute to stream channel profile changes that may increase temperature.

This permit renewal keeps the above-mentioned conditions that are protective of water quality for turbidity, sediments, toxic pollutants, dissolved oxygen and temperature and includes requirements to manage natural and restoration placement of habitat structure in areas where mining occurs. This permit includes time and location protections identified through partnering with other natural resource agencies to restore threatened and endangered fish and salmon runs in coastal streams.

In the addendum to the July 25, 1996 suction dredge mining permit, DEQ noted the importance of work performed as part of Oregon's Salmon and Stream Restoration Plan (now titled, *The Oregon Plan for Salmon and Watersheds*). At that time, DEQ stated permit conditions for protections in coastal streams would be revisited. Best management practices for habitat structure include restoration of boulders and habitat structure to their original location to prevent erosion from misplaced structures and to continue to protect stream function and complexity.

The size of equipment for which discharges are eligible for permit coverage is unchanged from the permit modification issued in 2018. Effluent limits for turbidity no greater than 10% above background have not changed. The water quality standard for turbidity does not allow more than a 10% percent cumulative increase in natural stream turbidities. The size of the mixing zone for turbidity has not changed nor has the prohibition on overlapping mixing zones or bank to bank (entire wetted perimeter) turbidity changed. No lowering of water quality is allowed outside the 300-foot mixing zone and mixing zones cannot overlap to prevent cumulative degradation. A narrative criterion for no visible oily sheen is also an effluent limit. These best management practices are protective of water quality standards.

This permit allows a discharge from the operation of gravity and siphon suction dredges equipped with a four-inch diameter hose in essential salmon habitat. Operation of motorized suction dredges equipped with a four-inch diameter hose outside of essential salmon habitat is also allowed. This size dredge is more likely to meet a 300-feet mixing zone for turbidity based on a DEQ 2004 field study. This also aligns with DSL requirements for operation of a non-motorized suction dredge in essential salmon habitat. Keeping a mixing zone at 300 feet allows for flexibility in streams where the type of sediment, not the size of the dredge, may influence the length of a plume since the length of a plume can be influenced not only by size of hose but also by the type of sediment being discharged. Where the sediment is fine, the plume may be longer with the same size of hose.

Discharges from suction dredges and in-water non-motorized mining equipment operated in accordance with the permit conditions will not result in a new or increased load of pollutants to waters of the state. Antidegradation requirements to protect sensitive salmon spawning designated uses under this permit are met by retaining limits on the size of a suction dredge in essential salmon habitat and by adhering to in-water work periods established to protect important species and life stages including migration, spawning and rearing. These activities are considered as part of this permit without a need for separate review.

The in-water non-motorized mining processes are not expected to create pollutants that are different than those evaluated under suction dredging. Therefore, the permit requirements are generally the same for all dredging activities with the exception that suction dredge mining is prohibited in certain areas of the Clackamas River, McKenzie River, and North Santiam River (OAR 340-041-0350). In-water non-motorized mining is not prohibited in these areas.

Suction dredging is prohibited during periods when native migratory fish are rearing and spawning through fry emergence, as identified by Oregon Department of Fish and Wildlife. Both suction dredges and in-water non-motorized mining equipment may not be used or operated where fish eggs, freshwater mussels and Pacific lamprey ammocoetes (larva) are present. The condition to not allow non-motorized mining equipment to operate where fish eggs are present aligns with DSL requirement for non-motorized mining equipment.

This permit renewal retains the antidegradation requirements from the previous permit necessary to protect streams impaired for turbidity, sedimentation and toxics other than chlorine, and protections remain to ensure operations upstream of waters identified as water quality limited do not further impair water quality in those streams.

Water quality limited waters often will not have assimilative capacity for additional input of the pollutant causing the impairment. This permit is not for Oregon streams that are water quality limited for sediments, turbidity, or toxics other than chlorine. As of February 2024, the current list of water quality limited water is found in Oregon's 2022 Integrated Report. The Integrated report contains a list of impaired waters.

