

Colorado Department of Transportation (CDOT) Municipal Separate Storm Sewer System (MS4)

Pollution Prevention Good Housekeeping Program Description Document (PDD)

Revised

3/01/2022

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1. Overview

The Colorado Department of Transportation's (CDOT's) municipal separate storm sewer system (MS4) is permitted under the Colorado Discharge Permit System (CDPS). The permit—CDPS Permit No. COS000005 (MS4 permit)—requires CDOT to implement seven program areas to reduce pollutants from entering state waters [Colorado Department of Public Health and Environment, 2015]. The permit further requires CDOT to develop a Program Description Document (PDD) for each of the MS4 Program areas that details how CDOT administers and implements the program area to include specific items that must be provided. This PDD is specific to the Pollution Prevention and Good Housekeeping (PPGH) Program.

This PPGH PDD is a narrative description of the PPGH Program implementation to meet the MS4 Permit requirements and to help avoid contributing pollutants to Colorado's surface water. The PDD also includes a PDD index, which is a list of citation(s) and location(s) for supporting documents for control measures, inspections, training and other procedures to which the program applies as required by Part I.E.6.c of the MS4 Permit.

The PPGH PDD will be updated as necessary to reflect current conditions, practices, and design standards.

The PPGH PDD is intended to provide flexibility in accommodating program specific MS4 Permit requirements and other information to guide effective program implementation.

This PPGH PDD is not only meant to address CDOT MS4 Permit regulatory requirements but will be an important tool to identify and reduce pollutant discharges into surface waters.

1.1. MS4 Program Area

CDOT's MS4 Permit applies to all areas of the Colorado state highway system and associated rights-of-way (ROWs), as well as all properties owned and operated by CDOT within the CDOT MS4 Phase I and Phase II permit areas. Properties owned and operated by CDOT in another permittee's permit area are covered by the CDOT's permit, which includes cities, counties, and specially designated areas. The permit lists several cities that meet the definition of "another permittee's permit area." Detailed mapping information for CDOT's MS4 areas can be found on C-Plan ([C-Plan MS4 Boundary](#)) or the CDOT Online Transportation Information System (<http://dtdapps.coloradodot.info/otis>). Once under the Environmental App, select the layer for MS4 "date to current".

1.2. Updates to this Guidance and Additional Resources

The PPGH PDD will be updated as MS4 program area details and approaches are refined and finalized. Updates are posted to the CDOT Stormwater Programs website, and the PDD Index tracks the revision history of each critical document.

Each year, the PPGH Program is reviewed. Recommendations on whether or not modifications should be considered, as specified in Part I.G.1 Annual Program Review and Part I.I.1.f "the results of the permit modifications assessment and if any parts of this permit need to be modified or a condition of the permit may not be practical" of the reporting requirements.

2. Program Information

2.1 Program History

The goal of the Colorado Department of Transportation's (CDOT's) Pollution Prevention and Good Housekeeping Program (PPGH) is to reduce the discharge of pollutants to the MS4 or Colorado surface waters from CDOT's facilities and maintenance operations. The program seeks to achieve this goal by developing procedures for several types of CDOT maintenance facilities and operations and providing training to CDOT maintenance personnel on proper implementation and inspection procedures in accordance with Part I.E.6 of the MS4 Permit. This PDD is a tool for the CDOT Water Quality Section, PPGH MS4 Manager, CDOT regions, regulators, Division of Maintenance & Operations (DM&O) and other interested parties to understand how the PPGH Program is tracked and evaluated for stormwater management.

The PPGH Program was originally developed in 2001 and modified under the MS4 Permit issued on December 28, 2006. The main objectives of the program rewrite under the 2006 MS4 Permit were to develop Facility Runoff Control Plans (FRCPs) for all Phase II MS4 Areas and to update the Phase I MS4 Areas. The CDOT's *Manual of Maintenance Procedures Appendix C* includes control measure practices to address stormwater quality management during maintenance activities. FRCPs were either updated or completed for all Phase I & Phase II facilities by 2012, and the Manual of Maintenance Procedures Environmental Section was updated September 2017 to include Appendix C, detailing Control Measures Practices. The PPGH Program was again updated under the current MS4 Permit issued on July 28, 2015.

2.2 Program Operation Coverage

The PPGH Program operates within CDOT's MS4 boundaries; therefore, all applicable operations and facilities within the MS4 area are held to MS4 Permit standards, requirements, and specifications.

As the MS4 boundary expands, new facilities are added to the list of applicable facilities covered under the PPGH program. CDOT staff outside of the MS4 area are also trained on proper stormwater management control measures for maintenance facilities and operations.

