



Illicit Discharge Detection and Elimination (IDDE) Program Standard Operating Procedures (SOP)

Last Revised: December 2022

Major Revisions:

May 2022,

July 2020

February 2019

November 2018

March-April 2018

Original: December 2017

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Introduction

Part I.E.2 of the MS4 Permit (No. COR-090000) requires the County to implement a program to effectively prohibit illicit discharges. This document constitutes the County's IDDE Program Description and documents the procedures used to meet the MS4 Program requirements for the Illicit Discharge Detection and Elimination (IDDE) Program. The document not only addresses each of the IDDE requirements, but also consolidates the Recordkeeping (Part I.E.2.b) and Program Description (Part I.E.2.c) requirements to further explain how each of these provisions are met.

Illicit Discharges

The term "illicit discharge" is defined in the Phase II MS4 Permit as "Any discharges to an MS4 that is not composed entirely of stormwater except discharges specifically authorized by a CDPS or NPDES permit and discharges resulting from emergency fire fighting activities."

There are many types of illicit discharges that, in accordance with the permit, must be prohibited. Only the discharges listed in Part.I.2.a.v. of the MS4 Permit can be excluded from being effectively prohibited (referred to as "allowable non-stormwater discharges" from this point forward). See Section 1 for a list of discharges that are "allowable non-stormwater discharges."

Illicit Discharge Prevention

Boulder County's Hazardous Materials Management Facility (HMMF) is operated to ensure the compliant "cradle to grave" management and disposal of hazardous materials/wastes that are disposed of at the facility by residents and businesses. All residents of Boulder County including all cities, towns and unincorporated areas; all residents of City and County of Broomfield; and all residents of the Town of Erie (not restricted to just the Boulder County area) may drop off household hazardous waste at the HMMF. In addition, the HMMF accepts waste from businesses in Boulder and Broomfield counties that generate small quantities of hazardous wastes AND that are classified by the State of Colorado as "very small quantity generators" (VSQGs). Typically, businesses that are VSQGs include auto shops; housecleaning companies; lab, R&D, analytical companies; landscapers; non-profits, painters; religious organizations; schools and school districts, tanning salons, manufacturers, retailers, etc.

The County considers this to be a companion program to IDDE because it provides an outlet for both residents and certain businesses to properly dispose of hazardous waste and prevent it from causing a material storage problem or illicit discharge. County Stormwater and Water Quality staff routinely publicize this service when providing compliance assistance or taking formal enforcement when a hazardous waste discharge is involved. Additionally, there are various stormwater fact sheets available to the public at the HMMF ranging from fertilizer use to good housekeeping practices and proper landscaping practices for clippings and yard waste.

Section 1: Codes, Resolutions, and Ordinances (Parts I.E.2.a.ii. and iii. and v.)

To the extent allowable under state or local law, the County must implement a regulatory mechanism to meet the IDDE requirements outlined in the MS4 Permit. The County must:

- 1) Prohibit illicit discharges into the MS4;
- 2) Have a procedure to request access to property(ies), as necessary to implement the illicit discharges procedures, to include judicial action; and

- 3) Provide the permittee the legal ability to cease or require to be ceased and remove, or require and ensure the removal of, and impose penalties for all illicit discharges for the period from when the illicit discharge is identified until removed.

Illicit Stormwater Discharge Ordinance (No. 2012-4)

The County first passed an Illicit Stormwater Discharge Ordinance in 2005, and replaced it with an updated version in November of 2012. This ordinance is hereinafter referred to as Boulder County Illicit Stormwater Discharge Ordinance (No. 2012-4) or “ordinance.” The ordinance specifically prohibits illegal discharges and allows for noncompliance remedies as required by the MS4 Permit. Right of entry is provided by Section 8 of the ordinance and procedures are further detailed below under Enforcement, General Procedures for Illicit Discharge Violations. Importantly, the ordinance states:

- 1) No person shall discharge or cause to be discharged into the storm drainage system or watercourses any pollutants or waters containing any pollutants that cause or contribute to a violation of applicable water quality standards, other than stormwater.
- 2) It shall be unlawful to cause pollutants to be deposited in such a manner or location as to constitute a threatened discharge into the storm drainage system or waters of the State. Pollutants that are no longer contained in a pipe, tank or other container are considered to be threatened discharges unless they are actively being cleaned up.

Allowable Non-Stormwater Discharges (Exclusions) (Part I.E.2.a.v.)

Per the MS4 Permit (I.E.2.a.v., Excluded Discharges), the MS4 community needs to address the following categories of non-stormwater discharges or flows (i.e., illicit discharges) only if the community identifies them as significant contributors of pollutants to the MS4 (drainage system). The County considers all of the discharges or flows listed below to be allowed non-stormwater discharges if they are not contaminated.

- A. Landscape irrigation
- B. Lawn watering
- C. Diverted stream flows
- D. Irrigation return flow
- E. Rising ground waters
- F. Uncontaminated groundwater infiltration
- G. Uncontaminated pumped groundwater
(Note: Discharges containing groundwater that comes into contact with construction activity is not considered “uncontaminated” due to the potential for sediment content.)
- H. Springs
- I. Flows from riparian habitats and wetlands
- J. Water line flushing in accordance with the division’s Low Risk Policy Discharge Guidance: Potable Water

- K. Discharges from potable water sources in accordance with the Division’s Low Risk Discharge Guidance: Potable Water.
 - 1) The potable water shall not be used in any additional process. Processes include, but are not limited to, any type of washing, heat exchange, manufacturing, and hydrostatic testing of pipelines not associated with treated water distribution systems.
- L. Foundation drains
- M. Air conditioning condensation
- N. Water from crawl space pumps
- O. Footing drains
- P. Individual residential car washing
- Q. Dechlorinated swimming pool discharges in accordance with the division’s Low Risk Discharge Guidance: Swimming Pools.
- R. Water incidental to street sweeping (including associated sidewalks and medians) and that is not associated with construction
- S. Dye testing in accordance with the manufacturer’s recommendations
- T. Stormwater runoff with incidental pollutants
- U. Discharges resulting from emergency fire fighting activities
- V. Discharges authorized by a CDPS or NPDES permit
- W. Agricultural stormwater runoff
- X. Discharges that are in accordance with the Division’s Low Risk Policy guidance documents or other Division policies and guidance documents where the Division has stated that it will not pursue permit coverage or enforcement for specified point source discharges.

Note: Future discharge sources defined by CDPHE-WQCD will be evaluated by the County. If a Low Risk Discharge Guidance discharge is determined not appropriate for discharge to the County’s storm drain system, it will be noted in [Appendix C: Low Risk Discharge Guidance](#).

- Y. Other discharges that the permittee will not consider as an illicit discharge and approved by the Division.

Note: The MS4 Permit allows the County to pursue Division approval for additional discharges to be added to the list of “Discharges that can be Excluded from being Effectively Prohibited.” This entails a specific process and is detailed in the CDPS General Permit for Stormwater Discharges Associated with MS4s. See I.E.2.a.v.(Y) for specific criteria. The discharge is not permitted until the County receives a response letter from the Division stating the discharge is approved.

Section 2: Storm Drain System Mapping (Part I.E.2.a.i)

The MS4 Permit requires the County to “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.” The MS4 Permit defines a municipal separate storm sewer system outfall as “a point source...at the point where a municipal separate storm sewer discharges to state waters.”

Boulder County views its storm drain system map as an important tool for addressing stormwater pollution because it provides the County with a solid understanding of the drainage system (MS4) and waterways it is attempting to protect, and assists in solving water quality problems.

