



COLORADO DISCHARGE PERMIT SYSTEM (CDPS) GENERAL PERMIT COR400000

STORMWATER DISCHARGES ASSOCIATED WITH
CONSTRUCTION ACTIVITY

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I. Guidance Document Purpose Statement

The purpose of this guidance document is to provide instruction and assistance to the regulated community on how to properly develop, revise, or maintain, a Stormwater Management Plan for compliance with CDPS General Permit COR400000, Stormwater Discharge Associated with Construction (the Construction Stormwater Permit). This guide explains each stormwater management plan requirement, and gives some options for you to consider in developing or revising stormwater control measures that are best suited to your site.

The procedures and/or methods described in this document are provided for information only. This guidance is not meant to modify or replace permit language or applicable laws and regulations. In the event of a conflict between this guidance and permit language or applicable laws and regulations, the permit and/or laws and regulations shall govern. It remains the responsibility of the permittee to read and fully understand the terms and requirements of all permits, law, and regulations.

For the purposes of this document, the term “stormwater management plan” is noted as the “plan.”

The Construction Stormwater Permit was renewed and issued on October 31, 2018, and effective on April 1, 2019. The updates required to maintain stormwater management plan compliance beginning on April 1, 2019 with the Construction Stormwater Permit are detailed in Appendix A of this document.

II. Introduction

Stormwater runoff is water from rain or snowmelt that does not immediately infiltrate into the ground, and instead flows across the land. Runoff from areas where construction activities are conducted can contain pollutants when runoff moves over and across construction sites and picks ups and carries natural and human-made pollutants associated with construction materials and carries them into lakes, rivers, wetlands, and into MS4 systems. Typically, sediment from disturbed areas is the main pollutant source at construction sites.

An electronic version of the Construction Stormwater Permit is available on the Water Quality Control Division’s website.

Summary of Authorized Discharges

Stormwater Discharges
Construction activity
Borrow or fill sites (within ¼ mile of a construction site)
Dedicated asphalt or concrete batch plants and masonry mixing stations
Non-Stormwater Discharges
Uncontaminated springs
Concrete washout water ¹
Landscape irrigation return flow
Emergency fire fighting

¹ Only to the ground, as conditions allow per the permit

Note that the Construction Stormwater Permit only authorizes the discharges of those stormwater and those non-stormwater sources listed in Part I.A.1 of the Construction Stormwater Permit. The permit does not cover discharges currently covered under an individual permit or a division Low Risk Discharge Guidance developed in accordance with the Low Risk Discharge Policy (WQCD Policy 27).

The division’s Low Risk Discharge Guidance for Discharges of Uncontaminated Groundwater to Land allows the discharge of construction dewatering to the ground, under specific conditions, when appropriate control measures are implemented. It does not allow discharge of construction dewatering of non-stormwater to be discharged to surface waters or to storm sewer systems without separate permit coverage under the division’s General Permit for Construction Dewatering Discharges (COG070000), the General Permit for Remediation Activities Discharging to Surface Water (COG315000), or the General Permit for Remediation Activities Discharging to Ground Water (COG316000). Although the Construction Stormwater Permit does not authorize the conditional discharge of construction dewatering to the ground, discharges of uncontaminated groundwater to land may be covered under the Low Risk Discharge Guidance when all the provisions in the guidance document are adhered to.

Stormwater Management Plan Goal

To identify possible pollutant sources at the construction site that may contribute pollutants to stormwater, and identify control measures that, when implemented in accordance with good engineering, hydrologic, and pollution control practices, will reduce or eliminate any possible water quality impacts.

A stormwater management plan shall be developed for each construction site covered by the Construction Stormwater Permit.

The stormwater management plan must be completed and implemented at the time the project breaks ground, and revised as construction proceeds, to accurately reflect the conditions and practices on site.

III. Stormwater Management Plan General Requirements

1. General requirements

- A stormwater management plan (“plan”) shall be developed for each construction site covered by the Construction Stormwater Permit prior to commencement of construction activities.
 - For public emergency related sites a plan shall be created no later than 14 days after the commencement of construction activities.
- The plan shall be prepared in accordance with good engineering, hydrologic and pollution control practices
 - The plan need not be prepared by a registered engineer.
- *The permittee need only submit the plan to the division upon request, it is not required with the application for the Construction Stormwater Permit.*
- The permittee must implement the provisions of the plan as written and updated, from commencement of construction activity until final stabilization is complete.
- A copy of the plan must be retained onsite or be onsite when construction activities are occurring at the site unless the permittee specifies another location and obtains approval from the division.

Definition: Good Engineering, Hydrologic and Pollution Control Practices

Methods, procedures, and practices that:

- Are based on basic scientific fact(s).
- Reflect best industry practices and standards.
- Are appropriate for the conditions and pollutant sources.
- Provide appropriate solutions to meet the associated permit requirements, including practice based effluent limits.

2. Signatory Requirements for Documents Submitted to the Division

- Documents required for submittal to the division in accordance with the Construction Stormwater Permit, including applications for permit coverage and other documents as requested by the division, must include signatures by both the owner and the operator, except for instances where the duties of the owner and operator are managed by the owner.
 - Examples include the permit application and Attachment A (completed at the time of a division inspection of the site to certify the plan).
 - It does NOT include permittee site inspection reports.

Definition: Owner

The party that has overall control of the activities and that has funded the implementation of the construction plans and specifications. This is the party with ownership of, a long term lease of, or easements on the property on which the construction activity is occurring

Definition: Operator

The party that has operational control over day-to-day activities at a project site which are necessary to ensure compliance with the permit. This party is authorized to direct individuals at a site to carry out activities required by the permit.

- The permittee, or the duly authorized representative shall make and sign the following certification on all such documents:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

3. Consistency with Other Plans

- The permittee may incorporate, by reference, applicable portions of plans prepared for other purposes at their facility. Plans or portions of plans incorporated by reference must be available along with the plan.