2.3. Applicable Facilities and Operations

The MS4 Permit stipulates the types of facilities and operations for which CDOT must implement control measures under the PPGH program. The following definition is from Part I.E.6 of CDOT's MS4 Permit.

"Applicable permittee operations and facilities" are permittee operations and facilities with stormwater discharges that are not authorized by a separate CDPS or NPDES discharge permit.

The applicable types of facilities listed in Part I.E.6.a.ii(A) of the permit include the following:

- 1) Vehicle maintenance and washing facilities and motor pools with vehicle maintenance and washing
- 2) Asphalt and concrete batch plants that are not subject to a separate CDPS or NPDES permit coverage.
- 3) Solid-waste transfer stations where waste and recyclables are briefly held before further transport
- 4) Outdoor storage yards with exposed stockpiles of materials, including stockpiles of road deicing salt, salt and sand, sand, and rotomill material, dirt, snow dumps, sweeper tailings and/or spoils, gravel
- 5) Equipment storage yards, including signs, traffic lighting, guardrails

Additionally, control measures must be implemented for operations that are not covered in Part I.E.6.a.ii(A). These operations listed in Part I.E.6.a.iii(A) of the permit include the following:

- 1) Operation and maintenance of the state highway system
- 2) Operation and maintenance of permittee parking lots
- 3) Operations at maintenance and storage yards
- 4) Operations at maintenance shops with outdoor storage areas
- 5) Operation and maintenance of snow dumps/snow disposal areas
- 6) Operation and maintenance of sites used for temporary storage of sweeper tailings or other waste piles
- 7) Operation and maintenance of grounds area and turf areas at rest areas
- 8) Building maintenance
- 9) MS4 maintenance, including trash removal
- 10) New construction of permittee facilities
- 11) Application of pesticides, herbicides, and fertilizers
- 12) Large outdoor festivals and events
- 13) Construction activities not subject to the requirements of Part I.E.1
- 14) Maintenance, replacement, and construction of utilities and the storm system, including operations, such as storage, dewatering, or disposal, associated with removal of sediment, debris, and other pollutant sources from the MS4, including removal of materials, such as trash, from control measures implemented in accordance with Part I.E.2, unless covered by a separate CDPS or NPDES permit.

The PPGH manager is responsible for developing and maintaining the FRCPs. A facility's FRCP contains installation, implementation, and maintenance procedures for all control measures as well as procedures for conducting and tracking inspections. The PPGH Manager is also responsible for conducting the annual visual inspection per Part I.E.6.a.ii.(C) of the MS4 permit. During the visual inspection the following occurs: verification that written procedures and documentation are current; observation of facility outfalls to Colorado surface waters or MS4 storm sewer system; and observation of facility conditions, including potential pollutant sources and proper control measure practices. The facility maintenance personnel are responsible for conducting routine assessments. In the course of these assessments, FRCPs are reviewed and modified to reflect the specific facility. Observation of facility outfalls to Colorado surface waters or MS4 storm sewer system; and observation of facility conditions, including potential pollutant sources and proper control measure practices are assessed.

The PPGH manager is also responsible for reviewing all the Environmental sections of the *Manual of Maintenance Procedures (MMP)* including *Appendix C* that have the potential to impact water quality. In collaboration with the Division of Maintenance and Operation the sections are revised as necessary. This manual summarizes all specific maintenance operations and activities, which CDOT conducts. It provides procedures for proper selection, installation, implementation, and maintenance of control measures. New procedures that have the potential to impact water quality are developed for any new applicable operations and added to the manual in collaboration with PPGH manager.

Table 2.3-1 provides a list of applicable permittee facilities, bulk storage facilities, and CDOT owned facilities or facilities that operate under a separate CDPS or NPDES permit coverage under the state's general stormwater permits for discharges of stormwater associated with industrial activity as required by the MS4 Permit for this PPGH PDD.