Boulder County's first GIS for the storm drain system primarily consisted of the Watershed Approach to Stream Health (WASH, now known as Keep it Clean Partnership) Drainage Map Project completed in 2004. During this project, the Public Works Department, Road Maintenance Division conducted inspections of drainage system assets. The features identified were limited, basically in right-of-way along county-maintained roads. Furthermore, the project did not always identify points where the drainage system discharges to receiving waters.

Due to these limitations, the County hired Anderson Consulting Engineers (ACE) in January 2017 to assist with our MS4 and drainage system mapping. Specifically, ACE was tasked with evaluating the current county drainage system records and geographic information system (GIS) data, and conducting desktop and field analysis to perform GIS map updates. The Request for Proposal (RFP # 6539-16) shows the scope of work included in the contract, and final report by ACE describes the depth and breadth of mapping that was performed for water quality purposes. Data from the ACE report and some internal data collections were used to create the County's stormwater mapping. This database is available at with permissions through the ArcGIS website.

Procedures for maintaining a current geodatabase and updating it for new outfalls, projects, and changed permit areas (i.e., annexations to municipalities) are as follows. Outfall location and other information are kept in a geodatabase available in GIS at [Boulder County Storm Drainage](#). When new features such as stormwater management facilities (SWMFs) or outfalls are built and accepted as part of stormwater quality permitting (SWQPs), the Public Works Consultant, CIP Manager, or Stormwater Quality Team will contact the Road Maintenance GIS Specialist and request an update to the GIS. If necessary, the Road Maintenance GIS Specialist will take point data in the field or use AutoCAD files to add the features.

Changes to the County's MS4 Permit area primarily consist of annexations to other municipalities and are tracked by Stormwater Quality Coordinator. Annexation updates are provided by the Community Planning and Permitting Department via the #GISAnnexationNotification email list. Each notification is assessed by the Stormwater Quality Coordinator using Boulder County Property Search and the Boulder County Stormwater web map to determine whether the property intersected the unincorporated urbanized area. If the property was previously located within the unincorporated urbanized area, the notification or map is saved here [..\ SD Mapping\Annexation Updates](#). This process is performed to maintain a simple list of changes to the Boulder County MS4 Permit area that corresponds to the calendar year and MS4 Annual Report to CDPHE as well as to modify any County outfall if that outfall is no longer operated by Boulder County. For real time updates to jurisdiction by parcel, please see Boulder County Property Search here <http://maps.boco.solutions/propertysearch/>. Updates to boundaries on a larger scale are also available on the outfall location map at [Boulder County Storm Drainage](#).

Locating Priority Areas (Part I.E.2.a.viii)

To identify priority areas, the County attempted to analyze areas with a history of past illegal discharges. However, prior to 2016 the County's IDDE complaint data did not distinguish whether the incidents were inside the unincorporated urbanized area. More importantly, we felt that there have not been enough recent IDDE complaints to provide meaningful trends. During the 2016-2017 reporting years, for example, the county averaged approximately 26 IDDE complaints per year county-wide, with the majority of complaints outside the unincorporated urbanized area. In 2022, there were 15 IDDE complaints and

approximately half were in the urbanized area. All complaints were investigated, and many were dismissed or resulted in immediate corrections, and were closed.

To improve the data allowing for the proper assessment, the County hired Truepoint Solutions (Truepoint) in April 2017 to design and configure the Accela Civic Platform for stormwater quality purposes such as tracking and the majority of the MS4 Permit-required recordkeeping. The Request for Proposal (RFP # 6642-17) shows the enormous undertaking and scope of work included in the contract. Beginning with the 2018 reporting year, Stormwater and Water Quality staff transitioned to the use of the Accela Civic Platform for all IDDE complaint tracking. Accela will enable us to readily determine repeat offenders, and to trend discharge types and locations. In the future this data can be taken into consideration for prioritization.

Also, in recognition of these limitations, in 2017 ACE was tasked with obtaining and developing a variety of GIS data that are useful for Illicit Discharge Detection and Elimination (IDDE) as shown in Table 1 below.

Table 1 - Map Layers and Data Needs

Category	Drainage System Characteristic	Mapping required by MS4 Permit	Data Source
Illicit Discharge Detection/Elim.	Critical pollutant source areas (e.g., hotspots) such as the following:	No	Local
	Hazardous material storage and disposal sites	No	OEM, County GIS
	General Industrial, Light Industrial, and Commercial Zoning Districts	No	LU, County GIS
	Permitted CDPS discharges (e.g., WWTPs, industrial facilities) and outfall locations	No	CDPHE
	Subdivisions/land areas served by septic systems	No	PH, County GIS

The County and ACE adapted methods in the Center for Watershed Protection (CWP) IDDE Guidance Manual¹ and conducted a desktop assessment of basic illicit discharge potential to identify priority areas. We mapped CDPS fixed facility discharges (data from CDPHE) and hazardous material generating sites (data from County Office of Emergency Management) and found that the density of these sites in the unincorporated Boulder County urbanized area was too low to provide meaningful priority areas. We then mapped General Industrial, Light Industrial, and Commercial Zoning Districts (data from Boulder County Community Planning and Permitting Department) within the unincorporated urbanized area and found a few concentrations of businesses that may be potential pollutant sources. Although this is instructive information, Boulder County does not consider these properties to be priority areas during this permit term. However, collectively all of this data will prove useful in IDDE tracing efforts as it can help with source identification and ruling out suspect flows.

Lastly, we mapped subdivisions served by septic systems (data from Boulder County Land Use Department) within the unincorporated urbanized area. The data was paired down to septic subdivisions that intersect with perennial streams, then paired down further to those subdivisions with nearby outfalls. The resulting priority areas are shown below in Table 2, and in GIS on the server here [Boulder County](#)

¹ CWP. 2004. *Illicit Discharge Detection and Elimination – A Guidance Manual for Program Development and Technical Assessments*. Center for Watershed Protection, Ellicott City, Maryland. October 2004.

[Septic and Perennial Streams](#). These subdivisions do not have piped drainage infrastructure or curb and gutter, but this is typical of our older land development. Technically, these areas are viewed as potential non-point source pollution priorities.

Table 2 – Priority Areas (2016-2021 Permit Term)

Subdivision	Description	Sanitary Sewage Disposal	Perennial Receiving Waterbody
Schlagel	South of Nelson Road nr. S. Airport Rd. Aerial imagery indicates potential for other types of illegal discharges, not just septic.	Septic	Dry Creek
Brigadoon Glen	South of Left Hand Creek near Niwot Rd. and N. 63 rd St. SepticSmart records indicate old original systems along creek.	Septic	Left Hand Creek

The County chose these priority areas for a variety of reasons. First, in a study by the Center for Watershed Protection failing septic systems were the most common residential discharge reported in 33% of IDDE programs surveyed (CWP, 2002), and the unincorporated Boulder County urbanized area is primarily residential. Second, it provides the County with an opportunity to better determine whether failing septic systems (a.k.a, Onsite Wastewater Treatment Systems or OWTS) in our community are causing illicit surface or subsurface discharges to adjacent streams. Third, it gives Public Health and Public Works Stormwater Quality staff an opportunity to work together with our Public Health OWTS staff to attempt improving a potential water quality issue that we have in common. Furthermore, the MS4 Permit requires us to train applicable County staff to recognize and appropriately respond to illicit discharges observed during typical duties, such as OWTS inspections. Therefore, we believe that these priority areas allow us to best meet the intent of the MS4 Permit, and train OWTS staff on the priority areas in an actionable way. A copy of our Left Hand Creek Septic System Study can be found on County files [..\WaterwaysReference\Boulder Creek TMDL 2B\ 2019 WQ MS4 Bacteria Impairment Supplemental\ Bridadoon Glen-Septic Study 2019\Final Report\BoulderCountyEcoli_Task2_Rev 2-11-20 - Final.pdf](#). The study determined that septic systems during dry weather, low flow conditions did not appear to be affecting E.coli levels in Left Hand Creek.