4. Required plan Modifications

At nearly every site, the implemented control measures will have to be modified to adapt to changing site conditions, or to ensure that potential pollutants are consistently and properly managed. The pollutant sources and management practices at a site must be reviewed on an ongoing basis. When control measures or other site conditions change, the plan must be modified to accurately reflect the actual field conditions. Examples include, but are not limited to, removal of control measures, identification of new potential pollutant sources, addition of control measures, modification of control measure installation and implementation criteria or maintenance procedures, and changes in items included in the site map and/or description. The plan should be viewed as a living document that is continuously being reviewed and modified as part of the overall process of assessing and managing stormwater quality issues at the site.

- The plan must be amended when the following occurs:
 - A change in design, construction, operation, or maintenance of the site requiring implementation of new or revised control measures;
 - The plan proves ineffective in controlling pollutants in stormwater runoff in compliance with the permit conditions;
 - Control measures identified in the plan are no longer necessary and are removed; and
 - Corrective actions are taken onsite that result in a change to the plan.
- For plan revisions made prior to or following a change(s) onsite, including revisions to sections addressing site conditions and control measures, a notation must be included in the plan that identifies:
 - The date of the site change, the control measure removed, or modified,
 - The location(s) of those control measures, and
 - Any changes to the control measure(s).
- The permittee must ensure the site changes are reflected in the plan. The permittee is noncompliant with the Construction Stormwater Permit until the plan revisions have been made.

IV. Stormwater Management Plan Requirements

Stormwater Management Plan Checklist

Use the table in Appendix B to track and review the completeness of the stormwater management plan. Refer to both the relevant sections of this guidance and the Construction Stormwater Permit for complete information on the required contents for the plan.

Stormwater Management Plan Contents

Your plan must contain the following nine elements, described in detail in the following pages:

1. Qualified Stormwater Manager
2. Spill Prevention and Response Plan
3. Materials Handling
4. Potential Sources of Pollution
5. Implementation of Control Measures
6. Site Description
7. Site map
8. Final Stabilization and Long Term Stormwater Management.
9. Inspection Reports

1. Qualified Stormwater Manager

Your plan must identify the qualified stormwater manager(s) for the site.

Definition: Qualified Stormwater Manager

An individual knowledgeable in the principles and practices of erosion and sediment control and pollution prevention, and with the skills to assess conditions at construction sites that could impact stormwater quality and to assess the effectiveness of stormwater controls implemented to meet the requirements of this permit.

2. Spill Prevention and Response Plan

Your plan must include procedures for preventing, responding to and reporting spills and leaks.

In general, spill prevention and response procedures should include the following:

- Notification procedures to be used in the event of an accident. At the very least, the Qualified Stormwater Manager should be notified. Depending on the nature of the spill and the material involved, the Colorado Department of Public Health and Environment (24-hour spill reporting line - 877-518-5608), downstream water users, or other agencies may also need to be notified;
- Instructions for clean-up procedures, and identification of spill kit location(s);
- Provisions for absorbents to be made available for use in fuel areas, and for containers to be available for used absorbents; and
- Procedures for properly washing out concrete truck chutes and other equipment in a manner and location so that the materials and wash water cannot discharge from the site, and never into a storm drain system or stream.

Specifically, a release of any chemical, oil, petroleum product, sewage, etc., which may enter waters of the State of Colorado (which include surface water, ground water and dry gullies or storm sewers leading to surface water) must be reported. More guidance is available on the division's website.

The division's toll-free 24-hour number for environmental hazards and chemical spills and releases is 1-877-518-5608.

3. Materials Handling

Your plan must describe and locate all control measures implemented at the site to minimize impacts from handling significant materials that could contribute pollutants to runoff.

These handling procedures can include control measures for pollutants and activities such as:

- Exposed storage of building material,
- Paints and solvents,
- Landscape materials,
- Fertilizers or chemicals,
- Sanitary waste material,
- Trash,
- Equipment maintenance, or
- Fueling procedures.

Where materials can impact stormwater runoff, existing and planned practices that reduce the potential for pollution must be described. For example, materials could be stored and handled in covered areas to prevent contact with stormwater, and chemicals should be stored within berms or other secondary containment devices to prevent leaks and spills from contacting stormwater runoff.

Definition: Significant Materials

Include, but not limited to:

- Raw materials;
- Fuels;
- Materials such as solvents, detergents, and plastic pellets;
- Finished materials such as metallic products;
- Raw materials used in food processing or production;
- Hazardous substances designated under section 101(14) of CERCLA;
- Any chemical the permittee is required to report under section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA);
- Fertilizers;
- Pesticides; and
- Waste products such as ashes, slag and sludge that have the potential to be released with stormwater discharges.

Definition: Control measure

Any best management practice or other method used to prevent or reduce the discharge of pollutants to state waters. Control measures include, but are not limited to, best management practices. Control measures can include other methods such as the installation, operation, and maintenance of structural controls and treatment devices.

Definition: Minimize

Reduce or eliminate to the extent achievable using control measures that are technologically available and economically practicable and achievable in light of best industry practice.

4. Potential Sources of Pollution

The plan must list all potential sources of pollution which may reasonably be expected to affect the quality of stormwater discharges associated with construction activity from the site. This shall include, but is not limited to, the following pollutant sources:

- Disturbed and stored soils;
- Vehicle tracking of sediments;
- Management of contaminated soils;
- Loading and unloading operations;
- Outdoor storage activities (erodible building materials, fertilizers, chemicals, etc.);
- Vehicle and equipment maintenance and fueling;
- Significant dust or particulate generating processes (e.g., saw cutting material, including dust);
- Routine maintenance activities involving fertilizers, pesticides, herbicides, detergents, fuels, solvents, oils, etc.;
- On-site waste management practices (waste piles, liquid wastes, dumpsters);
- Concrete truck/equipment washing, including washing of the concrete truck chute and associated fixtures and equipment;
- Dedicated asphalt, concrete batch plants and masonry mixing stations;
- Non-industrial waste sources such as worker trash and portable toilets.

