



DRAFT ENVIRONMENTAL ASSESSMENT

October 2024

**Water Quality Division
Montana Department of Environmental Quality**

PROJECT/SITE NAME: MPDES General Permit for Sand and Gravel Operations	
APPLICANT/COMPANY NAME: Multiple Permittees	
PROPOSED PERMIT/LICENSE NUMBER: MTG490000	
LOCATION: Statewide (Except A-1, A-Closed waterbodies and Indian Reservations).	COUNTY: <u>Statewide</u>
PROPERTY OWNERSHIP: _____ FEDERAL <u>X</u> STATE <u>X</u> PRIVATE <u>X</u>	

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1. PURPOSE AND NEED FOR PROPOSED ACTION

1.1 AUTHORIZING ACTION

Under the Montana Environmental Policy Act (MEPA), Montana agencies are required to prepare an environmental assessment (EA) for state actions that may have an impact on the human environment. The Proposed Action is considered to be a state action that may have an impact on the human environment and, therefore, the Department of Environmental Quality (DEQ) must prepare an EA. This EA will examine the proposed action and alternatives to the proposed action and disclose potential impacts that may result from the proposed and alternative actions. DEQ will determine the need for additional environmental review based on consideration of the criteria set forth in Administrative Rules of Montana (ARM) 17.4.608.

1.2 DESCRIPTION OF DEQ REGULATORY OVERSIGHT

DEQ implements the Water Quality Act of Montana, issuing discharge permits in conformance with the federal Clean Water Act under the Montana Pollutant Discharge Elimination System (MPDES) pursuant to Section 75-5-101, *et. seq.*, Montana Code Annotated (MCA), and the Administrative Rules of Montana (ARM) Title 17, Chapter 30, Sub-chapters 2, 5, 6, 7, 12, and 13.

1.3 PROPOSED ACTION

The proposed action is to reissue the statewide Montana Pollutant Discharge Elimination System (MPDES) General Permit for Sand and Gravel Operations (SGGP), MPDES Permit Number MTG490000 and subsequent authorizations under that permit. The SGGP reissuance (proposed action) does not approve, regulate, or permit the underlying sand and gravel activities or the scope of the sand and gravel operation. The General Permit reissuance regulates the discharge of mine dewatering water and process generated wastewater from sand and gravel mining and processing operations.

Sand and gravel mining and processing operations include the mining or quarrying and processing of crushed and broken stone, rock and riprap; sand and gravel for construction or fill purposes; and sand and gravel for uses other than construction and fill.

The SGGP requires the “owner or operator” of the sand and gravel operations to follow a Notice of Intent (NOI) process to obtain authorization under this General Permit. The NOI process requires an owner or operator, also identified as a “permittee”, to acknowledge eligibility for coverage under MTG490000 and agree to comply with the effluent limits and conditions of the General Permit. Authorizations under MTG490000 require DEQ review of a complete NOI package as outlined by Section 1.2 of the General Permit.

Please refer to the permit Fact Sheet (MT DEQ, MTG370000, 2024) for additional information.

Table 1: Summary of Proposed Action

Proposed Action	
General Overview	Reissue the statewide General Permit for Sand and Gravel Operations. Owners/operators of Sand and Gravel Operations would be required to apply for authorization under the renewed General Permit. The renewed General Permit will control the discharge of mine dewatering water and/or process generated wastewater (washing). Process wastewater and

	dewatering water are generally treated via settling ponds to settle out solids and reduce turbidity prior to discharge.
Duration & Hours of Operation	Operation: Sand and Gravel Operations covered under this General Permit are facilities engaged in the process of mineral mining and processing as defined in 40 CFR 436 Subparts B and C and that propose to discharge mine dewatering water or process generated wastewater to state surface waters. Hours of operation are not limited by this permit and the covered facilities generally operate year-round. Discharges of mine dewatering water or process wastewater may occur at any time and for any duration but are generally intermittent depending on operational need. See Part I.D of the permit fact sheet for additional information.
Estimated Disturbance	Surface disturbance varies from site to site. Surface disturbance is regulated by the DEQ Opencut Program. There is minimal disturbance associated with the MPDES permit coverage (only associated with discharge, which is infrequent). The disturbance area is regulated by the opencut program because the disturbance is associated with mining activities, not discharge.
Construction Equipment	Excavation equipment and haul trucks. This General Permit does not regulate the construction of the site. See above.
Personnel Onsite	Permit conditions require that personnel sufficient to comply with the conditions of the permit be present.
Location and Analysis Area	Location: Statewide except within the external boundaries of Indian Reservations. Analysis Area: Statewide
The applicant is required to comply with all applicable local, county, state, and federal requirements pertaining to the following resource areas.	
Air Quality	No air quality regulations apply for issuance of the MPDES permit
Water Quality	The applicants would obtain SGGP coverage and comply with requirements for discharge to state surface waters.
Erosion Control and Sediment Transport	SGGP requirements address erosion and sediment caused by the discharge. Sand and Gravel operations may also be subject to requirements for erosion control and sediment transport by the DEQ Opencut Program.
Solid Waste	The SGGP does not allow for solid waste disposal and would not regulate the generation or disposal of solid waste. Disposal of solid waste materials would be subject to regulation by the DEQ Solid Waste Management program, where applicable.
Cultural Resources	As part of the NOI process, new applicants would be required to provide information from both the Montana Natural Heritage Program for Species of