In 2023, the County intends to use the data collected in Accela to better understand locations and types of IDDE and assess if the IDDE priority areas need to change.

Section 3: Tracing the Source of an Illicit Discharge (Parts I.E.2.a.iv and I.E.2.b.iv)

Procedures to Respond to Reports of Illicit Discharges

Reports/complaints of an illicit discharge generally come into the Public Health Environmental Health front desk (303-441-1564), with this phone number publicized on our stormwater quality protection website and a variety of other locations. The stormwater quality protection website also has an online “report a concern” tool so that Water Quality and Public Health Administrative Services staff receive written reports directly via email. We encourage this method of written reporting and provide residents/employees guidelines on things to look for. Please see the stormwater quality protection website here:

<https://www.bouldercounty.org/environment/water/stormwater-management/>

The Keep it Clean Partnership also routinely updates its Reporting Numbers for Non-Emergency Stormwater Discharges, so that stormwater quality staff in the adjacent member communities (Boulder County and the cities of Boulder, Longmont, Lafayette, Louisville and Superior) are all able to refer reports to the appropriate jurisdiction. As a local public health agency, Boulder County Public Health (BCPH) staff also receive referrals directly from the CDPHE Colorado Environmental Release and Incident Reporting Line (24-hour) and disperse those to the respective jurisdiction/KICP member, if appropriate. Due to limited resources, Boulder County does not generally do a field inspection when the CDPHE referral states that the incident is being cleaned up, and does not impact water or threaten a storm drain (i.e., reported media impacted is “land” only).

BCPH front desk staff, including one administrative staff person dedicated to the Water Quality program, are knowledgeable about referring complaints to the correct staff. The Water Quality program has one staff member on-call each business day (primarily for OWTS purposes) that will confer with Public Works Stormwater Quality staff if an illicit discharge is reported, and coordination is required. At this time, most of the response and enforcement of the County’s IDDE program is through Public Health who coordinates with the Public Works Stormwater Quality Coordinator. However, some of limited response may also be by the Stormwater Quality Coordinator.

For additional details, please see Section 5 below on Procedures for Responding to Complaints and Subsequent Enforcement.

Division of Labor with EERT

Public Health Water Quality staff or the Public Works Stormwater Quality Coordinator generally respond to illicit discharge incidents in the urbanized area (based on 2010 census data). For emergency responses especially after business hours, the County will also rely upon on-call staff from BCPH’s Environmental Emergency Response Team (EERT). EERT members are not expected to meet the IDDE documentation requirements, and do not fill out IDDE Field Investigation Reports; however, after the initial response, then staff will collaborate to ensure all of the proper documentation has been completed. If EERT responds to an incident that impacts the county storm drain system or a waterbody, Water Quality and Stormwater staff should offer to do the follow-up and make an entry in the Accela database. Since most of these incidents are received from the CDPHE Colorado Environmental Release and Incident Reporting Line, follow-up generally consists of conferring with CDPHE on whether BCPH needs to be the lead agency ensuring proper cleanup and reviewing the written 5-day Spill Report and any analytical monitoring results. Water Quality and Stormwater staff intend to use the illegal discharge ordinance when it is deemed the most effective and applicable ordinance to enforce, or even to support another ordinance such as those used by EERT.

Our philosophy is that the illegal discharge ordinance is best used to address smaller incidental discharges that are not a grave concern to other governmental agencies (e.g., CDPHE, CSP, CDOT). EERT generally only gets involved in hazardous material releases, whereas Water Quality and Stormwater staff are attempting to fill the gap and address controllable impacts to water quality. Controllable impacts are the emphasis of our program rather than issues such as accidental spills and traffic accidents.

Documenting an Illicit Discharge

Beginning with the 2018 reporting year, Water Quality and Stormwater staff transitioned to the use of the Accela Civic Platform (a centralized recordkeeping system) for all IDDE complaint tracking and documentation. Instructions for Public Health Stormwater Quality staff and Public Works Stormwater Quality Coordinator on use of Accela for the IDDE record type are located here: \\crtfs01\he\HEShared\EH\Water_Quality_Program\Stormwater_MS4_Program_Program_Management_PMO-IT Projects\Accela Build RFP 6642_17\Accela wiki instructions\Illegal Discharge-11-30-17.docx

Water Quality and Stormwater staff are mostly using iPads and Adobe Acrobat fillable forms (IDDE Field Investigation Report) for investigations. The IDDE Field Investigation Report form contains all information/fields required under Part 1.E.2.b.vi(A) of the MS4 Permit and is available on the iPads in the PDF Expert App and here [..\Forms](#)

The iPads assist with efficiency as photographs are taken and dropped directly into the fillable form. All documentation such as IDDE Field Investigation Reports and written notices are uploaded into Accela ([use Appendix D below](#)). These documents are then accessible through both Accela and FileNet/IBM Content Management (with searchable text) under the appropriate unique record ID (IDDE-17-XXX).

Reporting of an illicit discharge in the County occurs through citizen observation, County field staff observation, or other public agency observation or spill reports. The Accela database tracks these different complaint types and documents the responding response and department. In the future, we intend to use this information as a metric on whether complaints are being received from another County department that we have trained and where illicit discharges are occurring.

The Accela database will also generate required information for Annual Reporting to CDPHE, including:

- Number of unresolved illicit discharge investigations (for the purposes of the Annual Report, an “unresolved illicit discharge” is one that has been identified or reported to the permittee and the requirements for removing the illicit discharge were not met during the reporting period).
- The number is reported if the issue is in the urbanized area and unresolved during the reporting period.

Detection of Illicit Discharges in the Field

Consider the following techniques for detection of potential illicit discharges (for discharges that are not known):

- Since the storm drain system is primarily designed to convey stormwater, flows should typically not be present during dry weather (48 hours without precipitation).
- There are sections of the storm drain system that are also designed to convey irrigation water. The County’s Storm Drain System GIS and the hydrology layer can help to confirm if this is the case.
- While any dry weather flow should be checked, some are considered allowable non-stormwater discharges, such as irrigation, groundwater, potable water, etc.
- Look for dry weather flows, staining, or residue that indicate a potential illicit discharge.

- The presence of floating and suspended materials, oil and grease, discoloration, turbidity, odor, foam, or abnormal vegetation (e.g., excessive algae, or dying plant life) can indicate a potential illicit discharge. These are suspect conditions.

In 2021, Boulder County used consultant support for a dry weather screening initiative to determine the extent to which Boulder County's MS4 contributes to elevated *E. coli* under dry weather conditions. The dry weather screening study of MS4 outfalls was also used to attempt identification of sources of elevated *E. coli* loading to 303(d) listed streams within the county's jurisdiction. Consultant and county staff successfully visited and investigated 116 of the 121 County MS4 outfalls in October 2021, with a follow-up visit to the remaining five outfalls in early December 2021. Of the outfalls investigated, only five were flowing and of these, only three were flowing at or above 5 gpm. The *E. coli* concentrations at all three sampled outfalls were below 126 MPN/100 mL. Moreover, the flowing outfalls appear to be PVC underdrains carrying groundwater rather than MS4 outfalls. Based on these findings, the Boulder County MS4 outfalls do not appear to be significant contributors of *E. coli* to impaired streams under dry weather conditions. The complete report on the dry weather screening study is available here <..\WaterwaysReference\WWE WQ Priority Project 2020-21\2021 Work Products\Dry Weather Investigation Memo\M-DryWeatherScreeningFindings Fall2021 12-30-21final.pdf>.

