



DRAFT ENVIRONMENTAL ASSESSMENT

09/16/25

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

PROJECT/SITE NAME: Disinfected Water & Hydrostatic Testing General Permit

APPLICANT/COMPANY NAME: Multiple

PROPOSED PERMIT/LICENSE NUMBER: MTG770000

LOCATION: Statewide except within Indian Reservations

COUNTY: All

PROPERTY OWNERSHIP: ☒ FEDERAL ☒ STATE, or ☒ PRIVATE

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OVERVIEW OF PROPOSED ACTION

Authorizing Action

Under the Montana Environmental Policy Act (MEPA), Montana agencies are required to prepare an environmental review for state actions that may have an impact on the Montana environment. The Proposed Action is considered to be a state action that may have an impact on the Montana environment and, therefore, the Department of Environmental Quality (DEQ) must prepare an environmental review. This environmental assessment (EA) will examine the proposed action and alternatives to the proposed action and disclose potential and proximate 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.

Description of DEQ Regulatory Oversight

DEQ implements the Montana 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, Subchapters 2, 5, 6, 7, 12, and 13. DEQ has the authority to issue general permits for certain categories of point sources, including discharges from disinfected water and hydrostatic testing, described at ARM 17.30.1341.

Proposed Action

The proposed action is to renew the General Permit for Disinfected Water and Hydrostatic Testing (DWHT) for another five-year cycle. New and renewal authorizations that would be subject to the proposed action may be located anywhere in Montana, other than within the boundaries of an Indian Reservation. This general permit renewal would provide a continued permitting mechanism for DWHT operations. Disinfected discharges originate from the flushing of fire hydrants, draining of water storage towers or tanks, and the emptying of public or private swimming pools. Hydrostatic testing discharges include water used to test the hydrostatic properties of new or existing pipes, tanks, vessels, boilers, and other similar equipment to ensure there will be no discharge of residual petroleum-containing wastes. All information included in this EA is derived from the permit administrative record, permitting documents, and other research tools.

Table 1. Summary of Proposed Action

General Overview	The proposed action is to reissue the Disinfected Water and Hydrostatic Testing (DWHT) General Permit which would provide a continued permitting mechanism for the discharge of treated wastewater from DWHT operations into state surface waters for permittees eligible for authorization under the DWHT General Permit (see Fact Sheet Section III).
Duration & Hours of Operation	The proposed action is to renew the DWHT for a term of five years. Discharges authorized by the DWHT General Permit may be intermittent or continuous.
Estimated Disturbance	The renewal of the DWHT General Permit would not authorize ground disturbance.
Construction Equipment	The renewal of the DWHT General Permit would not authorize the use of construction equipment.

Personnel Onsite	The renewal of the DWHT would require that facilities authorized under the DWHT General Permit have personnel on site sufficient to meet the terms of the permit.
Location and Analysis Area	<i>Location & Analysis Area:</i> State-wide, except within the boundaries of Indian Reservations and where discharges are prohibited (see Fact Sheet Section III).

Table 2. Applicants would be required to comply with all applicable local, county, state, and federal requirements pertaining to the following resource areas.

Air Quality	Dewatering and hydrostatic testing activities typically requires pumps including diesel or gasoline pumps, which emit air contaminants (including greenhouse gases) as well as noise pollution during the period of operation. No air quality permits are needed from the DEQ Air Quality Bureau for a temporary, mobile source (DEQ Air Quality, Henrikson, 2024). The treatment of petroleum-contaminated water may also involve the use of air stripping units or other mechanisms that volatilize volatile organic compounds to remove them from contaminated water. This may produce air pollutants which may be subject to additional regulation under the Montana Clean Air Act and/or the federal Clean Air Act. This general permit would not authorize or otherwise regulate these activities.
Water Quality	The DWHT General Permit would authorize discharges of treated disinfected water and hydrostatic testing operations to state surface waters. The general permit includes effluent limitations and other conditions designed to protect water quality, ensuring that water quality standards are not violated.
Erosion Control and Sediment Transport	The DWHT General Permit would require that discharge flow not cause erosion to streambeds or banks by requiring the installation of Best Management Practices for erosion control. Dischargers unable to comply with this condition or with effluent limits or other terms and conditions of the permit would be excluded from coverage.

