

CDOT MS4 Illicit Discharges Program Description Document

Version 1.2

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Contents

1.0	Overview	1
1.1.	MS4 Program Area	1
1.2.	Updates to this Guidance and Additional Resources.....	1
2.0	Sections of the PDD.....	2
2.1.	Introduction	2
2.2.	Program Operation Coverage	2
2.3.	Planning and Approval	2
2.4.	Program Organizational Structure	2
	Table 1. CDOT MS4 ID Program Water Quality Team	3
2.5.	Regulatory Structure and Regulatory Mechanism.....	3
2.6.	Control Measure Implementation and Procedures	4
2.6.1.	CDOT Utility Program	4
2.6.2.	Allowable Non-Stormwater Discharges	4
2.6.3.	Process for Approving Other Non-Prohibited Discharges	5
2.6.4.	Prohibited Non-Stormwater Discharges	6
2.6.5.	ID Identification, Tracking/Investigation, Removing, and Recordkeeping.....	6
2.7.	Training and Certifications	6
2.8.	Program Compliance and Quality Assurance (Headquarters)	6
2.9.	Inspections	6
2.10.	Tracking.....	6
2.11.	Documents.....	6
2.12.	Recordkeeping	7
2.13.	Annual Reporting	7
2.14.	Overlapping CDOT MS4 Program Areas and Priority Areas.....	7
2.15.	PDD Index.....	8
3.0	PDD Requirements.....	9

1.0 Overview

1. Construction Sites
2. Permanent Water Quality Management
3. Illicit Discharges
4. Industrial Facilities
5. Public Education and Outreach/ Public Involvement and Participation
6. Pollution Prevention and Good Housekeeping
7. Wet Weather Monitoring

This PDD is specific to the MS4 Illicit Discharges Program (MS4 ID Program) and includes a narrative description of how CDOT implements the MS4 ID Program to meet the MS4 Permit requirements and a PDD index. The PDD Index is a list of citations and locations 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 PDD Index also identifies staff responsible for MS4 ID Program documentation and transmittal within CDOT as well as, externally to the Colorado Department of Public Health and Environment (CDPHE).

The MS4 ID Program PDD is a regulatory based program management tool the CDOT ID Manager and Water Quality Section Manager use for internal management of the MS4 ID Program and overall management of CDOT's MS4 Permit Program.

1.1. MS4 Program Area

The CDOT MS4 Permit covers all areas of the Colorado state highway system and associated rights-of-way (ROWs), as well as any properties owned and operated by CDOT within other jurisdiction's MS4 Phase I or Phase II permit areas.

CDOT's MS4 area may expand or contract as municipal boundaries or infrastructure of the cities and counties in Phase I and II areas change. CDOT's [OTIS mapping site](#) has the up-to-date boundaries of CDOT's MS4 Areas.

1.2. Updates to this Guidance and Additional Resources

The MS4 ID Program PDD is a dynamic document that is reviewed at least annually, and updated as needed. In addition to these updates, CDOT uses the ESRI MS4 Dashboard as real-time tracking systems.

MS4 ID Program PDD updates are posted to the CDOT Water Quality Website at <https://www.codot.gov/programs/environmental/water-quality/stormwater-programs/idde.html>. The PDD Index tracks the revision history of each document relevant to the MS4 ID Program.

The Water Quality Section Manager and the MS4 ID Program Manager (ID Manager) review the performance of the MS4 ID Program annually. The Water Quality Section Manager determines, based on the annual review, if additional resources (staff, budget, training, etc.) must be sought to ensure ongoing MS4 permit compliance and program performance.

2.0 Sections of the PDD

Section 2.0 describes the main programmatic elements to meet the PDD requirements detailed in the MS4 permit. Documents necessary to the execution of the MS4 ID Program are identified by reference, including the document location, to minimize the frequency with which the MS4 ID Program PDD is updated.

2.1. Introduction

The main objective of CDOT's MS4 ID Program is reducing illicit discharges, illicit connections, and illicit dumping (collectively "illicit discharges" [IDs]) to CDOT's MS4. The MS4 ID Program uses training/education, identification, reporting, investigation, tracking, and removal to curtail IDs. Of these, CDOT emphasizes education through training to identify and eliminate IDs within the MS4 Permit area.