Source Tracing Procedures and Tools

Much of the drainage system in Boulder County consists of open drainage features (swales and ditches) rather than piped infrastructure, so surface observations are a useful technique to investigate potential illicit discharges when suspect flow is observed.

- Proceed up-gradient from the point of observation and follow surface flows, staining, or residue to discern possible source.
- If the source cannot be identified, consult the County's Storm Drain System GIS to determine potential flow paths, drainage features, or downstream receiving waters that could be impacted. The GIS is currently the main tool available for source tracing. Parcel information and potential pollutant source areas are included in the GIS to aid with investigative work.
- Working up the system from the point of observation, check the next upstream access point in the drainage system to see if there is evidence of discharge and to discern possible source;
- Repeat these steps until an access point is found with no evidence of discharge; the discharge source is likely to be located between these two access points (i.e., bracketing).
- Interview bystanders, businesses, residents for their observations or recent activities.

Section 4: Removing an Illicit Discharge (Parts I.E.2.a.vi and I.E.2.b.vi)

Per the MS4 Permit, Boulder County "must remove or require the removal of the source of the illicit discharge. The County must also cease or require the cessation of the illicit discharge. After the illicit discharge has been ceased, the County must also minimize surface contamination by removing or requiring the removal of surface residue or other type of pollutant source."

Of the various methods that can be used, determining the source of the discharge and securing the cooperation of the responsible party can be the most effective way to correct an illicit discharge and eliminate future discharges. If the responsible party is unwilling to remedy the problem, enforcement action may be necessary (Utilize procedures in Section 5, Enforcement).

A field guide for response and removal is found in [Appendix A: Guidance for Water Quality and Stormwater Staff on Responding - Removing an Illicit Discharge](#).

Responsible Party or Property Owner is Identified

Section 11 of the Illicit Stormwater Discharge Ordinance enables BCPH to hold the responsible party accountable for any cleanup and remediation associated with an illicit discharge. Please note that under other environmental laws (such as the CWA or RCRA), the property owner can also be held responsible. Therefore, when the property owner is a County department it is imperative to perform appropriate cleanup and limit the County's liability (see Procedures below).

If applicable, Water Quality or Stormwater staff will inform the responsible party that they are required to immediately report the illicit discharge incident to the CDPHE Colorado Environmental Release and Incident Reporting Line (1-877-518-5608). Refer to [Appendix C: State Spill Reporting](#) to determine when reporting is required. It is also appropriate to provide the responsible party with contact information for our on-call emergency environmental and abatement service contractors, making it clear that the cleanup and remediation costs are paid by the responsible party.

A Written Warning Notice, IDDE Field Investigation Report, or Notice of Violation (NOV) needs to be issued to the responsible party and used to: (1) require the cessation of the illicit discharge, (2) removal of the source, and (3) removal of surface residue. The Enforcement Procedures (see Section 5 below) are to be used to ensure these 3 requirements are met.

If appropriate cleanup is not conducted following a NOV, Water Quality or Stormwater staff may use an on-call contractor to perform the cleanup ourselves (i.e., administrative abatement). This ability is only available when the storm drain system is impacted. The process consists of coordinating with the County Attorney's Office to obtain an administrative entry and abatement warrant, assessing the cost of cleanup, recording the assessment notice with the County Clerk and Recorder (i.e., lien against the property), and collection of assessment by the County Treasurer. This administrative abatement procedure is further detailed in Section 8.2 of the Illicit Stormwater Discharge Ordinance. For watercourse only violations, we cannot perform administrative abatement, and instead have to use the other penalties listed in Section 11 of the ordinance or refer the matter to CDPHE due to their authority over State Waters.

Procedures for Cleanup Conducted by Boulder County

The MS4 Permit also requires written procedures for cleanup conducted by Boulder County to remove materials associated with an illicit discharge.

Boulder County has multiple office and facility locations throughout the County with facilities in Boulder, Longmont, Louisville, Nederland and Lafayette, with nearly all facilities located outside the unincorporated urbanized area (i.e., outside the MS4 Permit area).

In the Spring of 2018, the County awarded a number of contractors with continuing services contracts for spill cleanup, remediation, and emergency response services. The 2018 contracts are in the process of being resolicited in 2023. The Solicitation of Qualifications (SOQ # 6703-17) shows the scope of work included in the contracts, and that the services are specifically geared to MS4 and water quality purposes. One of our primary contractors is Environmental Restoration, LLC, the prime USEPA Emergency and Rapid Response Services Contractor in 8 of the 10 USEPA Regions (USEPA Regions 1, 2, 3, 4, 5, 6, 7, and 8)

covering 42 states. The contractors are tasked with containing and remediating spills and/or abandoned non-hazardous and hazardous materials at Boulder County facilities or activities, on Boulder County property, non-compliant private properties, or in surrounding bodies of water. These services are made available to all County departments ensuring timeliness and consistency in responding to spills, with particular attention to those that threaten Boulder County waterways.

When the responsible party or property owner is a County department, Water Quality or Stormwater staff provide technical and compliance assistance to the department, including facilitating reporting to CDPHE and other agencies, when applicable. Explain this role to the County department and help provide them with the resources they need to ensure cleanup is performed correctly.

An IDDE Field Investigation Report or Written Warning Notice needs to be issued to the responsible Boulder County department and used to: (1) require the cessation of the illicit discharge, (2) removal of the source, and (3) removal of surface residue. This is for documentation purposes and ease of sharing photos in context.

County staff utilize best professional judgment and available resources to ensure the discharge is eliminated to the extent possible, including removal of surface residue to prevent transport in future storm events. The on-call emergency environmental and abatement service contractors are available for this purpose and the following general steps need to occur.

1. County staff (e.g., Road Maintenance crews, Fairgrounds operations staff) are routinely the first responders, and notify their County department managers (e.g., Bob Kiepe, David McLeod, Joe Lafollette, etc.) who call and make arrangements with an on-call contractor.
2. The County department managers notify the Hazardous Materials Program Manager, Public Health Water Quality Coordinator, and Public Works Stormwater Quality Coordinator. The County department managers, Water Quality Coordinator, Stormwater Quality Coordinator, or their designees provide on-site monitoring of the cleanup work to ensure we get what we pay for.
3. The Hazardous Materials Program Manager performs a journal entry to bill the appropriate property owner or responsible party (County department). Cleanup and remediation costs are paid out of the appropriate County department budget. If the cost is too large, then the responsible department will need to complete a budget supplemental.

Responsible Party is Unknown

Only in the event that the responsible party cannot be identified, Boulder County may perform and pay for all necessary cleanup or remediation work using an on-call contractor. In this situation, funds are not recoverable and the cleanup and remediation costs are paid out of the Spill Response and Cleanup Services budget in Public Works (47540) regardless of whether it is County or private property that is impacted.

Division of Labor with CDPHE and EPA

If the source of a suspected illicit discharge is a CDPS or NPDES permitted facility or operation, or non-filer, the permit requirement to require removal of the illicit discharge can be met by notifying the CDPHE Water Quality Control Division through a written report.

Generally, this means that Stormwater or Water Quality staff need to determine whether the illicit discharge originated from a facility that has or should have CDPS or NPDES industrial general permit

coverage or wastewater discharge permit. If so, the illicit discharge can be referred to CDPHE Water Quality Control Division (if it hasn't already been referred to them), and our removal responsibility ends. In many cases it is preferable to coordinate with the Division on corrective actions and verify jurisdictional authority.

An example of a collaboration in 2021 with CDPHE is the Momentum Recycling Facility, see record No. IDDE-21-011 in Accela. However, if the discharge is associated with a CDPS facility ultimately it is the divisions jurisdiction. The County will still document the discharge either as a IDDE or as a water quality compliant depending on the nature of the discharge and manner in which the discharge becomes known. Water quality complaints are documented in Accela as COMW records.

