

**DEPARTMENT OF ENVIRONMENTAL QUALITY
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PROGRAMMATIC REVIEW/ ENVIRONMENTAL ASSESSMENT

Division/Bureau:

Permitting & Compliance Division, Water Protection Bureau, Water Quality Discharge Permits Section, Storm Water Program

Proposed Action:

Montana Pollutant Discharge Elimination System (MPDES) permit number MTR000000 is an ongoing *General Permit for Storm Water Discharges Associated with Industrial Activity* (General Permit) which is required by Administrative Rules of Montana (ARM) 17.30.1341(6) to have a fixed term not to exceed five years. Consequently, MTR000000 was originally issued on October 8, 1992, reissued on October 26, 1994, reissued on October 1, 2001, and reissued on October 12, 2006 and will expire on September 30, 2011. This year it is now due to be reissued for the 2011-2016 permit cycle.

During this renewal cycle for MTR000000, the Department is proposing to merge this General Permit with MPDES permit number MTR300000, historically called the *General Permit for Storm Water Discharges Associated with Mining and with Oil and Gas Activities*. MTR300000 was originally issued on May 18, 1992, reissued on September 1, 1997, reissued November 17, 2002, and reissued January 1, 2008 which will expire on December 31, 2012. By this MTR300000 expiration date, existing permittees under MTR300000 will be brought under permit coverage using MTR000000. After the effective date of the reissued MTR000000, no new authorizations will be issued under MTR300000 and new facility/activity storm water discharges will be covered under MTR000000 instead.

This reissued General Permit will be renamed as the *Multi-Sector General Permit for Storm Water Discharges Associated with Industrial Activity (MSGP)*. It has been revised to include more recent and contemporary requirements, as many requirements in previous versions of MTR000000 go back to the beginning of the storm water program and included permit language and requirements originally developed in the 1990s.

The Department will be switching to a "Notice of Intent" (NOI) system for obtaining permit coverage under the MSGP rather than the historical "application" process. Under the reissued General Permit, for those existing permittees under MTR000000 who need to renew their permit coverage, a NOI and a renewal fee (based on ARM 17.30.201) will be submitted. Existing permittees under MTR300000 who need to renew and transfer

permit coverage from MTR300000 to the reissued MTR000000 will also need to submit a renewal NOI and fee.

For new authorizations under the MSGP, using the NOI system, a “owner or operator” seeking coverage under the General Permit will be required to submit a complete “NOI Package”. An NOI Package consists of a NOI Form, a SWPPP, and the required fee. In accordance with ARM 17.30.1341(4), the Department will issue a Confirmation of Receipt letter or notify the NOI Filer that the source does not qualify for coverage under the General Permit within 30 days of receipt of a NOI Package. With respect to the Montana Environmental Policy Act (MEPA), the Department has developed this Programmatic Environmental Assessment and provided an opportunity for public comment on the draft General Permit and draft Programmatic Environmental Assessment in accordance with ARM 17.30.1373.

Description of Proposal:

This Programmatic Review pertains to various permitted storm water discharges for industrial, mining, and oil and gas activities under the General Permit. This General Permit is applicable within the State of Montana, excluding Indian Reservations (where the federal EPA is the permitting authority). “Storm water” is defined in ARM 17.30.1102(27). This 2011 reissued General Permit is applicable to both “storm water discharge associated with industrial activity” as defined in ARM 17.30.1102(29) and “storm water discharge associated with mining and with oil and gas activities” as defined in ARM 17.30.1102(30).

ARM 17.30.1102(30) is similar to ARM 17.30.1102(29) except it pertains to mining and oil and gas activities that discharge storm water contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts, or waste products located on the site of such operations. In general, such facilities include active and inactive mining operations, with a few exceptions as stated in ARM 17.30.1102(30). "Inactive mining operations" are also defined in ARM 17.30.1102(30).

In federal rule, the definition of "storm water discharge associated with industrial activity" includes mining and oil and gas activities. In Montana, ARM 17.30.1102(30) provides a separate definition for "storm water discharge associated with industrial activity" which is stated in ARM 17.30.1102(29). However, ARM 17.30.1102(30) refers back to ARM 17.30.1102(29) for some similar requirements which are common to both definitions. The mining/oil and gas component was broken out into a separate definition from other industrial activities, and two different MPDES General Permits were developed, one for industrial activity and this General Permit.

These two defined types of storm water discharges are ultimately proposed to be combined back into a single regulatory definition through future proposed rule changes, likely during the life cycle of this reissued 2011 General Permit MTR000000. Consequently, in the General Permit, the Fact Sheet, and in this Programmatic

Review/Environmental Assessment, the term "industry" or "industrial" is generally used to represent all such potential storm water discharges subject to federal/state regulation, including those for mining and oil and gas.

