



# STORMWATER POLLUTION PREVENTION PLAN

FEBRAURY 21, 2020

---

## 3422 NEPHI MAINTENANCE STATION



Utah Department of Transportation  
Nephi Maintenance Station  
105 E. 900 N.  
Nephi, Utah 84648  
(435) 623-1717

## Certification

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

Daniel Page, S.E.

---

Certifying Official

Director of Maintenance, Asset, and Facility Management

---

Certifying Official's Title

---

Certifying Official's Signature

---

Date

## Stormwater Pollution Prevention Team

The following personnel are responsible for implementing this Stormwater Pollution Prevention Plan (SWPPP). The Station Supervisor is responsible for ensuring that there is a current SWPPP for this facility.

<u>Name</u>	<u>Position</u>	<u>Role</u>	<u>Reference in SWPPP</u>
Chad Cowan	Station Supervisor	Manages daily operations at the facility, updates facility SWPPP, documents any inhouse stormwater related training in SWPPP	1.5, 3.4, 4.1, 5, Attachments B, E, F
Neil Lundell	Area Supervisor	Oversees maintenance facilities within their area, primary contact for spills within their area	4.1, 5, Attachment B
Jordan Pogorzelski	Region Stormwater Program Coordinator	Notified of any issues, needs or questions regarding stormwater and stormwater infrastructure at the facilities in their region	4.1, 5, Attachment B

# TABLE OF CONTENTS

Acronyms and Abbreviations.....	ii
1 Introduction.....	1
1.1 SWPPP Purpose .....	1
1.2 SWPPP Objectives .....	1
1.3 Pollutants.....	1
1.3.1 Description of Potential Pollutant Sources.....	2
1.4 SWPPP Availability.....	2
1.5 SWPPP Revisions .....	2
2 Maintenance Facility Information .....	3
2.1 Property Information .....	3
2.2 Topological Features .....	3
2.3 Environmental Areas and Surface Water Bodies .....	3
2.4 Water Supply and Site Wells .....	3
2.5 Stormwater Conveyance and Treatment BMPs .....	4
2.6 Wash Water Conveyance .....	4
2.7 Sewage Conveyance.....	4
3 Maintenance Facility Activities and BMPs .....	5
3.1 Activities .....	5
3.1.1 Operations and Maintenance Program – Standard Operating Procedures .....	5
3.1.2 SOPs for Salt and Other Deicing Materials.....	5
3.1.3 SOPs for Vehicles and Equipment .....	5
3.2 Pollutant Sources and Best Management Practices.....	6
3.3 Non-Hazardous Materials Storage.....	9
3.4 Hazardous Materials Storage.....	10
3.5 BMP Training and Awareness.....	11
4 Non-Stormwater Discharges .....	12
4.1 Non-Stormwater Discharges (Prevention and Reporting).....	12
5 Facility SWPPP Inspections .....	13

## Attachments

ATTACHMENT A: Site Map

ATTACHMENT B: Operations and Maintenance Program (Standard Operating Procedures and Resources)

ATTACHMENT C: Inspection Documentation

ATTACHMENT D: Hazardous Materials References

ATTACHMENT E: Training Information

## Acronyms and Abbreviations

BMP	Best Management Practice
DWQ	Utah Division of Water Quality
Maintenance	UDOT Maintenance, Asset, and Facility Management
MOU	Memorandum of Understanding
MS4	Municipal Separate Storm Sewer System
Permit	UDOT UPDES Municipal Stormwater Permit
SOP	Standard Operating Procedure
SWMP	Stormwater Management Program
SWPPP	Stormwater Pollution Prevention Plan
UDOT	Utah Department of Transportation
UPDES	Utah Pollutant Discharge Elimination System
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey

# 1 INTRODUCTION

This Stormwater Pollution Prevention Plan (SWPPP) has been prepared for this maintenance station in general accordance with the requirements of the Utah Department of Transportation (UDOT) Stormwater Management Program (SWMP) to comply with the Utah Pollutant Discharge Elimination System (UPDES) Permit. The Permit requires the preparation of SWPPPs for maintenance stations. The SWPPP identifies potential pollutants and tailored standard operating procedures (SOPs) that include best management practices (BMPs) that, when implemented at the facility will have the ultimate goal of preventing or reducing the discharge of pollutants from this facility. The SWPPP also include information on the required inspections to be conducted at the facility.

## 1.1 SWPPP Purpose

The purpose of the SWPPP is to identify the activities conducted at the maintenance station and the stormwater SOPs that will be implemented to reduce the discharge of pollutant runoff from the facility. This SWPPP provides a site-specific description of stormwater pollution prevention practices at this facility.