5. Implementation of Control Measures

Your plan must include design specifications that contain information on the implementation of the control measure in accordance with good engineering hydrologic and pollution control practices. Control measures must be implemented to control all pollutant sources at the site.

When selecting control measures, consider first those that limit the source of the pollutant. It is much more efficient, from both a cost and environmental standpoint, to prevent the pollution in the first place than to clean up polluted stormwater. For example, mulching disturbed ground to reduce erosion, in most

cases, is easier and more effective than trying to capture and treat sediment-laden runoff before it reaches state waters.

Redundant control measure use is highly recommended to eliminate reliance on any one (or two) control measures, and is often necessary to provide an adequate treatment train to remove pollutants in runoff. In particular, inlet protection, when implemented without appropriately installed and maintained up gradient control measures for runoff from disturbed areas, is inadequate. Inlet protection does not provide a mechanism for pollutant removal from disturbed areas without additional or adequate control measures that are designed and installed for the pollutant source, because the inlet protection design must enable the inlet to function without completely blocking flows into the inlet in a manner that causes localized flooding.

Although it is acceptable, and often advisable when used in conjunction with redundant control measures, to locate structural control measures in areas of concentrated flow (e.g., check dams along drainage ditches, detention ponds, etc.), remember that removing sediment from stormwater is often not as efficient a practice as preventing erosion in the first place, and that once erosion starts, additional sediment control measures will almost always be necessary to prevent the discharge of sediment from the site. The most efficient construction site control measures are those that prevent erosion from occurring.

Be sure to check with the local city, county, or drainage authority to determine if they require that specific design criteria be met.

Control measures must be located:

- Prior to the stormwater leaving the control of the permittee, i.e., where the permittee is capable of ensuring the control measures' proper operation and maintenance.
- Prior to discharge to a receiving water defined as Waters of the United States (see below section on Protecting Waters of the US); and
- Prior to discharge into a municipal storm sewer or other stormwater collection system not owned by the permittee (unless specific permission is granted).

A preventive maintenance program should prevent control measure breakdowns and failures by proactively maintaining or replacing control measures and equipment. Site inspections, as described in Section V of this document, should uncover any conditions, such as deteriorating silt fence or water collected in fuel tank secondary containment, which could result in the discharge of pollutants to storm sewers and surface waters. For example, sediment that has been collected by sediment controls, such as silt fence and inlet protection, should be removed on a regular basis, to prevent failure of control, and remove the potential of that sediment from being discharged from the site if the control measure did fail. Removed sediment must be moved to an appropriate location where it will not become an additional pollutant source, and should never be placed in ditches or streams.

Your plan must include the following information, as applicable:

- Drawings,

- Dimensions,
- Installation information,
- Materials,
- Implementation processes,
- Control measure-specific inspection expectations,
- Maintenance requirements, and
- A documented use agreement between the permittee and the owner or operator of any control measures located outside of the permitted area, which are utilized by the permittee’s construction site for compliance with the Construction Stormwater Permit, but not under the direct control of the permittee. Your plan must also include design specifications for these control measures, as detailed above.

Control Measure Specification Template

Refer to Appendix C for a template for control measure specifications.

Structural vs Nonstructural Control Measures

- **Structural Control Measures:** Physical devices that prevent or minimize water quality impacts
 - Examples: Sediment basin, silt fence, vehicle track pad
- **Nonstructural Control Measures:** The implementation of methods, practices, and procedures to minimize water quality impacts
 - Examples: Preventative maintenance procedures, sweeping

Erosion vs Sediment Control Measures

- **Erosion Control Measures:** Practices that prevent or minimize the erosion of soil
 - Examples: Phasing, temporary stabilization
- **Sediment Control Measures:** Practices to remove sediment from runoff
 - Examples: Erosion control logs (straw wattle), inlet protection

Helpful Resources For Selecting Appropriate Control Measures:

Urban Storm Drainage Criteria Manual Volume 3 - Best Management Practices (Urban Drainage and Flood Control District)

This BMP Manual includes discussion of stormwater quality management and control measures for many activities, including construction. Commonly used by cities and counties in the Denver metropolitan area.
<http://www.udfcd.org/>

National Menu of Stormwater Best Management Practices (EPA)
Guidance for cities and counties who are required to develop programs to regulate construction activities in their jurisdiction (under the construction tab).

<http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm>

International Stormwater BMP Database

Database of monitoring results showing effectiveness of structural and non- structural control measures
<http://www.bmpdatabase.org>

6. Site description

Your plan must include a narrative site description including, at a minimum, the following components:

- The nature of the construction activity at the site;
- The proposed schedule for the sequence for major construction activities and the planned implementation of control measures for each phase. (e.g.: clearing, grading, utilities, vertical, etc.);
- Estimates of the total acreage of the site, and the acreage expected to be disturbed by clearing, excavation, grading, or any other construction activities;
- A summary of any existing data used in the development of the construction site plans or plan that describe the soil or existing potential for soil erosion;
 - The source of this data must be included in the plan
- A description of the percent of existing vegetative ground cover relative to the entire site and the method for determining the percentage;
 - To meet this requirement, the permittee shall include an estimate of the pre-disturbance percent density of vegetative ground cover (also known as plant density, vegetation density, or percent cover). This description should be site specific and detail the pre-existing, natural vegetation conditions. If information directly related to the

pre-disturbance or pre-existing natural vegetation for a site is not known, this information can be based on available information of natural vegetation densities in the area, or on conditions at a similar site in the area that is undisturbed or that has established non-irrigated vegetation. Additionally, the permittee must describe how the percent density of vegetative ground cover was determined for the site.