Based on the ARM 17.30.1102(29) and (30), for regulated industrial, mining, and oil and gas activities under the formal rule definitions, the terms also includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process wastewaters (as defined in ARM 17.30.1102(20)); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and final products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water.

The preceding two paragraphs summarize what storm water discharge areas are subject to (eligible) for permit coverage under this General Permit. However, many specific types of industrial and/or mining facilities or sites have similar identified areas which are subject to federal Effluent Limitation Guidelines (ELGs) with respect to storm water discharges.

Discharges subject to federal ELGs as adopted by the Montana Board of Environmental Review in ARM Title 17, Chapter 30, Subchapter 12 would have to be covered under a separate Individual MPDES permit instead of this General Permit.

The NOI Filer must refer to pertinent federal 40 CFR regulations and determine what storm water discharges are eligible for permit coverage under the General Permit, and what storm water discharges are subject to these federal ELGs and would be permitted under a separate Individual MPDES permit.

Based on the aforementioned areas at industrial, mining, and oil and gas activity sites, characteristic storm water effluent discharge may contain pollutants which pose a threat to receiving surface waters. In general, studies performed over the past thirty or more years and historical monitoring data have indicated storm water runoff from these types of facilities may carry higher than normal annual loadings of total suspended solids (TSS), chemical oxygen demand (COD), metals, oil & grease, nutrients, and other organic chemicals/compounds. Pollutant concentrations may vary considerably with respect to industrial activity type, storm events, and location. For mining activity sites, TSS is of most concern, as well as metals.

Pursuant to 75-5-605(2) Montana Code Annotated (MCA) of the Montana Water Quality Act (MWQA), the discharge of wastes to state waters without a current permit from the Department is prohibited. Sediment and other materials are defined as "other wastes" in 75-5-103(23) MCA. "Pollutants" are defined in ARM 17.30.1102(19). "Discharge of a pollutant", as defined in ARM 17.30.1102(2), results when pollutants come into contact

with storm water discharges from the industrial activity site. "Point source" is defined under ARM 17.30.1102(18). ARM 17.30.1105 requires point source discharges of storm water associated with industrial, mining, and oil and gas activity to obtain MPDES permit coverage.

Pursuant to 75-5-402, MCA and requirements found in ARM, Title 17, Chapter 30, Subchapter 11, the Department regulates storm water discharges associated with industrial, mining, and oil and gas activities (ARM 17.30.1105(1)(b) and (c)). Additionally, point source discharges could require MPDES permit coverage under ARM 17.30.1105(e) and/or (f) if the Department determines that storm water controls are needed based on wasteload allocations that are part of Total Maximum Daily Loads (TMDLs) that address the pollutants of concern, or if the Department determines the discharge is contributing to a violation of a water quality standard or is a significant contributor of pollutants to surface waters.

The following conditions must be met to qualify for coverage to discharge storm water under the General Permit:

- A. The facility must have "storm water discharge associated with industrial activity" as defined by 40 Code of Federal Regulations (CFR), Part 122.26(b)(14). The State of Montana has currently adopted the types of industrial activities stated in 40 CFR through ARM 17.30.1102 (29) and (30) in consideration of our delegated responsibilities through EPA. These definitions typically include specified industrial activities based on the primary Standard Industrial Classification (SIC) code as listed in the federal "1987 Standard Industrial Classification Manual" (or the type of industrial activity in the absence of a identified SIC code). These SIC codes and/or types of industrial activities to be covered under the General Permit are listed in Appendix A to the General Permit.
- B. A discharge of storm water occurs from a facility or activity to surface waters or a drainage system which carries storm water to surface waters.
- C. The storm water discharge consists of runoff only from precipitation events, either rainfall or snowmelt, and is not mixed with process wastewater. Certain allowable non-storm water discharges are accommodated in Part 1.1.3. of the General Permit

Quarterly storm water sampling and analytical testing will be required under this General Permit. Analytical monitoring data will be reported to the Department using the Department's Discharge Monitoring Report Form (DMR), and entered into the Department's Integrated Compliance Information System (ICIS) database. Quarterly sampling will be required to be reported no later than the 28th day of the month following the three month quarterly period.

The General Permit also includes conditions pertaining to Water Quality Standards, discharges into listed impaired waterbodies on the State's 303(d) list, and Total Maximum Daily Load-based Waste Load Allocations.

Pursuant to ARM 17.30.1116, discharges composed entirely of storm water are not regulated as discharges associated with industrial, mining, and oil and gas activity if there is no exposure of industrial materials and activities to rain, snow, snowmelt, and/or runoff, and the discharger satisfies the conditions of this Industrial No-Exposure Certification rule. Consequently, permit coverage for storm water discharges normally regulated under the General Permit would not be necessary and owners/operators would submit a complete "Industrial No Exposure Certification Form" to the Department instead. The Department has developed a standard form for this which must be used. This potential option for those who are eligible is briefly mentioned in Part 1.5 of the General Permit.