Under the MS4 Permit, UDOT is required to reduce the discharge of pollutants associated with stormwater drainage from UDOT-owned facilities. This SWPPP is a planning, evaluating, implementing and reporting tool that is used to ensure compliance with UDOT's MS4 Permit.

## 1.2 SWPPP Objectives

This SWPPP has been developed to meet the following objectives:

- Identify pollutant sources that may affect the quality of stormwater discharges;
- Identify potential pathways and conveyances for pollutants to discharge from the facility;
- Identify and implement SOPs that include best management practices to reduce or prevent pollutants in stormwater discharges.

## 1.3 Pollutants

The MS4 Permit requires that the SWMP address, at minimum, typical pollutants found at UDOT facilities and operations. These pollutants are:

- Total suspended solids
- Sediment
- Petroleum products
- Pesticides and herbicides
- Chlorides
- Heavy metals (e.g., zinc, lead)
- Bacteria
- Chlorine
- Organic matter

SWPPPs developed for UDOT owned or operated facilities identify potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges associated with activity from the facility and include BMPs to reduce or eliminate pollutants in stormwater runoff.

### **1.3.1 Description of Potential Pollutant Sources**

There are potential pollutant sources that can exist in different areas around the maintenance station. Potential areas of concern at a maintenance facility include:

- Fixed fueling operations
- Vehicle and equipment maintenance and/or cleaning areas
- Brine making areas
- Loading/unloading areas
- Waste storage or disposal areas
- Liquid Storage tanks
- Process and equipment operating areas
- Storage or disposal areas for significant materials
- Operations that have the potential to discharge pollutants into stormwater conveyance systems that leave the site

A list of hazardous materials located at the station can be found in Section 3.4. To identify the locations of potential pollutant sources at the station, please refer to the Site Map in Attachment A.

## **1.4 SWPPP Availability**

This SWPPP will be maintained at this facility and will be made available to a representative of the Utah Division of Water Quality (DWQ), the US Environmental Protection Agency (USEPA) and/or other local agency if requested.

## **1.5 SWPPP Revisions**

The individuals listed on the Stormwater Pollution Prevention Team Page of this SWPPP are responsible for ensuring that any changes in design, construction, operation, or maintenance activities at the station do not cause the discharge of pollutants to surface water, groundwater, or a municipal separate storm sewer system (MS4). This SWPPP will be revised if it is in violation of any condition of the Permit, has not achieved the general objective of reducing pollutants in stormwater discharges, or whenever the DWQ requires revision of the SWPPP. Additionally, the Station Supervisor is responsible for ensuring the SWPPP is revised as activities and SOPs change.

## **2 MAINTENANCE FACILITY INFORMATION**

This section of the SWPPP provides a general description of the maintenance station.

A maintenance road crew is stationed at this facility. There are no outside crews that store materials on-site. The maintenance station's primary activities are to store equipment, tools, raw materials, loading and unloading of materials, equipment repair, and equipment cleaning.

Maintenance vehicles required to support the highway activities conducted from this maintenance station are stored at this station.

### **2.1 Property Information**

Described below is property information for the Nephi Maintenance Station. All elevations are referenced to mean sea level. Latitude and Longitude are in decimal degrees. A facility site map is located in Attachment A of this SWPPP.

<b>Street Address</b>	105 E. 900 N.
<b>City</b>	Nephi
<b>State</b>	Utah
<b>Zip Code</b>	84648
<b>County</b>	Juab
<b>Facility Acreage (acres)</b>	13.0
<b>Facility Elevation (feet)</b>	5,152
<b>Latitude</b>	39.723°
<b>Longitude</b>	-111.834°

### **2.2 Topological Features**

The Nephi Maintenance Station is located along 900 North at 105 East, within Nephi, Utah. The southern half of the property is paved with asphalt and the northern part of the property is compacted gravel. Both the paved and unpaved portions are relatively flat; most of the property gently slopes to the northwest, directly to the retention basin, but with the southern end flowing south and the area around the salt shed flowing to a small retention basin.

### **2.3 Environmental Areas and Surface Water Bodies**

This facility is located nearby the Salt Creek. Any pollutants that are generated or runoff from this facility may contribute to the impairment of thi waterbody. Only clean stormwater and snow melt are allowed to leave this facility through the storm drainage system.

### **2.4 Water Supply and Site Wells**

There are no on-site groundwater wells, drinking water wells, agricultural wells, or injection wells operated at this station. Potable water service is provided to the site by the Nephi City Public Works (435-623-0822).