The purpose of this PDD is to develop and document programmatic information for CDOT management, state and federal agencies, and third parties. A list of Programmatic information, including the Illicit Discharge Program Manual, provides the methodology and approach used by CDOT to maintain compliance with MS4 Permit ID requirements. This PDD is an overarching and dynamic document that identifies critical elements necessary to maintain regulatory compliance and protect water quality.

2.2. Program Operation Coverage

CDOT's MS4 ID Program is implemented and executed within the CDOT MS4 Areas (Section 1.1).

2.3. Planning and Approval

The MS4 permit states that CDOT:

"shall maintain a current map of the location of all MS4 outfalls within the permit area, and the names and location of all state waters that receive discharges from those outfalls. A 'municipal separate storm sewer system outfall' (outfall) is a point source, as defined herein, at the point where a municipal separate storm sewer discharges to state waters."

The Survey123 Outfall Inventory serves as CDOT's current map of the location of all MS4 outfalls within the permit area. The map of these are located on CDOT's Online Transportation Information System (OTIS): <https://dtdapps.coloradodot.info/MapViewExt/>. As new MS4 areas are added, CDOT will add all outfalls in these areas to the Outfall inventory map. The process/procedure for identifying outfalls and collecting this data are found in the Environmental Programs Branch (EPB) GIS Manual, also stored with the ID Manager.

2.4. Program Organizational Structure

The overall CDOT responsibility for compliance with the MS4 Permit is the Chief Engineer, who is also the Director of Stormwater Compliance. The Director of Stormwater Compliance is the main signatory and holder of the MS4 Permit. The Water Quality Section is responsible for CDOT's overall MS4 Permit management and compliance program. The ID Manager reports to the Water Quality Section Manager. Organizationally, the Water Quality Section Manager reports to the CDOT Division of Transportation

Development (DTD), EPB.

Direct implementation and administration of the MS4 ID Program’s conditions and compliance activities can occur within each of the five CDOT Regions. Maintenance staff and other individuals, including the public, may identify potential discharges. Region Water Pollution Control Managers (RWPCMs) coordinate with the ID Manager to report and eliminate IDs, as necessary.

The CDOT-CDPHE Liaison provides a regulatory interface between CDOT and CDPHE. This liaison is an EPB CDOT employee, who offices at CDPHE and is a valuable resource in permit regulations and interpretation.

Table 1. identifies the CDOT MS4 ID Program Water Quality Team. An overall CDOT Organization Chart can be viewed at: <https://www.codot.gov/about/CDOT-org-chart/view>.

Table 1. CDOT MS4 ID Program Water Quality Team

Title	Name	Contact Information
Director of Stormwater Compliance (Chief Engineer)	Steve Harelson	Available upon request
Water Quality Section Manager	Jean Cordova	(303) 512-4053
ID Manager	Jeremiah Unger	(303) 757-9497
CDOT/CDPHE Liaison	Tripp Minges	(303) 757-9788
Assistant ID Manager	Rachel Hansgen	(303) 757-9975
ID Hotline	Hotline	(303) 512-4426 (4H2O)

2.5. Regulatory Structure and Regulatory Mechanism

CDOT’s regulatory structure and mechanism for the MS4 ID Program lie within Federal and State Regulations and Statutes. CDOT has legal authority to control activities taking place within their ROW but not outside of the ROW per CFR 710.201(a) and CRS 43-2-147(1). Activities outside of CDOT ROW are under the authority of the local municipality or county.

If the source of an ID cannot be identified, additional support may be requested from CDPHE, US Environmental Protection Agency (EPA), Colorado State Patrol (CSP), CDOT Maintenance (MTCE), CDOT Property Management, local police or fire departments and/or adjacent MS4 jurisdictions. CDOT Property Management, CSP, another municipal responder, or a specialized HAZMAT contractor may be needed if the ID is determined to contain hazardous material and, in addition, the CDPHE Spill Hotline is notified (<https://www.colorado.gov/pacific/cdphe/wq-environmental-spills>) at 1-877-518-5608.