Benefits and Purpose of Proposal:

The purpose of the issuance of this General Permit, other than satisfying federal and state rules, is to regulate the storm water discharges from an industrial, mining, and oil and gas facility or activity. The primary benefit of permitting storm water discharges through this General Permit is to require the development and implementation of various Control Measures and Best Management Practices (BMPs) through various effluent limitations and as compiled in the SWPPP.

To elaborate, as the effluent characteristics of storm water runoff can be highly variable and unpredictable, ARM 17.30.1345(1) and 17.30.1344 provide for the use of Control Measures and BMPs where numeric effluent limitations are infeasible. The Department has concluded that the most prudent, reasonable land, soil and water conservation practices to protect surface waters of the state will be achieved through the development and implementation of such Control Measures and BMPs. Requirements and/or considerations for developing and implementing such Control Measures are stated in Part 2.1. and Control Measure requirements which are typically common and necessary for all industrial, mining, and oil and gas activities are stated in Part 2.2 as Technology-Based Effluent Limits (TBELs). TBELs for particular industrial sectors, based on facility type, are stated in Part 3.4. Additionally, further description of particular Control Measures at the facility is required to be compiled and implemented through the use of the SWPPP required in Part 3.1. of the permit (see Part 3.1.5.). The SWPPP is defined in ARM 17.30.1102(31). SWPPP submittal is a required component of the permit application procedure pursuant to ARM 17.30.1110(7). This SWPPP identifies site characteristics, potential pollutants, and various BMPs to minimize or prevent pollutants from entering storm water runoff and/or receiving surface waters. Development and implementation of Control Measures and BMPs as compiled in a SWPPP is critical to MPDES storm water discharge permitting. To optimize updating this reissued General Permit (particularly TBEL requirements found in Part 2 and SWPPP and industrial sector-specific requirements found in Part 3), and to capitalize on the wealth of experience and pertinent guidance available from the federal EPA, the Department consulted and utilized the EPA's *Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity* (and the associated Fact Sheet), effective September 29, 2008 (as modified effective May 27, 2009).

TBELs in this permit are Control Measures developed using “Best Professional Judgment” (BPJ) which reduce and/or eliminate pollutant discharges in storm water. These effluent limits correspond to required levels of technology-based control including “Best Practicable technology” (BPT), “Best Achievable Technology” (BAT), and “Best Conventional Treatment Technology” (BCT) for industrial storm water discharges. Owners or operators need to consider what Control Measures are considered “best” for their industry, and select and implement them for their particular site.

It is the Department’s position that Montana’s surface water quality standards can be maintained through compliance with the various requirements in this permit. This includes not only the Control Measures and BMPs contained within the permit and SWPPP, but other corrective action, inspection, monitoring, and reporting/recordkeeping requirements. In particular, this permit contains mechanisms which allow for an iterative approach to BMP implementation whereby BMP effectiveness is tracked and improvements are made as necessary. The BMPs help minimize or eliminate the generation or migration of pollutants to surface waters. In addition, permittees will be prohibited from discharging process wastewater under this General Permit, and there are only certain allowed non-storm water discharges under this permit.

This General Permit does not authorize storm water discharges that the Department determines will cause, or have a reasonable potential to cause or contribute to, a violation of applicable water quality standards. If such is the case, the Department may notify an NOI Filer or permitted discharger that MPDES permit coverage is necessary under an Individual Permit instead of under this General Permit. Furthermore, requirements are incorporated into the General Permit in Part 3.2. to address listed impaired waterbodies and their pollutants of concern, with or without approved Total Maximum Daily Loads (TMDLs), under Section 303(d) of the Clean Water Act.

More specifically, depending on whether the storm water discharges into a listed impaired receiving surface water(s), the permittee’s SWPPP may need to include a section describing how the SWPPP will control discharges of pollutants of concern (for which the listed waterbody is impaired) and ensure storm water discharges will not cause or contribute to instream exceedances of water quality standards. This SWPPP must specifically identify Control Measures and BMPs that will collectively control the discharges of pollutants of concern. Information on impaired waterbodies may be obtained from the Department’s Clean Water Act Information Center website. If a TMDL has been approved for any waterbody into which the permittee discharges storm water, and the TMDL considered and addressed MPDES-regulated storm water discharges, then the Department shall incorporate the Waste Load Allocation (WLA), as applicable, into the permit as required by 75-5-703, MCA, or notify the permittee that they may need to obtain an MPDES Individual Permit.