## **2.5 Stormwater Conveyance and Treatment BMPs**

The Nephi Maintenance Station has stormwater runoff that flows mostly from the south to the north of the site, with a few exceptions. Runoff sheet flows from the east-central area to a central swale directed to a culvert, which then drains through another culvert to a retention pond in the northwestern corner. The area around the salt shed, in the west-central part of the property, drains to a smaller retention basin. The parking lot area in the far south of the area drains off to the south to southwest.

Treatment BMPs are defined as permanent stormwater treatment measures to improve stormwater quality. Treatment BMPs at the Nephi Maintenance Station include: two retention basins and an oil/water separator.

## **2.6 Wash Water Conveyance**

Outdoor washing occurs at the wash rack and all wash water is retained in the retention basin. Any indoor washing or steam cleaning drains into the floor drains and then to an oil/water separator. The oil/water separator consists of a gravity separation system to remove the solids and oils prior to discharge of the treated water to the sewer system operated by the Nephi City Public Works (435-623-0822).

## **2.7 Sewage Conveyance**

Sanitary waste at the Nephi Maintenance Station is conveyed to the Nephi City sanitary sewer system. The Nephi City Public Works (435-623-0822) operates the sewer system.

The Station Supervisor will keep the list of chemicals in Section 3.4 at the station current and up to date. Nephi City Public Works has an unapproved pretreatment program. Therefore, for questions about any new or current products and their potential discharge to the sanitary sewer system, please contact the DWQ Pretreatment Program Coordinator. Contact information for the DWQ Pretreatment Program Coordinator can be found in Attachment B of the SWPPP in the Maintenance Emergency Call Down List.

### **3 MAINTENANCE FACILITY ACTIVITIES AND BMPS**

This section identifies the activities conducted at the maintenance station and the BMPs to be implemented to reduce and/or eliminate the discharge of pollutants in stormwater runoff from the facility.

#### **3.1 Activities**

The Nephi Maintenance Station is a staging area for the routine and emergency repair and upkeep of the state highway system within the State of Utah. The maintenance station's primary activities are to store equipment, tools, raw materials, loading and unloading of materials, equipment repair, and equipment cleaning.

##### **3.1.1 Operations and Maintenance Program – Standard Operating Procedures**

The Operations and Maintenance program for UDOT maintenance stations include Standard Operating Procedures for the following items:

- use, storage and disposal of chemicals
- spill prevention plans
- dumpster and waste management
- cleaning, washing, painting and other activities
- parking lot and facility cleaning (sweeping & schedules)
- inventory of floor drains and discharge locations
- salt and other deicing materials
- application, storage and disposal of fertilizers, pesticides, and herbicides
- vehicle cleaning, maintenance and storage
- wastewater disposal
- fueling operations
- guidance documents for the Operations and Maintenance Program may be found in the Standard Operating Procedures and Resources (Attachment B)

##### **3.1.2 SOPs for Salt and Other Deicing Materials**

Storage piles of salt or other materials used for deicing are enclosed or covered to prevent exposure to precipitation. Materials should be prevented from physically leaving the maintenance station. For further guidance, see the SOPs for Salt Storage (Attachment B).

All salt is stored in the covered salt shed, and any drainage from the salt shed would be captured and retained by the retention basin. Brine is stored in tanks on-site but is not made on-site.

##### **3.1.3 SOPs for Vehicles and Equipment**

Vehicle and equipment repair, storage and maintenance must be conducted in a manner to prevent the discharge of contaminants from the site. For further guidance see the SOPs for Vehicle and Equipment Fueling, Vehicle and Equipment Washing and Vehicle and Equipment Maintenance (Attachment B).

Vehicles are stored either in the main building or in the covered shed. Spill kits and absorbent materials are on hand to deal with spills or leaks. There are no fuel areas at this facility. Any indoor steam cleaning and maintenance occurs in the main building and wash water is drained into the floor drains and through the oil/water separator before discharging into the sewer system. Outdoor vehicle cleaning occurs at the wash rack where all wash water is retained by the retention basin.

### **3.2 Pollutant Sources and Best Management Practices**

Maintenance BMPs are pollution prevention measures designed to reduce the discharge of pollutants associated with maintenance activities. The maintenance station has implemented BMPs for each maintenance activity identified in Section 3.1. Based on the activities conducted, a list of potential pollutant sources, pollutants, locations, and applicable BMPs has been compiled in Attachment B of the SWPPP. The BMPs identified in the SOPs for this facility are considered appropriate and are implemented on an activity-by-activity basis. Details describing the BMPs that relate to the facility specific SOPs are provided in Attachment B including description, appropriate application, and list of pollutants each BMP helps minimize.