It is important to note that only illicit discharges are handled by CDOT maintenance and Water Quality staff. Spills are handled by Colorado State Patrol and CDPHE. This division of responsibilities is clarified by the CDOT/CDPHE/CSP Memorandum of Understanding (MOU). The MOU is located with the ID Manger, on the Water Quality Server, or the [property management website](#).

If CDOT is not able to eliminate an ID, CDOT reports the ID to CDPHE for enforcement action or the appropriate District Attorney’s office for prosecution. The enforcement process is further detailed in the Illicit Discharge Program Manual, which can be found on the [Illicit Discharge Program webpage](#).

CDOT does not have any regulatory mechanisms that allow for exemptions, waivers, or variances.

2.6. Control Measure Implementation and Procedures

“Control measures,” previously known as best management practices (BMPs), are methods used to prevent or reduce the discharge of pollutants to state waters. Control measures include, but are not limited to, procedures for illicit discharge identification, reporting, enforcement, and removal. These procedures, systems, and processes are detailed in the ID Program Manual. The following subsections describe control measures incorporated into the MS4 ID Program.

2.6.1. CDOT Utility Program

Utility connections through CDOT’s MS4 are authorized through CDOT’s Utility Permit Program (Utility Program, <https://www.codot.gov/business/permits/utilitiesspecialuse>). The Utility Program is responsible for providing services in the following areas:

- Utility/Highway Project Coordination—Region Utilities Engineers work with other CDOT employees and utility companies to identify the utilities that are located within highway project boundaries and coordinate any necessary relocation of these utilities to facilitate highway construction activities.
- Utility and Special Use Permitting—Utility and Special Use Permits are issued to entities external to CDOT in order to manage the installation of utilities, or the performance of other types of work, within the state highway ROW.

As part of the CDOT permit application for Utility and Special Use permits, CDOT provides language to the applicant to ensure that applicants are aware of being in compliance with applicable state and federal laws, which includes the provisions of the Colorado Water Quality Control Act such as the CDPS requirements. CDOT Utility and Special Use permit applications contain a requirement that the permittee must satisfactorily address environmental, ecological, archaeological, and historical clearances.

2.6.2. Allowable Non-Stormwater Discharges

The following allowable non-stormwater discharges are allowed through CDOT’s MS4, all others are prohibited.

- Landscape irrigation
- Lawn watering
- Diverted stream flows
- Irrigation return flow
- Rising groundwater
- Uncontaminated groundwater infiltration (as defined at 40 CFR 35.2005(20))
- Uncontaminated pumped groundwater
- Springs
- Flows from riparian habitats and wetlands
- Water line flushing in accordance with the [CDPHE’s Low Risk Policy Discharge Guidance](#)
- Discharges from potable water sources in accordance with the [CDPHE’s Low Risk Discharge Guidance](#)
- Foundation drains
- Air conditioning condensation
- Water from crawl space pumps
- Footing drains
- Individual residential car washing

- Dechlorinated swimming pool discharges in accordance with the [CDPHE’s Low Risk Discharge Guidance](#)
- Water incidental to street sweeping (including associated sidewalks and medians) and not associated with construction
- Dye testing in accordance with the manufacturer’s recommendations
- Stormwater runoff
- Discharges resulting from emergency firefighting activities
- Discharges authorized by a Colorado Department of Public Safety permit (CDPS) or National Pollutant Discharge Elimination System (NPDES) permit
- Any animal or agricultural waste from farms and ranches that do not require a CDPS or NPDES permit
- Discharges that are in accordance with the [CDPHE’s Low Risk Policy guidance documents](#)

2.6.3. Process for Approving Other Non-Prohibited Discharges

Per the MS4 permit, CDOT may apply the following procedures to get other non-prohibited discharges approved:

“Other discharges that the permittee will not consider as an illicit discharge and approved by the Division: The permittee may propose discharges in accordance with the requirements below to seek Division approval to allow the permittee to not effectively prohibit the discharges. Upon approval by the Division, the permittee is not required to address the discharges as illicit discharges in accordance with the requirements of this permit. The permittee can still effectively prohibit these discharges if the permittee determines that the discharge is a significant source of pollution. The permittee must complete the following actions for discharges to be authorized by the Division:

1) The permittee must submit a list of the discharges and the basis that the discharges meet one of the following criteria:

(a) The discharges, with proper management, are not expected to contain pollutants in concentrations that are toxic or in concentrations that would cause or contribute to a violation of a water quality standard; or

(b) The discharges are not eligible for coverage under a CDPS or NPDES general permit and prohibiting the discharges would result in changes to existing practices for the owner or operator of the discharges that are determined by the permittee to be impracticable.