Description and analysis of reasonable alternatives whenever alternatives are reasonably available and prudent to consider:

1. Issuance of the General Permit

Coverage under this General Permit do not regulate the industrial, mining, or oil and gas activity itself, but the storm water discharges associated with specified types of mining or oil and gas activity. Through federal and state law, environmental regulation is mandatory with respect to these storm water discharges. Through the same federal and state laws pertaining to storm water discharges, the issuance of a General Permit is the typical regulatory mechanism to institute appropriate controls. A General Permit is typically issued for a category of point sources, such as storm water discharges from industrial, mining, or oil and gas activities, which have similarities with respect to potential wastes/pollutants, operations, effluent limitations, monitoring, BMPs, and/or standard requirements.

ARM 17.30.1110(5) requires that a SWPPP be submitted with a completed application in order to obtain coverage under the General Permit. The proposed General Permit provides more specific SWPPP requirements. The SWPPP describes the site characteristics and potential sources of storm water pollution, as well as the development/implementation of Control Measures and BMPs in order to comply with effluent limitations and minimize the discharge of pollutants that come into contact with storm water runoff.

2. No Action Alternative

This MPDES General Permit proactively requires permittees to develop and implement their Control Measures, BMPs, SWPPP, and related requirements with the previously discussed benefits.

Without coverage under an MPDES storm water discharge permit, when a potential problem pollutant discharge occurs, the Department's response would be limited to enforcement actions after the fact. Such enforcement actions would have a deterrent effect on future discharges, but would not be as effective as permit coverage to minimize pollution in the first place. If an MPDES storm water discharge permit were not issued, there would be an increased potential for pollution from storm water runoff since Control Measures and BMPs would be less adequately addressed.

3. Issuance of an Individual MPDES Permit

Another alternative would be to require operators which would otherwise be covered under this General Permit to apply for and obtain an MPDES Individual Permit.

An MPDES Individual Permit typically includes specific facility numeric effluent limits and treatment requirements, and are typically issued for process wastewater or similar discharges. Covered discharges under this General Permit do not pertain to process wastewater discharges. Due to flow rates being so variable for storm water (rainfall and/or snowmelt) discharges, and because the storm water discharge may only potentially contain pollutants which have come into contact with the storm water runoff, it is technically impractical to calculate technology-based and/or water quality-based

numeric effluent limits. Therefore, based upon "Best Professional Judgement", the use of Control Measures and BMPs as compiled in a SWPPP is the most appropriate type of control for this point source category. This is the way to achieve the most prudent, reasonable land, soil, and water conservation practices to protect surface waters of the state. Control Measures and BMPs should be the most cost-effective means of either removing the source pollutants or eliminating contact between potential pollutants and storm water discharges associated with industrial, mining, or oil and gas activity.

Based upon the aforementioned considerations and to accomplish the desired goals, the issuance of MPDES Individual Permits for each industrial, mining, or oil and gas activity which include specific numeric effluent limits and treatment requirements is not pertinent, except potentially if a listed impaired waterbody EPA-approved TMDL and/or WLA indicates the need for this type of MPDES permit. The Department has concluded that in this case, Individual Permits would be similar to the proposed General Permit in that they would require the development/implementation of Control Measures and BMPs. Issuing an Individual Permit provides little additional benefit in terms of resource protection.

In conclusion, and in consideration of the facts stated above, no prudent or reasonable alternatives are available other than the issuance of the General Permit.

Listing and appropriate evaluation of mitigation, stipulations and other controls enforceable by this or another government agency:

Storm water discharges covered under this General Permit pertain to industrial, mining, or oil and gas activities which may be affected and regulated through other applicable federal, state, or local law, rule, standard, ordinance, or order. This General Permit is based on MPDES regulatory authority and institutes controls which pertain to the appropriate management of storm water discharges due to industrial, mining, or oil and gas activity. Requirements associated with other enforceable documents may overlap or supplement these controls.

Affected Environment and Impacts of the Proposed Project:

The following symbols are used in the table below.

Key to Ranking	
NA	Not applicable
N	No effects
B	Potentially beneficial effects
C	Potentially minor adverse effects
A	Potentially major adverse effects
M	Corrective action required
P	Additional permits will be required

NOTE: The following table reflects potential effects from the regulation of storm water discharges under the General Permit from the industrial, mining, or oil and gas activity, and effects due to the implementation of Control Measures and BMPs required by the General Permit. It does not pertain to other potential environmental, or other, effects from the industrial, mining, or oil and gas activity itself, whether existing or new. Also, the General Permit contains requirements for Control Measures and BMPs, their maintenance, and associated corrective action as necessary. Essentially, the implementation or improvement of Control Measures and BMPs is corrective action in many circumstances.