To determine if a facility or operation has CDPS permit coverage, refer to <https://www.colorado.gov/pacific/cdphe/clean-water-permitting-sectors>.

The list of active CDPS certifications is available at <https://www.colorado.gov/pacific/cdphe/clean-water-active-permits> (sort by county). The list of facility types and sectors that require industrial stormwater coverage is available at [..\Industrial General Permits\Facility Sectors COR900000 PERMIT.pdf](#).

Section 5: Enforcement (Parts I.E.2.a.vii and c.vii)

As required by the MS4 Permit, Boulder County must “implement appropriate written enforcement procedures and actions to eliminate the source of an illicit discharge when identified/reported, discourage responsible parties from willfully or negligently repeating or continuing illicit discharges, and discourage future illicit discharges from occurring. The written procedures must address mechanisms for enforcement for all illicit discharges from the moment an illicit discharge is identified/reported until it is eliminated. The permittee must escalate enforcement as necessary based on the severity of violation and/or the recalcitrance of the responsible party to ensure that findings of a similar nature are enforced upon consistently. Written enforcement procedures must include informal, formal, and judicial enforcement responses.”

This section describes the available enforcement tools and provides guidance as to the type and level of enforcement that Water Quality and Stormwater staff may take when resolving an instance of non-compliance, and how to properly administer and track enforcement actions. It should be emphasized that the procedures described in this section are guidelines, not rules. Departure from these guidelines will sometimes be appropriate, justified, and acceptable. The intent of these procedures is to ensure that findings of a similar nature are enforced upon consistently (Part I.E.2.a.vii of the MS4 Permit).

Typically, the County enforces on illicit discharges in a graduated manner, beginning with efforts to obtain voluntary compliance and escalating to increasingly severe enforcement actions if compliance is not obtained. Each of these items below can be used in any order and can be used concurrently.

Informal Enforcement Response

Informal enforcement response includes notice to the operator or property owners such as verbal warnings upon field investigation, door hangers, telephone call with responsible parties, technical compliance assistance, and distribution of educational materials (e.g., the county's hazardous waste

disposal services for businesses, best management practices/control measures (BMPs/CMs) by business sector from KICP, web sites). Additional informal actions can include the following.

- Informal meetings
- Written Field Investigation Reports
- Warning Notice – please note that these written warnings do not constitute a Notice of Violation. **A Warning Notice is typically used to prevent deficiencies from becoming violations, or when voluntary compliance may be achieved.**
- Combination of any or all of the above.

In an effort to prioritize limited resources, Water Quality and Stormwater staff may consider the discretionary factors listed below to determine whether immediate investigation or enforcement response (both informal and formal) is needed. Alleged illicit discharge violations that are not an immediate threat to water quality are investigated (responded to) on the next available field day on the inspector's schedule. Due to limited resources, Boulder County does not generally do a field inspection when the CDPHE referral states that the incident is being cleaned up and does not impact water or threaten a storm drain (i.e., reported media impacted is "land" only).

Immediate threats to water quality are investigated (responded to) as soon as possible, typically within 1-2 days. This response time is necessary to balance previous commitments such as MS4 program management deadlines and additional inspection types (food facilities, body art, etc.). The time period for informal enforcement response is typically within a few days.

Formal Enforcement Response

Formal enforcement response consists of a Notice of Violation (NOV). The NOV is issued under signature of Water Quality and Stormwater personnel with authority to investigate and determine the existence of the illicit discharge.

In accordance with Section 11 of the Illicit Stormwater Discharge Ordinance, NOVs may require the following without limitation:

- Cease and desist violating discharges, practices, or operations
- Implementation of source control or treatment BMPs
- Immediate elimination of illicit connections or discharges
- Abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected property
- Payment to cover administrative and remediation costs

The NOV should state the timeframe for compliance and abatement of the violation, including the deadline for elimination of the illicit discharge or connection and, as appropriate, remediation or restoration required. Involvement of state or federal authorities may be sought if the source of an illicit discharge is believed to be occurring under a CDPS or NPDES permitted facility or activity.

Again, time periods for investigation or enforcement response are based on the discretionary factors listed below. The time period for formal enforcement response is typically within a few days and immediate when necessary.

In the event a property in violation fails to correct the violation or comply with the requirements under the NOV by the timeframes specified therein, including any reasonable extensions of time granted at the

discretion of BCPH with coordination of the Stormwater Quality Coordinator, the matter may be referred to the County Attorney's Office for determination of further enforcement steps. Upon consultation with the County Attorney's Office on a particular case, it may be appropriate to issue the responsible party or property owner a formal letter from the County Attorney's Office requiring compliance and abatement prior to a judicial enforcement response, or move straight to a judicial enforcement response. County Attorney's Office contacts are as follows:

- Attorney's Office Main Line, (303) 441-3700.
- Erica Rogers, CPP Attorney, (303) 441-3862.
- Olivia Lucas, Code Enforcement Attorney, (303) 441-3854.
- Kate Haywood, BCPH Attorney, (303) 441-4540.

Judicial Enforcement Response

Judicial enforcement response includes using the court process to obtain compliance through filing an administrative abatement action pursuant to Section 8 of the IDDE ordinance or other appropriate enforcement action, including for fines, under Section 11 of the IDDE ordinance. Judicial enforcement response is triggered only when a site has been through a formal enforcement response, and is still not compliant. Judicial enforcement may be initiated in conjunction with the County Attorney's Office. The timeline for judicial enforcement response is determined by court schedules.

Enforcement Escalation Process

Each incident of non-compliance requires a response that is appropriate for the nature of the violation. Enforcement actions include an assessment of the need for any corrective action, which may include appropriate penalty. Enforcement response levels generally escalate in the following progression; however, an evaluation of the incident takes into consideration the discretionary factors below to decide which level (or combination of levels) is used first.

1. Written Warning Notice or IDDE Field Investigation Report
2. Notice of Violation (NOV)
3. County Attorney Action (up to and including judicial enforcement action)

Discretionary Factors

Water Quality Stormwater staff use professional judgment and may consider the following discretionary factors to determine whether immediate investigation is needed, and in determining the appropriate level of compliance assistance and enforcement action in a given situation. Any action the County takes against the party in non-compliance is based on the nature and severity of the situation and in accordance with the Illicit Stormwater Discharge Ordinance. Discretionary factors include, but are not limited to:

- Severity (per MS4 Permit), Duration, and Impact of the Violation(s)—Consider the following questions:
 - Did the violation result in an actual or potential threat to human health and the environment?
 - Did the violation impact the County drainage system, MS4, or receiving waters?
 - What were the type and volume of pollutants discharged?
- Actions by the Responsible Party—Consider the following questions:
 - Was the violation intentional and what was the degree of negligence involved?
 - What precautions (e.g., BMPs/CMs), if any, were taken to prevent the violation?
 - Have there been past efforts to educate the responsible party with applicable requirements (i.e., should have known better)?

- Did the owner/operator obtain required permits, particularly applicable county permits?
- Compliance History—Use Accela to research whether there are chronic violations and consider the following questions:
 - Is there a pattern of previous recurring violations, whether the same or of a different nature, that indicate a disregard for compliance with County ordinances, or other environmental laws and regulations? **Boulder County defines these as chronic violations.**
- Responsiveness (as opposed to Recalcitrance referred to in MS4 Permit)—Consider the following questions:
 - How did the responsible party respond once the violation was discovered or documented?
 - Did they cooperate; did they act in good faith to respond to the violation in a timely manner? **Boulder County defines these qualities as being “responsive.” “Recalcitrant” is the opposite of “responsive.”**
- Circumstances— Consider the following questions:
 - Are there any mitigating factors outside the person’s control that contributed to the violation?
 - Was the violation a result of an extreme rainfall event or other unpredictable natural events?