	Concern and the Montana State Historic Preservation Office (SHPO) for a report on any historical, cultural, or archaeological resources.
Hazardous Substances	Hazardous substances associated with this permit are expected to be limited to the potential use of fuel and other compounds for the operation of equipment. Best management practices observed during vehicle fueling and maintenance would minimize the potential for any hazardous material spills.
Reclamation	Once closed or abandoned, Sand and Gravel Operations are subject to reclamation requirements implemented by the Opencut Program.

Cumulative Impact Considerations	
Past Actions	Discharges from Sand and Gravel Operations that were authorized under the 2019-SGGP would be required to submit a complete renewal package for coverage under the 2024-SGGP. DEQ incorporates by reference DEQ's Opencut environmental review document on file with DEQ's Air Energy and Mining Division.
Present Actions	Cumulative impacts could occur if multiple Sand and Gravel Operations were permitted near one another. All Sand and Gravel Operations would be subject to regulation by multiple State programs. Cumulative impacts are expected to be minimal.
Related Future Actions	None under consideration.

1.4 PURPOSE, NEED, AND BENEFITS

DEQ's purpose in conducting this EA is to re-issue the existing MPDES permit for discharges from Sand and Gravel Operations. DEQ's action on the permit application is governed by § 75-5-101, *et seq.*, Montana Code Annotated (MCA) and the Administrative Rules of Montana (ARM) Title 17, Chapter 30, Sub-chapters 2, 5, 6, 7, 12, and 13.

The purpose and need is to reissue an existing MPDES permit to allow for activities at Sand and Gravel Operations in compliance with the Montana Water Quality Act (MWQA) regulations.

1.5 OTHER GOVERNMENTAL AGENCIES AND PROGRAMS WITH JURISDICTION:

All applicable local, state, and federal rules must be adhered to, which may also include other local, state, federal, or tribal agency jurisdiction. Other governmental agencies which may have overlapped, or additional jurisdiction include but may not be limited to: Montana Department of Natural Resources, Montana Department of Fish Wildlife and Parks, Montana Department of Transportation, United States Forest Service, U.S. Fish and Wildlife Service, U.S Army Corps of Engineers, Montana Department of Environmental Quality Waste Management Division and Air Energy and Mining Division.

2. AFFECTED ENVIRONMENT AND IMPACT BY RESOURCE

2.1 EVALUATION AND SUMMARY OF POTENTIAL IMPACTS

The impact analysis will identify and evaluate direct and secondary impacts to the physical environment and human population in the area to be affected by the proposed project. *Direct impacts* occur at the same time and place as the action that causes the impact. *Secondary impacts* are a further impact to the human environment that may be stimulated, induced by, or otherwise result from a direct impact of the action. (ARM 17.4.603(18)) Where impacts would occur, the impacts will be described in this analysis.

Cumulative impacts are the collective impacts on the human environment within the borders of Montana of the Proposed Action when considered in conjunction with other past and present actions related to the Proposed Action by location and generic type. Related future actions must also be considered when these actions are under concurrent consideration by any state agency through pre-impact statement studies, separate impact statement evaluation, or permit processing procedures. The projects identified in Table 1 were analyzed as part of the cumulative impacts assessment for each resource.

The duration is quantified as follows:

- **Short-term:** Short-term impacts are defined as those impacts that would not last longer than the installation and operation of the proposed Facility.
- **Long-term:** Long-term impacts are impacts that would remain or occur following proposed project closure and removal.

The intensity of the impacts is measured using the following:

- **No impact:** There would be no change from current conditions.
 - **Negligible:** An adverse or beneficial effect would occur but would be at the lowest levels of detection.
 - **Minor:** The effect would be noticeable but would be relatively small and would not affect the function or integrity of the resource.
 - **Moderate:** The effect would be easily identifiable and would change the function or integrity of the resource.
 - **Major:** The effect would alter the resource.
- a. **GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE**
Are soils present which are fragile, erosive, susceptible to compaction, or unstable? Are there unusual or unstable geologic features? Are there special reclamation considerations?