Rank	Consideration	Remarks
PHYSICAL AND BIOLOGICAL ENVIRONMENT		
B, C	1. SOIL SUITABILITY, TOPOGRAPHIC AND/OR GEOLOGIC CONSTRAINTS (soil moisture, unstable soils or geologic conditions, steep slopes, erosion potential, subsidence potential, seismic activity)	The long-term effect on soil suitability, topographic and/or geologic constraints should be beneficial with respect to minimizing the potential for pollutants (including sediment) to come into contact with storm water runoff. Permitting actions under this General Permit will require the characterization of potential pollutants to storm water, Control Measures and BMPs to be developed and implemented to alleviate the potential for pollutants to come into contact with storm water runoff, and other requirements to improve existing or background threats prior to storm water discharge regulation under this General Permit. This typically includes measures to minimize erosion and slope stability threats which could introduce potential pollutants (including sediment) into storm water runoff as necessary. However, the development and implementation (such as construction) of BMPs could temporarily create minor adverse effects based upon this consideration, but the long-term net effect would still typically be beneficial. Implementation of BMPs could also have a very minor effect on soil moisture content at the industrial, mining, or oil and gas activity site by modifying drainage, and consequently, subsurface infiltration.

N	2. HAZARDOUS FACILITIES (power lines, hazardous waste sites, distances from explosive and flammable hazards including chemical/petroleum storage tanks, underground fuel storage tanks and related facilities such as natural gas storage facilities and propane tanks)	Storm water discharge regulation under this General Permit should have no effect on hazardous facilities other than potential beneficial effects from the implementation of Control Measures and BMPs, particularly to alleviate hazardous substances from potentially coming into contact with storm water. Also, discharges authorized under this General Permit are restricted from having any process wastewater discharges and are required to be strictly storm water-related discharges.
B, C	3. AIR QUALITY (effects to or from project, dust, odors, emissions)	Through the implementation of Control Measures and BMPs there are potential beneficial effects to air quality through the proper handling and management of potential pollutants. Typically, any adverse effects would be minor and would be associated with the implementation of BMPs, such as dust created during any BMP construction activities.
B, C	4. GROUNDWATER RESOURCES & AQUIFERS (quality/nondegradation, quantity/reliability, distribution, uses/rights, number of aquifers, mixing zones)	This General Permit does not pertain to discharges of storm water (and any potential wastes/pollutants) into ground water. The general storm water management Control Measures and BMPs which are implemented at the facility can affect the recharge of ground water through infiltration. A potentially beneficial effect would be these BMPs keeping potential pollutants from entering ground water, but depending on the BMPs used, the opposite effect could occur with a minor adverse effect (such as potentially contaminated storm water due to a spill being directly introduced into the subsurface environment). However, this General Permit does not regulate storm water discharges to ground water. By implementing BMPs, primarily through the use of storm water detention/retention structures and/or the development of relatively impervious surfaces, the recharge to ground water in the immediate vicinity of the facility could be altered and/or reduced. It could allow more evaporation and/or evapotranspiration of rainfall/snowmelt runoff instead of infiltration and recharge to ground water. This could be interpreted as an adverse effect, but overall, is likely to have a negligible effect on the quantity and use of ground water resources locally. During the construction and/or implementation of BMPs, it is possible to have a minor adverse effect on this consideration.
B, C	5. SURFACE WATER RESOURCES (quality/nondegradation, quantity/reliability, distribution, uses/rights, storm water controls, source of community supply, community treatment, mixing zones)	With storm water discharge regulation under this General Permit, and through the development and implementation of Control Measures and BMPs, the effect is likely to be beneficial to surface water quality in that potential pollutants would have less of a chance of reaching receiving surface waters through storm water runoff. However, the potential for pollutants to be exposed to storm water is typically an inherent possibility and could potentially have an adverse effect on receiving surface water quality. Since nondegradation requirements apply to new and increased sources, the impact to surface water quality would be minor. The purpose of storm water discharge regulation under this General Permit is to alleviate that potential adverse effect, but it does potentially exist. This potential adverse effect could pertain to water uses and rights as well. The effect on the quantity of surface water through the implementation of BMPs, similar to that expressed above for ground water, could be interpreted as a minor adverse effect through potentially reducing the localized recharge to surface water, and/or by the detention/retention of storm water runoff. As

