



**Storm Water Discharges Associated with Construction Activity**  
**Storm Water Pollution Prevention Plan Development Guidance Document**  
**Created November 2013 / Revised March 2014**

The purpose of this guidance document is to help you develop a Storm Water Pollution Prevention Plan (SWPPP) for your construction project that is in compliance with requirements for the General Permit for Storm Water Discharges Associated with Construction Activity (general permit). This document explains each of the SWPPP requirements and provides some examples for consideration when selecting Best Management Practices for your construction project. Throughout the document you will see the word **Note** highlighted. The purpose is to provide detailed explanation and/or specific examples of information to further explain requirements.

The goal of the SWPPP is to identify all potential pollutant sources that may impact storm water, and identify the Best Management Practices to control these pollutant sources. Proper selection, installation, and maintenance of Best Management Practices is required to ensure the discharge of storm water from your construction project does not negatively impact water quality. The SWPPP must be complete, be implemented at the start of the construction project, and be updated and revised to reflect current site conditions as the construction project proceeds.

**Note:** permit authorization under the general permit is **strictly** for the discharge of storm water. The discharge of process wastewater is subject to other MPDES permitting requirements.

Items pertaining to records retention, self reporting, inspections, are detailed in the general permit; therefore, this document will not provide an in-depth explanation of how to complete these items.

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**Applicability of Permit Coverage**

Permit coverage under the general permit is required by owner/operators engaging in construction activities that meet the following two criteria:

- 1.) There are areas of ground disturbance or other potential pollutant sources due to the construction activity where a storm water discharge to state surface waters can occur.
- 2.) The construction activity has a total area of ground disturbance through clearing, grubbing, grading, or placement/removal of earth material which is equal to or greater than one acre. The total area must include all areas that are part of a larger common plan of development or sale.

A larger common plan of development or sale is a contiguous area where multiple separate and distinct construction activities are taking place at different times on different schedules, but still under one plan. This includes phased projects, projects with multiple filings or lots, and projects in a contiguous area that may be unrelated but still under the same contract. If the project is part of a common plan of development or sale, the disturbed area of the entire plan must be used in determining general permit requirements and all portions of the project must be covered.

Construction activity is defined by causing disturbance of earth material. Disturbance is created by clearing, excavating, demolition, installation of haul or access roads, staging areas, stockpiling of earth materials, placement/removal of earth material, and borrow areas.

**Note:** acreage of disturbance does not typically include construction activities that are performed for routine maintenance on existing roads where the line and grade of the road is not being altered or does it include paving of existing roads.

**Submitting the Application:** The owner/operator of the construction activity is to complete and submit an application package for coverage under the general permit. DEQ recommends submitting the application package at least 10 days before starting construction activities. The authorization will become effective upon receipt of a complete application package. An application package consists of the following information:

- 1.) Notice of Intent – Form NOI; including USGS Topographical Map
- 2.) Storm Water Pollution Prevention Plan – Form SWPPP; including site maps and all applicable Attachments
- 3.) Application fee

An owner/operator is defined as a person who owns, leases, operates, controls, or supervises a point source. A point source is defined as a discernible, confined, and discrete conveyance from which pollutants may be discharged to state waters. A construction site meeting the criteria above is considered a point source. The owner/operator of a construction project is identified in the Notice of Intent and Storm Water Pollution Prevention Plan. It is recommended that the owner/operator have operational control of the construction project on a day-to-day basis to ensure compliance with the requirements of the general permit. Although it may be acceptable to have an alternative party fulfill regulatory requirements and ensure compliance with the general permit, the owner/operator remains liable for any noncompliance or violations resulting from the actions of the alternative party.

Examples of owner/operators include:

- 1.) **Owner or Developer:** an owner or developer who owns the site and/or is operating as a site manager or otherwise has supervision or control over the site, either directly or through contract with an individual listed below.
- 2.) **General Contractor or Subcontractor:** a contractor with contractual responsibility and operational control that has the ability to address the impacts of the construction activities on storm water quality.
- 3.) **Other Parties:** consultants or engineering firms that act as a construction project manager under contract with the owner/operator and have operational control to address the impacts of the construction activity on storm water.

A person(s) or company(s) conducting construction activities at a site may be held liable for operating without the necessary general permit coverage if the site does not have a general permit authorization that is issued to an owner/operator. For instance, if the site or a portion of the project is sold or the contractor changes, the general permit authorization may end up being held by a permittee who is no longer the current owner/operator. In these situations, the previous authorization does not cover the new owner/operator's activities. A new or transferred authorization would be required to be submitted.

**Note:** Subcontractors or other parties performing work within a construction activity that has a current general permit authorization may not be required to obtain a new authorization. A new general permit authorization is not required if the following conditions are met: 1.) the subcontractor's activities are covered by the current general permit authorization; 2.) the owner/operator maintains operational control of the subcontractor's activities; and 3.) the impacts these activities may have on storm water quality. These situations include subcontractors that install utilities or perform support activities for a project. Finally, although separate general permit coverage may not be required, a subcontractor is not exempt from storm water regulations and may still be held liable if their activities result in the discharge of pollutants.

#### Determining Owner/Operators at Developments with Multiple Owner/Operators

It is essential for developments with multiple owner/operators performing different construction activities for the development follow the guidance on who may apply for general permit coverage in this section. Regardless of the number of owner/operators associated with a development, each owner/operator is responsible for having and maintaining a SWPPP in place that clearly and accurately reflects their construction areas and activities unless there is one general permit authorization and SWPPP in place for the entire development and associated construction activities.

**Note:** In some instances, owner/operators may be required to submit a NOI package for sites that are less than one acre of disturbance. DEQ will process these application packages in the same manner as all other application packages seeking coverage under the general permit.

The Form NOI and Form SWPPP are available on DEQ's webpage at the link provided in the Contact Information box on page 1. Upon receipt of the NOI package, DEQ will process the application, issue a Confirmation of Receipt Letter with a MPDES permit authorization number (MTRXXXXXX), and a copy of the general permit to the owner/operator.

**Note:** Provided below is information on permit fee, application processing, and use of the Form SWPPP.

**Permit Fee:** Permit fees for coverage under the general permit are based on acreage of construction related disturbance. The fee schedule is identified in Section J of the Form NOI. Additional fee information can be found in the Administrative Rules of Montana, 17.30.201.

**Application Package Completeness:** DEQ reviews application packages for coverage under the general permit for completeness. The Form NOI must be filled out completely and accurately or the application will be deemed incomplete and processing of the application will not continue until all required information is submitted. Adequacy of the NOI package is determined through a regulatory inspection.

**Form SWPPP:** DEQ provides a Form SWPPP that was developed to maintain compliance with the general permit requirements. It is the responsibility of the owner/operator to ensure the Form SWPPP is complete, accurate, and up-to-date to reflect current activities at all times. The Form SWPPP provided by DEQ is not required to be used; however, the owner/operator is required to develop a SWPPP. If the owner/operator uses a different format or template other than the Form SWPPP provided by DEQ, the SWPPP is still required to address all requirements defined in the general permit.

**Modifying the NOI:** modifying the original NOI is required when one of the two following conditions are met:

- 1.) The area of construction related disturbance has changed in acreage.
- 2.) There is a change in project scope.

Modifications are required to be submitted to DEQ. The date the modification is submitted to DEQ will determine the applicable modification fee. For instance, if the modification is submitted less than six months from the date of DEQ's Confirmation of Receipt letter, the applicable fee is the defined modification fee. Modifications that occur six months after the date of DEQ's Confirmation of Receipt letter will be processed as a new project.

**Terminating the NOI:** an owner/operator may terminate the general permit authorization under the general permit by submitting a Notice of Termination (Form NOT). A NOT may be submitted when the following conditions are met:

- 1.) The site has achieved final stabilization.
- 2.) Temporary Best Management Practices have been removed.
- 3.) Construction activities are completed, including the removal of construction equipment.
- 4.) All potential pollutant generating activities associated with construction activity are completed.

**Note:** final stabilization is defined as the establishment of a vegetative cover of at least 70% pre-disturbance levels that is uniformly distributed throughout the area of disturbance or other physical erosion reduction methods have been employed. **Re-seeding does not qualify for final stabilization if the seeding has not started to establish.**

Filing a NOT before achieving final stabilization is achieved will result in re-submitting an application package and can result in a formal enforcement action.

**Transferring the NOI/permit authorization:** a general permit authorization can be transferred from one party to another. DEQ provides a permit transfer notification form (Form PTN) for this purpose. The form is required to be submitted 30 days before the transfer is scheduled to occur, requires two signatures, and a modification fee.

**Note:** transferring of a general permit authorization can result in noncompliance if the new owner/operator does not update the SWPPP to reflect the new construction activities being pursued by the recipient of the general permit authorization.

Please visit <http://www.deq.mt.gov/wqinfo/mpdes/stormwaterconstruction.mcp> for forms, supplemental information, and additional guidance material.

Contact the Water Protection Bureau at (406) 444-3080 with any questions or comments.