# 4. Permit coverage and eligibility

## 4.1 Discharges authorized by this permit

This section describes the scope of permitted activities and type of operation covered by this permit. Equipment authorized to discharge under this is the same as the permit issued in 2018 and includes:

- Discharges from motorized suction dredges not exceeding 30 horsepower and suction hoses with inside diameters no larger than four inches in diameter that do not operate in essential salmon habitat.
- Discharges from gravity or siphon suction dredges with suction hoses with inside diameters no larger than six inches in diameter that do not operate in essential salmon habitat.
- Discharges from gravity or siphon suction dredges with suction hoses with inside diameters no larger than four inches inside essential salmon habitat.
- Discharges from other in-water non-motorized mining equipment or devices.

The permit defines suction dredge and in-water non-motorized mining equipment to include specific types of equipment.

Definitions in the permit describe two specific types of mining equipment authorized by this permit – (1) suction dredge and (2) in-water non-motorized mining equipment. For example, by definition, a suction dredge includes gravity and siphon dredges. Operators of gravity or siphon suction dredges are required to register for coverage under this permit.

## 4.2 Discharges not authorized by this permit

This permit does not authorize either highbanking equipment operations such as using a power sluicebox, or other motorized classifying equipment used for mining below ordinary high-water level of state waters. To prevent confusion, highbanker and a combination highbanker/suction dredge is defined and is not authorized to discharge under this general permit. If a person's proposed operation or type of equipment for placer mining does not conform to this permit, then an individual NPDES permit may be required.

Discharges may be allowed dependent on equipment type and size in waters designated as essential salmon habitat.

The proposed permit is not valid in all areas or water bodies of the state. There are restrictions on permit coverage in the following designated waters:

- State-designated scenic waterways
- Essential Salmon Habitat

- Outstanding Resource Waters
- Tribal lands or water that constitutes a boundary with tribal lands
- Water bodies in categories 4 and 5 on DEQ's 303(d) impaired waters list for sediment, turbidity and toxics unless a total maximum daily load (pollution reduction plan) is provided
- Streams in the 2019 EPA Willamette Basin Mercury TMDL

In this permit renewal, North Fork Smith River, as well as Waldo Lake and Crater Lake are now included in the section on Outstanding Resource Waters.

## 4.3 Suction dredge equipment registration and other requirements

Registration is required for permit coverage of suction dredges. Upon registration, the permit will be assigned for the full five-year term of the permit. An assigned permit number will be provided, which is required to be displayed on the registrant's suction dredge.

New, annual and renewal administration fees are contained in ORS 468B.118 and implemented in OAR 340-045-0075.

New registration for a discharge from a motorized suction dredge for applicants not registered under this permit costs $500.This application fee of $500 consists of a $250 initial fee and $250 first annual fee. An annual fee of $25 is required to obtain initial permit coverage for a discharge from a gravity or siphon suction dredge. There is no registration requirement or fee for in-water non-motorized mining equipment.

Once a person is registered to this permit DEQ will invoice annual fees for the convenience of registrants. Failure to receive an invoice does not excuse a failure to pay annual fees. The application form for this permit will include space for an applicant to provide an invoice contact and address on where to send an invoice.

Each year an annual fee payment of $250 is required to maintain permit coverage for a discharge from a motorized suction dredge. Each year an annual fee of $25 is required to maintain permit coverage for a discharge from a gravity or siphon suction dredge.

A person requesting coverage for a motorized suction dredge and a gravity or siphon suction dredge will be required to pay both annual fees.

The permit will use the most current 303(d) list of impaired waters as approved or established by EPA, in effect as of January 1 of year to determine where permit coverage is available. DEQ's online mapping tool provides information on water quality limited streams on the 303(d) list for those registering under the permit and on DEQ's integrated report assessment database.

DEQ typically processes applications for suction dredge mining after Jan. 1 and just prior to the established in-water work period for suction dredge mining. DEQ can notify new applicants, and registrants when a new EPA approved or established 303(d) list that affects these applicants and registrants is in effect.

## 4.4 Suction dredge equipment renewal

An operator of a motorized suction dredge will be required to pay a renewal fee of $250 in addition to the annual fee for continued permit coverage at the time of permit renewal.

