Illicit Discharge Detection and Elimination (IDDE) Plan

Prepared by:
Utah Department of Transportation

April 2017
Illicit Discharge Detection and Elimination (IDDE) Plan Modifications

Table 0-1: Modifications to UDOT’s IDDE Plan

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<th>Mod. No.</th>
<th>Date</th>
<th>Brief Description</th>
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1 Illicit Discharge Detection and Elimination

1.1 Introduction

This Illicit Discharge Detection and Elimination (IDDE) Plan describes procedures and best management practices to protect UDOT’s Municipal Separate Storm Sewer System (MS4) from pollutants due to illicit discharges and illegal connections.

This Plan complies with the requirement in Section 4.2.3 of the Utah Department of Transportation UPDES MS4 Permit (UTS000003) “Authorization to Discharge Municipal Storm Water Under the Utah Pollutant Discharge Elimination System (UPDES)” (Permit) which states:

“The Permittee shall revise as necessary, implement and enforce an IDDE program to systematically find and eliminate sources of non-storm water discharges to the MS4 and to implement defined procedures to prevent illicit connections and discharges according to the minimum performance measures listed below. The IDDE program shall be described in writing, included in the Permittee’s SWMP document, and contain the elements detailed in this part of the Permit.”

1.2 Illegal Connections and Illicit Discharges (IC/IDs)

Illegal connections may carry pollutants from off-site sources to UDOT drainage systems. Common examples of illegal connections are floor drains, sewer lines, and other similar features.

An illicit discharge is any non-stormwater discharge that enters UDOT right-of-way, except those allowed in Permit Section 1.2.2.2. Common examples of non-stormwater discharges include wash water, sediment, spilled chemicals, liquid waste, sewage releases and illegal dumping.

2 Legal Authority

Utah Code 72-7-102, 72-7-104, and 72-7-208 grants UDOT adequate authority to detect, investigate, eliminate, and enforce against any non-stormwater discharges (including illegal dumping) that it identifies in its storm drainage system or within its right-of-way. Illegal connections to UDOT’s storm drainage system are considered unauthorized encroachments.

3 Priority Areas for IC/IDs

Areas within UDOT’s MS4 that are more likely to have illicit discharges are considered priority areas. Priority areas are identified based on the following criteria:

- Industrial or commercial development adjacent;
- A history of past IC/IDs;
- Water bodies adjacent;
- Onsite sewage disposal systems; and
- Older infrastructure.
The Permit requires a plan that specifies those areas that are considered a priority and conduct field assessments within those areas to detect IC/IDs.

Rest areas and park and ride lots have been identified as priority areas and will be screened during the 2015-2020 Permit period. Rest areas and park and ride lots are located adjacent to interstate highways and other major state routes to provide motorists refuge to stop and park. UDOT’s rest areas provide amenities such as restrooms, visitor information, picnic areas and drinking water. These facilities have a higher opportunity for illicit discharges and onsite sewage overflows.

At a minimum, 20% of the priority areas will be screened each year of the Permit period, starting with the highest ranked. Document inspections using the inspection form in Appendix A.

4 Dry Weather Screening at Stormwater Outfalls

Dry weather screening involves identifying stormwater outfall locations, performing field investigations during periods of dry weather and assessing the potential for illicit discharges. UDOT maintains an inventory of stormwater outfall locations within a GIS map titled “Storm Drain Systems”. This map shows storm drainage systems, outfall locations, ditches, canals and receiving waters.

The Permit requires that stormwater outfalls be screened at least once during the Permit term. Dry weather screening will be performed on all stormwater outfalls that are located within the Department’s right of way where the drainage system discharges to Waters of the State. Drainage system’s that discharge into detention and retention basins will not be screened unless the basin discharges to a Waters of the State.

5 IC/IDs Management Procedures

5.1 Discovery and Reporting of IC/IDs

IC/IDs, which do not initiate emergency response protocol, are identified and documented in the following ways:

UDOT staff must notify their supervisor of suspected IC/IDs. Staff should provide the location and description of the connection and/or discharge to UDOT right-of-way. The supervisor should then notify the Region Safety/Risk Manager.

The public can notify UDOT of suspected IC/IDs by using UDOT’s “Click ‘n Fix” internet and phone application. Details of IC/IDs are forwarded to the UDOT Regions for investigation.