## **Attachment A**

### Storm Water Pollution Prevention Plan Guidance Document

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## A.) Introduction

Storm water run-off is generated when precipitation from rain and snowfall events flows over land and does not infiltrate or percolate into the ground. Construction activities can generate and use many different kinds of pollutants that can impact storm water discharges. The primary pollutant of concern associated with construction activities is sediment. Clearing, grubbing, and grading activities remove existing vegetative cover and expose soil to environmental conditions. Rain, snowmelt, and wind can cause erosion of the exposed soil potentially impacting state waters. It is estimated that run-off rates from construction projects are 10 to 20 times greater than those from agricultural lands, and 1,000 to 2,000 times greater than those of forested lands.

Due to the nature construction activities, run-off can negatively impact state waters by altering the physical, biological, and chemical composition of our state waters. For instance, excessive sediment can cause drinking water problems, impact fish and macro-invertebrate habitat, alter channel dynamics, and carry nutrients into state waters. In addition to sediment, many construction activities require the use of toxic or hazardous materials that can impact water quality. Such items include petroleum products, pesticides, herbicides, asphalt, sealants, and concrete washout.

## B.) General Guidance

### The Storm Water Pollution Prevention Plan (SWPPP)

The SWPPP is a plan based on pollution prevention. The SWPPP describes and identifies strategies, steps, and techniques that will be used to minimize the discharge of pollutants in storm water runoff from a construction site. The SWPPP contains three components.

Component one is the narrative description of the construction activity, site conditions before, during, and after construction, pollutant sources, Best Management Practices, inspection and maintenance procedures, and final stabilization measures. Component two is the site map that provides detail of the site conditions and locations of required items detailed in the general permit. Component three is the Best Management Practice design, installation, implementation, and maintenance specifications for all selected Best Management Practices. The emphasis of the SWPPP is on pollution prevention. SWPPPs that lack sufficient information become reactionary, which results in noncompliance.

**Note:** a narrative description of the Best Management Practices provided in the SWPPP can be cross referenced with a Best Management Practice design, installation, implementation, and maintenance specification; therefore, an additional narrative is not required in the SWPPP. A complete Best Management Practice design, installation, implementation, and maintenance specification includes a detailed description of the Best Management Practice and its intended use and limitations, a detailed drawing to demonstrate proper installation, and a maintenance procedure. If any one of these three items is missing from the Best Management Practice design, installation, implementation, and maintenance specification, the SWPPP must detail the missing information in the appropriate section. For instance, the owner/operator identifies silt fence as a perimeter control. The owner/operator selects a Best Management Practice design, installation, implementation, and maintenance specification that is lacking a description of maintenance procedures. In order to remain in compliance, the owner/operator includes information on maintenance in the Inspection and Maintenance Procedures section of the SWPPP.

### Developing the SWPPP

The SWPPP is required to identify site characteristics, pollutant sources, Best Management Practices, inspection and maintenance procedures, and measures to ensure final stabilization

will be achieved. The purpose of a developed SWPPP is to have a usable document that is able to be implemented throughout active construction until final stabilization is achieved. For instance, the SWPPP is required to provide a description of site characteristics before, during, and after construction. The development of an adequate description of these site characteristics will aid in proper pollutant source identification and proper Best Management Practice selection and installation. The developer of a SWPPP is required to account for the amount, frequency, intensity, and duration of precipitation for the area the construction project is located in and use good engineering, hydrologic, and pollution control practices to ensure water quality is protected. The SWPPP is not a paperwork exercise and, therefore, should not include practices that sound good, but are unreasonable and/or are not feasibly possible to implement for the construction activity. For instance, identifying straw wattles as a perimeter control to manage runoff from all disturbed areas is unreasonable if the drainage areas are large, the site has steep, long slopes, and/or channels that are deep and narrow.

**Note:** if an owner/operator contracts the services of a separate party to develop and submit the NOI package; including the SWPPP, DEQ strongly recommends the owner/operator review the documents to ensure legibility, usability, applicability, and completeness before construction activities start.

#### Implementing the SWPPP

The primary objective of the SWPPP is to **control all pollutant sources** during active construction and until **final stabilization** is achieved. This objective is achieved by implementing and/or installing Best Management Practices before earth disturbing activities **begin and not after**. Installation of Best Management Practices after construction activities start fails to demonstrate pollution prevention. For instance, installing a perimeter control after the initial site grading activities are complete.

#### Managing the SWPPP

The SWPPP is required to be maintained on-site with the identified SWPPP Administrator(s) and provided at the request of representatives from EPA, DEQ, or other permitting authorities. The SWPPP is required to be up-to-date to reflect current site conditions, including construction phase, changes to Best Management Practices, and changes in inspection frequency. If Best Management Practices identified in the SWPPP prove to be ineffective or impractical, the SWPPP is required to be updated to reflect these changes or improvements within the required timeframe.

**Note:** The SWPPP is a document that is to be developed for pollution prevention. The SWPPP is required to address all the requirements identified in the general permit. If there are requirements that are not applicable to the construction project, a brief description as to why is required to be provided. Statements like: N/A; Not Applicable, To Be Determined, As Site Conditions Warrant, If Determined to be Necessary, At the Discretion of the Engineer/Project Manager are **unacceptable**.

- Failing to develop a complete SWPPP puts the owner/operator in automatic violation of the general permit.
- Failing to implement the SWPPP puts the owner/operator in automatic violation of the general permit.
- Failing to update the SWPPP within the required timeframes puts the owner/operator in automatic violation of the general permit.

### Best Management Practices (BMPs)

Best Management Practices include a wide array of erosion and sediment controls and good housekeeping practices. The intended use of Best Management Practices is to minimize the impacts to water quality of storm water discharging from a construction site. Selection and implementation of Best Management Practices is dependent upon site conditions, potential pollutant sources, and the nature and type of construction activity.

There are two types of Best Management Practices:

**Structural:** include treatment processes and practices. Types include straw wattles, silt fence, earthen berms, retention ponds, rock check dams, inlet protection, etc.

**Non-Structural:** include activities. Types include: preserving natural vegetation, preventative maintenance and spill response procedures, scheduling of activities, prohibiting specific activities, educational meetings, other managerial techniques, etc.

Structural and non-structural Best Management Practices can be divided into two types that can minimize the discharge of sediment:

**Erosion Control:** practices designed to keep the sediment in place. These practices emphasize prevention. Best Management Practices include: project phasing, surface roughening, slope drains, check dams, erosion control blankets, etc.

**Sediment Control:** practices designed to remove sediment from runoff. Best Management Practices include: silt fence, straw wattles, earthen berms, inlet protection, sediment traps, sediment basins, etc.

**Note:** Best Management Practices work successfully when used in conjunction with each other. For instance, slopes should have an erosion control Best Management Practice like surface roughening or erosion control blankets to stabilize the soil on the slope and a sediment control Best Management Practice away from the toe of the slope to capture and treat runoff before discharge.

Emphasis of Best Management Practice selection should be placed on erosion control with sediment controls providing secondary treatment.

Proper selection, installation, and maintenance of Best Management Practices that are adequate for the intended field application will maintain cost effectiveness.

### Complying with the Non-Numeric Technology Based Effluent Limits

The Non-Numeric Technology Based Effluent Limits defined in Part 2 of the general permit prescribe how and what is required to be achieved when managing storm water throughout the life of a construction project. When developing and designing a SWPPP and selecting Best Management Practices to be used at a construction project emphasis is to be placed on this section of the general permit.

**Erosion and Sediment Controls:** site specific erosion and sediment control measures must be designed, installed, and maintained to control storm water volume and velocity, minimize the amount of soil exposed, disturbed, and discharged during the construction activity, provide and maintain natural buffers around surface waters, direct storm water to vegetated areas, minimize soil compaction, and preserve topsoil.

**Dewatering:** dewatering activities are prohibited under the general permit unless managed by appropriate controls and only if the discharge is not direct to state waters.

**Soil Stabilization:** soil stabilization must be implemented whenever clearing, grubbing, grading, excavation, or other earth disturbing activities have permanently ceased on any

portion of the construction site, or if these activities temporarily cease on any portion of the construction site and will not resume for a period exceeding 14 calendar days.

**Pollution Prevention:** pollution prevention measures are required to be designed, installed, and maintained to: minimize the discharge of pollutants from equipment and wash waters, prohibit the discharge of fuels, oils, or other pollutants used in vehicle maintenance and equipment operation; minimize the exposure of on-site building materials to precipitation and storm water; minimize the discharge of pollutants from spills and implement prevention and response procedures, and prohibit wastewater from washout of concrete, stucco, paint, form release oils, curing products, and other construction materials.

**Prohibited Discharges:** concrete washout, stucco, paint, form release oils, curing compounds, fuels, oils, other pollutants associated with vehicle maintenance, soaps, and solvents are **prohibited** to be discharged under this general permit.

**Surface Outlets:** discharges from basins and/or impoundments are required to be from outlet structures that withdraw water from the surface.