## 4.5 In-water non-motorized mining equipment: Permit coverage and other requirements

In-water non-motorized equipment will be covered under the permit and the operator will be required to follow all the applicable conditions, including having a copy of the permit, but a person operating non-motorized equipment does not have to register for permit coverage or pay a fee. DEQ does not view panning as non-motorized equipment. DEQ does not require NPDES permit coverage for panning.

# 5. Schedule A – Waste discharge limitations for all equipment

Conditions in this permit are protective of water quality standards. Water quality standards include beneficial uses of the water, numeric and narrative criteria to protect the uses and antidegradation measures that protect designated and existing uses and high quality waters.

Water quality-based effluent limits and technology-based effluent limits are the primary means used to protect water quality. Technology-based effluent limits require a minimum level of treatment of pollutants based on available treatment technologies.

Technology-based effluent limits have been established by EPA regulations for only some types of discharges. These EPA established technology-based effluent limits are also known as effluent limit guidelines and are contained in 40 CFR 440.140 to 440.148. When effluent limit guidelines have not been established, permits must include technology-based effluent limits that are based on the best professional judgment of the permit writer. EPA's technology-based effluent limits do not apply to placer mining activities processing less than 5,000 cubic yards per year. For point sources not covered by effluent limit guidelines, permit writers develop technology-based effluent limits using best professional judgment.

Permits must contain technology-based effluent limits and any additional limits needed to ensure the permitted activity does not cause or contribute to an exceedance of water quality standards.

The permit includes a narrative water quality-based effluent limit that prohibits any other direct or indirect discharge of pollutants to waters of the state unless authorized by this permit. The permit includes provisions discussed below that address turbidity and prohibits discharges to certain water quality limited water bodies.

This general permit does not authorize discharges into waters that are listed as impaired for sedimentation, turbidity, or toxics (other than chlorine). Toxics embedded in sediment can be resuspended or otherwise released into the water from dredging.

Suction dredge operations create suspended particles that can be measured as turbidity. Literature on dredging recognizes that gravel and coarse sand will remain as "loose tailings" and the finer sediment will be carried further downstream in suspension. (Harvey 1998) Turbidity can adversely impact water quality and can have indirect effects on fish and other aquatic life. Turbidity is a measure of light transmission. Turbidity is seen as muddy or cloudy water. Visual monitoring is required to determine compliance with turbidity limits.

Sedimentation is a significant water quality parameter needing to be addressed for salmon recovery. (Oregon Department of Environmental Quality, Oct. 2000) Sediments are transported downstream when bed material or bank material is disturbed by human or natural processes.

Non-motorized suction dredges with suction hoses that have inside diameters no larger than four inches are eligible for coverage to operate within essential salmon habitat. This restriction will minimize water quality impacts in environmentally sensitive areas. Less material is mobilized by a suction dredge and suction hose with an inside diameter no larger than four inches so that less turbidity will be generated from movement of bed material.

DEQ is restricting the size of the dredge inside of essential salmon habitat because DEQ's 2004 field study on the four-inch dredge showed that it is more likely to meet the water quality effluent limit for turbidity. Turbidity is limited to a 300-foot mixing zone. An operator is required to take corrective action when visible turbidity extends beyond 300 feet. Movement of less material may not result in less turbidity. For example, visible turbidity may extend beyond 300 feet as a result from mining in silt and clay. A hose size limitation for a gravity or siphon suction dredge operation in essential salmon habitat also aligns with Department of State Land's requirement for a general authorization (permit) (ORS 196.810(1)(b)).

# 5.1 Effluent limits

This permit has conditions to minimize turbidity, suspended sediment that is seen as turbidity and toxics. Turbidity is muddiness or cloudiness in water. Suspended sediment can cause a turbid plume in the water. Disturbance of stream deposits in streams listed as water quality impaired for toxics other than chlorine, can lead to the release of toxic pollutants embedded in the sediment into the water column. For purposes of this permit, the list of toxics excludes chlorine. Chlorine has properties that would not sequester the pollutant to sediments and would not lead to the release of toxic pollutants associated with stream deposits that are disturbed. Use of petroleum products can cause an oily sheen.