Table 2.3-1. Applicable Facilities

Region	Facility	SAP No.
1	2968 Highway 83 (Franktown)	CO-FCMC206
1	MM 48.7, Franktown Storage Facility	CO-FCMC358
1	4455 Castleton Court (Castle Rock)	CO-FCMC209
1	18500 East Colfax (Aurora) (KOA)	CO-FCMC060
1	25030 State Highway 72 (Arvada)	CO-FCMC074
1	17101 West Colfax, (6&40 Yard) (Golden)	CO-FCMC075
1	3570 South Knox Court (Denver)	CO-FCMC055
1	6050 Wadsworth (Arvada)	CO-FCMC014
1	8200 Hwy 85 (Commerce City)	CO-FCMC081
1	139 West Walnut (Brighton)	CO-FCMC085
1	6551 Indiana (Arvada)	CO-FCMC066
1	8400 S. Santa Fe (Littleton), Blakeland	CO-FCMC205
1	402 Highway 7 (Broomfield)	CO-FCMC332
1	8800 South Wadsworth (Littleton)	CO-FCMC077
1	3320 South Parker Road (Cherry Creek)	CO-FCMC056
1	12400 Hwy 285 (Morrison)	CO-FCMC067
1	4295 Zang Street (Golden)	CO-FCMC068
1	7800 Valley Hwy (Thornton)	CO-FCMC083
1	7100 Pennsylvania (Thornton)	CO-FCMC082
1	2300 West 11 th Ave (Denver)	CO-FCMC002
1	3601 Park Avenue West (Denver)	CO-FCMC004
1	8898 Caley (Greenwood Village)	CO-FCMC275
1	5701 Federal Blvd (Denver)	CO-FCMC086
1	4900 South Santa Fe Drive (Littleton)	CO-FCMC058
2	651 West Hwy 50 (Canon City)	CO-FCMC091
2	10 Monarch Lane (Pueblo)	CO-FCMC008
2	4105 Pueblo Blvd (Pueblo)	CO-FCMC308
2	20125 Wigwam Road (Fountain)	CO-FCMC269
2	5615 Willis Blvd (Pueblo) (R2-HQ)	CO-FCMC344

Table 2.3-1 (continued). Applicable Facilities

Region	Facility	SAP No.
2	2025 Commercial Blvd (Colorado Springs)	CO-FCMC027
2	11905 Hwy 83, (Monument)	CO-FCMC267
2	5710 E Bijou Street, (Colorado Springs)	CO-FCMC321
2	700 Washington (Monument)	CO-FCMC028
3	2010 Lincoln Avenue (Steamboat)	CO-FCMC147
3	2330 G Road (Grand Junction)	CO-FCMC049
3	606 S. 9th Street (Grand Junction)	CO-FCMC048
3	2424 North Townsend (Montrose)	CO-FCMC123
4	602 Linden (Ft. Collins)	CO-FCMC272
4	7520 Marshall Drive (Superior)	CO-FCMC046
4	1050 Lee Hill Road (Boulder)	CO-FCMC042
4	4897 Broadway Street & Hwy 36 (Boulder)	CO-FCMC343
4	4108 E County Road 50, (Mount Vista) (Fort Collins)	CO-FCMC313
4	10601 US Highway 34 (Greeley)	CO-FCMC012
5	26254 Hwy 160 E (Durango)	CO-FCMC112
5	20581 Hwy 160 W (Durango)	CO-FCMC121
Bulk Storage Facilities		
1	18500 East Colfax (Aurora) (KOA)	CO-FCMC060
2	5615 Willis Blvd (Pueblo) (R2-HQ)	CO-FCMC344
3	2330 G Road (Grand Junction)	CO-FCMC049
5	20581 Hwy 160 W (Durango)	CO-FCMC121

List of facilities the permittee owns or operates that are subject to separate CDPS or NPDES permit coverage under the state’s general stormwater permits for discharges of stormwater associated with industrial activity. No separate CDPS or NPDES permitted facilities are in MS4 coverage areas.