**Note:** DEQ recommends the following erosion and sediment control principles and practices be implemented on all construction sites:

- Phase the construction activity(s)
- Minimize the amount of disturbance at any one given time; preserve existing vegetation; implement stabilization measures
- Control run-on; prevent runoff from disturbed areas by directing it to vegetated areas
- Stabilize exposed soils immediately upon construction activity completion
- Protect slopes; break up slope lengths and steepness
- Establish perimeter controls
- Create stabilized entrances
- Protect inlets/outlets
- Inspect and maintain Best Management Practices

Place emphasis on erosion controls and supplement erosion controls with sediment controls to ensure the discharge of sediment is minimized.

**Note:** construction dewatering activities are not permitted to be discharged to surface waters or to storm water sewer systems without separate MPDES permit coverage. The discharge of construction dewatering to the ground may be permitted by the general permit when appropriate Best Management Practices are implemented and when the following conditions are met:

- The discharge and the Best Management Practices are included in the SWPPP
- Adequate Best Management Practices are included to control storm water discharges
- The discharge does not leave the site as surface run-off to surface water or storm sewer systems
- The ground water being pumped is not contaminated with pollutants to exceed state ground water quality standards

If **any** of the above conditions are **not** met, a separate MPDES permit is **required**.

**Note:** the pumping of storm from excavations, ponds, and depressions to surface waters or to a municipal storm sewer system is permitted under the general permit provided the following conditions are met:

- 1.) The discharge is composed entirely of storm water
- 2.) Adequate Best Management Practices are implemented/installed to control sediment laden water from the pumping operation before discharge
- 3.) The dewatering activity and associated Best Management Practices are clearly documented in the SWPPP

If there is a visible sheen in the discharge, the discharge is no longer considered storm water. The discharge of process wastewater without proper MPDES permits will result in a formal enforcement action.

#### Existing Best Management Practices

The SWPPP can identify existing storm water controls at the construction site, including other erosion, sediment, and drainage controls which are required by other regulations or regulatory agencies. Examples include local erosion and sediment control ordinances, prescribed techniques for use in restoration or stabilization projects, and existing storm water controls like retention and detention basins.

#### Storm Water Management and Other Parties

Reliance on other storm water controls implemented by other parties may be required to ensure adequate storm water management. For instance, if a general permit authorization is issued for a lot in a larger development, the owner/operator may need to depend on Best Management Practices implemented by the individual(s) in charge of the larger development, which may include street sweeping, inlet protection, or a detention pond. In these situations, the Best Management Practices implemented by the individual(s) in charge of the larger development are required to be addressed in the SWPPP of the owner/operator for the lot. Additionally, written agreements must exist between the parties and the party implementing the Best Management Practices must ensure proper installation, operation, and maintenance. These written agreements are required to be contained within the SWPPP.

**Note:** An owner/operator is responsible for the following items:

- Complying with the requirements in the general permit for the areas and activities for which general permit coverage is issued.
- Identifying all potential pollutant sources and minimizing the discharge of these pollutants. It is the responsibility of the owner/operator to ensure pollutant sources are managed appropriately and pollution of storm water does not occur.
- Managing all pollutants generating from their activities. If pollution of storm water occurs within an owner/operator's permitted area, the owner/operator is responsible for managing the pollutants.
- Managing pollutants that pass onto and can be or are discharged from their permitted area. This also applies to pollutants that discharge from another entity's activities onto the owner/operator's permitted area. If pollutants are discharged from one site to another and to state waters, both parties may be held liable.
- Identifying and describing all Best Management Practices to be utilized to minimize the discharge of pollutants. This applies to all Best Management Practices within the permitted area of the owner/operator and Best Management Practices used outside of the permitted area by the owner/operator. In the case where Best Management Practices are implemented by another party and the owner/operator is depending upon

the use of them, the owner/operator may be held responsible if a discharge of pollutants occurs from their construction activity.

### Records Management

Records are required to be maintained on-site, up-to-date, with the identified SWPPP Administrator(s) and provided at the request of an official from DEQ, EPA, or local regulatory agency/organization. Required records include: a copy of the general permit; copy of the complete and signed NOI; a copy of DEQ's confirmation letter; a copy of the up-to-date SWPPP; Best Management Practice installation and design standards for all Best Management Practices installed and detailed in the SWPPP; SWPPP Administrator training documentation; Delegation of Authority form; SWPPP revision log; inspection records; and noncompliance reports.

**Note:** The use of electronic records is acceptable provided the two conditions are met:

- 1.) Records are available at the time of an inspection.
- 2.) All records meet the required signatory requirements.

Updates to the SWPPP are required to be made to the narrative and site map if a change in design, implementation, or installation is required. Updates can be completed:

- 1.) Using a SWPPP revision/update log
- 2.) On the original SWPPP and site map
- 3.) On the original SWPPP and new site map

Updates to the original SWPPP and site map can be completed written or electronically. In either case, the corresponding inspection report is required to include information regarding the update. For instance, during a routine weekly inspection, the SWPPP Administrator identified and documented that a perimeter control (silt fence) was inadequate because site conditions had changed. The SWPPP Administrator reviewed the up-to-date SWPPP and determined there were no Best Management Practices that were identified to meet the current site conditions. The SWPPP Administrator identified the location and description of the required additional Best Management Practice in the current routine inspection report, added a new Best Management Practice to the SWPPP and site map, obtained a new Best Management Practice installation and design standard for the additional Best Management Practice, and identified the installation date in the next inspection report.

## **C.) Storm Water Pollution Prevention Plan**

This portion of the guidance document is separated into two sections:

- 1.) General Permit Requirements are provided in *Italics*
- 2.) Explanation of General permit requirements are provided in standard font with **Explanation**

### **Part 3.1. SWPPP – General Requirements**

3.1.1. *The SWPPP must be developed and implemented in accordance with good engineering, hydrologic, and pollution control practices.*

3.1.2. *The SWPPP must meet the following general objectives:*

- *Identify and describe site characteristics which affect storm water discharges and the transport of potential pollutants with respect to the particular construction activity;*
- *Identify and describe all potential pollutant sources which may affect the quality of storm water discharges associated with the construction activity;*

- Identify and describe the Best Management Practices to be used to reduce potential pollutants in storm water discharges associated with the construction activity and to ensure compliance with the effluent limitations in this permit;
- Identify and describe the measures which will be used to achieve final stabilization;
- Identify and clearly describe the inspection and maintenance procedures implemented at the site to maintain all erosion and sediment control and other Best Management Practices identified in the SWPPP, in good and effective operating condition; and
- Be prepared and updated in accordance with the terms and conditions of this permit.

3.1.3. The SWPPP must be implemented as stated in the Primary SWPPP Administrator's up-to-date field copy. SWPPP implementation must initiate at the start of ground disturbance associated with the construction activity, and continue until final stabilization of all construction activity-related ground disturbance is achieved and permit coverage has been terminated.

**Explanation:** This part of the general permit details the requirements and the expectations for the preparation, implementation, and management of the SWPPP. Detailed explanations are provided in parts below.

### **Part 3.2. SWPPP Administrator**

#### **3.2.1. SWPPP Administrator - General Requirements**

The permittee must specify a Primary SWPPP Administrator(s), a Secondary SWPPP Administrator (as applicable), and any other designated SWPPP Administrator(s) in the SWPPP. A SWPPP Administrator(s) is an individual or position title who is responsible for developing, implementing, maintaining, revising, and updating the SWPPP. The SWPPP Administrator(s) must address all aspects of the SWPPP, initiating with the start of construction activities, and lasting until final stabilization is achieved and the permit authorization is terminated. There can be multiple individuals and/or position titles which serve as a SWPPP Administrator; but a Primary SWPPP Administrator and Secondary SWPPP Administrator (as applicable) must be identified on the NOI Form and in the SWPPP.

The SWPPP Administrator(s) must have knowledge of the principles and practices of erosion and sediment controls and pollution prevention practices and possess the skills necessary to assess site conditions and determine the effectiveness of selected Best Management Practices. The knowledge and skills are required so that the quality of storm water discharges are controlled and the effluent limitations in Part 2 of this permit are complied with.

The SWPPP Administrator(s) must meet the authorized representative requirements as defined in Part 4.15 of this permit to sign inspection reports and other reports. The primary and secondary SWPPP Administrators identified in Section F of the Form NOI meet this requirement. The permittee can identify additional SWPPP Administrator(s) by completing and submitting the SWPPP Form's ATTACHMENT A - Delegation of Authority Form at the time of submittal of the NOI package. If there is a change in the original SWPPP Administrator(s) or additional SWPPP Administrator(s) are needed, the permittee must submit a new authorization as required by Part 4.15 of this permit.

The Primary SWPPP Administrator person/position provided on the NOI form, is also for use by the Department as a permittee contact.

#### **Part 3.2.2. SWPPP Administrator - Training**

The SWPPP Administrator(s) must be trained with respect to the following:

- The design, installation, function, and location of all storm water controls and Best Management Practices on the site required by this permit, and how they are to be maintained and/or repaired;
- The proper procedures to follow with respect to this permit's pollution prevention requirements, including inspections; and
- When and how to conduct inspections, record applicable findings, take corrective actions, and, where appropriate, report violations and/or noncompliances.