### 5.1.1 OAR 340-041-0036 Turbidity criteria

The water quality criterion for turbidity contained in OAR 340-041-0036 allows no more than a ten percent cumulative increase in natural stream turbidities, as measured relative to a control point immediately upstream of the turbidity causing activity.

This permit has effluent limits for turbidity and narrative criteria. Under narrative criteria in OAR 340-041-0007(1) conditions need to be provided to control activities to protect water quality. This permit protects and maintains beneficial uses with best management practices.

The turbidity criterion (OAR 340-041-0036(2)) allows the turbidity to be exceeded for limited duration activities necessary to address an emergency or to accommodate essential dredging, construction or other legitimate activities provided all practicable turbidity control techniques have been applied and one of the following has been granted: a permit or certification authorized under terms of Clean Water Act sections 401 or 404 or OAR 141-085-0100 (Removal and Fill Permits, DSL), with limitations and conditions governing the activity set forth in the permit or certificate.

The Army Corps of Engineers has not issued a National General Permit for small scale suction dredge mining under 404. DEQ cannot issue a 401 certification without a 404 permit; therefore OAR 340-041-0036(2) is not applicable.

### 5.1.2 OAR 340-041-0053 Mixing zone

DEQ has the authority under OAR 340-041-0053 to suspend water quality standards in a specified limited area called the regulatory mixing zone.

A regulatory mixing zone is a portion of a water body designated in an NPDES permit where water quality standards may be suspended, as long as the proposed mixing zone under OAR 340-041-0053(2)(c) is:

- As small as feasible
- Avoid overlap with any other mixing zones and be less than the total stream width minimizes the adverse effects on the indigenous biological community
- Allows the passage of fish and other aquatic organisms, and
- Does not threaten public health and minimizes the adverse effect on other designated beneficial uses outside the mixing zone.

DEQ concludes that 300 feet is the distance at which there is no reasonable potential to violate the water quality criterion for turbidity. After the initial fallout, lingering suspended material will remain. The vast majority of sediment discharge will fall out of the water column and be diluted within distances much less than 300 feet. Suction dredging in streams that are water quality limited for toxics other than chlorine, could disturb stream deposits and lead to the release of toxic pollutants (Oregon Department of Environmental Quality, 1999). A mixing zone is provided to allow for settling. Toxics return to background levels within 300 feet. (Royer, et al., April 1999)

For purposes of comparison, Table 2 summarizes information on regulation of turbidity plumes from placer mining.

**Table 2 – Turbidity Plume Distances**

| Suction dredge size | Turbidity distance | Source of Information |
|---|---|---|
| Less than or equal to 4 inch nozzle, 12 HP | 40 feet | Utah Division of Water Rights Recreational Dredging Application 2024-2025 Conditions of Approval |
| Nozzle diameter of 5 inch or less and 15 HP or less | 150 | Record of Decision, Small-Scale Suction Dredging in Lolo Creek and Moose Creek, Environmental Impact Statement, Lochsa and North Fork Ranger Districts, USDA Forest Service, Clearwater National Forest. Clearwater and Idaho Counties, Idaho |
| Intake size less than or equal to six inches | 160 to 260 feet | DEQ March 15, 1999 Memo Suction Dredge Mining Permit—Addendum to Fact Sheet dated July 25, 1996 |
| Intake nozzle up to 5 inch diameter | 200 feet | Biological Evaluation for Small Placer Miners in Idaho National Pollutant Discharge Elimination System (NPDES) General Permit, August 2012, Prepared by: US EPA Region 10 Office of Water and Watersheds, Office of Environmental Assessment<br>Executive Update December 2017, US EPA Region 10 Office of Water and Watersheds |
| Intake nozzle up 5 inch diameter and multiple dredges equivalent to a 5 inch diameter intake nozzle, 15 HP or less | 500 feet | Idaho Pollutant Discharge Elimination System General Permit No. IDG370000 |

| Suction dredge size | Turbidity distance | Source of Information |
|---|---|---|
| Intake nozzle with 6 to 10 inch diameter or equivalent combination of intake hoses. | 500 feet | Alaska Pollutant Discharge Elimination System Permits GP #AKG375000 and GP # AKG371000 |

The mixing zone is being minimized by a limitation on hours of operation, along with the 300-foot length. The mixing zone is minimized because an overlap with other plumes is not allowed and a turbidity plume cannot cover an entire stream width. Drinking water will be protected by not allowing a visible turbid plume to reach a drinking water intake.