Region	Facility	CDPS or NPDES Permit No.	SAP No.
N/A	N/A	N/A	N/A

2.4. Citation(s)/Document(s)

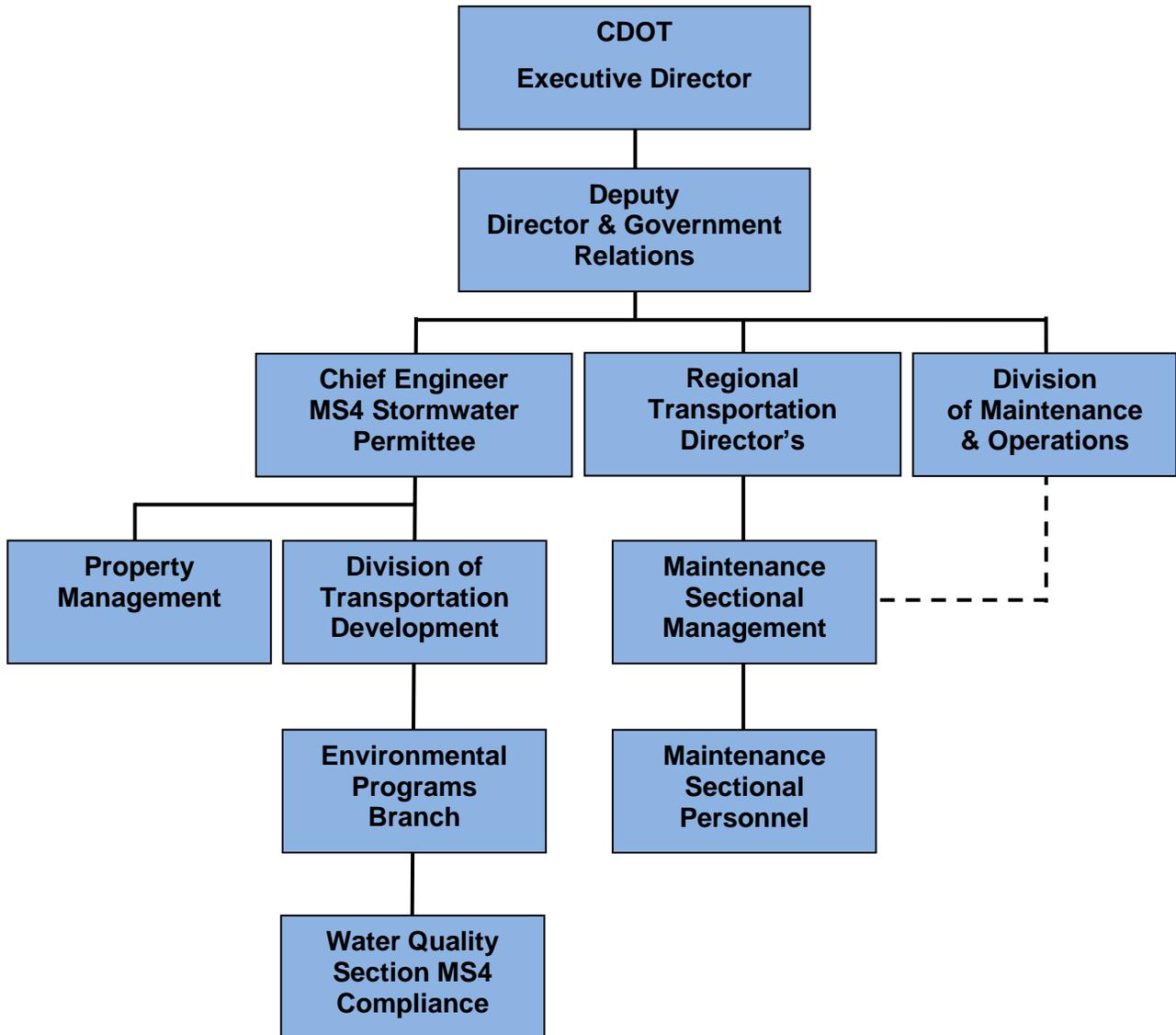
The PPGH Program uses and generates several documents to implement various program activities such as developing FRCPs and conducting inspections. The following is a list of documents related to the PPGH Program:

- Manual of Maintenance Procedures, including Appendix C
- Site Specific FRCP
- FRCP Routine Procedures and Inspection Questionnaire
- FRCP Annual Procedures and Inspection Questionnaire

Additional document details including locations are in the PDD Index in Section 2.11.

2.5. Program Organizational Structure

The CDOT MS4 Permit specifies that the MS4 program area PDD must detail an organizational structure identifying the responsibilities of applicable CDOT departments and regions. The PPGH Program resides as part of the Water Quality Section, within the Environmental Programs Branch (EPB). EPB is a branch of the Division of Transportation Development, which is part of the Engineering Department. The program is dependent upon the actions of HQ Property Management, Division of Maintenance & Operations (DM&O), The Regional Transportation Director's, Maintenance Sectional Management and Maintenance Sectional Personnel to ensure program compliance. The following provides a program organization structure:



CDOT Department	Responsibilities
Chief Engineer MS4 Stormwater Permittee	CDOT Chief Engineer has primary authority of ensuring compliance of CDOT's MS4 permit; his role is director of stormwater compliance for CDOT.
Regional Transportation Directors	Regional Transportation Directors – Responsible for planning, directing, and executing major programs for a geographical region of the state.
Division of Maintenance & Operations	Division of Maintenance & Operations (DM&O) – administers oversight of the of the SAP work order software. Part of the DM&O's role is to ensure compliance with CDOT's MS4 permit concerning all CDOT maintenance work orders. DM&O manages the Manual of Maintenance procedures in collaboration with EPB and Sectional Maintenance Management.
Property Management	Property Management – administers SPCC program documents for the Bulk Storage of Petroleum, Oils, and Lubricants (POLs) in accordance with EPA requirements, provides for secondary containment of bulk storage of other liquid chemicals stored on CDOT maintenance facilities and administers capital improvement projects.
Division of Transportation Development	Provides information and recommendations that guide and influence transportation investment decisions: some of the work includes supporting the regions in project delivery through setting environmental policy, permitting, review construction/maintenance support, and mitigation regulations, design, and monitoring.
Environmental Programs Branch	Supports CDOT compliance with a broad range of environmental regulations etc., in planning, design, construction, and maintenance activities. This is accomplished through policy guidance, scientific investigations, interagency negotiation, and technical expertise in at least 10 unique environmental specialty areas including water quality.
Water Quality Section MS4 Compliance	Water Quality Section (WQS)- responsible for all 7 MS4 stormwater program compliance oversight. The Pollution Prevention Good Housekeeping program is managed and executed by the PPGH Manager. The PPGH Manager performs annual inspections, evaluates compliance, and documents annual inspections. For noncompliant facilities the PPGH Manager, collaborating with the Water Quality Section Manager and Environmental Program Branch Manager, contacts the Division of Maintenance & Operations who facilitates direction to Regional Transportation Directors and Maintenance Superintendents to address findings and allocate resources.
Maintenance Sectional Management	Maintenance Section Superintendents ensure <i>Maintenance Facilities</i> comply with each Facility Runoff Control Plan and the Manual of Maintenance Procedures Control Measures Practices (<i>i.e., appendix C</i>).
Maintenance Sectional Personnel	Maintenance Sectional personnel are responsible for conducting routine assessments. In the course of these assessments, FRCPs are reviewed and modified to reflect the specific facility. Observation of facility outfalls to Colorado surface waters or MS4 storm sewer system; and observation of facility conditions, including potential pollutant sources and proper control measure practices are assessed.

2.6. Control Measure Implementation and Procedures

The PPGH Program implements a site-specific stormwater management plan for each applicable facility listed in Table 2.3-1. These plans are referred to as Facility Runoff Control Plans (FRCPs) and include procedures for the installation, implementation, and maintenance of all control measures at a site. FRCPs include the following categories of control measures as necessary to prevent or reduce potential pollutants:

- Preventative maintenance
- Good housekeeping
- Spill prevention and response procedures
- Structural control measures
- Evaluation of non-stormwater discharges
- Personnel training
- Procedures and Inspection Process
- Assessment Questionnaire

The PPGH Program Manager is responsible for developing FRCPs and implementing its program.

The Division of Maintenance & Operations are responsible to ensure compliance and the facility maintenance personnel are implementing the FRCP at each site.

The FRCP is viewed as a “living document” that is reviewed and modified as part of the overall process of assessing and managing stormwater quality at the maintenance facility.

The MS4 Permit requires that written inspection procedures be developed for conducting annual inspections of maintenance facilities. The inspection procedures are listed within each site specific FRCP and discussed further in section 2.8 – 2.10 of this PDD.

The PPGH Program Manager is responsible for conducting and tracking annual inspections.

Site specific maintenance personnel are responsible for conducting routine inspections. Routine inspections are conducted to ensure that control measures are operating as expected or alert maintenance personnel that new control measures need to be implemented at the site to prevent or reduce the discharge of pollutants from maintenance facilities.

Trainings are also conducted to instruct maintenance personnel and other CDOT personnel on proper procedures for implementation of FRCPs and the PPGH Program. Training is further discussed in Section 2.9 of this PDD.

Control measures are implemented for all maintenance operations not covered under FRCPs as required by Part I.E.6.a.iii of the MS4 Permit. All CDOT maintenance procedures are summarized in the *Manual of Maintenance Procedures (MMP)* and the control measures are typically listed in *Appendix C*. All CDOT maintenance personnel should use this manual for the proper implementation of control measures for maintenance operations that have the potential to impact water quality.

Part I.E.6.a.iv of the MS4 permit requires that all maintenance facilities that store petroleum products and other liquid chemicals must have bulk storage containers that provide secondary containment or an equivalent protection to contain and prevent spills. Procedures for these bulk storage facilities are outlined in site-specific FRCPs.

Part I.E.6.a.vi of the MS4 Permit requires preventing or reducing nitrogen and phosphorus in stormwater runoff associated with the applicable maintenance operations and facilities. As of September 2015, CDOT's maintenance has removed all bulk storage of fertilizer materials. Including limiting the use of fertilizer materials to only its operations to installing trees as needed. CDOT utilizes various liquid and granular deicer products which has elements of phosphorus. CDOT has strict standards regarding these elements and can be found on the CDOT Approved product Listing via this link: <https://www.codot.gov/business/apl>

2.7. Program Compliance and Quality Assurance (Headquarters)

Program compliance and quality assurance is a CDOT Water Quality Section function to ensure that MS4 program activities undertaken by the CDOT Maintenance facilities and the PPGH Program are in compliance with the MS4 Permit and CDOT policies and procedures.