**Table 1: Potential Pollutant Sources at the Nephi Maintenance Station, Pollutants of Concern, Location, BMPs and BMP Reference**

Potential Pollutant Sources	Pollutants of Concern										FW* = Facility Wide		
	Petroleum Products	TSS/Sediments	Litter and Debris	Heavy Metals	pH	Nutrients	Pathogens	Pesticides	Solvents/ Degreasers	Chlorides	Map Location Attachment A	Describe BMPs in Place	BMP Reference Attachment C
Building and Grounds Maintenance	X	X	X							X	FW*	Building and grounds maintenance activities are conducted in a careful manner to ensure pollutants are not discharged into the surrounding lands.	MS-4, MS-5, MS-6, MS-7, MS-9, MS-10
Vehicle & Equipment Parking	X			X	X						D4, E3-4	Spill cleanup materials are utilized in the event of vehicle or equipment leaks or spills. Used absorbent or other clean-up materials are disposed of properly.	MS-5, MS-13
Vehicle & Equipment Washing & Steam Cleaning	X	X	X	X		X					D3-4	The uncovered wash rack drains to a retention pond. Indoor steam cleaning drains to an oil/water separator, which discharges treated water to the sanitary sewer. The oil/water separator is maintained regularly to remove accumulated oily and solid wastes. Removed wastes are properly disposed of offsite.	MS-6, MS-15
Vehicle & Equipment Maintenance & Repair	X			X		X			X		D4	Maintenance and repair activities are conducted indoors. Petroleum products, solvents, degreasers, and other automotive fluids used during maintenance and repair are kept inside the shops or within covered secondary containment. Spill kits equipped with dry sweep absorbent and absorbent pads are	MS-16

**Table 1: Potential Pollutant Sources at the Nephi Maintenance Station, Pollutants of Concern, Location, BMPs and BMP Reference**

Potential Pollutant Sources	Pollutants of Concern										FW* = Facility Wide		
	Petroleum Products	TSS/Sediments	Litter and Debris	Heavy Metals	pH	Nutrients	Pathogens	Pesticides	Solvents/ Degreasers	Chlorides	Map Location Attachment A	Describe BMPs in Place	BMP Reference Attachment C
												utilized in the event of a spill. Used absorbent or other clean-up materials are disposed of properly.	
Vehicle & Equipment Fueling	X										NA	Vehicle and equipment fueling activities are not performed at this station.	MS-11, MS-14
Outdoor Loading & Unloading of Materials & Tools	X	X	X	X	X	X				X	E1, E4	Spills or leaks resulting from outdoor material loading/unloading are cleaned immediately. Spill kits equipped with dry sweep absorbent and absorbent pads are utilized in the event of a spill. Used absorbent or other clean-up materials are disposed of properly.	MS-6, MS-7, MS-9
Outdoor Storage of Raw Materials	X	X	X	X	X	X					D1-2, E2-3	Materials are stored in uncovered areas, but all runoff is captured by retention basin.	MS-2, MS-6, MS-7, MS-9, MS-12
Roadway Waste Handling & Disposal	X	X	X	X	X	X					E3	When possible, roadway waste is immediately taken to the Nephi City dump.	MS-8, MS-12, MS-13
Storage of Hazardous Materials	X	X	X	X	X	X		X			D4, E4	All hazardous materials are stored indoors or within covered secondary containment.	MS-3, MS-11
Pesticide Storage					X			X			E4	Pesticides are stored inside the main building or in a locked shed.	MS-3

Table 1: Potential Pollutant Sources at the Nephi Maintenance Station, Pollutants of Concern, Location, BMPs and BMP Reference													
Potential Pollutant Sources	Pollutants of Concern										FW* = Facility Wide		
	Petroleum Products	TSS/Sediments	Litter and Debris	Heavy Metals	pH	Nutrients	Pathogens	Pesticides	Solvents/ Degreasers	Chlorides	Map Location Attachment A	Describe BMPs in Place	BMP Reference Attachment C
Pesticide Use and Mixing					X			X			E4	Pesticides are used and mixed according to manufacturer specifications.	MS-1, MS-5
Portable Sewage: Restrooms/RV Dump Station/Maintenance					X		X				D4	The station drains to the sanitary sewer system. The restroom is located indoors.	MS-8

### 3.3 Non-Hazardous Materials Storage

Based on the activities conducted at the facility, the following non-hazardous materials are stored outdoors.