Compliance with effluent limits for turbidity in Schedule A, Conditions 1 and 2 is required at all times. Schedule A, Condition 3 limits operation to daylight hours so that a visible plume can be seen. If turbidity is visible over 300 feet downstream or down current of suction dredging and non-motorized in stream mining, then turbidity exceeds the allowable in-stream water quality criterion and the permit requires the operator to take immediate corrective measures. Corrective measures can include the options of moving to a location where the dredging of concentrated silt and clay are avoided, using reasonable care to avoid dredging silt and clay materials, or reducing the volume of effluent discharged by limiting the amount of materials dredged or speed of the suction dredge. Moving to increase the distance between dredging operations will prevent an overlap of turbidity plumes as required in Schedule D, Condition 1.

### 5.1.3 OAR 340-013-0020 Environmental Standards for Wilderness Areas

Pursuant to OAR 340-013-0020(1)(b)(A) and OAR 340-013-0035, no measurable turbidity is allowed in wilderness areas established prior to 1972. The term ‘no measurable increase’ is not defined. For the purpose of implementing this standard in Schedule A, Condition 4, a measurable increase is any visible turbidity. Visible turbidity is defined in the permit as turbidity that is distinctly visible when compared to background turbidity.

### 5.1.4 OAR 340-041-0007(12) Oily sheen

The necessity of using, handling and storing petroleum products near water for operation of a suction dredge creates the potential for creating an oily sheen in water. An effluent limit for no visible oily sheen is included in Schedule A, Condition 5. Consistent with statewide narrative criteria in OAR 340-041-0007(12) Objectionable discoloration, scum, oily sheens, or floating solids, or coating of aquatic life with oil films may not be allowed, Schedule D of the permit prohibits the creation of an oily sheen.

# 6. Schedule B –Monitoring and reporting requirements for suction dredge registrants

Minimum monitoring and reporting requirements apply to operators of suction dredges Any operator of a suction dredge is required to register for permit coverage.

Frequency of monitoring, information collected with the monitoring and record-keeping required for suction dredges are specified in Schedule B.

The permit requires visual monitoring once per day during daylight hours to determine compliance with the turbidity limits. Recorded information on the location of visual monitoring must include township, range and section and latitude and longitude and stream name. If mercury is observed that information must be included in the monitoring report, as well as, the amount of mercury collected and the manner of hazardous waste disposal.

The following monitoring and record retention requirements from Schedule F General Conditions are also in Schedule B:

- Section C8. regarding retention of records; (Schedule B, Condition 5)
- Section C9. records contents; (Schedule B, Condition 3b, c, d, j and f)
- Section D6. other noncompliance; (Schedule B, Condition 3i.)
- Section D7. duty to provide information (Schedule B, Condition 6)

DEQ requires information in the monitoring log and annual report of any noncompliance, which includes observation of a visible oily sheen or other noncompliance at any time. A spill that creates a visible oily sheen is required to be reported as provided in Condition 12 in Schedule D.

Persons registered are required to submit an annual report to DEQ. Schedule B, Condition 7 requires the monitoring log submitted as part of the DEQ annual report form. Schedule B, Condition 7 requires a registrant to submit permit-required electronic monitoring reports using a web-based portal.

This annual report submittal is required even if suction dredging did not occur. DEQ can use annual reports to determine location of waterbodies where suction dredging occurs, number of suction dredges operating in a waterbody and compliance-related issues. Information from annual reports will assist DEQ with permit renewal, document effectiveness of the permit, and may be necessary to support development of total maximum daily loads or other load analysis.

A registrant must submit permit-required monitoring results electronically using the DEQ-approved web-based forms.

Monitoring and record-keeping are not required for the non-motorized in-stream equipment and devices.

# 7. Schedule C- Compliance schedule

A compliance schedule is not part of this permit.

