

DEPARTMENT OF ENVIRONMENTAL QUALITY
Environmental Assessment

Water Quality Division
Water Protection Bureau

Name of Project: Montana Pollutant Discharge Elimination System General Permit for Suction Dredging Operations

Type of Project: Portable suction dredges are mechanical devices that remove submerged streambed materials (substrate) by means of hydraulic suction. Water and substrate are vacuumed through an intake conduit with a diameter of four inches or less. The material is then processed through a sluice box, which is a riffled trough that traps gold and other dense materials settling out from flowing water. The remainder of the substrate falls off the end of the sluice box and is deposited back into the stream bottom as waste, or tailings. Lighter sediments are discharged in a turbid plume. The discharge consists of stream water and bed material; no materials or chemicals are added to the discharge water.

Location of Project: Statewide (Except A-1, A-Closed waterbodies, and Indian Reservations)

Description of Project: Reissue the statewide General Permit for Portable Suction Dredging Operations (MTG370000). Owners/operators of recreational portable suction dredges will be required to apply for authorization under the renewed General Permit. The renewed General Permit will control recreational suction dredge wastewater containing turbidity.

Agency Action and Applicable Regulations: The proposed action is to reissue the General Permit. The actions in this EA will fall under:

- Montana Water Quality Act 75-5-101, *et seq.*
- Administrative Rules of Montana (ARM) Chapter 17:
 - Subchapter 2 – Fees
 - Subchapter 5 - Mixing Zones in Surface and Ground Water
 - Subchapter 6 - Montana Surface Water Quality Standards and Procedures
 - Subchapter 7 - Nondegradation of Water Quality
 - Subchapter 12 and 13 - Montana Pollutant Discharge Elimination System

Summary of Issues: Applicants must contact the Montana Department of Fish, Wildlife and Parks (FWP) to ensure fisheries will be protected at the proposed operation location(s). In the NOI, the applicant must include the name of the FWP person contacted as well as any seasonal restriction. DEQ will include seasonal restrictions in the authorization letter authorizing the discharge of wastewater.

Applicants are required to include a consultation letter from the Montana Sage Grouse Habitat Conservation Program if the operation is in sage grouse core, general, or connectivity habitat.

Benefits and Purpose of Action: Wastewater discharged at recreational suction dredge operations that meet water quality standards for turbidity will protect water quality and beneficial uses of state waters.

Affected Environment & Impacts of the Proposed Project:

Y = Impacts may occur (explain under Potential Impacts).

N = Not present or No Impact will likely occur.

Impacts on the Physical Environment	
Resource	[Y/N] Potential Impacts and Mitigation Measures
1. Geology and Soil Quality, Stability and Moisture: Are soils present which are fragile, erosive, susceptible to compaction, or unstable?	[N] Best Management Practices (BMPs) in the permit will control potential soil instability of stream banks at suction dredge operations.

<p>Are there unusual or unstable geologic features? Are there special reclamation considerations?</p>	
<p>2. Water Quality, Quantity and Distribution: Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?</p>	<p>[N] Turbidity and TSS: Under the general permit, applicants operating recreational suction dredges are granted authorization to discharge wastewater from recreational suction dredges to surface waters of the state. Discharges are prohibited to A-1 and A Closed waters.</p> <p>If an operator notices an increase in turbidity 10 stream widths downstream from the operating suction dredge, a violation of the water quality standard probably occurs (there is assumed to be an increase of greater than 5 NTUs in the receiving stream) and the operator must discontinue operations.</p> <p>Subsequent suction dredge activities may continue as long as there is no increase in turbidity in the receiving stream 10 stream widths downstream from the operating suction dredge.</p> <p>Best Management Practices (BMPs) are incorporated as a special condition of the permit to control discharge of pollutants. In addition, operators are not allowed to add chemicals or discharge petroleum products while suction dredging.</p>
<p>3. Air Quality: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?</p>	<p>[N] There may be short term combustion odors associated with the recreational suction dredge engine.</p>
<p>4. Vegetation Cover, Quantity and Quality: Will vegetative communities be significantly impacted? Are any rare plants or cover types present?</p>	<p>[N] Best Management Practices (BMPs) will limit vegetation disturbance.</p>
<p>5. Terrestrial, Avian and Aquatic Life and Habitats: Is there substantial use of the area by important wildlife, birds or fish?</p>	<p>[N] Applicants must contact FWP to ensure fisheries will be protected at the proposed suction dredge location(s). If FWP determines that a seasonal restriction is required to protect fisheries, the applicant must include the seasonal restriction on the NOI form. DEQ will include seasonal restrictions on the confirmation letter authorizing the discharge of wastewater.</p> <p>Owners/operators of suction dredges are also required to obtain a 310 Permit. Conservation Districts and FWP fishery biologists work together to review each suction dredge operation and impose any necessary restrictions based on the FWP stream classification list. With seasonal restrictions, when necessary, suction dredging is not expected to affect aquatic life.</p>
<p>6. Unique, Endangered, Fragile or Limited Environmental Resources: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern?</p>	<p>[N] Some suction dredge operations may be proposed on streams with endangered species such as Bull trout, White sturgeon, and Pallid sturgeon. FWP fisheries biologists work with U.S Fish and Wildlife Service fisheries biologists to protect these species. Seasonal restrictions or allowing suction dredging for only a short or limited time period may be necessary to protect endangered species.</p> <p>Authorizations do not waive the responsibility for dredgers to comply with the federal Endangered Species Act.</p> <p>With seasonal restrictions, when necessary, suction dredging is not expected to affect aquatic life.</p>
<p>7. Historical and Archaeological Sites: Are any historical, archaeological or paleontological resources present?</p>	<p>[N] The General Permit prohibits operating in the stream banks or undercutting stream banks in such a manner to cause caving or erosion of the banks. In addition, no machinery other than the floating suction dredge can be used during suction dredging. Since suction dredging occurs in the water and not on land, no historical or archaeological sites are expected to be impacted.</p>
<p>8. Aesthetics: Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?</p>	<p>[N] Suction dredge activities usually occur on national forest land or other public land away from populated areas. There could be noise for a short time period associated with any construction project.</p>
<p>9. Demands on Environmental Resources of Land, Water, Air or Energy: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project? Will new or upgraded powerline or other energy source be needed?</p>	<p>[N]</p>
<p>10. Impacts on Other Environmental Resources: Are there other activities nearby that will affect the project?</p>	<p>[N] No significant impacts on other environmental resources have been identified.</p>