Table 3. Cumulative Impacts

Past Actions	Permittees who were authorized under the 2021-DWHT General Permit would be required to complete a renewal package for continued coverage under the renewed DWHT General Permit to continue operations under the new permit.
Present Actions	Permittees may be subject to additional regulations and/or permitting associated with reclamation activities, underground storage, tanks and air quality.
Related Future Actions	Permittees may be subject to additional regulations and/or permitting associated with reclamation activities, underground storage tanks, and air quality.

Purpose, Need, and Benefits

DEQ's purpose in conducting this environmental review is to renew the existing MPDES general permit for

disinfected water and hydrostatic testing discharges for another five-year period. 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, Subchapters 2, 5, 6, 7, 12, and 13. General Permits are allowed under ARM 17.30.1341.

Other Governmental Agencies and Programs with Jurisdiction

The proposed action would be located within the State of Montana except for within the boundaries of Indian Reservations. 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 local municipalities, Montana Department of Natural Resources and Conservation, Montana Board of Oil & Gas, Montana Fish, Wildlife, & Parks, and the Environmental Protection Agency.

EVALUATION OF AFFECTED ENVIRONMENT AND IMPACT BY RESOURCE

The impact analysis will identify and evaluate the proximate direct and secondary impacts TO THE PHYSICAL ENVIRONMENT AND 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 Montana's 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. When the analysis discloses environmental impacts, these are proximate impacts pursuant to 75-1-201(1)(b)(iv)(A), MCA.

Cumulative impacts are the collective impacts on Montana's 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:

- **Construction Impacts (short-term):** These are impacts to the environment during the construction period. When analyzing duration, please include a specific range of time.
- **Operation Impacts (long-term):** These are impacts to the environment during the operational period. When analyzing duration, please include a specific range of time.

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.

Geology and Soil Quality, Stability and Moisture

This section includes the following resource areas, as required in ARM 17.4.609: Geology; Soil Quality, Stability, and Moisture

The DWHT General Permit would provide a continued regulatory mechanism to authorize discharges of treated water from disinfected water and hydrostatic testing operations statewide over a wide range of soil types and geologic features.

Direct Impacts

Discharges into surface waters may cause erosion to streambeds or banks if they occur such that sediment or soil is entrained in the flow. As a special condition of the permit (see DWHT General Permit Section I.C.), discharge flow must not cause erosion to streambeds or banks. To ensure this, permittees would be required to install Best Management Practices (BMPs) for erosion control. Dischargers unable to comply with this condition or with effluent limits or other terms and conditions of the permit would be excluded from coverage. No short or long-term direct or secondary impacts to geology or soil quality, stability and moisture are anticipated.

Secondary Impacts

The discharge of disinfected and hydrostatic testing treated water may involve the installation of associated treatment infrastructure and/or outfall structures where they do not already exist. The DWHT General Permit does not authorize or otherwise regulate these activities, nor does it exempt permittees from any local, state, or federal regulations associated with the construction or operation of infrastructure. However, should these activities occur, they may cause minor to major, short and long-term impacts to geology and soil quality, stability, and moisture.

Cumulative Impacts

The discharge of disinfected water and hydrostatic testing water is likely to occur on developed sites, cities, and towns with a history of disturbance to soils and geology. If the hydrostatic testing involves equipment previously associated with petroleum, the facilities involved with the hydrostatic testing may require additional remediation activities to remove contaminants from soils, etc. These activities may have moderate to major short-term impacts to soils and geology. However, these activities are generally undertaken in support of long-term improvements to ecological integrity and human health. The contribution of activities authorized by this general permit is expected to be negligible and short term.

Water Quality, Quantity, And Distribution

This section includes the following resource areas, as required in ARM 17.4.609: Water Quality, Quantity and Distribution

The DWHT General Permit would authorize discharges of disinfected water and hydrostatic testing wastewater into state surface waters. This General Permit includes effluent limitations and other conditions designed to protect water quality, ensuring that water quality standards are not violated. All effluent limitations were developed using nonsignificance criteria (see ARM 17.30.715) to prevent the degradation of surface waters. Discharges into A-Closed waterbodies would be prohibited by the DWHT General Permit. Applications proposing discharges into areas of unique ecological or

recreational significance or those that are on the 303(d)-impairment list for any pollutant of concern in the DWHT General Permit may be denied.