		<p>stated for ground water, even though this could be interpreted as an adverse effect, overall it is likely to have a negligible effect on the quantity and use of surface water resources locally. During the construction and/or implementation of BMPs, it is possible to have a minor adverse effect on this consideration.</p>
B, A	<p>6. VEGETATION AND WILDLIFE SPECIES AND HABITATS, INCLUDING FISHERIES AND AQUATIC RESOURCES (threatened, endangered, sensitive species, prime habitat, population stability, potential for human wildlife conflicts, effectiveness of post-disturbance plans)</p>	<p>With the development and implementation of Control Measures and BMPs, the facility will have the potential beneficial effect of reducing the potential for pollutants to be discharged into the environment, and in particular, storm water runoff. With respect to this Vegetation and Wildlife Species and Habitats consideration, the BMPs should help maintain existing conditions. Implementing BMPs may also create new habitats (such as ponds and/or wetlands) and/or provide new or improved vegetation (such as providing an erosion resistant new grass-mixture seeding while removing some noxious weeds which were observed, and consequently improving the type and amount of insects and subsequent species up the food chain). Potentially adverse effects could include the temporary and/or permanent alteration of site conditions when implementing BMPs. During the construction and/or implementation of BMPs, it is possible to have an adverse effect on this consideration. If rare plants, or threatened or endangered species are present, the effect could be more significant.</p>
B, A	<p>7. UNIQUE, ENDANGERED, FRAGILE, OR LIMITED ENVIRONMENTAL RESOURCES (biologic, topographic, wetlands (within one mile), floodplains (within one mile), scenic rivers, natural resource areas, etc.)</p>	<p>With the development of the SWPPP and associated BMPs, the facility will have the potential beneficial effect of reducing the potential for pollutants to be discharged into the environment, and in particular, storm water runoff. With respect to this Unique, Endangered, Fragile, or Limited Environmental Resources consideration, the BMPs should help maintain existing conditions. Implementing BMPs may also create new habitats (such as ponds and/or wetlands) and/or provide new or improved vegetation (such as providing an erosion resistant new grass-mixture seeding while removing some noxious weeds which were observed, and consequently improving the type and amount of insects and subsequent species up the food chain). Potentially adverse effects could include the temporary and/or permanent alteration of site conditions when implementing BMPs. During the construction and/or implementation of BMPs, it is possible to have an adverse effect on this consideration. If rare plants, or threatened or endangered species are present, the effect could be more significant.</p>
B, C	<p>8. LAND USE (waste disposal, agricultural lands [grazing, cropland, forest lands, prime farmland], recreational lands [waterways, parks, playgrounds, open space, federal lands], access, commercial and industrial facilities [production & activity, growth or decline], growth, land-use change, development activity)</p>	<p>Storm water discharge regulation under this General Permit, and implementation of the associated Control Measures and BMPs should have at least a minor beneficial effect on the success of the industrial, mining, or oil and gas activity facility (production, activity, growth) by implementing measures to reduce or eliminate threats to the public health and/or the environment, primarily through potential pollutant releases into storm water runoff. Without potential pollutants being released and possible contamination issues through the development and implementation of pollution prevention measures, the industrial, mining, or oil and gas activity will benefit. A very minor amount of land on the industrial, mining, or oil and gas activity site may have to be used to implement BMPs. Consequently, during the construction and/or implementation of BMPs, it is possible</p>

		to have a minor adverse effect on this consideration.
A	9. HISTORICAL, CULTURAL, & ARCHEOLOGICAL (sites, facilities, uniqueness, diversity)	The General Permit requires Control Measures and BMPs to be developed and implemented to control and/or treat storm water runoff. During construction of these BMPs, which is more likely at new facilities, subsurface artifacts may be encountered. The potential adverse effects, as with any construction project, could be not being aware of any potential artifacts, not being able to work and/or design around artifacts, the potential destruction of artifacts, and/or the displacement/removal of artifacts. In conclusion, during the construction and/or implementation of Control Measures and BMPs, which typically occurs on the sites of new facilities, it is possible to have an adverse effect on this consideration. If historical, cultural, or archeological resources are present, the effect could be more significant.
B, C	10. AESTHETICS (visual quality, nuisances, odors, noise)	The aesthetics associated with storm water discharge regulation under this General Permit should improve, and have a beneficial effect. The development of a SWPPP and implementation of BMPs should result in a cleaner, more attractive, industrial, mining, or oil and gas activity site. This would be accomplished by not only improvements to control storm water runoff, but in measures to improve the management and handling of materials and operations which could better help keep potential pollutants out of the environment. A potential minor adverse effect would be the construction of the BMPs. These adverse effects could be both temporary (dust, noise, visual), as well as permanent. The most expected permanent effect would be the construction of structures and storm water management BMPs in a physical setting where completely undeveloped ground existed before. In conclusion, during the construction and/or implementation of BMPs, it is possible to have a minor adverse effect on this consideration.
B, C	11. DEMANDS ON OR CHANGES IN ENVIRONMENTAL RESOURCES INCLUDING LAND, WATER, AIR, OR ENERGY USE (need for new or upgraded energy sources, potential for recycling, etc.) {See (4), (5), and (8).}	Storm water discharge regulation under this General Permit should have a largely beneficial effect on environmental resources by implementing BMPs which will help characterize potential sources of pollution at the industrial, mining, or oil and gas activity site, and evaluating and implementing measures to reduce these potential sources. This could potentially include waste reuse, reduction, recycling, and/or treatment. Potentially very minor adverse effects would include temporary and/or permanent effects with a higher use of water (washing), land (construction of BMPs), and/or energy (construction and operation of some BMPs). However, an opposite beneficial effect could also occur through improvements in the operation of the facility by BMPs eliminating and/or reducing these demands (such as by eliminating potential spills, waste generation, and the use of environmentally-friendly and more energy-efficient equipment).