Non-Hazardous Material	Location on Site Map	BMPs
Aggregate	D1-2, E2-3	Stored uncovered, but area drains to retention pond.
Treated Wood	E3	Stored uncovered in stacks.
Heavy Equipment Parts	E1, E3-4	Stored uncovered in open racks or on the ground.
Trash	E3	Stored uncovered in dumpsters.
Steel/Sheet Metal	E1, E3-4	Some stored in covered stacks, but some stored uncovered.
Rubber	E3	Containers are located in covered areas.

### 3.4 Hazardous Materials Storage

The following hazardous materials are stored at this facility in proper containment. Hazardous materials reference documents are included in Attachment D of this document.

<b>Table 2: Maintenance Hazardous Materials List</b>				
<b>Common Name</b>	<b>Chemical Name</b>	<b>Storage Location on Site Map</b>	<b>Liquid or Solid</b>	<b>BMPs</b>
Motor Oil, gear oil, hydraulic oil, transmission fluid	Petroleum oil	D4	Liquid	Stored inside building, some on catch basins and some not.
Petroleum solvents	Petroleum Naphtha	D4	Liquid	Stored inside building by parts washer.
Antifreeze	Ethylene glycol	D4	Liquid	Stored inside building, in store room.
Used oils	Petroleum oil	D4	Liquid	Stored in above ground used oil tank outside, in an covered, concrete catch basin.
Petroleum Products, Various Types: Oil, Asphaltic Emulsion, Etc.	Petroleum Products, Various Types: Oil, Asphaltic Emulsion, Etc.	D4	Liquid	Stored inside building, in flammables cabinets.
Oxygen gas	Oxygen	D4	Gas	Stored inside building, secured to wall.
Acetylene gas	Acetylene	D4	Gas	Stored inside building, secured to wall.
Heavy Duty Grease	Grease	D4	Solid	Stored inside building, on catch basins and in store room.
Elastoflex 506	Elastoflex / Rubberized Asphalt Joint/Crack Sealer	E3	Solid	Stored inside covered shed.
Cold Patch Asphalt	Asphalt	E4	Solid	Stored inside covered shed.
Herbicides	Glyphosate, isopropylamine salt	E4	Liquid	Stored inside building, in store room and in locked shed.
Waste Fluorescent Lamps	Mercury	D4	Solid	Stored inside building. Transported off-site by a licensed HW hauler for recycling.
G.E. Fluorescent Lamps	Mercury	D4	Solid	Stored inside building.
Multi-Purpose Automatic Transmission Fluid	Petroleum oil	D4	Liquid	Stored inside building, some on catch basins and some in store room.
Kerosene		D4		Stored inside building, on catch basin.
Latex Paint	Latex Paint	E4	Liquid	Stored inside building, in locked shed.

### 3.5 BMP Training and Awareness

Per the UDOT SWMP, UDOT policy and practice is to provide education and training to ensure employees have the knowledge and skills necessary to perform their functions effectively and efficiently. Annual stormwater training is required of all UDOT employees whose duties involve stormwater management and administered through the UDOT Learning Portal. The Pollution Prevention and Good Housekeeping training includes the following topics:

- equipment inspection to ensure timely maintenance;
- proper storage of industrial materials (emphasize pollution prevention);
- proper management and disposal of wastes; proper management of dumpsters;
- minimization of use of salt and other deicing materials (cover/prevent runoff to MS4 and ground water contamination);
- benefits of appropriate on-site infiltration (areas with low exposure to industrial materials such as roofs or employee parking);
- proper maintenance of parking lot surfaces (sweeping).

Station Supervisors will review BMPs with crews to prevent or control non-stormwater discharges every time there is a change of type of work activity. BMP training sign in sheets for this facility are included in Attachment E of this document.

The Station Supervisor is responsible for providing and documenting on-going awareness training for stormwater pollution issues for activity crews and station personnel. Training is conducted during tailgate and pre-job meetings to review environmental concerns and BMPs, and to ensure that BMPs are implemented during maintenance activities. The awareness training includes:

- The importance of observing good housekeeping practices, with emphasis on preventing debris from entering the Station's stormwater management system.
- Explanation and discussion of required standards for housekeeping and the procedures required to maintain those housekeeping standards.
- Explanation and discussion of spill response procedures, locations and proper usage of absorbent materials and spill recovery equipment, spill response methods, disposal of spill cleanup materials, and spill reporting requirements.
- Discussion of material management practices and UDOT policies associated with the outdoor storage of materials and the practices for handling materials to minimize the potential for discharges.
- Discussion of proper solid waste handling procedures.