Monitoring conditions in the general permit require that effluent flow be monitored daily, and the Special Conditions of the general permit require that Best Management Practices be implemented to ensure that discharge flow does not cause erosion to receiving streambeds or banks.

Direct & Secondary Impacts

The proposed DWHT General Permit includes effluent limitations for pollutants of concern (POC) associated with disinfected water and hydrostatic testing activities of equipment both associated and not associated with petroleum uses. These POC include total residual chlorine, total suspended solids, pH, benzene, toluene, ethylbenzene, xylenes (total), and oil & grease. Dehalogenation chemicals are also limited to 1.5 times the manufacturer's recommended dosage on the chemical package, as excessive dehalogenation chemicals may deplete oxygen concentrations in receiving waters. These limits are assessed based on their nonsignificance criteria (found at ARM 17.30.715). These effluent limitations are calculated to ensure that effects to water quality are negligible and short-term. Dischargers authorized by the DWHT General Permit would be required to monitor and report discharge flows, which are expected to have negligible to minor impacts on water quantity.

Cumulative Impacts

While point source discharges permitted under Montana's nondegradation policy, along with non-point source discharges to surface waters may have negligible to major cumulative effects on water quality, the activities authorized by the DWHT General Permit are expected to have only negligible and short-term effects.

Air Quality

This section includes the following resource areas, as required in ARM 17.4.609: Air Quality

The DWHT General Permit would authorize discharges of treated water from disinfected water and hydrostatic testing operations statewide. The State of Montana includes the following Class I airsheds:

- *Anaconda-Pintler Wilderness Area*
- *Bob Marshall Wilderness Area*
- *Cabinet Mountains Wilderness Area*
- *Flathead Reservation*
- *Fort Peck Reservation*
- *Gates of the Mountains Wilderness*
- *Glacier National Park*
- *Medicine Lake Wilderness Area*
- *Mission Mountains Wilderness Area*
- *Northern Cheyenne Reservation*
- *Red Rocks Lakes Wilderness Area*
- *Scapegoat Wilderness Area*
- *Selway-Bitterroot Wilderness*
- *UL Bend Wilderness*
- *Yellowstone National Park*

Direct Impacts

Dewatering and hydrostatic testing activities typically requires pumps that are usually electric,

gasoline or diesel that produce emissions. Combustion products emitted from gasoline or diesel pumps include particulate matter (PM10 and PM2.5), nitrogen dioxide and nitric oxide (NOx), sulfur dioxide (SOx), and carbon monoxide and carbon dioxide.

There may be short-term combustion odors associated with these pumps. Noise pollution may also be associated with pump operations (see Aesthetics).

Secondary Impacts

The treatment of petroleum-contaminated water may involve the use of air stripping units or other mechanisms that volatilize volatile organic compounds (VOCs) to remove them from contaminated water. The process of volatilizing these compounds may produce air pollutants. These activities may be subject to additional regulation under the Montana Clean Air Act and/or the federal Clean Air Act. This general permit would not authorize or otherwise regulate these activities. These effects to air quality are expected to be minor in nature but variable in duration, depending on the timing and extent of treatment.

Cumulative Impacts

Should authorizations under the General Permit be clustered in a small geographic area or co-occur with other activities that affect air quality, the associated treatment of contaminated water may contribute to localized cumulative impacts to air quality. The potential contributions to these cumulative impacts are expected to be minor but variable in duration, depending on the timing and extent of treatment.

Vegetation Cover, Quantity, and Quality

This section includes the following resource areas, as required in ARM 17.4.609: Vegetation Cover, Quantity and Quality

Discharges authorized by the DWHT General Permit may occur statewide outside the boundaries of Indian Reservations, except where otherwise excluded (See Permit I.C.). These activities would typically occur on previously developed sites and are unlikely to be inhabited by rare plants or cover types and the activities are unlikely to cause significant impacts to vegetative communities. However, all new sources seeking coverage under the DWHT General Permit are required to submit an analysis from consultation with the Montana Natural Heritage Program. If the proposed discharge is in an area of unique ecological or recreational significance, the application may be denied (see Permit I.C.5.)