# 8. Schedule D – Best management practices and other special conditions

Oregon’s water quality standards are based on the protection of designated and existing uses, including aquatic organisms and public health, and the prevention of degradation of water quality. Best management practices together with effluent limits protect beneficial uses and water quality in the receiving waters of the state.

Placer mining activities have been studied for their turbidity impacts, the movement of bed material that can contribute to erosion and create deposition, as well as, more recently, toxic

pollutants. The Institute for Natural Resources Policy Paper 2003-01, prepared by Oregon State University and entitled “Recreational Placer Mining in the Oregon Scenic Waterway System,” states “[T]he result of not adopting all best management practices, even by only a handful of recreational miners, can cause serious long-term damage to the ecological health of a particular stretch of river.” (Bernell 2003)

In the process of dredging, sediments are taken up and re-deposited in water. The re-deposited sediments can have effect on fish spawning and benthic habitat. OAR 340-041-0007(11) does not allow the formation of appreciable bottom or sludge deposits or the formation of any organic or inorganic deposits that are harmful to fish or other aquatic life, public health, recreation or industry. This permit retains best management practices that prevent creation of excess suspended material and sedimentation that can threaten the survival of fish and other aquatic species.

# 8.1 BMPs and special conditions

This permit contains best management practices to minimize the impacts recovering precious metals and minerals from stream deposits have on beneficial uses and water quality.

This permit includes best management practices used in previous permits and commonly used in other state permits and regulations for placer mining, including Idaho’s 2024 NPDES general permit and Montana’s NPDES general permits. Other states’ permits and regulations give an indication of what is reasonably expected as best management practices. Plans of operation for suction dredge mining, which are a part of federal land use authorizations, include similar terms and conditions to mitigate impacts on water quality, aquatic habitat and species. In this permit, best management practices are technology-based effluent limits.

### 8.1.1 Schedule D, Condition 1 (no overlapping plumes), Schedule D, Condition Nos. 2 & 3 (in water work and the presence of fish eggs) Schedule D, Condition 4 (fish passage), Schedule D, Condition 5 (relocate if encounter mussels), Schedule D, Condition 6 (avoid working in or return to stream lamprey ammocoetes), Schedule D, Condition 19

This permit retains the condition to provide a continuous zone of passage that meets mixing zone rule requirements for free-swimming and drifting organisms. Visible turbidity must not cover the entire wetted perimeter (wetted width, from stream bank to opposite stream bank) as required in Schedule A, Condition 1. Schedule D, Condition 1 of the permit requires that there be no overlap in turbidity plumes where more than one piece of equipment is operating in the same waters. Unobstructed fish passage is required in Schedule D, Condition 4.

Re-deposition of suspended sediments downstream of dredging that covers fish eggs reduces the availability of oxygen. Excavation and deposition that would disturb fish eggs and their spawning grounds are protected by specifying in Schedule D, Conditions 2 and 3, that suction dredge operations need to observe in-water work periods. The in-water work periods are based on the protection of fish and fish spawning developed by ODFW and give primary consideration to anadromous and other game fish, and threatened, endangered or sensitive species.

Best management practices in Condition nos. 3, 5 and 6 remain unchanged from the existing permit. Suction dredges and in-water non-motorized mining equipment must not be used where fish eggs, Pacific lamprey and mussels are present. Pacific lamprey ammocoetes and mussels may be present when the in-water work schedule allows mining. However, fish eggs, lamprey ammocoetes (larvae), and mussels may also be present outside of the in-water work period.

When lamprey ammocoetes are found at a mining site, salvage efforts in the area of operation and in the removed substrate must be made by sifting through streambed material in the area of operation and in the removed substrate and returning salvaged ammocoetes to the stream away from the activity. If live mussels are encountered, the operation must be relocated. Reference materials will be provided for guidance on DEQ's Metal Mining Activies web page.

Condition 19 contains the requirement in Oregon Revised Statute ORS 468B.116(2)(c). Condition 19 does not allow metal mining equipment to be operated in a manner that is deleterious to freshwater mollusks, essential salmon habitat or habitat essential to the recovery and conservation of Pacific lamprey.