## **4 NON-STORMWATER DISCHARGES**

The UDOT MS4 Permit prohibits the release of non-stormwater discharges into the MS4. Unlike with the sanitary sewer, the stormwater system leads directly into Waters of the State (streams, rivers, lakes, groundwater, etc.) without going through a water treatment system. Anything that enters the storm system will end up in Utah's water. Diligence is required at all UDOT facilities to eliminate non-stormwater discharges to Utah's waters.

### **4.1 Spills and Discharges (Prevention and Reporting)**

The Department's UDOT MS4 Permit prohibits the discharge of non-permitted non-stormwater discharges. If a discharge occurs, or if the station receives a written notice or order from any regulatory agency, the Station Supervisor will immediately notify the Region Stormwater Program Coordinator. The Station Supervisor will coordinate the reporting of prohibited non-stormwater discharges to the DWQ through the Region Stormwater Program Coordinator and the Area Supervisor.

To prevent non-stormwater discharges from occurring, the responsible Station Supervisor will ensure that maintenance personnel:

- Determine where the flow of a leak, spill, or other runoff will travel;
- Identify drain inlets and water courses, both upstream and downstream of the work site;
- Ensure that vehicles and equipment are clean and in good operating condition by conducting pre-operational inspection of vehicles and equipment;
- Set up work areas to minimize the tracking of material by vehicles and equipment in and out of the work area;
- Collect and properly dispose of wastes, materials removed as a result of equipment and system maintenance, litter and debris;
- Secure lids on containers of liquids when not in use;
- Control spills promptly;
- Have appropriate spill cleanup material onsite and protect drainage systems and watercourses from spilled material.

## 5 FACILITY SWPPP INSPECTIONS

As stated in the UDOT MS4 Permit, UDOT is required to conduct weekly, or more frequent as necessary visual inspections of UDOT facilities and track those inspections in a log for every facility. The purpose of the inspections is (1) to identify areas contributing to a discharge of potential pollutants associated with the maintenance station activities, and (2) to evaluate whether SOPs and BMPs identified in the SWPPP are adequate and properly implemented or whether additional control practices are needed.

Station Supervisors are responsible for weekly visual inspections, quarterly comprehensive inspections (with specific attention paid to waste storage areas, dumpsters, vehicle and equipment maintenance/fueling areas, material handling areas, salt storage and brine making areas and similar pollutant-generating areas) and quarterly visual observation of stormwater discharges. Inspections are to monitor the implementation and adequacy of the facility's BMPs and for notifying the Area Supervisor and Region Stormwater Coordinator in the event that a non-stormwater discharge or other instance of non-compliance occurs.

All Weekly Visual Log, Quarterly Comprehensive, and Quarterly Discharge inspections shall be completed using the Survey123 app or through a web browser on the desktop at the following link:

<https://uplan.maps.arcgis.com/apps/MapSeries/index.html?appid=a647f52268964e7aa890332b6b544be6>

Records of completed inspections and inspection form responses can also be accessed at the above link.

Stormwater self-audit inspections conducted by UDOT personnel, or inspection documents from local regulatory agencies, will be appended to Attachment C of this SWPPP, and retained for at least the effective period of the permit.

Appendix C includes an SOP for utilizing Survey123 as well as a list of information recorded in each of the electronic inspection forms.

### Weekly Inspection Forms

- UDOT Maintenance Station Weekly Inspection Log – This visual inspection is to be completed at least weekly and whenever a spill is detected at the maintenance station. Weekly inspections are documented in the Weekly Visual Inspection Survey123 form. Details of the information collected through this inspection form are on page C-8. Any spill events (whether observed during the weekly visual inspection or otherwise) must be documented with the same Weekly Visual Inspection Survey123 form.