- A description of any allowable non-stormwater discharges at the site, including those being discharged under a division low risk discharge guidance policy;
 - Low risk discharge guidance is available on the division website.
- A description of areas receiving discharge from the site, including a description of the immediate source receiving the discharge. If the stormwater discharge is to a municipal separate storm sewer system, the name of the entity owning that system, the location of the storm sewer discharge, and the ultimate receiving water(s); and
- A description of all stream crossings located within the construction site boundary. This should include at least the following information:
 - the location within the site;
 - the stream name;
 - a description of any disturbed upland areas that may contribute to the stream at the stream crossing locations; and
 - a description of the control measures implemented for those contributing disturbed upland areas.

Definition: Receiving Water

Any classified or unclassified surface water segment (including tributaries) in the State of Colorado into which stormwater associated with construction activities discharges. This definition includes all water courses, even if they are usually dry, such as borrow ditches, arroyos, and other unnamed waterways.

7. Site map

Your plan must include a site map which includes, at a minimum, the following:

- Construction site boundaries;
- Flow arrows that depict stormwater flow directions on-site and runoff direction;
- All areas of ground disturbance including areas of borrow and fill;
- Areas used for storage of soil;
- Locations of all waste accumulation areas, including areas for liquid,

concrete, masonry, and asphalt;

- Locations of dedicated asphalt and/or concrete batch plants, and masonry mixing stations;
- Locations of all structural control measures;
- Locations of all non-structural control measures;
- Locations of springs, streams, wetlands and other state waters, including areas that require pre-existing vegetation be maintained within 50 feet of a receiving water, where determined feasible; and
- Locations of all stream crossings located within the construction site boundary.

Your site map does not need to be drawn to scale, but it should be legible and easy to read. Maps that are part of the construction plans, such as a grading plan, are a good base for developing the site map, if they are amended to include all required information as discussed below. Local municipalities may also have maps suitable as bases to begin mapping procedures. If no other suitable base maps are available, one must be developed. Regardless of the source of the base map, the site map needs to be of suitable scale to show the construction portion of the site and the features within it.

8. Final stabilization and long term stormwater management

The plan must include a description of what measures will be taken to finally stabilize the site. The method of stabilization must be provided for all areas that will remain pervious (i.e., vegetated or landscaped instead of paved, built on, or otherwise structurally stabilized). Questions that may need to be addressed include: What type of cover will be used? What are the specific seed mixtures and application rates? Are additional BMPs needed to prevent erosion as the vegetation becomes established? Will the soil need to be amended? Will special methods be employed on any steep slopes or areas of concentrated flow?

The description, or portions of the description, can often be found within a site's Final Landscaping plans. These plans can be used to provide the information required. However, the stormwater management plan must reference the Final Landscaping plans, and the Final Landscaping plans must be available on site to meet this requirement.

Your plan must describe:

- The practices used to achieve final stabilization of all disturbed areas at the site and
- Any planned practices to control pollutants in stormwater discharges that will occur after construction operations are completed (detention/retention ponds, rain gardens, stormwater vaults, etc.).

Definition: Final Stabilization

The condition reached when all ground surface disturbing activities at the site have been completed, and for all areas of ground surface disturbing activities where a uniform vegetative cover has been established with an individual plant density of at least 70 percent of pre-disturbance levels, or equivalent permanent, physical erosion reduction methods have been employed.

9. Site inspection reports

Your plan must include your documented inspection reports, as described in the section below.

V. Site Inspections

1. Person responsible for conducting inspections

The inspector must be a qualified stormwater manager (see definition on Page 7 of this document).

2. Inspection frequency

Permittees must conduct the first site inspection within seven calendar days of the commencement of construction activities on site. Permittees must conduct site inspections in accordance with one of the following minimum frequencies:

- At least one inspection every 7 calendar days.
- At least one inspection every 14 calendar days, PLUS post-storm event inspections conducted within 24 hours after the end of any precipitation or snowmelt event that causes surface erosion.
 - Post-storm inspections may be used to fulfill the 14-day routine inspection requirement.

Permittees may conduct inspections on either the 7 day or 14 day schedule, and may switch between these schedules as appropriate for the site. The inspection schedule must be noted on the inspection reports, as noted below.

When site conditions make the required schedule impractical, the permittee may petition the division to grant an alternate inspection schedule. The alternative inspection schedule may not be implemented prior to written approval by the division and incorporation into the plan.

Permittees must conduct site inspections at least once every 7 calendar days for sites that discharge to a water body designated as an Outstanding Water by the Water Quality Control Commission.

3. Reduced inspection frequency

- Post-Storm Inspections at Temporarily Idle Sites
 - For permittees choosing to combine 14-day inspections and post-storm-event inspections, if no construction activities will occur following a storm event, post-storm event inspections must be conducted prior to re-commencing construction activities, but no later than 72 hours following the storm event. The delay of any post-storm event inspection must be documented in the inspection record. Routine inspections must still be conducted at least every 14 calendar days.
- Inspections at Completed Sites/Areas
 - When the site, or portions of a site are awaiting establishment of a vegetative ground cover and final stabilization, the permittee must conduct a site inspection at least once every 30 days.
 - Post-storm event inspections are not required.
 - This reduced inspection schedule is allowed if all of the following criteria are met:
 - All construction activities resulting in ground disturbance are complete;
 - All activities required for final stabilization, in accordance with the plan, have been completed, with the exception of the application of seed that has not occurred due to seasonal conditions or the necessity for additional seed application to augment previous efforts; and
 - The plan has been amended to locate those areas to be inspected on a reduced schedule.
- Winter Conditions Inspections Exclusion
 - Inspections are not required for sites that meet all of the following conditions:
 - Construction activities are temporarily halted,
 - Snow cover exists over the entire site for an extended period, and
 - Melting conditions posing a risk of surface erosion do not exist.
 - When this inspection exclusion is implemented, the following information must be documented in the inspection reports:
 - Dates when snow cover existed;
 - Date when construction activities ceased; and
 - Date melting conditions began.