2) For all such discharges identified prior to the effective date of this permit and that will continue to be allowed, the information required by Subsection (1) must be submitted to the Division for approval in accordance with the compliance schedule in I.H.

3) The Division may deny approval of the discharge in writing. The Division’s denial will be based on a determination that the provided information does not demonstrate that the criteria of Part I.E.3.a.v(Y)(1) have been met.

4) The permittee must public notice the discharges authorized by the Division in

accordance with its public notification procedures.

5) The permittee must notify the Division within 30 days and revise its regulatory mechanism and procedures within 180 days if the permittee becomes aware of new information that the discharges authorized using the criteria in Part I.E.3.a.v(Y) no longer meets the criteria of that Part.”

2.6.4. Prohibited Non-Stormwater Discharges

All discharges that do not appear on the allowable discharges list are prohibited. CDOT regards any of these discharges as illicit and follows the reporting procedure as described in the Illicit Discharge Program Manual, located on the [Illicit Discharge Program webpage](#).

2.6.5. ID Identification, Tracking/Investigation, Removing, and Recordkeeping

CDOT’s written procedures for ID identification, tracking and investigation , removal, and recordkeeping are maintained in the Illicit Discharge Program Manual, found on the [Illicit Discharge Program webpage](#). The Manual is a reference document that directs CDOT Water Quality staff in uniform response to illicit discharges requests. Standard operating procedures in the manual detail CDOT-specific processes for response. This document is reviewed and updated to remain consistent with the current program practices.

2.7. Training and Certifications

CDOT incorporates ID training into many general Water Quality trainings, including trainings given to MTCE staff. These trainings are given by the ID Manager or distributed to existing CDOT staff and new hires through CDOT’s online learning platform. General trainings focus on identifying and reporting IDs. HAZWOPER certifications are additionally required of all ID Program staff to ensure staff are prepared to identify and respond to IDs appropriately.

All MS4 ID Program specific training documents identify the name and title of each individual trained, date of training, and a list of topics covered. This information is maintained by the ID Manager.

2.8. Program Compliance and Quality Assurance (Headquarters)

Program compliance and quality assurance is a core function of the Water Quality Section. The Water Quality Section records and tracks critical environmental management and quality assurance/quality control actions and processes to ensure compliance with the MS4 Permit.

2.9. Inspections

The process of conducting ID field investigations or inspections is covered in the Illicit Discharge Program manual which can be found at [CDOT’s Illicit Discharge Program webpage](#).

2.10. Tracking

All Survey123 investigation and associated ID records are stored in the Water Quality Server. Records can be provided by the ID Manager to the CDPHE, EPA, or other entities upon request.

2.11. Documents

All documents (including forms and responses/notifications) used to trace the discharge are the responsibility of the ID Manager and tracked on the Water Quality Server. All written procedures for ID reporting, tracing, enforcements and removal, and recordkeeping are detailed in the Illicit Discharge

Program Manual which can be found on the [Illicit Discharge Program webpage](#).

2.12. Recordkeeping

Recordkeeping is a core function of the ID program and the MS4 Permit identifies specific records that must be kept to demonstrate compliance with ID effluent limitations and recordkeeping requirements.

The following records are available from the ID Manager.

- Current stormwater outfall map ([CDOT's OTIS](#))
- Current separate storm sewer system map (available from the ID Manager upon request)
- Regulatory Mechanism documents
- Survey123 ID investigations
- Discharges that could be excluded from being effectively prohibited:
 - (A) Copies of all required submittals to CDPHE.
 - (B) Copies of the documents used to provide any required public notice and any public comment received as part of the public notice process.
- ID removals
- The map and/or list of ID priority areas
- MS4 ID Program specific training records

For records on industrial facilities and referrals to CDPHE on industrial discharges, contact the WQ Section Manager or refer to the Industrial Stormwater PDD for more information.