This SWPPP Administrator(s) training must be completed before the start of earth-disturbing activities or potential pollutant-generating activities, whichever occurs first. For new employees hired after this time, the training must occur before assuming SWPPP Administrator responsibilities.

*Documentation demonstrating this training has occurred for the SWPPP Administrator(s) must be maintained with the SWPPP, and must include the following:*

- *Date, location, length, and provider of the training;*
- *Name(s) and title(s) of persons trained; and*
- *Summary of the information covered in the training.*

*SWPPP Administrator training requirements stated in Part 3.2.2. are effective **January 1, 2014**, in order to provide additional time for the regulated community to get the necessary training. The Department encourages permittees to get this training as soon as possible during this first year period of the permit in order to better ensure compliance with the other conditions in this permit. This one year extension of SWPPP Administrator training requirements does not apply to the compliance expectations for all other requirements in the permit, which remain fully enforceable for the entire effective life of the permit.*

**Explanation:** This part of the general permit explains the SWPPP Administrator requirements. The SWPPP Administrator can be an individual(s) or position(s). The individual(s) that maintain the SWPPP Administrator title are the responsible party for developing, implementing, maintaining, and revising the SWPPP. In addition, the SWPPP Administrator is the primary DEQ contact for all SWPPP related issues and is responsible for accuracy, adequacy, completeness, implementation, and updating the SWPPP. DEQ recommends that the SWPPP Administrator be a person of authority and have direct interaction with management activities associated with the construction project.

SWPPP Administrators are required to possess a working knowledge of erosion and sedimentation, the various types of Best Management Practices to control erosion and sedimentation, including installation and maintenance procedures, general housekeeping practices, how to complete and document routine inspections, and make updates to the SWPPP. This education is required to be completed through obtaining a certification from an accredited training program that offer a certificate of completion and/or a certification card. The certificate of completion and/or certification card must be current (not expired) and maintained on-site with the required records defined in Part 2.5 of the general permit.

Training requirements are further defined in Part 3.2 of the general permit. These requirements can be met by completing MT DEQ's BMP 201: SWPPP Administrator training course or an equivalent course. If there are questions regarding whether an existing certification meets MT DEQ's requirements, please contact DEQ at (406) 444-3080.

### **Part 3.3. Construction Activity and BMP Schedule and Phasing**

*The SWPPP must include a description of the intended sequence of construction activities, including a proposed implementation schedule and construction sequencing for major activities.*

*If the project is broken up into different phases, these must be identified. The SWPPP must clearly describe the relationship between the phases of construction, and the implementation and maintenance of both structural and non-structural storm water Best Management Practices. The SWPPP must identify the Best Management Practices to be implemented during the different project phases.*

*For the overall construction activity or for each phase of construction activities if multiple phases will occur, the permittee must identify specific components within each of the following categories, including an estimated start date and duration for each component:*

- 3.3.1. *Installation of storm water Best Management Practices, and when they will be made operational;*
- 3.3.2. *Commencement and duration of earth-disturbing activities, including clearing and grubbing, mass grading, site preparation (such as excavating, cutting, and filling), road construction, utility and infrastructure installation, final grading, and creation of soil stockpiles requiring stabilization;*
- 3.3.3. *Cessation, temporarily or permanently, of construction activities on the site, or in designated portions of the site;*

3.3.4. *Final or temporary stabilization of areas of exposed and disturbed soil. The completion of stabilization must meet the requirements in Part 2.1.2. of this permit; and*

3.3.5. *Vertical construction (the construction of structures and buildings);*

3.3.6. *Removal of temporary storm water conveyances/channels and other temporary storm water control measures and/or Best Management Practices, removal of construction equipment and vehicles, and cessation of any potential pollutant-generating activities due to the construction activity.*

**Explanation:** This part of the general permit requires an owner/operator to develop a schedule of activities associated with the construction project. The purpose of developing the schedule is to coordinate construction activities and pollutants associated with each construction activity and the implementation of Best Management Practices to ensure proper storm water management.

**Note:** Phasing is a requirement in the general permit and it is essential for success in managing storm water during construction. Phasing should be considered a project schedule that includes the sequencing of construction activities and associated Best Management Practices to manage pollutant sources associated with the different construction activities. For instance, the Best Management Practices installed or implemented to control erosion and sedimentation during a clearing and grubbing phase would be different than the Best Management Practices implemented during vertical construction because the pollutant sources are different. Dependent upon the construction project, multiple phases may be on-going at one time resulting in multiple types of Best Management Practices being utilized to manage the different pollutants.

The SWPPP is required to describe the specific type and location of Best Management Practices to be used for the proper management of all pollutant sources associated with the construction activity. In order to clearly document these measures, a schedule for implementation is required to be developed. The schedule must provide the estimated date for implementation of each identified Best Management Practice and approximate removal date. The Best Management Practice implementation and removal schedule is to correlate with the schedule of construction activities. A description of how the Best Management Practice will be used on-site is required to be provided in the SWPPP as well. See explanation in Part 3.7 below.

**Note:** Successful phasing incorporates a construction work schedule that limits the area of disturbance at any given moment of the project. The emphasis should be placed on developing a SWPPP that strategically coordinates the timing of land disturbing activities to minimize soil exposure and plans for the timely installation of all erosion and sediment control practices. For instance, disturbing a smaller portion of the overall project, finishing grading and other construction activities, and implementing final stabilization measures before disturbing the next portion of the project area. By reducing the timeframe soil is exposed, erosion and sediment control Best Management Practices will become more manageable, permit violations can be avoided, and cost savings will be incurred. This phasing sequence can be documented as three phases: initial, interim, and final; however, this phasing schedule would be applied to each construction activity associated with the project; therefore, increasing the number of phases.

#### **Part 3.4. Site Description**

*The SWPPP must contain a narrative description of the following:*

3.4.1. *The nature of the construction activity and what is being constructed;*

3.4.2. *A description of all support activities and associated storm water discharges dedicated to the construction activity including but not limited to: material borrow areas, material fill areas, concrete or asphalt batch plants, equipment staging areas, access roads/corridors, material storage areas, and material crushing/recycling/processing areas;*

3.4.3. *The total area of the site (in acres), and the area of the site (in acres) expected to undergo construction-related disturbance (including all construction-related support activities);*

3.4.4. *A description of the character and erodibility of soil(s) and other earth material to be disturbed at the site, including cut/fill material to be used;*

3.4.5. *For a storm water discharge associated with construction activity with construction-related disturbance of five acres or more of total land area:*

- *an estimate of the runoff coefficient of the site, both before and after construction, including a description of what this is based on; and*
- *an estimate of the increase in impervious area after the construction activity identified on the NOI form is completed;*

3.4.6. *The names of receiving state surface waters and a description of the size (area drained), type, and location of each point source discharge or outfall. If there is no distinguishable point source discharge or outfall to the receiving state surface waters, a description of storm water runoff flow and drainage patterns into the receiving state surface waters must be provided. This must specify if discharges are to unnamed drainages and provide the name of the first named drainage that will receive that discharge down gradient of the site. If the discharge is to a municipal separate storm sewer, the location of any storm sewer discharge into receiving state surface waters; and*

3.4.7. *Provide a brief description of the existing vegetation at the site and an estimate of the percent density of vegetative ground cover.*

**Explanation:** This part of the general permit requires a narrative be provided of the overall scope and physical characteristics of the project. Emphasis should be placed on the site characteristics pre, during, and post construction. These descriptions should be used to help develop the SWPPP and select appropriate Best Management Practices to manage pollutant sources throughout the life of the construction project.

Information to be included:

3.4.1. Provide a description of the construction activities at the site and final project detail.

Explain the type of project, provide a summary of major construction activities (clearing, grubbing, grading, excavation, vertical construction, lot development, paving, utility installation, landscaping, etc.) **Note:** information provided in this section can be further developed using the schedule of activities provided in Part 3.3.

3.4.2. Provide a description of all support activities that pertain to the project. Support activities can negatively impact storm water and erosion and sediment controls are not designed to treat common pollutants associated with support activities. Additional support activities include: equipment or vehicle washing, material storage, haul roads, loading and unloading operations, etc.

3.4.3. Provide the total area associated with the construction activity and total area of construction related disturbance. This information is useful in determining the extent and types of Best Management Practices to be used. **Note:** This information must match the information provided in the Notice of Intent.

3.4.4. Provide a description of the soil composition expected to be encountered at the construction site. Proper identification of soil types will aid in successful Best Management Practice selection. **Note:** lengthy data sheets provided by USGS or NRCS offices are not required to be included as part of the SWPPP application package. This information can be used; however, a summary of the soil type(s) is only required.

3.4.5. Provide an estimate of the run-off coefficient and increase in impervious surface. **Note:** 3.4.5. is only required for sites that propose to disturb five or more acres.