4. Inspection scope

Inspect the following areas for evidence of, or the potential for, pollutants leaving the construction site boundaries, entering the stormwater drainage system, or discharging to state waters:

- Construction site perimeter;
- All disturbed areas;
- Designated haul routes;
- Material and waste storage areas exposed to precipitation;
- Locations where stormwater has the potential to discharge offsite; and
- Locations where vehicles exit the site.

Inspections must include the following requirements:

- Visually verify whether all implemented control measures are in effective operational condition and are working as designed in their specifications to minimize pollutant discharges.
- Determine if there are new potential sources of pollutants.
- Assess the adequacy of control measures at the site to identify areas requiring new or modified control measures to minimize pollutant discharges.
- Identify all areas of non-compliance with the Construction Stormwater Permit requirements and, if necessary, implement corrective action as described below.

Helpful resource for inspections:

See Appendix D for an example of
Facility Inspection Documentation

What to include in your inspection reports:

At a minimum, the inspection report must include:

- The inspection date;
- Name(s) and title(s) of personnel conducting the inspection;
- Weather conditions at the time of inspection;
- Phase of construction at the time of inspection;
- Estimated acreage of disturbance at the time of inspection
- Location(s) of discharges of sediment or other pollutants from the site;
- Location(s) of control measures needing maintenance;
- Location(s) and identification of inadequate control measures;
- Location(s) and identification of additional control measures are needed that were not in place at the time of inspection;
- Description of the minimum inspection frequency and any deviations from the minimum inspection schedule;
- After adequate corrective action(s) and maintenance have been taken, or where a report does not identify any incidents requiring corrective action or maintenance, the report shall contain the following statement

“I verify that, to the best of my knowledge and belief, all corrective action and maintenance items identified during the inspection are complete, and the site is currently in compliance with the permit.”

VI. Routine Maintenance

The permittee must ensure that all control measures remain in effective operating condition and are protected from activities that would reduce their effectiveness. Control measures must be maintained in accordance with good engineering, hydrologic and pollution control practices.

During inspections, or upon general observations of the site, the permittee must identify control measures that require routine maintenance (see definition below). Control measures observed during inspections that require routine maintenance should be noted in the inspection reports, as stated above in Section V. However, these items are not subject to the requirements for corrective actions, as described below in Section VII.

Definition: Control measure requiring routine maintenance

Any control measure that is still operating in accordance with its design and the requirements of this permit, but requires maintenance to prevent a breach of the control measure.

Example: Removing sediment from behind a sediment control log that is less than $\frac{1}{2}$ the height of the control measure

VII. Corrective Actions

The permittee must assess the adequacy of control measures at the site, and the need for changes to those control measures, to ensure continued effective performance.

When an inadequate control measure (see definition below) is identified (i.e., new or replacement control measures become necessary), the following corrective action requirements apply. The permittee is in noncompliance with the Construction Stormwater Permit until the inadequate control measure is replaced or corrected and returned to effective operating condition.

Definition: Inadequate Control Measure

Any control measure that is not designed or implemented in accordance with the requirements of the permit and/or any control measure that is not implemented to operate in accordance with its design.

Example: Removing sediment from behind a sediment control log that is at or more than $\frac{1}{2}$ the height of the control measure.

- The permittee must take all necessary steps to minimize or prevent the discharge of pollutants, until a control measure is implemented and made operational and/or an inadequate control measure is replaced or corrected and returned to effective operating condition.
 - If it is infeasible to install or repair of control measure immediately after discovering the deficiency, the following information must be documented and kept on record:
 - Describe why it is infeasible to initiate the installation or repair immediately; and
 - Provide a schedule for installing or repairing the control measure and returning it to an effective operating condition as soon as possible.

Definition: Infeasible

Not technologically possible, or not economically practicable and achievable in light of best industry practices.

- If applicable, the permittee must remove and properly dispose of any unauthorized release or discharge (e.g., discharge of non-stormwater, spill, or leak not authorized by the Construction Stormwater Permit). The permittee must also clean up any contaminated surfaces to minimize discharges of the material in subsequent storm events.

VIII. Other Required Noncompliance Notifications

The permittee shall report the following circumstances orally within twenty-four (24) hours from the time the permittee becomes aware of the circumstances, and shall mail to the division a written report containing the information requested within five (5) working days after becoming aware of the following circumstances:

- Circumstances leading to any noncompliance which may endanger health or the environment regardless of the cause of the incident (these types of circumstances would primarily result from the discharge of pollutants in violation of the Construction Stormwater Permit);
- Circumstances leading to any unanticipated bypass which exceeds any effluent limitations in the Construction Stormwater Permit;
- Circumstances leading to any upset which causes an exceedance of any effluent limitation in the Construction Stormwater Permit;
- Daily maximum violations for any of the pollutants limited by Part I of the Construction Stormwater Permit. This includes any toxic pollutant or hazardous substance or any pollutant specifically identified as the method to control any toxic pollutant or hazardous substance (these types of circumstances would primarily result from an exceedance of a numeric effluent).

Definition: Bypass

The intentional diversion of waste streams from any portion of a treatment facility

Definition: Upset

An exceptional incident in which there is unintentional and temporary noncompliance with permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation

Appendix A: Stormwater Management Plan Requirement Changes in the Construction Stormwater Permit Renewal Effective April 1, 2019