### 8.1.2 Schedule D, Conditions 7 (no mining of stream banks), 8 (undercutting), 9 and 10 (moving habitat), 11 (bridge footings, dams), 14 (10 feet into wetted perimeter) and 15 (motorized equipment)

This permit limits areas where suction dredging and non-motorized mining can occur to prevent excess sedimentation and turbidity and protect beneficial uses, such as aquatic life. In Schedule D, Condition 7, dredging or mining from stream banks is not allowed. Undercutting or eroding stream banks and removal or disturbance of boulders, rooted vegetation or embedded woody plants from the stream bank is prohibited in Schedule D, Condition 8.

The requirement in Schedule D, Conditions 9 and 10, for movement of in-stream habitat structure has changed from the current permit. The permit requires boulders, woody debris, and other key pieces of habitat structure that are moved in the course of mining to be returned to their original locations once a mining activity is complete. This condition also provides clarity on the type of equipment that may be used when moving in-stream habitat structure by specifying only non-motorized or hand equipment may be used.

Studies have shown that placer mining can have a negative impact on habitat structure that is necessary for fish and benthic communities (Bernell 2003), (R2 Resource Consultants 2006), (Lisle 1986). Changes in habitat can affect the ability of a watershed to meet water quality standards (Oregon Department of Environmental Quality 2000). Streams have been added to DEQ's 303(d) 2010 list for impairment of biological conditions. Waters of the state, including habitats, must be of sufficient quality to support aquatic species without detrimental changes in resident biological communities.

Coarse woody debris and large boulders are beneficial to a stream and its biological community. Coarse woody debris can stabilize banks, provide a place for gravel build up and deep pools that add to a stream's complexity and function. Aquatic habitat restoration projects conducted around the state involve placement of large wood and boulders in stream and riparian areas to promote fish habitat.

In Schedule D, Conditions 9 and 10, boulders and habitat structure may be moved around in the stream but not removed. This permit condition with its requirement to return habitat structure to its original location will limit adverse effects and prevent further degradation of natural complexity and function of streams.

Erosion increases the sediment load to a stream and increases turbidity. In Schedule D, Condition 14, mining into non-vegetated gravel bars up to 10 feet outside the wetted perimeter can occur only in non-essential salmon habitat. Under Schedule D, Condition 15, stream bank erosion is minimized by prohibiting motorized wheeled or tracked equipment from being used in-water. Access points for a suction dredge are kept to established areas.

These best management practices minimize the impact of erosion and protect the habitat for beneficial uses by keeping dredging excavating activities in the stream and along the wetted perimeter. Stream bank erosion can accelerate production of stream fines. Movement of a boulder may redirect flow in a stream to cause channeling or bank erosion. Finer sediments cause sediment and turbidity problems in the receiving stream. Dredging activities are regulated within the defined wetted perimeter to prevent erosion, release of finer material, loss of riparian shade, and change in stream morphology.

Schedule D, Condition 11, contains the requirement to manage operations to avoid affecting infrastructure, such as bridge footings and dams to prevent potential impacts from erosion. This requirement and may also satisfy requirements for a 401 certification if one is necessary.

### 8.1.3 Schedule A, Condition 1 (meet water quality standards), Schedule A, Condition 5 (no oily sheen), Schedule A, Condition 6 (water quality limited water), Schedule D, Conditions 12 (oil), Schedule D, Condition 13 (drinking water sources), Schedule D, Condition 17(chemical agents), Schedule D, Condition 20 (mining location)

Schedule A, Condition 1 was revised for clarity. Schedule A, Condition 1 does not allow a discharge of pollutants that are different than what the permit allows. Compliance with conditions in the permit will generally meet this requirement for sediment, turbidity and toxics. Schedule D, Condition 12 contains best management practices for proper handling, storage and refueling or petroleum products. OAR 340-041-0007(12) states that objectionable discoloration, scum, oily sheens, or floating solids or coating of aquatic life with oil films may not be allowed. Preventing contamination from petroleum products can be managed in various ways. The requirement for no visible oily sheen is consistent with DEQ's water quality criterion and along with best management practices required in Schedule D, Condition 12, which will protect water from leaks and spills of petroleum products resulting from operation or refueling of a suction dredge. Schedule A, Condition 5 requires management of petroleum products to prevent a visible oily sheen.