3.4.6. Provide the names of all receiving state waters and description of the size, type, and location of each outfall. If there is no discernible outfall, provide a description of the flow and drainage patterns. If the discharge is to a municipal storm sewer system, identify the discharge location for the storm sewer system. **Note:** the information contained in this section is required to match the information provided in the Notice of Intent. Descriptions are to provide a clear

explanation of storm water drainage onto, on-site, and from the site. For instance, runoff generated on-site flows north to the drainage ditch that discharges to Beaver Creek.

3.4.7. Provide a description of existing vegetation and a percent density. **Note:** this information is required to determine when the site has reached final stabilization.

### **3.5. Site Map**

*The SWPPP must include one or more legible site maps/plans of sufficient scale and size which clearly show site conditions. Multiple site maps/plans are encouraged for clarity as necessary. SWPPP site maps/plans must minimally include the following:*

- 3.5.1. *Site boundaries (based on the identified construction activity scope on the NOI form);*
- 3.5.2. *Locations and types of all dedicated construction activity support areas (including off-site) such as access-related work, earth material borrow areas, equipment staging areas, materials storage areas, temporary concrete or asphalt batch plants, and any areas used for fill placement);*
- 3.5.3. *Locations where ground-disturbing activities will occur, noting any phasing of construction activities;*
- 3.5.4. *Preconstruction topography of the site including showing state surface waters which will receive storm water runoff from the site;*
- 3.5.5. *Drainage pattern(s) and flow directions (use arrows) of storm water and authorized non-storm water flow onto, over, and from the site property before and after major grading activities, including lines showing boundaries between different drainage areas;*
- 3.5.6. *Storm water, and allowable non-storm water discharge locations and types, including the locations of any storm drain inlets and where storm water or allowable non-storm water will be discharged to state surface waters;*
- 3.5.7. *Municipal separate storm sewer systems, where the construction activity's storm water discharges are into them;*
- 3.5.8. *Locations and sources of run-on to the site from adjacent property that may contain potential pollutants (including sediment);*
- 3.5.9. *Locations of areas of cut and fill;*
- 3.5.10. *Locations of areas which are to remain undisturbed including vegetative buffer areas;*
- 3.5.11. *Locations of existing vegetation or other pre-existing ground stabilization measures before construction (such as forest, pasture, lawn, pavement, structures);*
- 3.5.12. *Approximate slopes before and after major grading activities. Note areas of steep slopes both before and after grading;*
- 3.5.13. *Locations where sediment, soil, or other construction and building materials will be stockpiled;*
- 3.5.14. *Locations of fueling, vehicle and equipment maintenance, and/or vehicle cleaning and washing areas;*
- 3.5.15. *Locations of concrete washout and other waste management areas;*
- 3.5.16. *Locations of ground water or other construction dewatering activities and discharges (see Part 3.7.9. of this permit);*
- 3.5.17. *Designated points on the site where vehicles will exit onto paved roads;*
- 3.5.18. *Locations of other potential pollutant-generating activities not specified elsewhere;*
- 3.5.19. *Locations of all structural and non-structural Best Management Practices for potential pollutants other than sediment;*
- 3.5.20. *Locations and specific types of all temporary or permanent erosion and sediment control Best Management Practices ;*
- 3.5.21. *Locations and specific types of all storm water control Best Management Practices , including impoundments or conveyances such as retention and detention ponds, ditches, pipes, and swales;*
- 3.5.22. *Locations of structures and other impervious surfaces upon completion of construction;*
- 3.5.23. *Map scale;*
- 3.5.24. *North arrow; and*
- 3.5.25. *Map legend.*

**Explanation:** This part of the general permit requires the development of a site map for each construction project. Items 3.5.1 to 3.5.25 are required to be included and must be clearly indicated on the site map(s). The site map(s) is not required to be drawn to scale; however, the site map(s) should be legible and easy to read. Grading plans provide a good start to developing the site map; however, the grading plans will most likely have to be updated to include the required information. Maps may be available through a local municipality,

government agency, or private company. In either case, a site map is required to be developed and the site map should be a useable scale to identify the construction area and the items within it.

**Note:** Multiple site maps may be required to clearly document the required information and adequately address phasing requirements. Maps that are small in size become un-legible when field updates are continuously made to them. For instance, using one 11.5x16 inch piece of paper to draw a subdivision of 50 acres will become very difficult to understand and use. This will become evident once the site map requirements identified in 3.5.1 to 3.5.25 are included on the map and updates or changes are documented on the same map. Consider developing maps for each phase of construction, each area of the project, and /or each drainage area of the project. The maps will prove to be more usable and understandable for SWPPP Administrators and will easily convey efforts to manage storm water.

### **3.6. Identification and Summary of Potential Pollutant Sources**

*All potential pollutant sources, including materials and activities, associated with the construction activity must be evaluated for the potential to contribute pollutants to storm water discharges. The SWPPP must identify and describe those sources determined to have the potential to contribute pollutants to storm water discharges, and the sources must be controlled through BMP selection and implementation, as required in Part 3.7. below.*

*At a minimum, each of the following sources and activities must be evaluated for the potential to contribute pollutants to storm water discharges, and identified in the SWPPP if found to have such potential:*

- *All disturbed and stored soils;*
- *Vehicle tracking of sediments;*
- *Vehicle trucking of sediments;*
- *Management of contaminated soils;*
- *Loading and unloading operations;*
- *Outdoor storage activities (building materials, fertilizers, chemicals, etc.);*
- *Vehicle and equipment maintenance and fueling;*
- *Significant dust or particulate generation;*
- *Routine maintenance activities involving fuels, oils, solvents, pesticides, herbicides, fertilizers, detergents, etc.;*
- *On-site waste management practices (waste piles, liquid wastes, dumpsters, roll-offs, etc.);*
- *Concrete truck and equipment washing;*
- *Dedicated asphalt and concrete batch plants;*
- *Non-industrial waste sources such as worker trash and portable toilets;*
- *Demolition materials;*
- *Other non-storm water discharges if present; and*
- *Other areas or procedures where potential spills can occur.*

**Explanation:** This part of the general permit requires the identification of all pollutant sources associated with the construction activity that can impact storm water discharges. All these pollutant sources are required to be clearly documented in the SWPPP. Part 3.6 of the general permit provides a list of 16 potential pollutant sources; however, there may be more pollutants than provided. Additionally, any one pollutant may be present in different forms on the construction project; therefore, completing an assessment of the different forms a pollutant may be present is required to be completed. For instance, disturbed soils can be present in areas of shallow grade, steep slopes, stockpiling, channels, etc. By completing this assessment, adequate Best Management Practices can be selected to manage these different forms of disturbed soils.

To complete a thorough assessment of all pollutant sources and various forms, please consider the following:

- Duration of activity resulting in the pollutant(s) – everyday, weekly, monthly; or can it be scheduled during a different timeframe.
- Site characteristics of the area where the activity that is generating the pollutant(s) – pavement, gravel, vegetation; physical characteristics like slope length and gradient
- Is there a means to provide primary and secondary containment at areas where support activities, loading/unloading operations, and materials storage will occur
- Is there existing drainage features that could impact the areas where support activities, loading/unloading operations, and material storage will occur
- Is there an excessive amount of materials or toxic substances that will be stored on-site or can these materials be delivered or transported off-site on a regularly scheduled basis or as the activity occurs

Regardless of the activity that results in the pollutant, all pollutants must be clearly identified in the SWPPP along with all the Best Management Practices to control the pollutants. The expectation is that the owner/operator maintains operational control of all pollutants. In some situations one Best Management Practice may be used to manage more than one pollutant.

**Note:** permit authorization under this general permit does not authorize the discharge of process wastewater. Process wastewater is the co-mingling of non-sediment pollutant sources with storm water, irrigation drainage, ground water, etc. Non-sediment pollutant sources include petroleum products, paints, oils, solvents, stucco, concrete washout, fertilizers, herbicides, masonry liquids, drilling chemicals, etc. In order to ensure proper management of these non-sediment pollutant sources, it is strongly recommended that exposure is limited and/or storage occurs in leak proof storage containers. A documented discharge of these types of pollutants will result in a formal enforcement request.