Division of Labor with other County Departments

The Illicit Stormwater Discharge Ordinance is generally intended to control pollution from sources such as residential, commercial, industrial activities, vehicle, and unpermitted construction activities (small construction more than 100 feet from a waterway). Construction sites that have stormwater quality permit (SWQP) coverage address violations and enforcement using Article 7-904.I of the Land Use Code, Enforcement and Penalties and Stormwater Quality Ordinance, that is administered by the County Engineer.

Additionally, some residential complaints involving homeowners may be better suited for other County groups, such as CPP Code Enforcement (rubbish, community standards, animal units), Animal Control (excessive pet waste), or the OWTS team within BCPH (septic system complaints).

The IDDE program is primarily administered through Public Health with coordination and assistance from the Stormwater Quality Coordinator, as needed. The Public Works Stormwater Quality Coordinator reviews the program documents with Public Health Water Quality staff and ensures the program is operating within the requirements and goals of Boulder County’s MS4 permit. The Stormwater Quality Coordinator also assists in recordkeeping, responding to complaints and illicit discharges, and produces the MS4 Annual Report.

General Procedures for Illicit Discharge Violations

The goal of enforcement is to protect the public health, safety and welfare of Boulder County citizens by controlling pollution associated with illicit discharges.

Right of entry to investigate suspected violations of the Illicit Stormwater Discharge Ordinance is addressed by Section 8 of the Ordinance. Before entering any private property, County staff shall make a reasonable effort to locate the owner or other person having charge or control of the premises, or portion thereof desired to be inspected, and obtain consent to enter.

If such consent cannot be obtained while onsite, County staff will observe and document conditions as best as possible from public property or public right-of-way (e.g., county road). County staff may also make observations of a premises under investigation from adjacent private property when the owner the private property gives consent to do so. Observations from public property, public right-of-way, or adjacent private property with permission may provide a sufficient and good-faith basis on which to initiate an informal or formal enforcement action. For example, an NOV can be issued based on the evidence gained, and it can describe our efforts to obtain access. This approach is more likely to lead to the owner agreeing to give County staff access.

If consent of the owner or other person having charge or control of the property under investigation cannot be obtained, and County staff have a reasonable basis for suspecting a violation of the IDDE ordinance on the property, but onsite observation is deemed necessary to proceed with enforcement, the County staff may seek entry by submitting a sworn affidavit to the proper court of jurisdiction, setting forth facts sufficient to support a reasonable belief that a violation exists or is likely to exist and that further investigation of the property is thus warranted. A request to the court for entry must be reviewed and filed with the court by the County Attorney's Office. Such request for entry may include the right for County staff or its designees to set up devices on the property, conduct sampling, take photographs, or perform other investigations deemed reasonably necessary to investigate the alleged violation or assess the effect of any unauthorized discharges. In a situation where the owner cannot be located and the illicit discharge is ongoing or egregious, then make a request to the court for an administrative abatement warrant rather than a search warrant.

Because of the potential for enforcement actions to be appealed, complete documentation of all circumstances and activities related to a violation is essential. Water Quality and Stormwater staff must collect defensible documentation of the violation including clear photographic evidence (i.e., photos) that shows the relationship of the issue to downstream drainage features and waterbodies. **The IDDE Field Investigation Report form needs to be completely filled out to include information on the issue (e.g., discharge), potentially responsible party, etc.** Furthermore, communication with the responsible party is critical, as no enforcement action should come as a surprise to the recipient.

Procedures for Responding to Complaints and Subsequent Enforcement

1. **Complaint or referral of violation received** – Initial entry into Accela (database) as an IDDE (Illicit Discharge Detection and Elimination) record and review the nature of the complaint. We do not anticipate that IDDE records will be associated with other records in Accela. If that changes based on case specifics such as joint enforcement, use the [Accela Wiki](#) for instructions on how to relate records.
2. **Preliminary Research** – research property and compliance history in Accela for anything you might need to know, determine potential code citations for alleged violation, etc. Importantly, you will need to use a mapping program ([View the Boulder County Stormwater Map](#)) to determine if the site is within the MS4 Permit Area (i.e., unincorporated urbanized area). **If so, the incident needs tracked for the MS4 Annual Report and resolution needs to be carefully demonstrated.**

In some cases, it is preferable to leverage the complainant to provide photographic evidence, or guide when it is best to time your site investigation and be able to observe the issue. This is often the case with transient issues, such as a specific garbage truck that is having sporadic problems with hydraulic leaks. If the issue is resolved while waiting on evidence from the complainant, it may

not be necessary to conduct your own site investigation. Resolution can be considered the response other times there may be several subsequent site visits to verify that the complaint has truly been resolved.

3. **Initial Prioritization** based on information from the complainant and use of the discretionary factors listed above, as applicable.
4. **Site Investigation (i.e., Inspection)** – Use the IDDE Field Investigation Report form to document the investigation and note this as a Complaint. Obtain consent for entry as needed and attempt to contact owner at site or immediately after investigation to discuss the nature of the violation and corrective actions that are needed. No enforcement action should come as a surprise to the recipient.

If “No Violation” is found, note this in the Accela workflow and database, notify complainant, and close the case.

5. **Obtain contact information for the Potentially Responsible Party** – Use Accela for contacts from Building Permits, etc. Code Enforcement may be able to assist. County Sheriff databases are limited to very specific “criminal justice record” purposes. If plates need to be run, BCPH can submit a request to Colorado DMV to request a plate record: <https://www.colorado.gov/pacific/dmv/vehicle-record-searches>
6. **Informal and Formal Enforcement** – If a “Violation” is found, use the **discretionary factors listed above**, as applicable, to decide what type of enforcement is most appropriate to achieve the desired results. For consistency, the following guidelines are used.
 - a. **A Written Warning Notice or IDDE Field Investigation Report is typically issued to prevent deficiencies from becoming violations, or when voluntary compliance may be achieved.** At times, owners are unaware of the violation and will agree to voluntary compliance. Meet or discuss violation with owner and follow up in writing (IDDE Field Investigation Report or Written Warning Notice) with a **voluntary compliance timeline**. If using the IDDE Field Investigation Report, due dates can be included in the “Corrective Action Needed” column. If the voluntary compliance timeline is satisfactorily met, note the compliance in Accela database, notify complainant, and close the case. The **Written Warning Notice and other documents must be uploaded into the Accela record using the Documents feature**. Please see Appendix D for instructions.
 - b. **A Notice of Violation (NOV) is typically issued when the violations are severe in Duration or Impact (as explained in the discretionary factors listed above).** Severe violations can include impacts to the County drainage system or waterbodies, or conditions that threaten human health and/or the environment. NOV's need to be sent via certified mail through Water Quality program administrative staff. **Severe violations and needed corrections are communicated verbally and in writing (using the IDDE Field Investigation Report form) to the owner at site or immediately thereafter.**
 - c. **A Notice of Violation (NOV) is also issued to chronic and recalcitrant violators (as explained in the discretionary factors listed above).** Water Quality and Stormwater staff will evaluate the deficiencies as a whole to determine whether there is a pattern

that qualifies as a chronic or recalcitrant violation, in which case the violator will be issued an NOV within 10 business days of identification, unless there are extenuating circumstances.

Non-standard or complex NOVs can be reviewed by the County Attorney's Office upon request by staff. The **NOV and other documents must be uploaded into the Accela record using the Documents feature**. Please see Appendix D for instructions.