Permit Topic	COR400000 requirement (Permit Section)	Previous COR030000 requirement (Permit Section)
Stormwater Management Plan General Requirements		
Allowable Non-Stormwater Discharges	The Construction Stormwater Permit does not authorize discharges currently covered by a division Low Risk Guidance [including the Low Risk Discharge Guidance for Discharges of Uncontaminated Groundwater to Land] (I.A.2.c)	The permit authorizes discharge of construction dewatering to ground water, given the conditions provided in the permit are met (I.D.3.d)
Plan Completion Requirements	The stormwater management plan must be complete prior to the commencement of any construction activity (I.A.3.b.iv)	The stormwater management plan must be complete at the time the permittee applies for a permit (I.A.4.a)
	For public emergency related sites, a plan shall be created no later than 14 days after the commencement of construction activities (I.C.1.a.i)	No language included in the previous permit
Permittee Requirements	Both the owner and the operator must apply as permittees, except for instances where the duties of the owner and operator are managed by the owner (I.A.3.e)	Either the owner or the operator may apply as the permittee (I.A.4.b)
Plan Modifications	For plan revisions made prior to or following a change(s) onsite, including revisions to sections addressing site conditions and control measures, a notation must be included in the plan that identifies: the date of the site change; the control measure removed, or modified; the location(s) of those control measures; and any changes to the control measure(s) (I.C.3)	Responsive plan changes only must include a notation in the plan prior to the site change(s) that includes the time and date of the change(s) in the field, an identification of the control measures removed or added, and the location of those control measures. For plan changes made prior to changes in site conditions, the plan must be updated but the changes do not need to be annotated (I.D.5)
Stormwater Management Plan Contents		
Qualified Stormwater Manager	The plan shall identify the qualified stormwater manager(s) for the site. This is an individual knowledgeable in the principles and practices of erosion and sediment control and pollution prevention, and with the skills to assess conditions at construction sites that could impact stormwater quality and to assess the effectiveness of stormwater controls implemented to meet the requirements of this permit (I.C.2.a.i)	The plan shall identify the stormwater management plan administrator for the site. This is a specific individual(s), position or title who is responsible for developing, implementing, maintaining, and revising the plan. The activities and responsibilities of the

		administrator shall address all aspects of the facility's plan (I.C.3.a)
Implementation of control measures: Requirements for control measures outside of the permitted area	The plan must include a documented use agreement between the permittee and the owner or operator of any control measures located outside of the permitted area, that are utilized by the permittee's construction site for compliance with the Construction Stormwater Permit, but not under the direct control of the permittee. The plan must also include design specifications for these control measures (I.C.2.v)	No language included in the previous permit
Site description: Stream crossings	The plan site description must include a description of all stream crossings located within the construction site boundary (I.C.2.vi.h)	No language included in the previous permit
Site map: Flow direction arrows	The plan site map must include flow arrows that depict stormwater flow directions on-site and runoff direction (I.C.2.vii.b)	No language included in the previous permit
Site map: Areas requiring pre-existing vegetation to be maintained	The plan site map must include areas that require pre-existing vegetation be maintained within 50 feet of a receiving water, where determined feasible (I.C.2.vii.i)	No language included in the previous permit
Site map: Stream crossings	The plan site map must include locations of all stream crossings located within the construction site boundary (I.C.2.vii.j)	No language included in the previous permit
Site inspections		
Person conducting inspections	The permittee is responsible for ensuring that the inspector is a qualified stormwater manager (I.D.1)	No language included in the previous permit
Inspection frequency	Permittees must conduct the first site inspection within seven calendar days of the commencement of construction activities on site (I.D)	No language included in the previous permit
	Permittees must conduct site inspections in accordance with one of the following minimum frequencies: 1) At least one inspection every 7 calendar days. OR 2) At least one inspection every 14 calendar days, PLUS post-storm event inspections conducted within 24 hours after the end of any precipitation or snowmelt event that causes surface erosion (I.D.2)	Permittees must conduct a site inspection at least once every 14 calendar days, as well as conduct post storm inspections within 24 hours after the end of any precipitation or snowmelt event that causes surface erosion (I.D.6.a)

	Permittees must conduct site inspections at least once every 7 calendar days for sites that discharge to a water body designated as an Outstanding Water by the Water Quality Control Commission (I.D.3)	No language included in the previous permit
Inspection report content: weather conditions	At a minimum, the inspection report must include the weather conditions at the time of the inspection (I.D.5.c.iii)	No language included in the previous permit
Inspection report content: construction phase	At a minimum, the inspection report must include the phase of construction at the time of inspection (I.D.5.c.iv)	No language included in the previous permit
Inspection report content: disturbed acreage	At a minimum, the inspection report must include the estimated acreage of disturbance at the time of the inspection (I.D.5.c.v)	No language included in the previous permit
Inspection report content: inspection frequency	At a minimum, the inspection report must include a description of the minimum inspection frequency utilized when conducting each inspection (I.D.5.c.x)	No language included in the previous permit
Inspection report content: compliance statement	After adequate corrective action(s) and maintenance have been taken, or where a report does not identify any incidents requiring corrective action or maintenance, the report shall contain a statement as required in Part I.A.3.f., stating the following: “I verify that, to the best of my knowledge and belief, all corrective action and maintenance items identified during the inspection are complete, and the site is currently in compliance with the permit.” This must be signed by a Qualified Stormwater Manager (I.D.5.c.xii, I.A.3.f)	After adequate corrective action(s) have been taken, or where a report does not identify any incidents requiring corrective action, the report shall contain a signed statement indicating the site is in compliance with the permit to the best of the signer’s knowledge and belief (I.D.6.b.2.viii)
Corrective actions	If it is infeasible to install or repair of control measure immediately after discovering the deficiency, the following information must be documented and kept on record: 1) Describe why it is infeasible to initiate the installation or repair immediately; and 2) Provide a schedule for installing or repairing the control measure and returning it to an effective operating condition as soon as possible (I.B.1.c.i)	No language included in the previous permit