The Water Quality Section identifies quality assurance requirements and quality control protocols for the PPGH Program with a plan-do-check-act approach. If noncompliance is observed, the PPGH Program Manager notifies the Division of Maintenance & Operations of the non-compliance and requests corrective action work order(s). If chronic noncompliance is observed, the PPGH Program Manager will inform the Water Quality Section Manager and the Environmental Program Branch Manager. They will implement the escalation process which follows the Engineering chain of command and formal corrective action pursuant to State Personnel Board Rule 6-11 for chronic noncompliance of CDOT MS4 Stormwater Permit with reference to Policy Directive 1902.0.

All chronic non-compliance shall be reported to the Water Quality Control Division of the Colorado Department of Public Health and Environment (CDPHE) when internal escalation does not resolve the non-compliance.

To assess FRCP Inspection work orders for compliance the following metrics are identified:

- All FRCP Routine Inspection work orders have attached FRCP Inspection Questionnaire
- All FRCP Inspection Questionnaires are properly filled-out per specific facility
- All FRCP Inspection work orders have attached photos when findings are observed and corrected

2.8. Inspections & Assessments

Inspections are critical to any quality assurance plan and quality control function. Inspections enable the CDOT PPGH Program Manager to assess MS4 permit compliance and to develop adaptive management as needed. This section describes inspection procedures used by the CDOT PPGH Program to ensure that control measures are in operating condition, including annual and routine maintenance assessments.

2.8.1. Annual Inspections

The PPGH has developed written FRCP Procedures and Inspection Process for conducting annual visual inspections of applicable facilities as required by Part I.E.6.ii(C) of the MS4 Permit. These procedures include the following items from the permit:

- 1) An annual visual inspection of each applicable permittee facility.
- 2) A verification that the written facility procedures and documentation are current.
- 3) Observation of locations and areas where stormwater from facilities are discharged off-site; or discharged to state waters, or to a storm sewer system that drains to state waters.
- 4) Observation of facility conditions, including pollutant sources and control measures, to identify inadequate control measure and control measure requiring maintenance.

The PPGH Program has implemented the following procedures for inspections to ensure that the requirements of the MS4 Permit are met and facility inspections help achieve the program goal of preventing or reducing water quality impacts from pollutant being discharged to the MS4 and/or Colorado surface waters from CDOT's facilities and operations:

- The PPGH Manager or approved alternate shall be responsible for conducting a visual inspection of each applicable facility annually and including, at a minimum, the items listed in Part I.E.6.a.ii.(C) of the permit.
- Procedures for conducting inspections are specified in the FRCP Annual Procedures and Inspection Process.
- The FRCP shall be reviewed annually by the PPGH Manager and updated in collaboration with facility maintenance personnel.
- Facility personnel shall immediately communicate any significant changes that will affect the inspection questionnaire or FRCP to the PPGH Manager.
- All annual inspections are generated within CDOT's WQ software, which is managed by CDOT PPGH Program Manager.
- Annual Inspectors shall use the FRCP and inspection questionnaire as a field assessment tool during inspections.
- Annual Inspectors must answer each question on the questionnaire. If any of the responses to the questions are answered "yes", that is a "finding" and a follow-up corrective action is required, which shall include generating a CDOT maintenance work order to complete the action. This work order shall reference the Annual FRCP inspection date. Site specific maintenance personnel shall inform Division of Maintenance & Operations the corrective action work order number to address the Annual FRCP inspection finding.
- Inspection questionnaires should be attached to the corrective action work orders.
- All findings during the annual inspection process are based on a risk assessment and addressed immediately (*i.e., 24 hours*) or before the next routine assessment (*recommended once a month*). Findings associated with asphalt maintenance or repair are addressed within 6 months.
- Photos of the original findings are stored within CDOT's OnBase software and their correction photos shall be included in each corrective action work order.
- If Annual inspection(s) findings are not addressed by Maintenance Sectional Personnel within the appropriate timeframe the PPGH Program Manager will contact the Division of Maintenance & Operations of non-compliance and request documentation of compliance. The PPGH Program manager will also notify the Water Quality Section Manager and the Environmental Program Branch Manager of the non-compliance.
- The escalation process will follow the formal corrective action pursuant to State Personnel Board Rule 6-11 for chronic noncompliance of CDOT MS4 Stormwater Permit and/or CDOT Pollution Prevention and Good Housekeeping Program Description Document in reference to Policy Directive 1902.0.

2.8.2. Routine Assessments

The PPGH Program also requires that facility staff and/or maintenance personnel to conduct routine site inspections. Facility maintenance personnel conducts a visual inspection that includes, at a minimum, the items in Part I.E.6.a.ii.(C) of the permit. These procedures include the following items from the permit:

- Routine inspections are generated within CDOT's SAP work order software, which is managed by CDOT Plant Maintenance under the Division of Maintenance & Operations.
- Facility personnel shall use the FRCP and inspection questionnaire as a field assessment tool during inspections.

