## Montana Department of Environmental Quality Draft Environmental Assessment

Water Quality Division: Water Protection Bureau

**Proposed Action:** The proposed action is the reissuance of the Montana Pollutant Discharge Elimination System (MPDES) "General Permit for Sand and Gravel Operations", MPDES Permit Number MTG490000 and subsequent authorizations under that permit. In this document, MPDES Permit Number MTG490000 is hereafter referred to as the "General Permit", "SGGP", or "MTG490000".

Description of the Proposed Action: The Montana Department of Environmental Quality (DEQ) is proposing to reissue MTG490000 for a five-year permit cycle. MTG490000 is the permitting mechanism developed to provide and/or continue coverage (authorizations) for sand and gravel operations within Montana discharging to state surface waters, excluding operations occurring on land within the external boundaries of Indian Reservations. The General Permit 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.

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.

The Draft Fact Sheet provides the rationale for the Draft Permit and is a reference document for this Environmental Assessment.

**Purpose and Benefits of the Proposed Action:** The purpose of this action is to regulate discharges of mine dewatering water and process generated wastewater from sand and gravel mining and processing operations. Regulatory requirements and rationale of the SGGP are discussed in the fact sheet and draft permit.

Additional Government Agencies with Overlapping or Additional Jurisdiction, or Environmental Review Responsibility for the Proposed Action (and the permits, licenses, and other authorizations required):

No other government agencies have responsibility for the proposed action (issuing and administering the General Permit). Additional permitting, licenses, and authorizations may be required from government agencies, such as the Montana DEQ Opencut Mining Permit, for operational mining activities, exposure of storm water to pollutants from mining activities, or for final operation closure planning, but these additional requirements are outside the scope of the proposed action. The Montana Sage Grouse Habitat Conservation Program (Program) will provide recommendations designed to protect sage grouse populations through a consultation process for sand and gravel operations proposed

within sage grouse habitat designated by the Program. Both of these factors are outside of the scope of the proposed action to reissue MTG490000. The above-described overlapping or additional authorities are peripheral to the proposed action.

**Evaluation of Affected Environment and Impacts of the Proposed Project:** 

Environmental Assessment for Potential Effects to the Physical Environment					
Resource	Evaluation				
Terrestrial, avian, and aquatic life and corresponding habitats	The proposed action will protect receiving waterbodies from pollutants transported in mine dewatering water and process wastewater from sand and gravel mining operations. Sand and gravel activities typically disturb the project site's stabilizing vegetative cover and expose the soil and bedrock underneath to erosive elements such as rainfall and snowmelt runoff, and utilize water to wash aggregates. This proposed action covers discharges of mine dewatering water and process generated wastewater from sand and gravel operations to receiving waters. The proposed action does not approve, regulate, or permit the scope of the sand and gravel mining operation.  Compliance with conditions and limitations of the proposed General Permit will protect terrestrial, avian, and aquatic life and corresponding habitats from impacts associated with discharges from proposed sand and gravel operations and their associated activities.				
Sage Grouse Executive Order No. 12-2015	Projects within designated sage grouse habitat will be addressed through the Montana Sage Grouse Habitat Conservation Program (the Program). The Program has a role of consultation, recommendation, and facilitation, and has no authority to either approve or deny a project. Certain limitations or conditions may apply to a project within designated sage grouse habitat. Any recommendations and mitigations determined by the Program are provided to the project proponent in a consultation letter. Consultation with the Program must occur prior to submitting an NOI for authorization under the General Permit. The scope of the consultation letter may cover multiple state actions associated with the proposed project.  The Notice of Intent (NOI) forms require consultation with the Program for projects within designated sage grouse habitat and subject to Executive Order 12-2015				

	Projects not in designated sage grouse habitat are not subject to these additional NOI and authorization requirements.
Water quality, quantity, and distribution	The proposed action will 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.
Geology, and Soil quality, stability, and moisture	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 requires 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.
Vegetation cover, quantity, and quality	Sand and gravel operations impact vegetation. However, Montana DEQ Opencut mining program evaluates impacts to vegetation and requires bonding and an approved reclamation plan before operating a sand and gravel pit and issuing a permit.  For new operations applying for coverage under the SGGP, the applicant is required to evaluate impacts to vegetation and will contact the State Historic Preservation Office (SHPO) and the Natural Resource Information System (NRIS). This information is provided in the NOI
Aesthetics (visual quality, nuisances, odors, noise)	package for review and approval.  The location of some operations may be located in residential areas and may be visual to neighborhood residents and may generate increased noise in the area based on site specific activities. However, under the Opencut mining regulations, operations must comply with applicable local zoning regulations. In addition, to reduce noise and visual impact, operating permits may limit the hours of operation and require earth berms and/or vegetative screens.