### **3.7. Description of Best Management Practices (Best Management Practices )**

*The SWPPP must document the location and type of Best Management Practices which have been installed and implemented at the site to achieve the effluent limits in Parts 2.1. and 2.2. of this permit. This documentation must describe how the Best Management Practices at the site address the potential pollutant sources identified in Part 3.6. above. BMP design, installation, implementation, and maintenance specifications for the Best Management Practices identified in the SWPPP must be maintained on-site with the working up-to-date field copy of the SWPPP. The SWPPP submitted to the Department with the NOI Package does not need to include these specifications, but all SWPPPs must specifically identify the source(s) being used for these BMP design, installation, implementation, and maintenance specifications.*

*All copies of the SWPPP must include, but are not limited to, the following:*

#### **3.7.1. Structural Best Management Practices for Erosion and Sediment Control**

*The SWPPP must clearly describe and locate all structural Best Management Practices implemented at the site to minimize erosion and sediment transport. Practices may include, but are not limited to: straw bales, wattles/sediment control logs, sediment control (silt) fences, earth dikes, drainage swales, check dams, sediment traps, subsurface drains, infiltration trenches or basins, pipe slope drains, inlet protection, outlet protection, gabions, retaining walls, temporary drain diversions, and temporary or permanent sediment basins.*

#### **3.7.2. Non-Structural Best Management Practices for Erosion and Sediment Control**

*The SWPPP must clearly describe and locate, as applicable, all non-structural practices implemented at the site to minimize erosion and sediment transport. Descriptions must include interim and permanent*

*stabilization Best Management Practices , and site-specific scheduling for implementation of the practices. The SWPPP must include Best Management Practices to ensure that existing vegetation is preserved as much as practicable. Non-structural Best Management Practices may include, but are not limited to: temporary vegetation, permanent vegetation, mulching, geotextiles, sod stabilization, slope roughening, vegetative buffer strips, protection of trees, preservation of mature vegetation, and administrative controls.*

### **3.7.3. Materials Handling**

*The SWPPP must clearly describe and locate all practices implemented at the site to minimize impacts from procedures or construction/building materials that could contribute potential pollutants to runoff. Such procedures or materials could include, but are not limited to, the following: exposed storage of building materials; paints and solvents; fertilizers or chemicals; and equipment maintenance or fueling procedures.*

### **3.7.4. Dedicated Concrete or Asphalt Batch Plants**

*The SWPPP must clearly describe and locate all practices implemented at the site to control storm water pollution from dedicated concrete batch plants or dedicated asphalt batch plants covered under the submitted NOI.*

### **3.7.5. Vehicle Tracking Control**

*The SWPPP must clearly describe and locate all practices implemented at the site to control potential sediment discharges from vehicle tracking. Practices must be implemented for all areas of potential vehicle tracking, and can include, but are not limited to the following: minimizing site access; street sweeping or scraping; tracking pads; graveled parking areas; requiring that vehicles stay on paved areas on-site; wash racks; contractor education; and/or sediment control Best Management Practices .*

### **3.7.6. Waste Management and Disposal, Including Concrete Washout**

*The SWPPP must clearly describe and locate the Best Management Practices implemented at the site to control storm water pollution from all site wastes (liquid and solid), including concrete washout activities. All site wastes which are generated must be managed and disposed of in accordance with all applicable laws, regulations, and requirements.*

*The Best Management Practices used for concrete washout must ensure that these activities do not result in the contribution of potential pollutants associated with storm water runoff. The SWPPP must clearly describe and locate the Best Management Practices used which will ensure no untreated washout water from concrete washout activities is discharged from the site as surface runoff or to state surface waters.*

### **3.7.7. Stabilization Measures**

*The SWPPP must describe the specific vegetative and/or non-vegetative practices that will be used to achieve temporary and final stabilization on the exposed portions of the site (such as cover crop plantings, mulching or erosion control blankets, surface roughening, etc).*

### **3.7.8. Minimize Ground Disturbance**

*The SWPPP must address measures which have been taken to minimize ground disturbance and preserve pre-existing stabilization measures of earth material as much as possible. This could include a number of considerations such as site access, vehicle management, material/waste management, construction sequencing/phasing, equipment staging areas, and concentrating in areas with close proximity to state surface waters.*

### **3.7.9. Ground Water Dewatering**

*Discharges of ground water due to dewatering practices which will not discharge to state surface waters must be managed by appropriate Best Management Practices , and these must be identified in the SWPPP. The ground water dewatering practices and Best Management Practices must be identified on the site map required under Part 3.5. of this permit.*

*Discharges of ground water due to dewatering practices which will discharge to state surface waters are not authorized under this permit and must obtain appropriate authorization under a separate MPDES permit, which is typically the MPDES "General Permit for Construction Dewatering", Permit Number MTG070000. If this occurs and this separate MPDES permit authorization is obtained, these dewatering practices and Best Management Practices must be identified in the SWPPP. The ground water dewatering practices and Best Management Practices must be identified on the site map required under Part 3.5. of this permit.*

### **3.7.10. Operational Controls**

*If not addressed elsewhere, the SWPPP must address Best Management Practices which will be used on a day-to-day basis on the site to reduce or eliminate the contribution of potential pollutants in storm water runoff, such as good housekeeping activities to maintain a clean and orderly site, and removal of accumulated sediment on or off the site as much as practicable. For non-sediment potential pollutant sources, common potential problem areas to address would be waste management areas, storage areas, loading/unloading areas, and drums/tanks/containers. For example, measures could include a routine periodic schedule for the managing/removal of waste materials and source reduction practices.*

### **3.7.11. Spill Prevention and Response Procedures**

*The SWPPP must describe procedures to be followed to prevent and respond to spills, leaks, and other releases. This must include procedures for expeditiously stopping, containing, and cleaning up spills, leaks, and other releases. Adequate spill prevention and response procedures are addressed through worker training and having an up-to-date SPCC plan with a spill response kit on-site.*

### **3.7.12. Off-Site Vehicle Trucking of Sediment**

*When trucking saturated soils from the site, either tight leak-proof trucks must be used or loads must be required to drain until drippage has been reduced to less than one gallon per hour before leaving the site.*

### **3.7.13. Local Sediment and Erosion Control Requirements**

*The SWPPP must include a description of any and all applicable local erosion and sediment control requirements.*

**Explanation:** This part of the general permit requires the identification of all the Best Management Practices that will be used to manage all the pollutants associated with the construction activity. The general permit requires the specific type and location of all selected Best Management Practices be provided in the SWPPP and site map(s). Additionally, each Best Management Practice identified in the SWPPP is required to have a design, installation, implementation, and maintenance specification provided. In order to properly select and document Best Management Practices, an accurate description of the construction activity (Part 3.3), proper site evaluation and description (Part 3.4), and description of how the Best Management Practice will be used is required to be provided in the SWPPP (Part 3.7).

**Note:** When selecting Best Management Practices consider the following:

- 1.) Focus Best Management Practice selection on erosion control.
- 2.) Best Management Practices function best when used in conjunction with each other – i.e. use of erosion control practices with sediment control methods.
- 3.) Do not rely on one type of Best Management Practice – i.e. reliance on sediment controls only.
- 4.) Eliminate or minimize the exposure of non-sediment pollutant sources.

Emphasis of Best Management Practice selection should remain focused on prevention. Treatment alone of storm water discharges is not a cost effective means to manage pollutants. For instance, minimizing the area of disturbance at any given moment during the construction activity will directly result in less Best Management Practices being implemented/installed on-

site; therefore, reducing the cost of structural Best Management Practices and all associated maintenance, repairs, and replacements that will result from having to manage and provide treatment for large areas of disturbance.

After selecting Best Management Practices for prevention, Best Management Practices must be evaluated for treatment to aid in improving the quality of storm water discharges. For instance, using temporary sediment traps or basins and/or post construction Best Management Practices for active construction is a viable means to provide treatment provided site conditions are evaluated. Additionally, modifications to these types of Best Management Practices may be necessary to ensure proper function during active construction. See 3.9 of this guidance document for additional information.

Although Best Management Practice selection is dependent upon individual discretion, pollutant sources and site characteristics are required to be evaluated to ensure proper selection and field application.

**Note:** Best Management Practices included in the SWPPP are required to be adequately designed and implemented/installed to provide control of pollutant sources associated with the construction activity and minimize and/or prevent degradation of state waters. This requires the use of good engineering, hydrologic, and pollution control practices. Best Management Practices should be selected from well-accepted references that come with detailed design, installation, implementation, and maintenance specifications.

Best Management Practice selection and implementation is required by an owner/operator so that treatment is provided before discharge occurs from the permitted project area. The expectation is that the owner/operator maintains operational control of all the pollutant sources associated with the construction activity. In order to demonstrate compliance with this requirement, the following criteria must be met:

- 1.) The owner/operator has operational control of the Best Management Practices
- 2.) Best Management Practices are implemented/installed per the requirements of the general permit
- 3.) Best Management Practices are implemented/installed per the developed and up-to-date SWPPP

If an owner/operator wishes to use Best Management Practices outside of the permitted project area, the owner/operator must receive permission from the other party. This permission must be documented in the owner/operator's SWPPP in the form of an agreement. The agreement must outline the intended use and all inspection and maintenance responsibilities.

**Note:** Emphasis of Best Management Practice implementation should be placed on source control, i.e. preventing erosion and minimizing exposure, however, there will be circumstances in which treatment, i.e. sediment controls, will be required. Treating sediment laden storm water run-off is not a preferred method, especially when used alone.

In order to adequately address the Best Management Practice description requirements in the general permit, the following five questions must be addressed in the SWPPP:

- 1.) What Best Management Practice will be implemented/installed?
- 2.) When will the Best Management Practice be implemented/installed?
- 3.) Where will the Best Management Practice be implemented/installed?
- 4.) How will the Best Management Practice be implemented/installed?