- Facility personnel must answer each question on the questionnaire. If any of the responses to the questions are answered “yes”, that is a “finding” and a follow-up corrective action is required, which may include generating another work order to complete the action. If a new work order is generated, it must reference the inspection work order number.
- Inspection questionnaires are attached to assigned work orders.
- All findings during the inspection process are based on a risk assessment and addressed immediately (*i.e.*, 24 hours) or before the next routine assessment (*recommended once a month*). Findings associated with asphalt maintenance or repair are addressed within 6 months.
- Photos of the original findings and their corrective action photos shall be included in each work order.
- Facility maintenance staff contact the PPGH Manager if any sufficient changes need to be made to the FRCP or inspection questionnaire.
- For minor changes, such as personnel changes, facility staff shall cross-out old information and write-in new information then date and initial.

2.9. Training

Part I.E.6.a.v of the MS4 Permit requires CDOT to “train applicable permittee personnel to implement the Pollution Prevention/Good Housekeeping Program, including training for personnel that will conduct inspections and/or routine inspections in accordance with Part I.E.6.a.ii(C)”. CDOT has established general awareness training conducted at CDOT’s Division of Maintenance & Operations Training Services for all maintenance personnel and field implementation training that provides important compliance information. In addition to these courses, smaller regional PPGH trainings are conducted as requested. As required by Part I.E.6.b.iv of the MS4 Permit, CDOT is documenting the name and title of each individual trained, date of training, and a list of topics covered in the training. All PPGH personnel training that is conducted either online or in a classroom at Division of Maintenance & Operations Training Services is tracked using CDOT specific internal software (SAP).

2.9.1. General Awareness Training

CDOT’s general awareness training is designed for all CDOT personnel who could potentially influence stormwater quality at maintenance facilities. The general objective of the training is to introduce the basic principles of stormwater quality and compliance at the facilities. The training seeks to give all CDOT personnel the ability to serve as observers of facility site conditions and support the pollution prevention and good housekeeping practices outlined in the site-specific FRCPs.

2.9.2. Field Implementation Training

CDOT requires field implementation training for each site-specific FRCP. It is generally designed to educate facility personnel, particularly maintenance personnel directly involved with FRCP implementation, on how to utilize their FRCP for pollution prevention and good housekeeping and conduct an effective facility runoff control inspection. The training focuses heavily on proper procedures and inspection processes (e.g., periodic updates of the FRCP text, questionnaire, work order retention, and documentation specifics) for maintenance staff. A field exercise is also performed in which CDOT Maintenance personnel conduct a hands-on inspection under the supervision of the CDOT MS4 PPGH Manager. In the field session, instruction is given on the meaning of the questionnaire, what to look for, and examples of thorough documentation within CDOT’s SAP

software. This exercise allows the maintenance personnel to collaborate with seasoned stormwater inspectors from the Water Quality Section.

2.9.3. Online Refresher Training

CDOT is developing an online refresher training for all maintenance personnel. Once fully developed, this training will be conducted annually and includes a pass/fail test. The training will focus on the requirements in Part I.E.6.a.v of the permit to “inform personnel responsible for operations with the potential to result in an illicit discharge about the permittee’s prohibitions against, and potential impacts associated with, illicit discharges from permittee operations.” The training also includes information about trash and its effect on water quality.

2.10. Recordkeeping/Tracking

The MS4 Permit identifies specific records that must be kept for each MS4 program area to demonstrate compliance with effluent limitations and recordkeeping requirements. Recordkeeping requirements of the PPGH Program are specified in Part I.E.6.b of the MS4 Permit.

Active FRCPs are kept at each specific site. The FRCP is maintained for a period of at least three years from the date that the specific item is no longer being actively utilized for stormwater management as required by Part I.K.2 of the MS4 Permit. During the Annual FRCP inspection the PPGH Program Manager replaces the previous site specific FRCP with a revised version for that year. Electronic versions of the FRCP for previous years and Annual FRCP inspections are stored on the WQS server at CDOT HQ and per CDOT’s Water Quality Record Retention Plan using CDOT’s OnBase software.

SAP Database and Work Manager software is used to implement and track routine including all questionnaires, finding photos, and correction photos. The online or classroom trainings are also tracked within the SAP database and managed by the Division of Maintenance & Operations Training Services staff. All CDOT operations and maintenance procedures are summarized in the *Manual of Maintenance Procedures* that is managed by the Division of Maintenance & Operations. In collaboration with Maintenance Sectional Management and Environmental Programs Branch. All procedures for bulk storage control measures are outlined within the site-specific FRCP that is located at each bulk storage facility. Electronic copies of previous plans, annual inspections, trainings, and sign-in sheets are kept at CDOT’s Headquarters Water Quality Section, SAP Database, and CDOT’s OnBase software. These copies are managed by the PPGH Program Manager.