Appendix B: Stormwater Management Plan Content Checklist

	Yes	No
i) Qualified Stormwater Manager - Does the SWMP list individual(s) by title and name who are designated as the site's qualified stormwater manager(s) responsible for implementing the SWMP in its entirety?		
ii) Spill Prevention and Response Plan - Does the SWMP have a spill prevention and response plan?		
iii) Materials Handling - Does the SWMP describe and locate all control measures implemented at the site to minimize impacts from handling significant materials that could contribute pollutants to runoff		
iv) Potential Sources of Pollution - Does the SWMP list all potential sources of pollution which may reasonably be expected to affect the quality of stormwater discharges associated with construction activity from the site. This shall include, but is not limited to, the following pollutant sources:		
a) disturbed and stored soils		
b) vehicle tracking of sediments		
c) management of contaminated soils		
d) loading and unloading operations		
e) outdoor storage activities (erodible building materials, fertilizers, chemicals, etc.)		
f) vehicle and equipment maintenance and fueling		
g) significant dust or particulate generating processes (e.g., saw cutting material, including dust)		
h) routine maintenance activities involving fertilizers, pesticides, herbicides, detergents, fuels, solvents, oils, etc.		
i) on-site waste management practices (waste piles, liquid wastes, dumpsters)		
j) concrete truck/equipment washing, including washing of the concrete truck chute and associated fixtures and equipment		
k) dedicated asphalt, concrete batch plants and masonry mixing stations		
l) non-industrial waste sources such as worker trash and portable toilets		
vi) Implementation of Control Measures - Does the SWMP include design specifications that contain information on the implementation of the control measure in accordance with good engineering hydrologic and pollution control practices; including as applicable drawings, dimensions, installation information, materials, implementation processes, control measure-specific inspection expectations, and maintenance requirements.		
Notes:		

	Yes	No
vi) Site Description - Does the SWMP include a site description which includes, at a minimum, the following:		
a) the nature of the construction activity at the site		
b) the proposed schedule for the sequence for major construction activities and the planned implementation of control measures for each phase. (e.g.: clearing, grading, utilities, vertical, etc.)		
c) estimates of the total acreage of the site, and the acreage expected to be disturbed by clearing, excavation, grading, or any other construction activities		
d) a summary of any existing data used in the development of the construction site plans or SWMP that describe the soil or existing potential for soil erosion		
e) a description of the percent of existing vegetative ground cover relative to the entire site and the method for determining the percentage		
f) a description of any allowable non-stormwater discharges at the site, including those being discharged under a division low risk discharge guidance policy		
g) a description of areas receiving discharge from the site. Including a description of the immediate source receiving the discharge. If the stormwater discharge is to a municipal separate storm sewer system, the name of the entity owning that system, the location of the storm sewer discharge, and the ultimate receiving water(s)		
h) a description of all stream crossings located within the construction site boundary		
Notes:		

	Yes	No
vii) Site Map - Does the SWMP include a site map which includes, at a minimum, the following:		
a) construction site boundaries		
b) flow arrows that depict stormwater flow directions on-site and runoff direction		
c) all areas of ground disturbance including areas of borrow and fill		
d) areas used for storage of soil		
e) locations of all waste accumulation areas, including areas for liquid, concrete, masonry, and asphalt		
f) locations of dedicated asphalt, concrete batch plants and masonry mixing stations		
g) locations of all structural control measures		
h) locations of all non-structural control measures		
i) locations of springs, streams, wetlands and other state waters, including areas that require pre-existing vegetation be maintained within 50 feet of a receiving water, where determined feasible in accordance with Part I.B.1.a.i.(d)		
j) locations of all stream crossings located within the construction site boundary		
viii) Final Stabilization and Long Term Stormwater Management - Does the SWMP describe the practices used to achieve final stabilization of all disturbed areas at the site and any planned practices to control pollutants in stormwater discharges that will occur after construction operations are completed. Including but not limited to, detention/retention ponds, rain gardens, stormwater vaults, etc		

Notes:

	Yes	No
ix) Inspection Reports - Does the SWMP include documented inspection reports in accordance with Part I.D. of the permit?		
a) Is the inspector a qualified stormwater manager?		
b) Do the inspection records meet the minimum required inspection frequency identified on the inspection reports? <ul style="list-style-type: none"> • What minimum inspection frequency is being implemented at the site? • Is a reduced inspection frequency being implemented? 		
c) Were the following areas inspected for evidence of, or the potential for, pollutants leaving the construction site boundaries, entering the stormwater drainage system, or discharging to state waters:		
1) Construction site perimeter		
2) All disturbed areas		
3) Designated haul routes		
4) Material and waste storage areas exposed to precipitation		
5) Locations where stormwater has the potential to discharge offsite		
6) Locations where vehicles exit the site		
d) Do the inspection records include the following requirements:		
1) Visually verify whether all implemented control measures are in effective operational condition and are working as designed in their specifications to minimize pollutant discharges		
2) Determine if there are new potential sources of pollutants		
3) Assess the adequacy of control measures at the site to identify areas requiring new or modified control measures to minimize pollutant discharges		
4) Identify all areas of non-compliance with the permit requirements and, if necessary, implement corrective action as described below		
e) Do the inspection reports include, at a minimum, the following items:		
1) The inspection date		
2) Name(s) and title(s) of personnel conducting the inspection		
3) Weather conditions at the time of inspection		
4) Phase of construction at the time of inspection		
5) Estimated acreage of disturbance at the time of inspection		
6) Location(s) of discharges of sediment or other pollutants from the site		
7) Location(s) of control measures requiring routine maintenance		
8) Location(s) and identification of inadequate control measures and requiring corrective actions		
9) Location(s) and identification of additional control measures are needed that were not in place at the time of inspection		
10) Description of the minimum inspection frequency and any deviations from the minimum inspection schedule		
11) After adequate corrective action(s) and maintenance have been taken, or where a report does not identify any incidents requiring corrective action or maintenance, the report shall contain the following statement: “I verify that, to the best of my knowledge and belief, all corrective action and maintenance items identified during the inspection are complete, and the site is currently in compliance with the permit.”		

Notes:

Appendix C: Control Measure Specification Template

Control Measure Name

Description

Describe the control measure and what pollutant sources it will provide effective treatment for (part I.C.2.a.iv of the permit). Include the mechanism used for treatment of the pollutant source.

Implementation

Describe how the control measure will be implemented in accordance with good engineering, hydrologic and pollution control practices. Include the phase(s) of construction the control measure will be implemented for.