2.13. Annual Reporting

The MS4 Permit contains annual reporting requirements specific to the MS4 ID Program. CDOT prepares an annual MS4 Program-wide report that is submitted to CDPHE by April 1, of each year; covering January 1, through December 31, of the previous year. The MS4 Permit, Part I.I.1 lists MS4 ID Program information CDOT must track and include in the CDOT Annual Report. As part of Part I.G. of CDOT's MS4 permit, CDOT must conduct an annual review of each MS4 program that includes the following:

- (A) Provide the total number of unresolved reports/identification of IDs and the reason why they are unresolved.

Electronic copies of MS4 Annual Reports can be provided upon request.

2.14. Overlapping CDOT MS4 Permit Areas and Priority Areas

IDs that coincide with another jurisdiction's MS4 area require coordination between the ID Manager, the RWPCM, other appropriate individuals (CDOT and Contractor), and the other jurisdictions as needed. The involved parties will work together to determine the ID origin, which MS4 Permit applies to the ID (CDOT or other jurisdiction), and how to respond to the ID. CDOT checks for existing water quality permits and refers all incidents to the appropriate entity for enforcement if any such permits are held before relying on the ID program procedures, as these water quality permits also include requirements to track and eliminate IDs. The ID Manager maintains records of IDs that overlap other jurisdiction's MS4 areas.

CDOT's ID priority areas include any areas within the MS4 in particular area with a history of IDs.

2.15. PDD Index

The PDD Index (Table 2) is the complete list of documents, materials, standard operating procedures, design standards, guidance documents, software, and other sources used to manage and implement the MS4 ID Program. The purpose of the PDD Index is to identify reference documents that define the MS4 ID Program and identify documents that will be affected by informational or process changes. For example, a change in a CDOT specification can have a cascading effect on several documents such as procedures outlined in this PDD, training materials and tracking forms.

The ID Manager, or designee, is responsible for monitoring and reacting to internal and external program documentation changes that can affect other documentation critical for MS4 Permit compliance.

Table 2. MS4 ID PDD Index

Document	Responsible Party	Date/Revision history	Storage Location
Organization Chart	Water Quality Section Manager	2021	https://www.codot.gov/about/CDOT-org-chart/view
Storm Sewer System Map	ID manager	January 20, 2016	https://dtdapps.coloradodot.info/MapViewExt/
Priority Areas	ID Manager	January 20, 2016	ID Manager
CDOT Illicit Discharge Survey123 Application	ID Manager	2021	ID Manager
Survey 123 Illicit Discharge Tracking Spreadsheet	ID Manager	2021	Survey123 and Water Quality Server
CDPHE Notification Process	ID Manager	2021	Illicit Discharge Program Manual
Industrial Facilities Fact Sheet	Water Quality Section Manager	2020	Water Quality Section Manager
MS4 ID Program specific training documentation-PowerPoint	ID Manager	2017	ID Manager
IDDE Wallet Card	ID Manager	2009	https://www.codot.gov/programs/environmental/water-quality/documents/illicit-discharge-program/cdot_wq-wallet_4up_040108.pdf/view
IDDE Visor Card	ID Manager	2009	https://www.codot.gov/programs/environmental/water-quality/documents/illicit-discharge-program/cdot_wq-visor_photo_2up_040208.pdf/view
Outfall Mapping SOP – EPB GIS Manual	ID Manager	2017	ID Manager
Illicit Discharge Program Manual	ID Manager	2021	https://www.codot.gov/programs/environmental/water-quality/stormwater-programs/idde.html

3.0 PDD Requirements

The MS4 Permit details required PDD content for the MS4 ID PDD. These requirements are presented in the MS4 Permit, Part I.C, Part I.E.3.c (PDD) and Part 1.H (Compliance Schedule; Table 2 Compliance Schedule). Table 3 summarizes the primary MS4 ID PDD requirements and where the requirement(s) is/are addressed in this PDD.