Rank	Consideration	Remarks
IMPACTS ON THE HUMAN POPULATION		
N	12. CHANGES IN DEMOGRAPHIC CHARACTERISTICS (population quantity, distribution and density, rate of change)	NA
N	13. GENERAL HOUSING CONDITIONS (quality, quantity and affordability)	NA
N, B	14. DEMANDS FOR GOVERNMENT SERVICES	Other than the demand on the Department for continuing to implement discharge permitting under this General Permit in our permit fee-funded program, and the potential demand for some public entities to require permitting related to their construction projects, there is little potential effect on government services. However, by minimizing potential impacts to state surface waters through storm water discharge permitting, there may be a potential beneficial effect on other government services through the avoidance of respective water pollution and related issues.
N	15. POTENTIAL FOR DISPLACEMENT OR RELOCATION OF BUSINESS OR RESIDENTS	NA
N	16. PUBLIC HEALTH AND SAFETY (medical services and facilities, police, fire protection and hazards [see (2)], emergency medical services [see (8), LAND USE for waste disposal])	There should be little to no effect on Public Health and safety other than insuring the Control Measures and BMPs are implemented and maintained, and the inherent risks associated with the construction and operation of these. Some BMP construction activities, as well as the development and operation of BMPs (such as retention/detention structures) could pose a minor risk to untrained and/or unfamiliar parties. Training and access control measures should help alleviate these concerns.
B	17. LOCAL EMPLOYMENT AND INCOME PATTERNS (quantity and distribution of employment, economic impact)	Storm water discharge regulation under the General Permit, and the development and implementation of Control Measures and BMPs will require facility personnel, consultants, and various local services resulting in a probable minor increase in local employment and the economy.
N	18. LOCAL AND STATE TAX BASE AND REVENUES	NA
N	19. EFFECTS ON SOCIAL STRUCTURES AND MORES (social conventions/standards of social conduct), DEMANDS ON SOCIAL SERVICES (law enforcement, educational facilities [libraries, schools, colleges, universities], welfare, etc.)	NA
N	20. TRANSPORTATION NETWORK (condition and use of roads, traffic flow conflicts, rail, airport compatibility, etc.)	NA
N	21. CONSISTENCY WITH LOCAL ORDINANCES, RESOLUTIONS, OR PLANS (conformance with local comprehensive plans, zoning or capital improvement plans)	It is possible for local governments and/or groups to have current and/or future ordinances, resolutions, or plans which pertain to the management of storm water runoff, particularly in more urban settings. However, as this Department action is for the renewal of a General Permit, and based upon previous Department experience, there should be little to no effect with

		respect to this Consistency with Local Ordinances, Resolutions, or Plans consideration.
N	<p>22. REGULATORY RESTRICTIONS ON PRIVATE PROPERTY RIGHTS <i>(Are we regulating pursuant to a police power? Does the Agency action restrict the use of the property beyond the minimum necessary to achieve compliance with the Act? What are the costs of such additional restrictions resulting from proposed permit conditions? Are there other, less restrictive ways of achieving the same goal? See your assigned legal counsel for assistance preparing this section.)</i></p>	<p>This Programmatic Review, in the form of an Environmental Assessment, is intended to cover the storm water discharges regulated under this General Permit for individual industrial, mining, or oil and gas facilities or activities. Storm water discharges covered under this General Permit is regulating pursuant to a police power. The Agency is not restricting the use of the property beyond the minimum necessary to achieve compliance with the Montana Water Quality Act. Consequently, there will be no additional costs from such restrictions. There are not less restrictive ways of achieving the same goal. Storm water discharge regulation under the General Permit essentially requires the permittee to develop and implement Control Measures and BMPs to address storm water pollution issues. The implementation of BMPs is the least onerous and restrictive approach in regulating storm water discharges from industrial, mining, or oil and gas facilities or activities.</p>

Other groups or governmental agencies contacted or which may have overlapping jurisdiction:

In Montana, the Environmental Protection Agency also regulates the discharges of storm water from similar industrial, mining, or oil and gas activities that are located on Indian Reservations. Various other federal, state and local permits, ordinances, orders, judgments, or decrees may also pertain to facilities or activities covered under this General Permit, but not necessarily to discharges of storm water.