Direct Impacts

The discharge of disinfected water and hydrostatic testing water is not expected to have any direct, long- or short-term impacts on vegetation cover, quantity or quality.

Secondary Impacts

The discharge of disinfected water and hydrostatic testing water may involve the installation of associated treatment infrastructure and/or outfall structures where they do not already exist. This general permit does not authorize or otherwise regulate these activities, nor does it exempt permittees from any local, state, or federal regulations associated with the construction of infrastructure. However, should these activities occur, they may cause minor, short-term impact to vegetative communities.

Cumulative Impacts

The discharge of treated disinfected water and hydrostatic testing water would be likely to occur on developed sites with a history of disturbance to vegetation associated with said development. Facilities associated with petroleum use may also require additional remediation activities to remove contaminants from soils, etc. These activities may have moderate to major short-term impacts to vegetative communities. However, these activities are generally undertaken in support of long-term improvements to ecological integrity and

human health. The contribution of activities authorized by this general permit is expected to be negligible and short term.

Terrestrial, Avian, and Aquatic Life and Habitats

This section includes the following resource areas, as required in ARM 17.4.609: Terrestrial and Aquatic Life and Habitats; Unique, Endangered, Fragile, or Limited Environmental Resources

Discharges authorized by the DWHT General Permit may occur statewide outside the boundaries of Indian Reservations, except where otherwise excluded (See Permit I.C.). These activities typically occur on previously developed sites, and in cities and towns where actions such as flushing fire hydrants, draining water storage towers, tanks, swimming pools, or performing hydrostatic testing on equipment-such as pipes, tanks, vessels, or boilers, whether previously associated with petroleum or not-have occurred. These sites are unlikely to be inhabited by important wildlife or to harbor federally listed, endangered, or species of special concern. All continued and new discharges authorized by this general permit are required to submit a Montana Sage Grouse Habitat Conservation Program consultation letter, if applicable. All new sources seeking authorization under the general permit are required to submit analysis from consultation with the Montana Natural Heritage Program. If the proposed discharge is located in an area of unique ecological or recreational significance, the application may be denied (see Permit I.C.5.)

Direct Impacts

Discharges authorized by the DWHT General Permit would be required to conform with effluent limitations and other conditions of the permit. These conditions are designed to be protective of aquatic life beneficial uses in receiving waters, ensuring that water quality is not degraded through the assessment of effluent limitations based on nonsignificance criteria (ARM 17.30.715). Therefore, direct impacts to aquatic life and habitats are expected to be negligible over the short- and long-term. Direct impacts to terrestrial and avian life and habitats are not expected in the short- or long-term.

Secondary Impacts

The treatment of petroleum-contaminated water may involve the installation of associated treatment infrastructure and/or outfall structures. This general permit does not authorize or otherwise regulate these activities, nor does it exempt permittees from any local, state, or federal regulations associated with the construction of infrastructure. However, should these activities occur, they may cause minor, short-term impact to terrestrial and avian life and habitats.

Cumulative Impacts

The discharge of treated disinfected water and hydrostatic testing water previously associated with petroleum would be likely to occur from developed sites with a history of disturbance to habitats associated with said development. Facilities associated with petroleum may also require additional remediation activities to remove contaminants from soils, etc. These activities may have moderate to major short-term impacts terrestrial, avian, and aquatic life and habitats. However, these activities are generally undertaken in support of long-term improvements to ecological integrity and human health. Further, while point source discharges are permitted in accordance with Montana's nondegradation policy, these discharges in conjunction with non-point source discharges to surface waters may have negligible to major cumulative effects on aquatic life and habitats. The contribution of activities authorized by this general permit is expected to be negligible and short term.

History, Culture, and Archaeological Uniqueness

This section includes the following resource areas, as required in ARM 17.4.609: Historical and Archaeological Sites; Cultural Uniqueness and Diversity

Discharges authorized by the DWHT General Permit may occur statewide outside the boundaries of Indian Reservations, except where otherwise excluded (See Permit I.C.). These activities typically occur on previously developed sites. These sites are unlikely to have historical, archeological, or paleontological resources present. It is not anticipated that discharges authorized by the General Permit would cause a shift in any unique quality of the area. All new sources seeking authorization under the general permit are required to submit analysis from consultation with the Montana State Historic Preservation Office (SHPO) (see Permit I.D). If the proposed discharge is in an area of unique ecological or recreational significance, the application may be denied (see Permit I.C.5.)