### Quarterly Inspection Forms

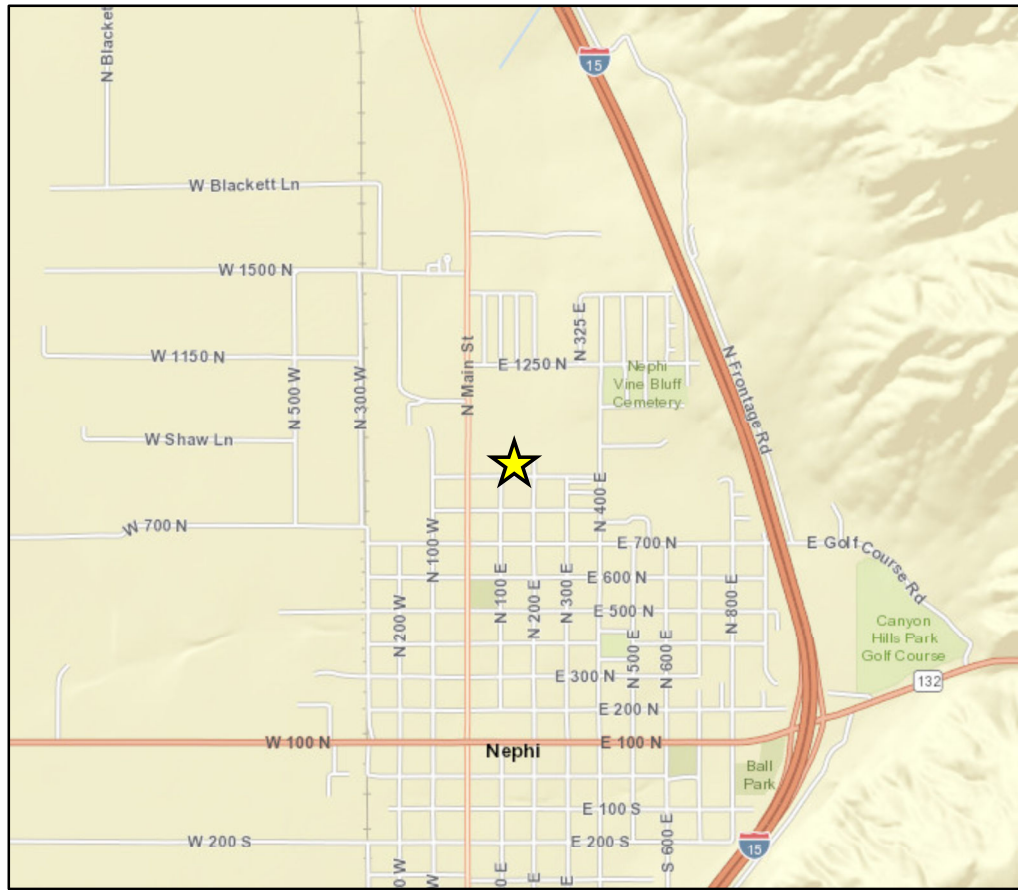
- UDOT Maintenance Station Quarterly Comprehensive Stormwater Inspection – Details on the information collected in the electronic Survey123 form are on pages C-3 to C-7.
- UDOT Maintenance Station Quarterly Stormwater Discharge Inspection – Details on the information collected in the electronic Survey123 form are on page C-2.

**Station supervisors are responsible for addressing deficiencies noted on any inspections and documenting the corrective actions.**