The Region Safety/Risk Manager is responsible for coordinating, tracking and reporting the investigation and resolution of IC/IDs. Refer to Appendix B for the Standard Operating Procedures for Region Safety/Risk Managers. An IC/ID Incident Report must be completed for all suspected IC/IDs, refer to Appendix C.
A field investigation may need to be conducted to determine the source, substance, and duration of the illegal connection or illicit discharge.

1. Investigator Responsibility:
   a. Estimate the quantity of flow observed
   b. Take photos of the discharge and any staining, deposits, etc.
   c. Trace the source of the illicit discharge
   d. Notify the UDOT Region Safety Risk Manager

2. UDOT Region Safety Risk Manager Responsibility:
   a. Complete the “UDOT Spill and Illicit Discharge Detection and Elimination (IDDE) Incident Report”.
   b. Based on the quantity and type of pollutants discovered, report the incident on the same day of discovery to:
      i. Local Health Department
      ii. Utah Department of Environmental Quality, Division of Environmental Response and Remediation, 24 hour phone number: 801 536-4123.
   c. Collect samples for lab testing if this would help with source identification.
   d. Deliver samples to UDOT Chemist for testing to determine the types of pollutants observed.
   e. Once source is located UDOT will issue a Notice of Violation and will work with state and local authorities to begin enforcement actions and eliminate the connection.

5.2 Storm Drain Network Investigations

The source of some illegal connections or illicit discharges can be located by systematically isolating the area from which the polluted discharge originates. This involves progressive investigation at junction boxes in the storm drain network to narrow down the location where the illegal discharge is entering the system. This method is best used to identify constant or frequent discharge sources such as an illegal connection into the drainage network.

Field crews should work progressively upstream from the outfall where the discharge was discovered and inspect junctions until the discharge is no longer present. Observations at junctions can be time-consuming, but they are generally a necessary step before conducting other tests. In particularly large storm drain systems, it may be helpful to first identify major branches of the system and test one junction at the downstream end of each branch. This can help to reduce the area that must be investigated. Drainage network investigations should include the following steps:

1. Review the drainage system map and identify the major branches. If a drainage system map is not available or major branches cannot be identified, then manhole observations must be done at each successive upstream manhole to map the drainage system and isolate the location of the polluted discharge entry. In such a case, field crews should also use the GPS unit to locate each observed manhole and add the location readings to the drainage system map.

2. Starting from the outfall, make observations at the next upstream manhole or junction to see if there is evidence of polluted discharge. As with the outfall inspections, field crews
are looking for the presence of flow during dry weather, foul odors, colors or stained deposits, oily sheen, floatable materials, etc.

3. Repeat observations at each upstream junction until no evidence of discharge is found; the discharge source is likely located between the junction with no evidence of discharge and the next downstream junction.

4. Work downstream from the “clean” manhole or junction to isolate the location where the polluted discharge is entering the storm drain system.

5. Document all findings on the attached UDOT Spill, Illegal Connection and Illicit Discharge Incident Report.

The Figure below shows the observation steps to isolate the location where an illicit discharge is entering the storm drainage network.

When visual inspections are not enough to isolate the source of the illegal discharge, additional field tests can be performed, such as; Dye testing or Video Inspection Closed-circuit television (CCTV) Inspection.
5.3 Enforcement of IC/IDs

All IC/IDs will be eliminated as expeditiously as possible. Progressive enforcement for removal of IC/IDs may include the following actions:

**Written Notice** – A Notice of Violation letter (Appendix CD) will be sent to the property owner where an IC/ID is discovered or to the individual responsible, if known.

**Agency Action** – If the connection is not removed within 10 days, a Notice of Agency Action (Appendix D) and a copy of the Notice of Violation will be sent to the Office of the Attorney General in order to request assistance in the removal of the discharge/connection.

**Removal of Illegal Connection** If the connection is not removed within 10 days after the Notice of Violation is issued to the responsible party, UDOT may remove the installation at the owner’s expense.