7. If using an IDDE Field Investigation Report or Warning Notice to document deficiencies and the voluntary compliance timeline is not satisfactorily met, Public Health Water Quality staff will issue an NOV. If the Illicit Stormwater Discharge Ordinance is updated to include Public Works as an administrator and enforcement department, then this document will be updated.
8. If using an NOV to document violations and the corrections have not been completed after the established deadlines in the NOV and no extensions have been granted, the matter shall be referred to the County Attorney's Office as follows.
9. **Referral to County Attorney**
 - a. If the violator has failed to remedy the violation after the established deadlines in the NOV and no extensions have been granted, the matter may be referred to the County Attorney's Office. Prior to referral, Water Quality or Stormwater staff shall confirm (generally through field inspection) that the violation still exists and ensure support from all appropriate management staff (Water quality Supervisor, Environmental Health Director). The case file in Accela should be fully up to date with all relevant documents and information at the time of referral.
 - b. An attorney with the County Attorney's Office will review the matter and send a letter to the violator stating that the case has been referred to the County Attorney's Office and that an enforcement action will be commenced unless the property is brought into compliance within a certain number of days. The letter will instruct the recipient to respond to the enforcement staff member assigned to the case if they wish to resolve the case short of court action. If the violator is represented by legal counsel, all communications should be routed through the County Attorney's Office.
 - c. If the violator responds to the letter and desires to correct the violation, the County Attorneys' Office and Water Quality and Stormwater staff will discuss available options to achieve compliance, including as appropriate, a written compliance agreement with the violator.
 - d. If the violator does not respond to the letter or fails to correct the violation, an enforcement action may be filed in County Court (Judicial Enforcement Response). Depending on the nature of the violation, the enforcement action filed in court may be to request an administrative abatement warrant under Section 8 of the Illicit Stormwater Discharge Ordinance or seeking monetary fines or other available relief under Section 11 of the Illicit Stormwater Discharge Ordinance.

Section 6: Training (Part I.E.2.a.ix)

While Boulder County is not expected to actively seek out unreported illicit discharges, the MS4 Permit does require us to identify and respond to illicit discharges observed during day-to-day normal work

activities. Water Quality and Stormwater staff identified those employees who will be likely to make such observations and provides training to those individuals.

Specifically, the following two types of staff are trained:

1. Water Quality and Stormwater staff that have the duty of conducting field investigations of reported illicit discharges; and
2. Staff who are in the field for primary duties, and who are trained to observe and report illicit discharges (**Public Health OWTS, Fairgrounds operations, and Road Maintenance staff**). Our goal is to leverage those staff who work directly in the MS4 Permit area or on the MS4/drainage system as part of their daily work routine.

Illicit Discharge Responder Training

Public Health Water Quality staff are primarily responsible for responding to an IDDE incident with support from the Public Works Stormwater Quality Coordinator. The training, at a minimum, consists of inspection personnel becoming familiar with using the Accela Database and iPads to document workflow and activities. Training also includes discussion and review of the IDDE procedures in this IDDE Program document.

Additional and more specific training is provided on the use of spill kits (see PIG® Truck Spill Kit video available here <https://www.newpig.com/pig-truck-spill-kit-in-stowaway-bag/p/KIT622#desc-spec>) and deployment of PIG® Oil-Only Absorbent Booms on the surface of waterways [..\..\Training Records\MCM3-IDDE\2018\BCPH Spill Response Kits](#).

Visual Observation Training

Staff who primarily work in the field include **Public Health OWTS, Fairgrounds and waste transfer operations, Parks and Open Space operations, and Road Maintenance and fleet staff** that are trained to observe and report illicit discharges. This training is typically given at staff meetings and includes basic information about noticing illicit discharges that may be encountered during typical duties and to report such incidences to Water Quality or Stormwater staff for further investigation. Again, controllable impacts are the emphasis of our program rather than issues such as accidental spills and traffic accidents. Due to this emphasis in the current permit term, we are not actively training emergency response personnel such as the County Sherriff's Department or outside agencies such as the Fire Protection Districts. These entities have their own spill response training.

Employee Type/Job Responsibilities	Training Topics	Type of Training	Documentation
<p>Public Health OWTS, Fairgrounds operations, Parks and Open Space, waste transfer staff, and Road Maintenance staff who primarily work in the field</p>	<p>How to identify an illicit discharge (common sources, behaviors)</p> <p>How to report an illicit discharge</p> <p>*Location of priority areas only covered with OWTS staff, as the areas are specific subdivisions served by septic systems.</p>	<p>May include one or more of the following:</p> <p>Standard operating procedures (SOPs), typical illicit discharges, and question and answer sessions</p>	<p>Training Sign In Sheet: Name, department, date of training, type of training, and list of topics covered</p> <p>Location of documentation: ..\Training Records\MCM3-IDDE</p>

Appendix A: Guidance for Water Quality and Stormwater Staff on Responding - Removing an Illicit Discharge

Initial Assessment:

- **Know what you're dealing with; do it safely; or call on experts.**
- Never approach, contact, or sample an unknown substance. If a highly toxic or flammable substance is discovered, staff should leave the immediate area and call 911.
- If the situation is an emergency, call 911.

Illicit discharge response:

1. Identify the material and volume spilled. If you cannot identify the material and its properties, have the responsible party contact a qualified cleanup contractor ([see below](#)) and **DO NOT proceed to step 2**.
2. Refer to the Safety Data Sheet (SDS) to determine appropriate personal protective equipment (PPE), such as gloves and safety glasses and appropriate cleanup methods. Gear up in the PPE using spill kit; one is located in the Jeep (PH Water Quality vehicle) and one in the public health office.
3. Stop the spread of the substance. Goal is to avoid discharge to the storm drain system or waterway and to minimize the area requiring cleanup. Avoid all contact with the substance by blocking or diverting the spill at a safe distance downgradient or downstream of the source.
4. Determine source of spill and stop the spill at its source if it can be done without contacting the substance (by closing a valve or setting a container upright).
5. Responsible party must contact a qualified cleanup contractor to perform all additional cleanup, including removing remaining material to prevent transport in future storm events to the extent feasible.

Possible actions for investigation and steps to ensure cease and removal:

- Go to site, obtain consent for entry, document violation (take pictures, record observations), utilize tracing methods to determine the source.
- Make contact with the property owner, manager, or other responsible party when possible, to ensure the source of the discharge is stopped and that appropriate cleanup occurs.
- When the responsible party cannot be identified and there is an immediate threat to water quality, secure the services of qualified cleanup contractor ([see below](#))
- When the substance, spent absorbent, and other cleanup equipment is determined safe to handle, but requires special disposal, you or the cleanup contractor may be able to take it to Boulder County's Hazardous Materials Management Facility (HMMF) for disposal (work with HMMF contact, Shelly Fuller @ 720-564-2243, to arrange a drop-off appointment).

Documentation

- Use iPad and IDDE Field Investigation Report form to record observations, contacts, and needed corrections.
- Update Accela database and upload all inspections, corrections, mitigation and correspondence.
- Refer to [Appendix B: State Spill Reporting](#) to determine when CDPHE reporting is required.