Direct Impacts

Discharges authorized by the DWHT General Permit would not be expected to have any direct, long- or short-term impacts on history, culture, or archaeological uniqueness.

Secondary Impacts

Discharges authorized by the DWHT General Permit are not expected to have any direct, long- or short- term impacts on history, culture, or archaeological uniqueness.

Cumulative Impacts

Discharges authorized by the DWHT General Permit would be likely to occur from developed sites, and cities and towns with a history of disturbance such that impacts to history, culture, and archaeological uniqueness may have already occurred and any additional impacts, while unlikely, would constitute cumulative impacts. The contribution of activities that would be authorized by this general permit are not expected.

Demands on Environmental Resources of Land, Water, Air, or Energy

This section includes the following resource areas, as required in ARM 17.4.609: Demands on Environmental Resources of Land, Water, Air, or Energy

Discharges authorized by the DWHT General Permit could occur state-wide, except within the boundaries of Indian Reservations and where discharges are otherwise prohibited.

Direct Impacts

The DWHT General Permit allows facilities to discharge wastewater from disinfected water and hydrostatic testing activities. Disinfected water activities include discharges from swimming pools and potable water systems. Discharges from potable water systems are those associated with maintaining a potable water supply, flushing fire hydrants and draining water storage towers and tanks prior to cleaning or maintenance activities or similar activities. Hydrostatic testing discharges are limited to hydrostatic testing of new or existing piping, tanks, vessels, boilers and other similar equipment, some equipment may be associated with petroleum. Minimal direct environmental demands are anticipated.

Secondary Impacts

Facilities involved in hydrostatic testing of equipment associated with petroleum use, may be responsible for installing and operating related treatment infrastructure, as well treating petroleum-contaminated sites. These activities may require additional demands on energy resources during construction and/or operation. These demands are anticipated to be variable by site, depending on the volume of water requiring treatment and the necessary duration of treatment. This general permit does not authorize or otherwise regulate these

activities, nor does it exempt permittees from any local, state, or federal regulations associated with the construction of infrastructure. These demands are anticipated to be minor to major, depending on site activities and needs.

Cumulative Impacts

The discharge of disinfected water and hydrostatic testing water is likely to occur on developed sites, or cities and towns with a history of disturbance associated with demands on air, energy, and water. Facilities that hydrostatic test equipment previously associated with petroleum may also require additional remediation activities to remove contaminants from soils, etc. These activities may have moderate to major short- to long-term demands on air, energy and water resources. However, these activities are generally undertaken in support of long-term improvements to ecological integrity and human health. The contribution of activities authorized by this general permit is expected to be negligible and short term.

Human Health and Safety

The applicant would be required to adhere to all applicable state and federal safety laws. The Occupational Safety and Health Administration (OSHA) has developed rules and guidelines to reduce the risks associated with this type of labor. Few, if any, members of the public would be in immediate proximity to the project during operations.

Direct Impacts

The authorized discharge of disinfected water and hydrostatic test water would be subject to effluent limitations calculated to ensure no exceedances of water quality standards, including standards developed to protect human health, are exceeded. No direct impacts to human health are anticipated.

Secondary Impacts

The treatment of petroleum-contaminated water may produce air pollutants (see Air Quality Section). This may produce localized conditions of elevated air pollution, most likely experienced by facility operators and other employees. Applicants would be required to adhere to all applicable state and federal safety laws. These effects to air quality are expected to be minor in nature but variable in duration, depending on the timing and extent of treatment.

OSHA requires employers to implement a hearing conservation program when noise exposure is at or above 85 decibels averaged over 8 working hours, or an 8-hour time-weighted average (TWA). Workers that remain in the direct vicinity of a larger, noisy pump may need to wear hearing protection.