### 5.) When will the Best Management Practice be removed?

Providing detailed descriptions of these five questions for each Best Management Practice selected for the management of pollutants will also aid in fulfilling the requirements in Parts 3.3, 3.5, and 3.7 of the general permit.

Part 3.7.6 of the general permit requires the proper management of solid and liquid wastes so that a discharge to state waters does not occur. **Note:** the discharge of concrete washout, petroleum products, chemicals, fertilizers, etc., are considered discharges of process wastewater; therefore, separate MPDES permit coverage is required to discharge this wastewater. **The general permit does not authorize the discharge of concrete washout to state surface waters or to storm sewer systems. Also, the general permit does not authorize the permanent disposal of concrete washout waste on-site.**

Part 3.7.9 of the general permit requires a description of dewatering activities. Please review **Notes** in Part B: General Guidance, Complying with the Non-Numeric Technology Based Effluent Limits of this guidance document for additional information regarding construction dewatering activities.

Part 3.7.13 of the general permit requires a description be provided of local erosion and sediment control requirements. This part specifically pertains, but is not limited to municipalities that are operating under the general permit for Storm Water Discharge Associated with Small Municipal Storm Sewer System. If the project area falls within a municipality please contact the municipality to obtain appropriate permits before construction activities start.

The information required to be provided in this section is a description of local requirements, if applicable. For instance, permit number, review process, description of required Best Management Practices, agreements with and/or other requirements of the municipality.

### **3.8. Final Stabilization**

*The SWPPP must clearly describe all procedures and Best Management Practices used to ensure that "final stabilization," as defined in Part 5 of this permit and ARM 17.30.1102(5), is achieved.*

*Final stabilization considerations for Best Management Practices used to obtain a vegetative cover could include, but are not limited to, the following: seed mix selection and application methods; soil preparation and amendments; soil stabilization practices (such as crimped straw, hydromulch, or rolled erosion control products); and appropriate sediment control Best Management Practices as needed until final stabilization is achieved.*

*For all areas with construction-related ground disturbance, final stabilization must be achieved uniformly over the entire disturbed area, without relatively bare areas based on the pre-disturbance conditions. If using seed or planted vegetation to achieve final stabilization, the plants must be perennial. Before submitting the NOT form to terminate coverage under this permit, in addition to achieving final stabilization the following must have also occurred:*

- *removal of temporary storm water conveyances/channels and other temporary storm water control measures and/or Best Management Practices*
- *removal of construction equipment and vehicles, and*
- *cessation of any potential pollutant-generating activities due to the construction activity.*

**Explanation:** This part of the general permit requires a description of the measures that will be taken to ensure final stabilization occurs on-site and the methods that will be used to establish final stabilization. Final stabilization is defined as the time at which all soil disturbing activities are completed, and a vegetative cover has been established of at least 70% of pre-disturbance levels, or equivalent permanent, physical erosion reduction methods have been employed. This means that final stabilization is required to be achieved in all areas of the construction site that

will remain pervious. Once final stabilization has been achieved a Notice of Termination (NOT) can be submitted to DEQ.

**Note:** The final stabilization description provided in the SWPPP is required to include the following items:

- 1.) Areas to implement final stabilization measures
- 2.) Types of seed mix
- 3.) Application type
- 4.) Soil preparation requirements, including amendments if necessary
- 5.) Soil stabilization measures
- 6.) Timeframe to implement these measures

The general permit requires the implementation of final stabilization measures immediately upon completing construction activities in any portion of the project. If final stabilization measures cannot be implemented immediately, temporary or interim stabilization measures are required to be implemented. These temporary or interim stabilization measures are required to be maintained until final stabilization measures are implemented. Temporary or interim stabilization measures include mulching, seeding, erosion control blankets, hydroseeding, and tackifiers.

**Note:** silt fence, straw wattles, berms, sediment basins and traps are not considered temporary stabilization measures; however, these structural Best Management Practices may be required to be used and maintained in conjunction with temporary or interim stabilization measures until final stabilization has occurred.

**Note:** seeding alone is not considered a sufficient Best Management Practices to manage disturbed area; therefore, supplemental Best Management Practices are required to be implemented/installed and managed until seeding has established and final stabilization has been achieved.

Additional areas that include the requirement for final stabilization are the site's drainage system and any permanent storm water controls for post construction. If accumulated sediment is observed in any portion of the project, it must be removed, returned to site, and stabilization measures must be implemented. This also pertains to the removal of temporary structural Best Management Practices (silt fence, straw wattles, rock check dams, earthen berms, etc.)

**Note:** the removal of temporary structural Best Management Practices may cause additional disturbance; therefore, an owner/operator will be unable to submit a NOT until the area of disturbance caused by the removal of the temporary Best Management Practice is stabilized.

### **3.9. Post-Construction Storm Water Management**

*The SWPPP must also clearly describe any Best Management Practices which are to be used to control storm water and potential pollutants in storm water discharges that will occur after construction operations have been completed at the site, including any applicable local requirements. Such measures may include, but are not limited to, the following: storm water detention structures (including wet ponds), storm water retention structures, flow attenuation by use of open vegetated swales and natural depressions, storm water run-on control/diversion measures, and infiltration of runoff on-site. In addition, for post-construction storm water management at constructed/developed sites, the Department is encouraging the use of "Low Impact Development" (LID) and "Green Infrastructure" Best Management Practices, where such practices are practicable, that infiltrate, evapotranspire, or capture for reuse the storm water runoff generated from the majority of expected storm events.*

**Explanation:** This part of the general permit requires a description of any planned storm water management controls to minimize or prevent pollution to state water and manage storm water after construction activities are completed. These measures typically include retention ponds, detention ponds, infiltration ponds, vegetative swales, other natural depressions, and any other design feature.

**Note:** The use of post-construction Best Management Practices is acceptable during active construction provided the following information is clearly documented in the SWPPP:

- 1.) Use of the Best Management Practice
- 2.) A description of the Best Management Practice
- 3.) A detailed specification drawing
- 4.) A maintenance plan

Please remember that the design intention of this type of Best Management Practice is for post-construction; therefore, the Best Management Practice will have to be modified for use during active construction to ensure adequate treatment before discharge to state waters. These modifications are required to use good engineering, hydrologic, and pollution control practices and must be documented in the SWPPP. For instance, modifications may include increasing capacity of the post-construction design and increasing holding time to ensure water is treated adequately before discharge. Additionally, one of the most important aspects of using a post-construction Best Management Practice during active construction is ensuring the runoff from the construction area flows into the Best Management Practice, thus project phasing is essential. Finally, additional up-gradient Best Management Practices are still necessary to be implemented/installed to provide adequate protection of state waters.

In order to file a NOT with DEQ, the post-construction Best Management Practice must achieve final stabilization. If there is accumulated sediment in the post-construction Best Management Practice, the sediment must be removed, returned to site, and final stabilization measures must be implemented. Dependent upon local requirements, the post-construction Best Management Practice might have to be inspected by local authorities before submitting a NOT.

### **3.10. Inspection and BMP Maintenance Procedures**

*The SWPPP must identify and clearly describe the inspection and maintenance procedures implemented at the site to maintain all erosion and sediment control and other Best Management Practices identified in the SWPPP, in good and effective operating condition. These documented procedures must comply with the inspection requirements in Part 2.3. of this permit (also refer to Parts 2.3.5., 2.4., 3.3., and 3.7. of the permit for related BMP maintenance requirements).*

**Explanation:** This part of the general permit requires a description of the inspection and maintenance procedures that will be performed and documented. An inspection schedule must be selected from Part 2.3 of the general permit. The schedules are as follows:

- 1.) Once every seven calendar days. –OR–
- 2.) Once every 14 calendar days and within 24 hours of a rainfall event of 0.25 inches or greater, and within 24 hours of a snowmelt event that causes visible surface erosion.

Once selected, the inspection schedule is not permitted to alternate between the schedules above. All inspections are required to be performed during normal business hours. Inspections are permitted to be reduced to once every 30 calendar days when the entire project has gone inactive or enters a period of temporary shutdown. If any portion of the project remains active, the inspection schedule originally identified is required to be completed throughout the entire

project area. Any changes in inspection frequency are required to be documented in the corresponding inspection report and updated in the SWPPP.

**Note:** Inspections may have to be completed at an increased frequency. The required inspection schedule provided in the general permit is the minimum; however, environmental conditions may warrant increased inspections. For instance, the project is in winter shut down and the site conditions are frozen. The project is in a monthly inspection schedule frequency; however, the long term forecast is calling for a warming trend that will potentially cause run-off conditions. The SWPPP Administrator decides to complete weekly inspections to document changing site conditions, complete Best Management Practice maintenance, and implement additional Best Management Practices. These actions being completed by the SWPPP Administrator are preventative, will reduce long-term maintenance, and help avoid items of potential noncompliance; therefore, avoiding permit violations.