Schedule D, Conditions 6 and17 remain unchanged from the existing permit. Schedule A, Condition 6 abates a discharge from reaching a water quality limited water by operating upstream from such waters as follows: 500 feet upstream from a stream segment that is listed as water quality limited or 500 feet upstream from a tributary of a stream with a stream segment that is listed as water quality limited. There are no sampling requirements in this permit. Although metals are expected to settle within 300 feet, a requirement to operate 500 feet upstream of water quality limited water body is more protective of water quality limited water. The 500 feet allows for further dilution and settling of turbidity, sediment and metals. Schedule D, Condition 13 ensures a visible plume would not reach a drinking water intake. Schedule D, Condition 17 states that use of chemical agents such as mercury are prohibited. Prohibiting the use of chemical agents will prevent chemical waste from entering water and protect water quality.

Some streams contain sediments contaminated with toxic pollutants. Suction dredging in streams that are water quality limited for toxics other than chlorine, could disturb stream deposits and lead to the release of toxic pollutants (Oregon Department of Environmental Quality 1999). Sediments contaminated with toxic pollutants are then transported downstream and deposited and can ultimately be ingested by benthic organisms and passed up the food chain (Oregon Department of Environmental Quality 2000). It is generally known that the properties of clay results in it adsorbing metals. Studies show higher concentrations of mercury are associated with silty and clay bed sediments (Hunerlach et.al 2004), (Fleck 2010). A mixing

zone limitation of 300 feet serves to regulate disturbance of material like clay that may harbor contaminants and tends to stay in suspension. Monitoring and reporting on compliance with the mixing zone requirement are part of this permit. This permit continues to require in-stream turbidity to be minimized and localized to the general area of the in-stream mining activity. This permit does not allow coverage for water quality limited streams in categories 4 and 5 on DEQ's 303(d) list for toxics other than chlorine, unless there is a Total Maximum Daily Load that expressly provides for mining under the permit either by allocation of a wasteload or determination that mining under the permit is not a source.

Schedule D, Condition 20 contains a requirement for DEQ to notify a registrant of a change in its permit status when authorization for permit coverage is no longer available and includes their registered mining location. In Condition 20, upon notification from DEQ, a registrant will need to amend their permit application to change a mining location or terminate their general permit registration.

Schedule D, Condition 13, states that the permit registrant may not allow the visible plume discharged from the suction dredge operation to reach the intake of a drinking water source. This condition minimizes turbidity and contaminated sediment from being entrained in a drinking water uptake. DEQ's Drinking Water Protection Program web page and Oregon Department of Water Resources web page provide tools to identify drinking water intakes.

### 8.1.4 Schedule D, Condition 16 (invasive species)

Schedule D, Condition 16 protects fish habitat. Best management practices for the prevention of invasive species remain in this permit.

### 8.1.5 Schedule D, Condition 18 (hours of operation near a campground)

Oregon Revised Statute 468B.116(2)(a) contains operating requirements for motorized mining equipment. Condition 18 prohibits operation of motorized mining equipment within 1000 feet of a residence or campground during certain hours. This permit condition may be waived in a permit issued to the owner of a federal mining claim if the applicant seeking a waiver of this permit condition provides substantial evidence specific to the mining claim that establishes that the application of the condition either violates federal law, or constitutes a regulatory taking. DEQ shall review and make a determination regarding the request for a waiver of this condition as part of the permit coverage decision.

# 9. Schedule E – Pretreatment

An industrial pretreatment program is not part of this permit.

# 10. Schedule F - NPDES general conditions

Schedule F contains conditions that are standard to all industrial NPDES permits and include language regarding operation and maintenance, monitoring and recordkeeping, and reporting requirements. Standard conditions in 40 CFR 122.41 must be in every NPDES permit. Previously this permit did not contain a complete list of these standard conditions. DEQ uses this standard set of conditions in industrial permits.

Where requirements in Schedules A, B, and D contain requirements that are more specific than the general conditions, those provisions in the permit supersede the general conditions.

# 11. References


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# Non-discrimination statement

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