The general permit is for coverage of Sand and Gravel Operations statewide and over a wide range of soil types and geologic features.

Direct Impacts

Proposed Action: The nature of sand and gravel mining operations usually results in large depressions or cuts in the earth. Montana DEQ Opencut mining requirements require proper reclamation of disturbed land. MTG490000 would require a daily visual observation log to assess and mitigate potential streambed and stream bank erosion of the receiving waters; and therefore, protect natural geology, soil quality, stability, and moisture from potential negative impacts from discharges of sand and gravel operations throughout Montana. The permit would also require compliance with effluent limitations, monitoring requirements, and Best Management Practices to control potential soil instability of stream banks at Sand and Gravel discharge locations. Refer to the permit Fact Sheet for additional information.

Secondary Impacts

Proposed Action: Secondary impacts are not expected. Permit conditions would protect receiving water conditions at each site.

Cumulative Impacts

Proposed Action: The cumulative impacts would include the Opencut permit plus the direct impacts of the Proposed Action of MTG490000.

b. 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?

Direct Impacts

Proposed Action: The proposed action would regulate discharges from sand and gravel operations through both technology-based and water quality-based effluent limitations to protect the receiving waterbody use classification and ensure the receiving water quality is maintained. MTG490000 will not negatively impact water quantity. Typically, sand and gravel discharges are intermittent based onsite activities, so increases in receiving water flows are short term. The proposed action is not expected to affect distribution.

Secondary Impacts

Proposed Action: Secondary impacts are not expected. Permit conditions would protect the receiving water at each site.

Cumulative Impacts

Proposed Action: The cumulative impacts would include the Opencut permit plus the direct impacts of the Proposed Action of MTG490000.

c. AIR QUALITY

Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?

Direct Impacts

Proposed Action: The proposed action is for reissuance of a wastewater discharge permit and is not expected to impact air quality.

Secondary Impacts

Proposed Action: No impacts.

Cumulative Impacts

Proposed Action: Sand and Gravel Operations may cause dust or other conditions that are subject to regulation by the Air Quality Bureau in DEQ's Air, Energy and Mining Division. There is no anticipated increase in dust with discharge.

d. VEGETATION COVER, QUANTITY AND QUALITY

Will vegetative communities be significantly impacted? Are any rare plants or cover types of present?

The Montana Natural Heritage Program identified the plant species of concern (SOC)

The general permit is for coverage sand and gravel operations statewide and over a wide range of vegetative conditions.

Direct Impacts

Proposed Action: The proposed action is for reissuance of a wastewater discharge permit. Direct impacts to vegetation cover, quantity and quality are expected to be minimal and could result from installation of the outfall pipe in a relatively small area.

Secondary Impacts

Proposed Action: No impacts.

Cumulative Impacts

Proposed Action: No impacts.

e. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS

Is there substantial use of the area by important wildlife, birds, or fish?

The general permit is for coverage of sand and gravel operations statewide and over a wide range of terrestrial, avian, and aquatic life habitats.

Direct Impacts

Proposed Action: The proposed action covers discharges of mine dewatering water and process generated wastewater from sand and gravel operations to receiving waters. The proposed action will protect receiving waterbodies from pollutants transported in mine dewatering water and process wastewater from sand and gravel mining operations through effluent limitations that are based on protecting Montana's water quality standards and the beneficial uses of the receiving waterbodies. Monitoring and reporting requirements will ensure compliance. Compliance with conditions and limitations of the proposed General Permit would protect terrestrial, avian, and aquatic life and corresponding habitats from impacts associated with discharges from proposed sand and gravel operations.

Secondary Impacts

Proposed Action: Effluent limits and permit conditions would protect aquatic life from direct and secondary impacts.

Cumulative Impacts

Proposed Action: No impacts.

f. HISTORY, CULTURE AND ARCHEOLOGICAL UNIQUENESS

Are there any historical, archaeological, or paleontological resources present?

Direct Impacts

Proposed Action: For new operations applying for coverage under the SGGP, the applicant is required to contact the State Historic Preservation Office (SHPO). This information is provided in the NOI package for review and approval. Previous reissuances of the General Permit provide no indication that historical and archaeological sites would be impacted by this action.

Secondary Impacts

Proposed Action: No impacts.

Cumulative Impacts

Proposed Action: No impacts.

g. 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?

Direct Impacts

Proposed Action: No impacts.

Secondary Impacts

Proposed Action: No impacts.

Cumulative Impacts

Proposed Action: No impacts.

h. HUMAN HEALTH AND SAFETY

Will this project add to health and safety risks in the area?

None expected. Each site would be evaluated individually, prior to issuance of the authorization.

Direct Impacts

Proposed Action: No impacts.