**Legal Action** - UDOT may pursue legal action, where applicable, to ensure corrective actions are taken to resolve an IC/ID and to recover appropriate costs.
Appendix A: Priority Area Screening Inspection Report
IDDE Priority Area Screening Inspection

INSPECTION INFORMATION
Inspection Date: __________ (Inspect during dry periods; 72hrs since previous storm)
Inspector Name(s): ________________________________________________________________
Area ID: ______ Region: ____ County: ______________ Nearest Route: ______ Milepost: __
Description of Priority Area: ______________________________________________________
______________________________________________________________________________
Adjacent Land Use(s): □ Commercial □ Industrial □ Agricultural □ Residential
□ Undeveloped □ Institutional □ ____________________________

FIELD OBSERVATIONS
Is there a Water of the State adjacent to the area? □ Yes □ No
If Yes, Name of waterbody: ______________________________________________________
Is there a storm drainage system within the area? □ Yes □ No
Is there a stormwater outfall within the area? □ Yes □ No
Are there offsite connections into the storm drainage system? □ Yes □ No
If Yes, Is there flow present? □ Yes □ No
If Yes, Describe: ________________________________________________________________
Description of offsite flow if unknown:

<table>
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<tr>
<th>Odor</th>
<th>Color</th>
<th>Clarity</th>
<th>Floatables</th>
<th>Deposits/Stains</th>
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<td>□ Clear</td>
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<tr>
<td>□ Chemical</td>
<td>□ White</td>
<td>□ Cloudy</td>
<td>□ Oil Sheen</td>
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<td>□ Sewage</td>
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Is there evidence of illegal dumping? □ Yes □ No
If Yes, Describe: ________________________________________________________________

CONCLUSION
Is it likely that an illicit discharge occurred? □ Yes □ No
If Yes, Notify the UDOT Region Safety/Risk Manager.
Appendix B: Standard Operating Procedures for Region Safety/Risk Managers
Standard Operating Procedures for Region Safety/Risk Managers

1.0 Spills and Illicit Discharges

1. Evaluate the amount, toxicity, and if the spill or illicit discharge could drain to surface waters or a storm drainage system.
   a. Hazardous Spill/Discharge: A leak, spill, or other release meeting any of the following characteristics is a hazardous spill and requires notification.
      i. 2.2 pounds or more of “acutely hazardous waste” (see the material's Material Safety Data Sheet), or
      ii. 220 pounds or more of other hazardous waste, or
      iii. 25 gallons or more of spilled fuel or oil causing a sheen to form on a water surface.
   b. Minor Spill/Discharge: A spill or illicit discharge that does not meet the hazardous spill/discharge definition and will not harm the public, personnel or the environment.
   c. Contact a state certified hazardous materials lab when necessary to identify an unknown substance.


3. Prepare an IC/ID Incident Report (Appendix A) and submit it to the (DERR).

1.1 Notification of Spills and Illicit Discharges

1. Determine the quantity or severity of the spill or illicit discharge.
2. For hazardous spills/discharges, notify the:
   a. Utah Department of Environmental Quality, (24-hour emergency number) (801) 563-4123
   b. Environmental Protection Agency (EPA) National Response Center, (800) 424-8802

1.2 Corrective Actions

1. Hazardous Spill/Discharges:
   a. Coordinate with DEQ Division of Solid and Hazardous Waste on acceptable clean-up and disposal practices.
   b. Use a hazardous waste removal/disposal company with a UDOT procurement contract or contract with the Utah Department of Administrative Services.

2. Minor Spills/Discharges:
   a. Begin spill clean-up activities using properly trained staff.
      i. Use contingency clean up products and equipment to handle non-emergency spills (absorbent materials, personal protection equipment, compatible empty container to store spilled material, fire extinguisher, etc.)
      ii. Spilled liquids or solids are to be properly contained in a compatible container and stored on-site until proper disposal action is taken as required by state and federal requirements.

1.3 Illegal Connections

1. Determine if the connection has been permitted. Coordinate with the Region Permit’s Officer.
2. Prepare an IC/ID Incident Report and submit it to the DERR.

2.0 Corrective Actions

1. If the connection is not permitted, issue a Notice of Violation (Appendix CD) and work with state and local authorities to begin enforcement actions and eliminate the connection.
Appendix C: Spill, Illegal Connection and Illicit Discharge Incident Report
Spill, Illegal Connection and Illicit Discharge Incident Report

INCIDENT INFORMATION
Report Date: _______ Incident Date: _______ Reported By: ________________________
Region: ___ County: ________________ State Route: _______ Milepost: _______
Location Description: __________________________________________________________
Description of Incident: _____________________________________________________________________________________________
__________________________________________________________________________________________________________________________________
__________________________________________________________________________________________________________________________________
Amount of Discharge (estimated): ________________________________