Impacts on the Human Environment	
Resource	[Y/N] Potential Impacts and Mitigation Measures
11. Human Health and Safety: Will this project add to health and safety risks in the area?	[N]
12. Industrial, Commercial and Agricultural Activities and Production: Will the project add to or alter these activities?	[N]
13. Quantity and Distribution of Employment: Will the project create, move or eliminate jobs? If so, estimated number.	[N]
14. Local and State Tax Base and Tax Revenues: Will the project create or eliminate tax revenue?	[N]
15. Demand for Government Services: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed?	[N]
16. Locally Adopted Environmental Plans and Goals: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[N] Suction dredge permittees are required to obtain a 310 permit from the local conservation district. Other state and federal agencies require various permits or leases if the suction dredging occurs on the land under their jurisdiction.
17. Access to and quality of Recreational and Wilderness Activities: Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?	[N].
18. Density and Distribution of Population and Housing: Will the project add to the population and require additional housing?	[N]
19. Social Structures and Mores: Is some disruption of native or traditional lifestyles or communities possible?	[N]
20. Cultural Uniqueness and Diversity: Will the action cause a shift in some unique quality of the area?	[N]
21. Other Appropriate Social and Economic Circumstances:	[N]
22(a). Private Property Impacts: Are we regulating the use of private property under a regulatory statute adopted pursuant to the police power of the state? (Property management, grants of financial assistance, and the exercise of the power of eminent domain are not within this category.) If not, no further analysis is required.	[N]
22(b). Private Property Impacts: Is the agency proposing to deny the application or condition the approval in a way that restricts the use of the regulated person's private property? If not, no further analysis is required.	[N]

Impacts on the Human Environment	
Resource	[Y/N] Potential Impacts and Mitigation Measures
<p>22(c). Private Property Impacts: If the answer to 21(b) is affirmative, does the agency have legal discretion to impose or not impose the proposed restriction or discretion as to how the restriction will be imposed? If not, no further analysis is required. If so, the agency must determine if there are alternatives that would reduce, minimize or eliminate the restriction on the use of private property, and analyze such alternatives. The agency must disclose the potential costs of identified restrictions.</p>	<p>[N]</p>

- 23. **Description of and Impacts of other Alternatives Considered:** None
- 24. **Summary of Magnitude and Significance of Potential Impacts:** None
- 25. **Cumulative Effects:** None
- 26. **Preferred Action Alternative and Rationale:** Issue the General Permit because it provides the regulatory mechanism for protecting water quality by enforcing the Montana Water Quality Act and rules.

Recommendation for Further Environmental Analysis:

EIS More Detailed EA No Further Analysis

Rationale for Recommendation: There will be no significant adverse impacts on the physical, biological or social portion of the human and natural environment.

- 27. **Public Involvement:** A public comment period and public hearing was held.
- 28. **Persons and agencies consulted in the preparation of this analysis:**
 Montana Fish Wildlife and Parks
 Montana Natural Resource Conservation Service

EA Checklist Prepared By:

Joanna McLaughlin

March 22, 2019

Approved By:

 Jon Kenning, Chief
 Water Protection Bureau

 Date