24 hour emergency environmental and abatement service contractors (check with Stormwater Quality Coordinator for current contact information):

Company Name	Contact Person	Address	Home Phone	Work Phone	Email
Custom Environmental (Ambipar)	Aaron Whatley	8041 N I-70 Frontage Rd Unit 11 Arvada, CO 80002	(800) 310-7445	(303) 423-9949	aaron.whatley@ambipar.com
Environmental Hazmat Services	Marty Green	4745 Independence St. Wheat Ridge, CO 80033	(720) 225-9252		mgreen@envhaz.com
Environmental Restoration	Patrick Heyneman	4295 Kearney St. Denver, CO 80216	(314) 347-2930	(888) 814-7477	p.heyneman@erllc.com

1. When calling a cleanup contractor, be prepared to provide the following information so the contractor can determine the correct equipment and develop an initial quote (if applicable):
 - a. The location of the spill (e.g., address, mile marker), its source (e.g., manhole, tanker truck), and identification of the type of material spilled (e.g., untreated wastewater, biosolids, specific chemical with applicable SDS);
 - b. The estimated volume of the spill;
 - c. How far the spill has travelled, and whether it has reached a drainage feature or waterbody;
 - d. Measures that are being or have been taken to contain or reduce the spill;
 - e. A list of potentially affected properties; and
 - f. A phone number and e-mail to contact an on-site county representative that will meet with the cleanup contractor.
2. **Purchasing policies need to be strictly followed at all times.** However, when waiting on quotes would result in the spread of spilled materials, increased cleanup costs, or additional environmental harm; it is not necessary to obtain quotes. In such emergency situations, the purchase order (i.e., ORACLE) needs to document why you were not able to obtain quotes. It is recognized that in many cases the contractor will need to respond to the scene to provide a quote and once mobilized it is most efficient to also perform the cleanup; therefore, in emergency situations quotes are not necessary.
 - a. An Emergency Response Work Order (EWO) or similar form will be prepared by the Contractor and emailed to County for signature and approval.
3. When the cleanup is not time sensitive, the exception listed in number 4 above does not apply and quotes must be obtained when applicable (i.e., for purchases \$10,000 or more).

Appendix B: State Spill Reporting

General

- Not all spills require reporting. Reach out to Stormwater Quality Coordinator or Public Health Water Quality to verify reporting requirements (Jennifer Keyes, jkeyes@bouldercounty.org, 720-225-7228 or Erin Dodge, edodge@bouldercounty.org, 303.441.1241)
- Confer with CDPHE or EERT on whether water supplier call-down needs to be initiated by the responsible party to notify downstream users of a qualifying incident.
- Spills that may result in a discharge of pollutants to State Waters need to be reported immediately to CDPHE Colorado Environmental Release and Incident Reporting Line by calling 1-877-518-5608.
- State Waters include Boulder Creek, South Boulder Creek, St. Vrain Creek, Left Hand Creek, Coal Creek, Rock Creek and their tributaries, and also include irrigation ditches, dry gulches, and stormwater conveyances (when they discharge to a surface water).
- To request Technical Assistance from EPA On-Scene Coordinator (OSC) call EPA Region 8 Duty Officer at 303-293-1788. See EPA slides in training records (Oil Spill Response - 8 hr Fast Water CSP Hazmat 8-5-19.pdf) for federal reimbursement for local response costs on oil spills.

State Reporting

To determine whether a spill is reportable, answer all of the following:

1. Was the discharge to, or did it result in a release to State Waters? And,
2. Was the spill attributable to County operations?
 - If yes, Water Quality or Stormwater staff will report on the County's behalf, if applicable.
 - If no, our reporting is not required, although is encouraged by the State. Typically, the responsible party is informed by County staff of the State reporting requirement and the County does not report on their behalf.
3. Was the spill to an impervious area or soil? And,
4. Was it fully contained and recovered or managed so that it cannot reach State Waters during the incident, or in the future? This can include containment and recovery within the storm drain system. And,
5. Was it managed in accordance with our BMPs and SOPs in accordance with the MS4 Permit? Spill SOPs are included in this document as Appendices. Operational BMPs are available at G:\EH\Water Quality Program\Stormwater_MS4 Program\MCM6_County Ops_Activity BMPs
 - If yes, reporting is not required.
 - If no, report.

If reporting a spill, be prepared to provide the following information:

1. The name of the responsible person and, if not reported by that person, the name of the person reporting the spill and the name of the responsible person;
2. An estimate of the date and time that the spill began or the actual date and time, if known;
3. The location of the spill, its source (e.g., manhole, tanker truck), and identification of the type of material spilled (e.g., untreated wastewater, biosolids, specific chemical with applicable MSDS);
4. The estimated volume of the spill and, if known, the actual date and estimate of the time that the spill will be fully controlled, if known;
5. Measures that are being or have been taken to contain, reduce, and/or clean up the spill;
6. A list of any potentially affected area and any known downstream water uses (e.g., public water supplies, irrigation diversions, public use areas such as parks or swim beaches) that will be or have been notified; and

7. A phone number and e-mail to contact a representative of the responsible person that is in charge of the response.
8. A written 5-day Spill Report will need to be submitted. An incident number and spill report form will be provided by the State when the initial verbal notification is reported.

Definitions

Waters of the State of Colorado (as defined in MS4 Permit): Any and all surface waters and subsurface waters which are contained in or flow in or through this state, but does not include waters in sewage systems, waters in treatment works of disposal systems, waters in potable water distribution systems, and all water withdrawn for use until use and treatment have been completed. This definition can include water courses that are usually dry. Note: this permit is only applicable to applicable discharges to surface waters of the state.

Municipal Separate Storm Sewer System (MS4) (as defined in MS4 Permit): A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- a. Owned or operated by a State, city, town, county, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or a designated and approved management agency under section 208 of the CWA that discharges to state waters;
- b. Designed or used for collecting or conveying stormwater;
- c. Which is not a combined sewer; and
- d. Which is not part of a Publicly Owned Treatment Works (POTW). See 5 CCR 1002-61.2(62).

References

CDPHE Environmental Spills – reporting, forms, guidance
<https://www.colorado.gov/pacific/cdphe/wq-environmental-spills>

CDPHE Environmental Spill reporting brochure 2017
https://www.colorado.gov/pacific/sites/default/files/OEPR5_Spill_line_brochure_1-15-14.pdf

CDPHE Spill Reporting Guidance 2008 (Policy No. WQE-10)
https://www.colorado.gov/pacific/sites/default/files/WQ_Ops-090904_SpillGuidanceDocument.pdf

Reg 65 (Regulations Controlling Discharges to Storm Sewers)
https://www.colorado.gov/pacific/sites/default/files/65_2008%2805%29hdr.pdf

Where the responsible party for a discharge can demonstrate to the Division that a discharge to a storm sewer system is contained within and removed from the storm sewer system without reaching state waters, as defined at section 25-8-103(19), C.R.S., no violation will be found to exist.

Appendix C: Low Risk Discharge Guidance

The MS4 Permit allows the County to consider some substances as allowable non-stormwater discharges when discharged in accordance with CDPHE Low Risk Discharge Guidance.

The following discharge guidance apply:

- [Potable water monitoring devices](#)
- [Potable water](#)
- [Rural Roadway Culvert Flushing by Public Entities](#)
- [Snow melting](#)
- [Surface cosmetic power washing operations to land](#)
- [Swimming pools](#)
- [Fire suppression dischargers](#)
- [Hot springs](#)

The following discharge guidance are available, but unlikely apply to discharges in unincorporated Boulder County:

- Low risk discharge guidance: [Uncontaminated groundwater to land](#), as uncontaminated groundwater is an allowable discharge to storm.

Appendix D: Accela Document Upload

Documents must be uploaded into the Accela record using the Documents feature. General information and instructions can be found here under “Attaching a Document to a CAP”: [Accela Wiki](#) .

1. Under PUBLIC INFO CATEGORY from the drop-down menus Select BOCO FILENET in the first one, and then in the second one Select either Internal Correspondence, Limited Public, or Public. Currently, most documents are “Limited Public.”

2. Next under DESCRIPTION the name of your document should be one of the following:
 - Complaint Description
 - Investigation Report
 - Warning Notice
 - NOV
 - Complainant Correspondence
 - Corrective Action Inspection
 - Corrective Action Approval
 - CDPHE Incident Report
 - CDPHE Correspondence
 - 5-day Spill Report
 - Cleanup Report
 - Waste Disposal Records