INVESTIGATION INFORMATION
Date Investigation Began: _______ Was Source of Discharge Found?  □ Yes □ No
Any Discharge to Storm Drain or Surface Water? □ Yes □ No
If Yes, Name of Receiving Surface Water: ________________________________
Method(s) Used to Discover Source of Discharge: __________________________________________________________
__________________________________________________________________________________________________________________________________
__________________________________________________________________________________________________________________________________
__________________________________________________________________________________________________________________________________
Agencies Discharge was Reported To: __________________________________________ Date: __________
________________________________________ Date: __________
________________________________________ Date: __________

ILlicit DISCHARGE REMOVAL INFORMATION
Description of Actions Taken to Remove the Discharge: ______________________________
__________________________________________________________________________________
__________________________________________________________________________________
Has Illicit Discharge Been Remediated?  □ Yes - Date: __________ □ No

ENFORCEMENT INFORMATION
List Enforcement Action(s) Taken
Date: _______ Enforcement Action: ____________________________________________
Date: _______ Enforcement Action: ____________________________________________
Appendix D: Notice of Violation
NOTICE OF VIOLATION

[Person or Business Name]
[Address of Person or Business]
[City, UT of Person or Business]

Dear Property Owner,

The Utah Department of Transportation (UDOT) is responsible for maintaining not only roadways, but also the extensive storm drain network located within the State rights-of-way. The Utah Pollutant Discharge Elimination System (UPDES) Program, which is a component of the Clean Water Act of 1972, requires UDOT to control the amount of pollutants entering the drainage system. Part of this charge is the detection and elimination of illegal discharges or connections to the system that may contain pollutants or are otherwise not allowed. Left uncorrected, any pollutants entering the system will ultimately impact nearby streams, as storm drainage is not treated at any sort of treatment facility. In addition, neighboring property owners are not allowed to occupy, use, or interfere with public right-of-way without permission. Any discharge/connection without permission is an illegal encroachment on UDOT right-of-way.

An inspection of the drainage system has occurred in the vicinity of your property and an illegal connection/discharge was discovered entering into the UDOT storm drain system. The discharge/connection was discovered on [insert date] at [Business Name (if applicable) and Address].

Type of pollutant(s): [insert pollutant(s)].

Photographs of this discharge/connection are enclosed with this letter. In addition, aerial photographs are enclosed showing the location of this discharge/connection.

This discharge or connection must be ceased or removed within 10 days. A follow-up investigation will be conducted after that time to ensure compliance. If the situation is not corrected, UDOT will take corrective measures, including but not limited to sending this matter to the Utah Office of the Attorney General so that a lawsuit may be filed. In the alternative, UDOT may remove the discharge/connection and bill you directly pursuant to Utah Code 72-7-104 and 72-7-208. If the illegal discharge/connection cannot be removed within 10 days, you do not understand this notice, or you disagree that an illegal discharge/connection exists at your property, please contact me with further details or explanation by calling [phone number of UDOT Stormwater Program Manager] or by email at [email of UDOT Stormwater Program Manager].

Sincerely,

[Name of UDOT Stormwater Program Manager]
UDOT Stormwater Program Manager
[Address of UDOT Stormwater Program Manager]
Enclosure (photographs)
Appendix E: Notice of Agency Action
Dear [Name of Attorney General],

The Utah Department of Transportation (UDOT) is responsible for maintaining not only roadways, but also the extensive storm drain pipe network located within the State's rights-of-way. Pursuant to Utah Code 72-7-1-104 and 72-7-208, the state has legal authority to remove any illegal connection/discharge within the State's rights-of-way.

On [insert date], an illegal connection/discharge was discovered entering into the UDOT system at [insert location]. A Notice of Violation (attached) was sent to the property owner [insert name] on [insert date]. Ten days have elapsed since the issuance of the letter and UDOT conducted a follow-up inspection on [insert date], where it was discovered that the illegal connection/discharge has not ceased or been removed.

This letter is to request assistance from the Utah Attorney General's Office in the removal of the discharge/connection. If you have any questions or need further information, please contact me by calling [phone number of UDOT Stormwater Program Manager] or by email at [email address of UDOT Stormwater Program Manager].

Sincerely,

[Name of UDOT Stormwater Program Manager]
UDOT Stormwater Program Manager
[Address of UDOT Stormwater Program Manager]