Table 3. MS4 ID PDD Regulatory Requirements

MS4 Permit Citation	MS4 Permit-required PDD Content	MS4 ID PDD Section or Subsection
Part I.C.1.a.	Current Control Measure Implementation and Procedures required by Parts I.D. and I.E. that describes how the requirements of Parts I.D. and I.E. are met.	Subsection 2.6
Part I.C.1.b.	Current Documents and Electronic Records: A list of citations for documents and electronic records used to comply with permit requirements. It is not required that the PDD repeat the information included in the cited documents. The PDD must include the names of the most recent version of the documents, source/author of the document, date of the document, and location(s) where the supporting documentation is maintained.	Subsections 2.11, 2.12, and 2.15
Part I.C.1.c.	Current Organizational Chart: An organizational chart indicating responsibility over applicable departments by the legal contact.	Subsections 2.4 and 2.15
Part I.C.2.	The PDD must be available to the public at reasonable times during regular business hours and maintained in a format that can be submitted to the Division within 10 business days of a request.	https://www.codot.gov/programs/environmental/water-quality/documents/illlicit-discharge-program
Part I.C.3.	Information in the PDD may be revised by the permittee at any time. The permittee must modify the PDD as changes occur to ensure the information is up to date.	Subsection 1.2
Part I.E.3.c.i.	Storm Sewer System Map: A list of citation(s) and location(s) of the storm sewer system map and procedures for updating the map for new or removed outfalls or expanded permit areas.	Subsections 2.3 and 2.15
Part I.E.3.c.ii.	Regulatory Mechanism: A list of the citation(s) and location(s) of the required elements of the regulatory mechanism, including a list of the associated program documents used to meet the regulatory mechanism requirements.	Subsection 2.5
Part I.E.3.c.iii.	Regulatory Mechanism Exemptions: A list of the citation(s) and location(s) of regulatory mechanism elements that allow for exemptions and the documented procedures that confirm that any exemptions, waivers, and variances comply with the permit.	2.5
Part I.E.3.c.iv.	Discharges that have been excluded from being effectively prohibited: Identification of any illicit discharges listed in Part I.E.3.a.v. that the permittee will consider an illicit discharge.	Subsections 2.6.2, 2.6.3, 2.6.4, and 2.15

Part I.E.3.c.v.	<p>Tracing an Illicit Discharge:</p> <p>(A) A list of citation(s) and location(s) of the specific tools available that will allow tracing of an illicit discharge, including as applicable storm sewer maps, dye tracers, cameras, aerial maps, etc.</p> <p>(B) A list of citation(s) and location(s) of the written procedures for tracing an illicit discharge, including the citation(s) and location(s) of supporting documents.</p> <p>(C) Documenting an illicit discharge:</p> <p>1) A list of citation(s) and location(s) of the record keeping system(s) used to maintain the required information.</p> <p>2) A list of citation(s) and location(s) of the written procedures used for documenting information on illicit discharge reports, including if applicable, identification of how information is consolidated between separate functional groups within the permittee's organization.</p>	Subsections 2.6.5, 2.9, and 2.15
Part I.E.3.c.vi.	Discharges that could be excluded from being Effectively Prohibited: A list of citation(s) and location(s) of the written procedures for excluding discharges from being effectively prohibited and the discharges that have been excluded from being effectively prohibited.	Subsections 2.6.3 and 2.15
Part I.E.3.c.vii.	Removing an Illicit Discharge: A list of citation(s) and location(s) of the written procedures for removing an illicit discharge, including the citation(s) and location(s) of supporting documents.	Subsections 2.6.5 and 2.15
Part I.E.3.c.viii.	Enforcement Response: A list of citation(s) and location(s) of the specific enforcement mechanisms available and written procedures for enforcement response, including the citation(s) and location(s) of supporting documents. The document(s) must detail the types of escalating enforcement responses the permittee will take in response to common violations and time periods within which responses will take place.	CDOT's enforcement authority to prohibit IDs or illegal connections aside from the Utility and Access permits (subsection 2.6.1) is CDPHE and/or the District Attorney's office.
Part I.E.3.c.ix.	Priority Areas: A list of citation(s) and location(s) of the priority areas.	Subsections 2.12 and 2.15
Part I.E.3.c.x.	Training: A list of citation(s) and location(s) of the training program and supporting documents.	Subsections 2.7 and 2.15
Part I.E.3.c.xi.	Industrial Facilities: A list of citation(s) and location(s) of the written procedures for reporting discharges from industrial activities to the Division, including the citation(s) and location(s) of supporting documents.	Subsections 2.12 and 2.15