	The proposed action specifically regulates discharges from sand and gravel mining operations and not the overall scope of the operation and associated activities. The Program consultation letter, if required, may include noise or visual requirements that are specific to sage grouse.			
Air Quality	Issuance of MTG4900000 is not expected to impact air quality. The proposed action will control water quality impacts arising from discharges from sand and gravel mining operations.			
Unique, endangered, fragile, or limited environmental resources to include endangered species and species of concern	The proposed action is not expected to impact unique, endangered, fragile, or limited environmental resources. The proposed action specifically regulates discharges from sand and gravel mining operations and not the overall scope of the operation and associated activities. For new operations applying for coverage under the SGGP, the applicant is required to evaluate impacts to vegetation and will contact the State Historic Preservation			
	Office (SHPO) and the Natural Resource Information System (NRIS). This information is provided in the NOI package for review and approval. The aquatic life and habitat will be protected by MTG490000 and the subsequent authorizations covered under this General Permit. Any potential impacts to aquatic species of concern will be mitigated through effluent limits and the requirements for a visual observation log.			
Historical and archaeological sites	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 will be impacted by this action.			
Demands on environmental resources (land, water, air, and/or energy use)	The SGGP regulates discharges through technology-based effluent guidelines and water quality based effluent limits. The daily visual observation log is a critical tool to assess, record, and improve water quality conditions from potential negative impacts from oil and grease and the volume/velocity of the discharge to the receiving water. The proposed action will continue the beneficial effects of regulating mine dewatering water and process generated wastewater discharges from sand and gravel operations to protect water quality and reduce the potential demand on resources that would result from uncontrolled discharges (like contamination of local waterbodies, fish kills, and			

the destruction of spawning and wildlife habitats) and any			
consequential remediation efforts.			

<u>Cumulative and Secondary Effects Analysis:</u> There are no cumulative or secondary effects in issuing the SGGP. Cumulative and secondary effects are specific to each individual authorization under the SGGP. An environmental assessment will be completed for each SGGP authorization that will address the cumulative and secondary effects relevant to each project.

Environmental Assessment for Potential Effects to the Human Population				
Topic	Evaluation			
Social structures	[N]			
Cultural uniqueness and diversity	[N]			
Access to and quality of recreational and wilderness activities	[N]			
Local and state tax base and tax revenues	[N] The proposed action is not expected to significantly affect this category. New projects may increase tax revenues.			
Human Health	[N] The SGGP implements the Montana water quality standards and will protect human health uses of state waters.			
Quantity and distribution of employment	[N]			
Distribution and density of population and housing	[N]			
Demands for government services	[N]			
Agricultural, industrial, and commercial production and activity (to include transportation)	The proposed action is not expected to significantly impact this category. Operations may reduce the agricultural land in the area but reclamation plans through Opencut mining permitting require reclamation of disturbed areas to a land use most appropriate and suitable for the area. The proposed action does not approve, regulate, or permit the scope of the sand and gravel mining operation.			
Locally adopted environmental plans and goals	The proposed action is not expected to significantly impact this category. The proposed action does not approve, regulate, or permit the scope of the sand and gravel mining operation. Reclamation plans are prepared and approved outside of the scope of the reissuance of the SGGP. The proposed action may have a beneficial effect on the local water quality.			
Other social and economic	No further significant impacts have been identified.			
circumstances				

Description and analysis of reasonable alternatives to the proposed action (whenever alternatives are reasonably available and the implementation of these alternatives); and selection of the preferred action.

The proposed action is the reissuance of the Montana Pollutant Discharge Elimination System General Permit for Sand and Gravel Operations.

The alternatives considered are:

- 1. <u>No Action:</u> DEQ would not reissue the General Permit under the "no action" alternative and the current General Permit would be allowed to expire. General Permit coverage would no longer be available, and all permitted sand and gravel operations would be required to obtain individual permit coverage.
- 2. <u>Reissuance of the General Permit with Modifications</u>: DEQ has not identified any necessary or reasonable alternatives to the proposed action.

**Issuance of the General Permit is the Preferred Action Alternative:** Per DEQ's duties to issue general permits for specific categories of point source discharges, the reissuance of MTG490000 will continue to regulate discharges of mine dewatering water and process generated wastewater from sand and gravel operations and continue to prevent exceedances of water quality standards in receiving waterbodies.

The proposed action requires owners/operators of regulated sand and gravel operations to meet technology and water quality based effluent limits and perform and log daily visual observations to maintain Montana's surface water quality standards and beneficial uses in receiving water bodies. The reissuance of MTG490000 is the preferred action because the Permit will continue to provide an effective regulatory mechanism for protecting water quality from discharges from sand and gravel operations.

Listing and evaluation of mitigation, stipulations, and other controls enforceable by the agency or other government agencies: The Montana Sage Grouse Habitat Conservation Program (Program) may provide recommendations through a consultation process for sand and gravel operations based on the location of a project proposed within designated sage grouse habitats. Recommendations are based on a comparison of the proposed activity with stipulations set forth in Executive Order 12-2015 when considering the type of proposed activity and where it is located. The proposed action serves as a mechanism to ensure that water quality is protected and authorizations under the General Permit incorporate requirements imposed by the Program for sage grouse conservation. The SGGP NOI package and permit language require a determination of whether a project will be located within designated sage grouse habitat and mitigation of any potential impacts. DEQ is the agency responsible for enforcing any recommendations included within the General Permit's authorization letters. Additional permitting including Opencut mining or air quality, licenses, and authorizations may be required from other governmental agencies due to the scope of the sand and gravel operation and these may require controls that overlap and/or supplement the General Permit requirements.

**Appropriate level of analysis and rationale:** This environmental assessment is the appropriate level of evaluation because the proposed action is not expected to result in significant impacts on the physical and human environment. No further environmental analysis, is recommended.

Listing of other agencies and groups that have been contacted or have contributed information: Montana Natural Heritage Program, Montana State Historic Preservation Office, and Montana Sage Grouse Habitat Conservation Program

<b>Public Involvement:</b> This EA will be	public noticed.	
EA Prepared by: Water Protection Bur	eau, May, 2019.	
Approved by:		
Jon Kenning, Chief	Date	