The purpose of completing and documenting inspections is to evaluate site conditions, identify pollutants, ensure Best Management Practices are implemented/installed correctly, are in effective operating condition, and to evaluate the effectiveness of the SWPPP. The goal is ensure water quality is being protected per the requirements of the general permit. Inspection reports are to clearly document unidentified pollutants, the need for additional Best Management Practices, Best Management Practice maintenance, replacement, failures, and any items of noncompliance, including discharges of pollutants from the construction project. The required areas to be inspected and information to be documented are detailed in Part 2.3.4 of the general permit.

Maintenance procedures are required to be clearly documented in this section of the SWPPP. Maintenance procedures are to be designed with good engineering, hydrologic, and pollution control practices. These procedures must address Best Management Practices that are no longer in effective operating condition and preventative maintenance procedures to ensure continued effective operating condition. If a Best Management Practice is selected with a design, installation, implementation and maintenance specification that provides a detailed description of the maintenance procedures, the SWPPP can provide a cross-reference to the Best Management Practice specification. If the Best Management Practice specification does not provide a maintenance description, one must be developed and included in the SWPPP for the Best Management Practice. In either case, all identified Best Management Practices must have a clearly documented maintenance procedure.

Maintenance, replacement, and repairs, or the implementation of additional Best Management Practices is required to be completed before the next storm event. Storm events are considered rainfall, snowfall, and/or runoff events that include snowmelt. Again, the emphasis of the SWPPP is on prevention; therefore, inspections are required to address pollutant sources and Best Management Practices to ensure pollutants are being effectively managed and Best Management Practices are in effective operating condition.

**Note:** providing a specific maintenance schedule is necessary to ensure Best Management Practices are maintained in effective operating condition and/or are replaced before the next storm event. Maintenance schedules that include language like “to be determined” or “as necessary” are typically deemed inadequate because maintenance is seldom completed in a timely fashion. For instance, a vehicle track pad was installed at an entry/exit location for the management of off-site tracking. The maintenance schedule provided a description that included “track pad will be maintained as needed.” In this situation, it is highly recommended that the maintenance schedule of the track pad be completed based on the traffic volume entering/exiting the site. If the construction project requires import and export of materials, maintenance will most likely be required on a daily basis to ensure effective operating condition.

Also, additional materials or alternative means to manage tracking may have to be available to ensure the Best Management Practice is maintained according to the design specification provided in the SWPPP and storm water discharges are adequately being managed. Conversely, during periods of low traffic volume, maintenance could be reduced to weekly. In these situations, providing a detailed schedule of maintenance clearly indicates a point of evaluation to determine the adequacy of the Best Management Practices implemented and ensuring storm water discharges are being managed per the requirements of the general permit.

### **3.11. Water Quality Controls for Discharges to Impaired Waterbodies**

*The permittee's SWPPP must include a section describing how the SWPPP will control storm water discharges associated with construction activity which may contain pollutants of concern for which the receiving state surface waters are listed as impaired waterbodies on the State's 303(d) list, and ensure storm water discharges will not cause or contribute to instream exceedences of water quality standards.*

*This description must specifically identify whether the potential downgradient receiving surface water is listed as an impaired waterbody. In making this determination, the permittee must consider and incorporate potential storm water drainage from the site which will flow into the impaired waterbody through tributaries and subsequent downgradient drainage in the watershed for the impaired waterbody. If this downgradient receiving surface water is listed as impaired, then the permittee must determine and identify whether the specified pollutants of concern for the impaired waterbody match potential pollutants generated at the construction activity site (such as sediment). If these match, the description must specifically address and identify Best Management Practices which will be used to adequately address the pollutant of concern (such as Best Management Practices to address sediment).*

*Information and maps (to locate the construction activity site with respect to the downgradient receiving state surface waters) on impaired waterbodies and their pollutants of concern may be obtained through the Department website at <http://www.deq.mt.gov>. As of the issuance date of this permit, the specific website link is <http://cwaic.mt.gov>.*

**Explanation:** This part of the general permit requires the identification of impaired waterbodies and the identification of specific Best Management Practices to control pollutants. Impaired waterbodies are state waters that have been degraded and cannot fully support the beneficial uses defined in the Montana Water Quality Act. Typically, a waterbody is listed for an impairment that is caused by a pollutant or a series of pollutant(s). For instance, a waterbody could be identified as being impaired for sediment, nutrients, metals, *E. Coli*, etc. Impaired waterbodies are listed by DEQ on the State's 303(d) list.

If the construction activity proposes to discharge to an impaired waterbody or a tributary of an impaired waterbody, specific Best Management Practices will have to be implemented to control the specific pollutants that have degraded the waterbody. This requirement only pertains to pollutants associated with the construction activity that the waterbody is listed for on the State's 303(d) list. For instance, the waterbody the construction activity proposes to discharge too is identified as being impaired for nutrients. The construction activity includes implementing final stabilization measures that require soil amendments or fertilizers. The fertilizers will be stored on-site for the duration of the construction activity. The SWPPP identifies the pollutant as fertilizers and proposes Best Management Practices that will minimize exposure during precipitation events. These Best Management Practices include storing fertilizers in a sealed storage container, applying the fertilizers at the recommended manufacturers' application rates, and applying them during timeframes when rainfall is not predicted to occur.

Each waterbody the construction activity proposes to discharge to along with any downstream receiving waterbody must be evaluated and identified to determine if the waterbody is on the State's 303(d) list. If an impaired waterbody is identified, adequate Best Management Practices

are required to be implemented to control the pollutants that waterbody is listed for on the 303(d) list. Information regarding listed waterbodies on the State's 303(d) list can be found at:

[Montana Department of Environmental Quality \(DEQ\) - CWAIC Home](#)

**Note:** Identification and management of all pollutants is required regardless of whether the proposed discharge location is to a waterbody identified on the State's 303(d) list.

### **3.12. SWPPP Revisions and Updates**

*The SWPPP must be maintained and kept up-to-date to reflect current site conditions as stated below. Also see Parts 2.3.5. and 2.4. of this permit.*

3.12.1. A SWPPP Administrator must revise the SWPPP:

- *When there is a change in design, construction, operation, or maintenance of the site, which would require the implementation of new or revised Best Management Practices ; or*
- *If the SWPPP proves to be ineffective in achieving the general objectives of controlling potential pollutants in storm water discharges associated with construction activity; or*
- *When Best Management Practices are no longer necessary and are removed.*

*SWPPP changes must be made before changes in the site conditions, except as allowed for in Part 3.12.2. below. SWPPP revisions must include, but are not limited to: potential pollutant source identification; selection of appropriate Best Management Practices for site conditions; BMP maintenance procedures; and interim and final stabilization practices. The SWPPP changes may include a schedule for further BMP design and implementation, provided that, if any interim Best Management Practices are needed to comply with the permit, these interim Best Management Practices are also included in the SWPPP and implemented during the interim period.*

3.12.2. *SWPPP changes addressing BMP installation and/or implementation are often required to be made in response to changing conditions, or when current Best Management Practices are determined ineffective. SWPPP revisions must be made in accordance with the following requirements:*

- *The SWPPP must be revised as soon as practicable, but in no case more than 72 hours after the change(s) in BMP installation and/or implementation occurs at the site; and*
- *A SWPPP Revision/Update Log must be maintained identifying all SWPPP modifications. For BMP changes, log entries must include the time and date of the change(s) in the field, an identification of the BMP(s) removed or added, the location(s) of those BMP(s), and the name of the SWPPP Administrator authorizing the change.*

**Explanation:** This part of the permit requires the SWPPP be maintained up-to-date to reflect current site conditions. Additionally, a description or explanation of how the SWPPP will be updated should be provided. Construction activities are dynamic in nature. The SWPPP is to be considered a document that reflects these changes. Updates to the SWPPP can be a result of changing site conditions, i.e. stockpile movement; changing of phases of construction, i.e. grading to vertical construction; identification of new pollutant sources, i.e. form oil due to foundation pours; and/or the need for new or additional Best Management Practices. In any case, the SWPPP is required to document these changes to ensure all pollutant sources are being properly managed. Typically, these changes are identified during the routine inspections required by Parts 2.3 and 3.10 of the general permit; however, there may be additional changes required because the project schedule, project scope, and/or environmental conditions have changed.

At a minimum, the SWPPP is required to be updated no more than 72 hours when the following conditions are met:

- When there is a change in design, construction, operation, or maintenance of the site, which would require the implementation of new or revised Best Management Practices ; or
- If the SWPPP proves to be ineffective in achieving the general objectives of controlling potential pollutants in storm water discharges associated with construction activity; or
- When Best Management Practices are no longer necessary and are removed.

Consider the SWPPP to be a document that is continuously being reviewed to determine its effectiveness in managing pollutants and storm water discharges. For acceptable methods on how-to-complete updates to the SWPPP, please refer to Part B: General Guidance, Records Management of this guidance document.

Please visit [www.deq.mt.gov/wqinfo/mpdes/stormwaterconstruction.mcp](http://www.deq.mt.gov/wqinfo/mpdes/stormwaterconstruction.mcp) for forms, supplemental information, and additional guidance material. Contact the Water Protection Bureau at (406) 444-3080 with any questions or comments.