Secondary Impacts

Proposed Action: No secondary impacts expected.

Cumulative Impacts

Proposed Action: No impacts.

i. SOCIOECONOMICS

Will the project add to or alter industrial or agricultural activities? Will the project create, move, or eliminate jobs? Will the project create or eliminate tax revenue? Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed? Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect? The project would occur on [type of land]. Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract? Will the project add to the population and require additional housing? Is some disruption of native or traditional lifestyles or communities possible?

Direct Impacts

Proposed Action: The proposed action is for reissuance of a wastewater discharge permit and would have minimal impact on Socioeconomics. The proposed action does not approve, regulate, or permit the scope of the sand and gravel mining operation.

Secondary Impacts

Proposed Action: No impacts.

Cumulative Impacts

Proposed Action: No impacts.

j. PRIVATE PROPERTY IMPACTS

If DEQ reissues the SGGP, any conditions of the permit are required by either the federal Clean Water Act or the Montan Water Quality Act, as implemented by the MPDES program. DEQ does not propose to include in the permit any conditions that are not required under the applicable regulations. Therefore, DEQ is not required to determine whether there are alternatives that would reduce, minimize, or eliminate the restriction on the use of private property, and to analyze those alternatives.

4. DESCRIPTION OF ALTERNATIVES

4.1 ADDITIONAL ALTERNATIVES CONSIDERED

No Action Alternative: In addition to the proposed action, DEQ must also considered a "no action" alternative. The "no action" alternative would deny the approval of the MPDES permit. Applicants would lack the authority to conduct the proposed activity and would have to obtain individual MPDES permit coverage.

If the applicant demonstrates compliance with all applicable rules and regulations required for approval, the "no action" alternative would not be appropriate.

Other Reasonable Alternative(s): No other alternatives were considered.

4.2 CONSULTATION

DEQ engaged in internal and external efforts to identify substantive issues and/or concerns related to the proposed project. Internal scoping consisted of internal review of the environmental assessment document by DEQ staff. DEQ Water Quality Division staff consulted with Air, Energy, and Mining Division staff in preparation of the draft permit.

4.3 NEED FOR FURTHER ANALYSIS AND SIGNIFICANCE OF POTENTIAL IMPACTS

When determining whether the preparation of an environmental impact statement is needed, DEQ is required to consider the seven significance criteria set forth in ARM 17.4.608, which are as follows:

- The severity, duration, geographic extent, and frequency of the occurrence of the impact;
- The probability that the impact will occur if the proposed action occurs; or conversely, reasonable assurance in keeping with the potential severity of an impact that the impact will not occur;
- Growth-inducing or growth-inhibiting aspects of the impact, including the relationship or contribution of the impact to cumulative impacts – identify the parameters of the proposed action;
- The quantity and quality of each environmental resource or value that would be affected, including the uniqueness and fragility of those resources and values;
- The importance to the state and to society of each environmental resource or value that would be affected.
- Any precedent that would be set as a result of an impact of the proposed action that would commit the department to future actions with significant impacts or a decision in principle about such future actions; and
- Potential conflict with local, state, or federal laws, requirements, or formal plans.

An EIS is not required under the Montana Environmental Policy Act (MEPA) because the project lacks significant adverse effects to the human and physical environment based on above listed criteria.

As described above, DEQ's decision to issue MPDES Permit No. MTG490000 authorizes discharge of Sand and Gravel Operation wastewater to waters throughout Montana. The discharges are subject to permit conditions and limitations that would protect beneficial uses and prevent significant changes in water quality. Environmental impacts resulting from issuance of the MPDES permit are localized and would be managed through permit conditions and limitations. At the time of this analysis, there are no known conflicts with local, state, or federal laws, requirements, or plans.

5. PUBLIC INVOLVEMENT

A 30-day public comment period will be held.

6. CONCLUSIONS AND FINDINGS

The preferred proposed action is to issue the MPDES permit. This action is preferred because the permit program provides the regulatory mechanism for protecting water quality by enforcing the terms of the MPDES permit.

Environmental Assessment and Significance Determination Prepared By:

DEQ Water Protection Bureau

Environmental Assessment Reviewed By:

DEQ Water Protection Bureau

Approved By:



January, 21, 2025

Tatiana Davila, Chief
Water Protection Bureau
Department of Environmental Quality

I. REFERENCES

MT-DEQ. 2024. Fact Sheet for Montana Pollutant Discharge Elimination System Permit MTG490000, General Permit for Sand and Gravel Operations.

MT-DEQ. 2024. Draft Montana Pollutant Discharge Elimination System Permit MTG490000, General Permit for Sand and Gravel Operations.

II. COMMENT SUMMARY AND RESPONSES TO SUBSTANTIVE COMMENTS

Responses to substantive comments.