Individuals or groups contributing to this Programmatic Review:

Historical storm water permits, staff, and experience within the Department’s Water Protection Bureau.

Summary of Issues:

This General Permit is being issued to allow for the regulation of storm water discharges from industrial, mining, or oil and gas activities, and to ensure the implementation of Control Measures and BMPs (as compiled in SWPPP) in order to help keep potential pollutants from entering storm water discharges, and eventually state surface waters.

Summary of Potential Effects:

The effects of the proposed issuance of the General Permit would be to eliminate or minimize impacts to water quality caused by storm water runoff. Through the development and implementation of Control Measures and BMPs, the General Permit will ultimately beneficially effect the water quality of state surface waters which receive

the site's storm water discharge, when compared with effects and conditions in the absence of this General Permit.

Potential adverse effects associated with the proposed re-issuance of the General Permit will typically be minor and not significant. These effects are typically caused by the construction and implementation of the structural Control Measures and BMPs. Also, these are often relatively small and localized in extent.

Because discharges authorized by the General Permit must meet Water Quality Standards and Nondegradation requirements, no significant water quality impacts will occur. In fact, there will be a net improvement with respect to water quality due to this General Permit. The only types of impacts that have the remote potential to be significant are those created by the construction and/or implementation of Control Measures and BMPs which are performed as a result of storm water discharge regulation under the General Permit. This would typically occur at only sites where new industrial, mining, or oil and gas facilities are being constructed and developed, and such effects due to the General Permit would be limited to the storm water structural Control Measures and BMPs themselves. Such BMPs can often be relatively minor with respect to the overall disturbance at the site. The impacts which have the potential to be more significant are for the following areas based on the 22 considerations listed in the table above:

1. VEGETATION AND WILDLIFE SPECIES AND HABITATS, INCLUDING FISHERIES AND AQUATIC RESOURCES;
2. UNIQUE, ENDANGERED, FRAGILE, OR LIMITED ENVIRONMENTAL RESOURCES; AND
3. HISTORICAL, CULTURAL, & ARCHEOLOGICAL

These impacts will almost always be minor.

As this Programmatic Review / Environmental Assessment pertains to various industrial, mining, and oil and gas facilities or activities covered under the General Permit, and because the Department will be using a conventional "Notice of Intent" process to obtain coverage under the General Permit, the Department will accommodate the aforementioned potential adverse effects as explained below.

Under the reissued General Permit, in order to confirm there are no potentially major adverse effects for the three criteria above based on the chart/table entitled "Affected Environment and Impacts of the Proposed Project", the NOI Form has two additional items which are necessary as follows.

For new applications which pertain to new industrial, mining, or oil and gas facilities that do not exist and will be constructed and initiating operation, the NOI filer must evaluate the following two Programmatic Review questions in order to assess impacts to the above three considerations:

1. Does the new construction and/or implementation of BMPs have an effect on Unique, Endangered, Fragile, or Limited Environmental Resources? In

answering this question, the NOI Filer will utilize the Montana Natural Heritage Program and the Natural Resource Information System (NRIS); and

2. Does the new construction and/or implementation of BMPs have an effect on Historical, Cultural, and Archeological Resources? In answering this question, the NOI Filer will utilize the Montana State Historic Preservation Office (SHPO).

For new facility or activity storm water discharge regulation under this General Permit, and based upon the findings with respect to the aforementioned two questions, the NOI Filer will have to confirm on the NOI Form that these checks and potential major adverse effects have been addressed.

Cumulative Effects:

The issuance of this General Permit should have little to no cumulative effect. Numerous facility or activity storm water discharges are regulated under the General Permit which have potential relatively minor effects individually, and are relatively spread out geographically over the entire state of Montana (excluding Indian Reservations where EPA does similar permitting instead of DEQ). Additionally, the majority of regulated storm water discharges pertain to existing industrial, mining, or oil and gas activities which have undergone similar storm water discharge regulation under previous General Permits. Storm water quality, and consequently receiving state surface water quality, will be improved with the issuance of this General Permit.

Recommendation:

Issue this General Permit.

Recommendation for Further Environmental Analysis:

- Prepare an Environmental Impact Statement
- Prepare a detailed Environmental Assessment
- No further analysis for issuance of General Permit; review of factors above for new facility or activity storm water discharges regulated under this General Permit

This Programmatic Review was prepared by Brian Heckenberger in November, 2012

Approved by:

Paul Skubinna, Chief
Water Protection Bureau
Permitting and Compliance Division

Date