Cumulative Impacts

Sites that have obtained authorization to hydrostatic test on equipment previously associated with petroleum may have experienced some degree of petroleum product contamination, necessitating remediation. There are risks to human health and safety associated with such contamination, but the remediation activities are generally undertaken in support of long-term improvements to human health and safety. The contribution of activities authorized by this general permit is expected to be negligible and short term. The DWHT General Permit does not authorize or otherwise regulate these activities, nor does it exempt permittees from any local, state, or federal regulations associated with the construction or operation of infrastructure.

Aesthetics

Will this project add or detract from existing views and aesthetics? Will there be any impacts to noise or lighting? Describe any aesthetics that may be altered due to the proposed actions.

Direct Impacts

Discharges authorized by the DWHT General Permit may have minor, short- to long-term impacts on aesthetics associated with outfall structures to receiving waters, which may detract from existing views and aesthetics.

Secondary Impacts

Discharges authorized by the DWHT General Permit may involve the installation, operation, and maintenance of associated treatment infrastructure and/or outfall structures. These structures and the operation thereof may detract from existing views and aesthetics and may produce noise. These impacts are expected to have minor short- to long-term impacts to aesthetics.

Cumulative Impacts

Sites with discharges authorized by the DWHT General Permit are likely to have been previously developed. As a result, any effects on aesthetics from the discharge of disinfected water or hydrostatic test water would be in addition to the prior impacts of development and other activities carried out to remediate petroleum-contaminated sites or to conduct hydrostatic testing of petroleum-related equipment. These impacts to aesthetics are expected to be highly variable, but the contribution of the DWHT General Permit discharges is expected to be minor and short- to long-term.

Socioeconomics

This section includes the following resource areas, as required in ARM 17.4.609: Social Structures and Mores; Access to and Quality of Recreational and Wilderness Activities; Local and State Tax Base and Tax Revenues; Agricultural or Industrial Production; Quantity and Distribution of Employment; Distribution and Density of Population and Housing; Demands for Government Services; Industrial and Commercial Activity; Locally Adopted Environmental Plans and Goals; Other Appropriate Social and Economic Circumstances

The project would occur on lands with various types of ownership. These projects are variable in duration and not anticipated to have any permanent impacts to population where they occur. Project areas would be subject to any plans or rules set forth by municipalities and/or counties. Some short-term jobs may be created if construction of treatment infrastructure or outfall structures is needed prior to discharge. Impacts to traffic are expected to be minimal. It is not anticipated that this project would disrupt native or traditional lifestyles or communities.

Direct Impacts

Discharges authorized by the DWHT General Permit are not expected to have direct impacts on socioeconomics, as they are not anticipated to be associated with job creation or loss, impacts to traffic or roads, or disruption of native or traditional lifestyles or communities. Applications may be denied if they are anticipated to impact areas of unique ecological or recreational importance.

Secondary Impacts

Some short-term jobs may be created by construction of treatment infrastructure and/or outfalls where they do not currently exist. These activities may be associated with temporary increases in local traffic, but these are expected to be minimal and short-term.

Cumulative Impacts

Sites on which discharges would be authorized by the DWHT General Permit are likely to be previously developed and associated with previous impacts. These impacts to socioeconomics are expected to be highly variable in intensity and duration but mitigated by activities associated with the DWHT General Permit.

Private Property Impacts

Discharges authorized by the DWHT General Permit may take place on private land owned by the applicant. DEQ's issuance of the DWHT General Permit may affect applicants' real property. DEQ has determined, however, that the permit conditions are reasonably necessary to ensure compliance with applicable requirements under the Montana Water Quality Act. Therefore, DEQ's approval of DWHT General Permit would not have private property-taking or damaging implications.

Greenhouse Gas Assessment

Disinfected water and hydrostatic testing are typically conducted by diesel or gasoline-powered pumps. The amount of combustion emissions depends on the type of fuel, the size of the pump, the hours of operation, and the efficiency of the pump. The combustion of fuel would release GHGs primarily being carbon dioxide (CO₂), nitrous oxide (N₂O) and much smaller concentrations of uncombusted fuel components including methane (CH₄) and other volatile organic compounds (VOCs). Issuance of the DWHT General Permit may also lead to minimal secondary greenhouse gas emissions associated with on-site power generation for treatment infrastructure and potential vehicle use in support of required monitoring and reporting. Issuance of the DWHT General Permit would not authorize or otherwise regulate the use of on-site power generation or vehicle usage.