2.11. PDD Index

The PDD Index is the complete list of documents, materials, Procedural Documents, guidance documents, software, and other sources used to manage and implement the PPGH Program. Each indexed resource includes the database and the document’s location table 2-1. The PPGH Program Manager is responsible for annually reviewing the information included in the PDD index and updating the index as necessary. In addition, the PPGH Program Manager is responsible for ensuring that any changes in one document will be reflected in other documents critical to the execution of consistency of the program.

Table 2-1. PPD Index of Documents

Citation(s)	Source/ Author	Date	Database	Document Location
PPGH Documents				
Facility Runoff Control Plans	PPGH Manager	Annually	OnBase	Current document stored at each facility listed in table 2.3-1 Previous documents stored in the WQS Server (\\public1\DTDI\magery\WaterQuality) and CDOT OnBase software
FRCP /annual questionnaire (inspections)	PPGH Manager	Annually	OnBase	CDOT OnBase software including WQS Server (\\public1\DTDI\magery\WaterQuality)
FRCP routine assessment(s)	DM&O	Routinely	SAP	SAP database
Procedural Documents				
Manual of Maintenance Procedures	DM&O	Annually	CDOT internal web site	DM&O (https://drive.google.com/file/d/1ztKXIOT3DLNSaWsOHbTF0sgu7CbdUZ9Q/view) and WQS Server (\\public1\DTDI\magery\WaterQuality)
Appendix C. of the Manual of Maintenance Procedures	PPGH Manager	Annually	CDOT internal web site	DM&O (https://drive.google.com/file/d/1ztKXIOT3DLNSaWsOHbTF0sgu7CbdUZ9Q/view) and WQS Server (\\public1\DTDI\magery\WaterQuality)
Approved Products Listing				
Liquid and Granular Deicing Materials	DM&O	Annually	CDOT's Official State Web Portal	https://www.codot.gov/business/ap
Training Program				
Division of Maintenance & Operations Training Services	DM&O	Annually	SAP	18500 E Colfax Ave, Aurora CO 80011
On-Site Facility Training	PPGH Manager	Annually	WQS Server	WQS (\\public1\DTDI\magery\WaterQuality)
Training Presentations	PPGH Manager	Annually	WQS Server	WQS (\\public1\DTDI\magery\WaterQuality)
Escalation Process				

Policy Directive 1902.0 CDOT Water Quality Compliance	Herman Stockinger	November 27 th , 2018	WQS Server	WQS (\\public1\DTDI\magery\WaterQuality\7-Poll Prev-Good Housekeeping\Procedures_ Questionnaire)
State Personnel Board Rule 6-11	State Secretary of State	Feb 14 th , 2017	State of CO Internet	https://www.colorado.gov/pacific/spb/rules-0
MS4 Stormwater Permit				
CDOT MS4 Stormwater Permit Modifications 1,2, & 3	CDPHE	2015	CDOT internal web site	WQS (\\public1\DTDI\magery\WaterQuality)
CDOT PPGH Program Manager				
Bob McDade	Jean Cordova	May 15 th , 2009	CDOT HQ 449B	CDOT Headquarters 2829 W Howard Place Denver, CO 80204

3. PDD Requirements for the PPGH Program in CDOT's MS4 Stormwater Permit

Following are MS4 Permit PDD requirements for the PPGH program. These elements are covered in this PPGH PDD.

Pollution Prevention and Good Housekeeping Program (CDPS COS000005 Part I.E.6.c.)

- Permittee Facility Runoff Control Measures: A list of citations(s) and locations(s) of the following:
 - List of applicable permittee facilities.
 - List of facilities the permittee owns or operates that are subject to separate CDPS or NPDES permit coverage under the state's general stormwater permits for discharges of stormwater associated with industrial activity.
 - Citation(s) and location(s) of supporting documents of the facility runoff control measures, including documents that provide control measure installation and implementation specifications and information.
 - Citation(s) and location(s) of supporting documents for inspections, including a list of the written procedures for conducting inspections.
- Permittee Operations and Maintenance Procedures: A list of citations(s) and locations(s) of the following:
 - List the permittee operations to which this program applies.
 - Citation(s) and location(s) of supporting documents, including documents that provide control measure installation and implementation specifications and implementation.
- Bulk Storage: A list of citations(s) and locations(s) of procedures to ensure that this requirement is met.
- Training: A list of citation(s) and location(s) of the training program and supporting documents.
- Nutrient Source Reductions: A list of citations(s) and locations(s) of the method used to evaluate operations and facilities to identify sources of nitrogen and phosphorus discharges from the MS4 that can be controlled through the implementation of control measures.