Installation Procedures

Describe the process required to install the control measure and have it adequately treat the intended pollutant source. Include specific depths, lengths, materials, and any other applicable information necessary to properly install the control measure.

Inspection Expectations

Describe how often the control measure will be inspected and what key features should be checked during each inspection (is the silt fence tail entrenched, are the straw wattles staked ever 4 feet, etc.)

Maintenance Requirements

Describe maintenance requirements, such as how to repair damaged sections, what qualifies as a failed control measure and when it needs to be replaced. Also include criteria that would trigger maintenance (i.e. 50% capacity of the control measure has been reached).

Control Measure Diagram



Appendix D: Stormwater Inspection Report Template

Facility Name		Permittee					
Date of Inspection		Weather Conditions					
Permit Certification #		Disturbed Acreage					
Phase of Construction		Inspector Title					
Inspector Name							
Is the above inspector a qualified stormwater manager? (permittee is responsible for ensuring that the inspector is a qualified stormwater manager)			<table border="1"> <tr> <td>YES</td> <td>NO</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>	YES	NO	<input type="checkbox"/>	<input type="checkbox"/>
YES	NO						
<input type="checkbox"/>	<input type="checkbox"/>						

INSPECTION FREQUENCY		
Check the box that describes the minimum inspection frequency utilized when conducting each inspection		
At least one inspection every 7 calendar days	<input type="checkbox"/>	
At least one inspection every 14 calendar days, with post-storm event inspections conducted within 24 hours after the end of any precipitation or snowmelt event that causes surface erosions	<input type="checkbox"/>	
<ul style="list-style-type: none"> This is this a post-storm event inspection. Event Date: _____ 	<input type="checkbox"/>	
Reduced inspection frequency - Include site conditions that warrant reduced inspection frequency	<input type="checkbox"/>	
<ul style="list-style-type: none"> Post-storm inspections at temporarily idle sites 	<input type="checkbox"/>	
<ul style="list-style-type: none"> Inspections at completed sites/area 	<input type="checkbox"/>	
<ul style="list-style-type: none"> Winter conditions exclusion 	<input type="checkbox"/>	
Have there been any deviations from the minimum inspection schedule? If yes, describe below.	YES	NO
	<input type="checkbox"/>	<input type="checkbox"/>

INSPECTION REQUIREMENTS*
i. Visually verify all implemented control measures are in effective operational condition and are working as designed in the specifications
ii. Determine if there are new potential sources of pollutants
iii. Assess the adequacy of control measures at the site to identify areas requiring new or modified control measures to minimize pollutant discharges
iv. Identify all areas of non-compliance with the permit requirements, and if necessary, implement corrective action
*Use the attached Control Measures Requiring Routine Maintenance and Inadequate Control Measures Requiring Corrective Action forms to document results of this assessment that trigger either maintenance or corrective actions

AREAS TO BE INSPECTED			
Is there evidence of, or the potential for, pollutants leaving the construction site boundaries, entering the stormwater drainage system or discharging to state waters at the following locations?			
	NO	YES	If "YES" describe discharge or potential for discharge below. Document related maintenance, inadequate control measures and corrective actions Inadequate Control Measures Requiring Corrective Action form
Construction site perimeter	<input type="checkbox"/>	<input type="checkbox"/>	
All disturbed areas	<input type="checkbox"/>	<input type="checkbox"/>	
Designated haul routes	<input type="checkbox"/>	<input type="checkbox"/>	
Material and waste storage areas exposed to precipitation	<input type="checkbox"/>	<input type="checkbox"/>	
Locations where stormwater has the potential to discharge offsite	<input type="checkbox"/>	<input type="checkbox"/>	
Locations where vehicles exit the site	<input type="checkbox"/>	<input type="checkbox"/>	
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	

REPORTING REQUIREMENTS

The permittee shall report the following circumstances orally within twenty-four (24) hours from the time the permittee becomes aware of the circumstances, and shall mail to the division a written report containing the information requested within five (5) working days after becoming aware of the following circumstances. The division may waive the written report required if the oral report has been received within 24 hours.

All Noncompliance Requiring 24-Hour Notification per Part II.L.6 of the Permit
a. Endangerment to Health or the Environment Circumstances leading to any noncompliance which may endanger health or the environment regardless of the cause of the incident (See Part II.L.6.a of the Permit) <i>This category would primarily result from the discharge of pollutants in violation of the permit</i>
b. Numeric Effluent Limit Violations <ul style="list-style-type: none"> ○ Circumstances leading to any unanticipated bypass which exceeds any effluent limitations (See Part II.L.6.b of the Permit) ○ Circumstances leading to any upset which causes an exceedance of any effluent limitation (See Part II.L.6.c of the Permit) ○ Daily maximum violations (See Part II.L.6.d of the Permit) <i>Numeric effluent limits are very uncommon in certifications under the COR400000 general permit. This category of noncompliance only applies if numeric effluent limits are included in a permit certification.</i>

Has there been an incident of noncompliance requiring 24-hour notification?	NO <input type="checkbox"/>	YES <input type="checkbox"/>	If "YES" document below
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Date and Time of Incident	Location	Description of Noncompliance	Description of Corrective Action	Date and Time of 24 Hour Oral Notification	Date of 5 Day Written Notification *

*Attach copy of 5 day written notification to report. Indicate if written notification was waived, including the name of the division personnel who granted waiver.

After adequate corrective action(s) and maintenance have been taken, or where a report does not identify any incidents requiring corrective action or maintenance, the individual(s) designated as the Qualified Stormwater Manager, shall sign and certify the below statement:

“I verify that, to the best of my knowledge and belief, all corrective action and maintenance items identified during the inspection are complete, and the site is currently in compliance with the permit.”

Name of Qualified Stormwater Manager

Title of Qualified Stormwater Manager

Signature of Qualified Stormwater Manager

Date

Notes/Comments