Direct Impacts

DEQ has determined EPA's Scope 1 GHG impacts as defined in the Inventory Guidance for Greenhouse Gas Emissions are appropriate under MEPA for this Proposed Action. Scope 1 emissions are defined as direct GHG emissions that occur from sources that are controlled or owned by the organization (EPA Center for Corporate Climate Leadership). DEQ's review of Scope 1 emissions is consistent with the agency not evaluating downstream effects of other types of impacts. DEQ used EPA's Simplified GHG Emissions Calculator (Mobile Sources tab) using a maximum diesel fuel combustion of 2 gallons/hour (gph) (based on fuel consumption for a Cummins Model C1350D4, maximum water pumping capacity of 1,350 gallons per minute (gpm) and DAE Model Appalachian 40, maximum water pumping capacity of 1,230 gpm). Assuming a reasonable worst-case scenario for any given permittee of 2 gph diesel consumption for 20 days at 8 hours each (160 pumping hours) provides 320 gallons of fuel consumed in a given dewatering project. The carbon dioxide (CO₂) emissions for that worst-case project are calculated to be 3,267 kilograms (3.3 metric tons). A typical passenger vehicle emits about 4.6 metric tons of CO₂ per year (EPA, 2024). On average, 8 million metric tons of CO₂ are produced annually in Montana from on-road mobile transportation sources (MDT, 2023). This review does not include an assessment of GHG impacts in quantitative economic terms, otherwise known as evaluating the social cost of carbon. DEQ instead calculates potential GHG emissions and provides a narrative description of GHG impacts. This approach is consistent with Montana Supreme Court caselaw and the agency's discussion of other impacts in this EA. See *Belk v. Mont. DEQ*, 2022 MT 38, ¶ 29.

Secondary Impacts

GHG emissions contribute to changes in atmospheric radiative forcing, resulting in climate change

impacts. GHGs act to contain solar energy loss by trapping longer wave radiation emitted from the Earth's surface and act as a positive radiative forcing component (BLM 2020).

Per EPA's website "Climate Change Indicators", the lifetime of carbon dioxide cannot be represented with a single value because the gas is not destroyed over time. The gas instead moves between air, ocean, and land mediums with atmospheric carbon dioxide remaining in the atmosphere for thousands of years, due in part to the very slow process by which carbon is transferred to ocean sediments. Methane remains in the atmosphere for approximately 12 years. Nitrous oxide has the potential to remain in the atmosphere for about 109 years (EPA, Climate Change Indicators). The impacts of climate change throughout Montana include changes in flooding and drought, rising temperatures, and the spread of invasive species (BLM 2020).

Cumulative Impacts

GHG emissions that would be emitted as a result of the proposed activities (renewing the General Permit) would add to GHG emissions. The No Action Alternative would contribute the same amount as the Proposed Action Alternative of GHG emissions.

Description of Alternatives

No Action Alternative: In addition to the proposed action, DEQ must also consider a "no action" alternative. The "no action" alternative would deny the renewal of the DWHT General Permit. This would eliminate the regulatory mechanism currently in place for the discharge of disinfected water and hydrostatic testing water. Any existing or new applicants would lack the authority to conduct the proposed activity under the DWHT General Permit. Any potential impacts that would result from the proposed action would not occur but may result in a failure to remediate the unauthorized discharge thereof. The no action alternative forms the baseline from which the impacts of the proposed action can be measured.

If permittees authorized under the DWHT General Permit demonstrate compliance with all applicable rules and regulations required for approval, the "no action" alternative would not be appropriate.

Other Reasonable Alternative(s): Another reasonable alternative would be the issuance of individual permits to dischargers with current and proposed eligibility under the DWHT General Permit. This alternative would result in similar environmental impacts.

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.

Public Involvement

A 30-day public comment period will be held. In addition, DEQ will hold a public hearing for the renewal of this general permit on **October 23, 2025**, at 10 A.M. in the Wilderness Room of the Colonial Building, in Helena, Montana.

Significance of Potential Impacts and Need for Further Analysis

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 this project lacks significant adverse effects to the human and physical environment based on above listed criteria.

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.

PREPARATION

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COMMENT SUMMARY AND RESPONSES TO SUBSTANTIVE COMMENTS