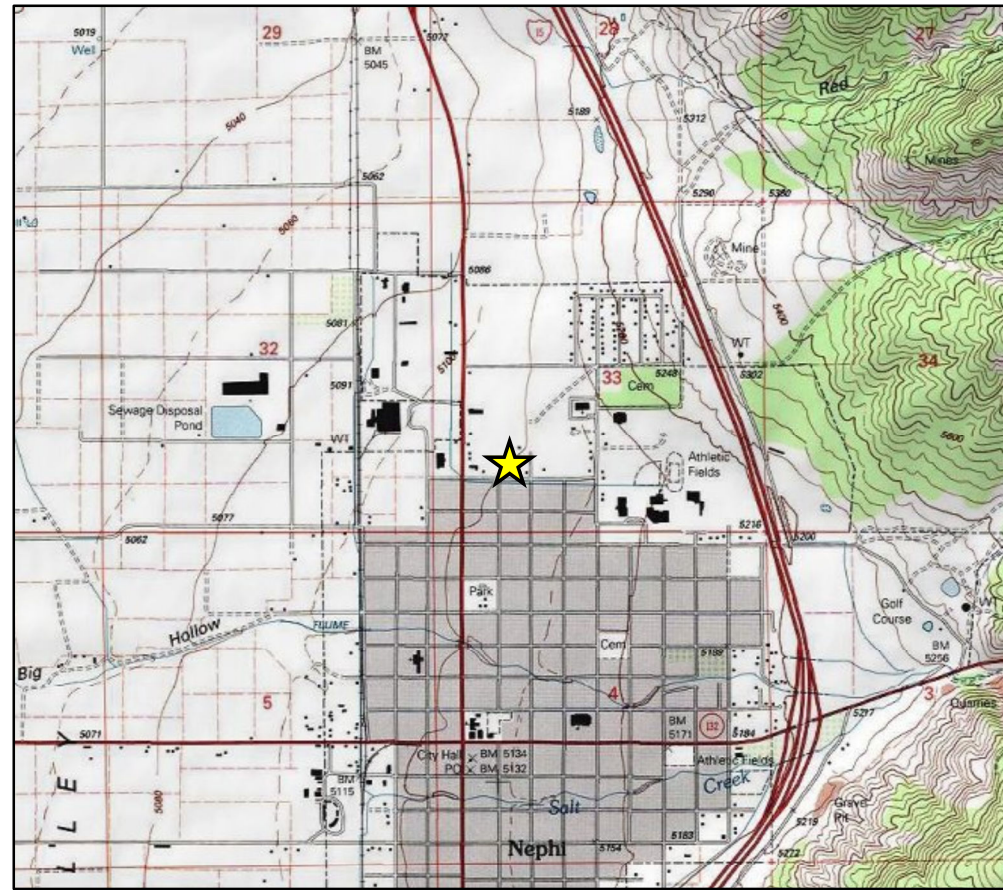


ATTACHMENT A:  
Site Map

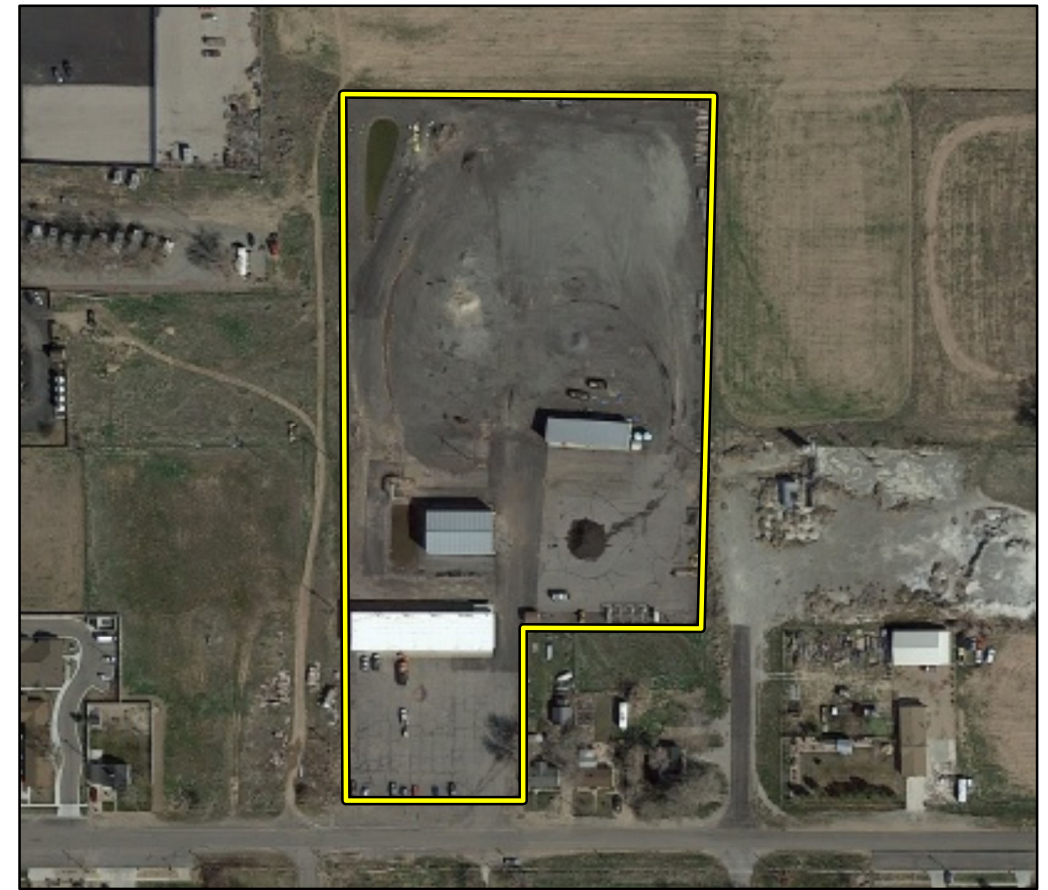




Google Maps



USGS Topographic Map



ESRI Aerial

## DESCRIPTIONS

 Site Boundary

 Site Feature Area

 Pervious Area

(All areas within site boundary not listed as pervious are assumed to be impervious.)

 Stormwater Gutter

 Stormwater Earthen Ditch

 Wastewater Pipe

 Stormwater Pipe

 Stormwater Surface Flow

 Basin


 Battery Storage

 Chemical Storage

 Fuel Island / Storage

 Inlet

 Metals

 Misc. Equipment

 Misc. Storage or Waste

 Oil Products

 Oil Water Separator

 Outfall

 Paint Related Materials

 Salt / Brine Making

 Salt Shed / Storage

 Spill Kit

 Spreader / Loading Rack

 Stockpile

 Wash Rack

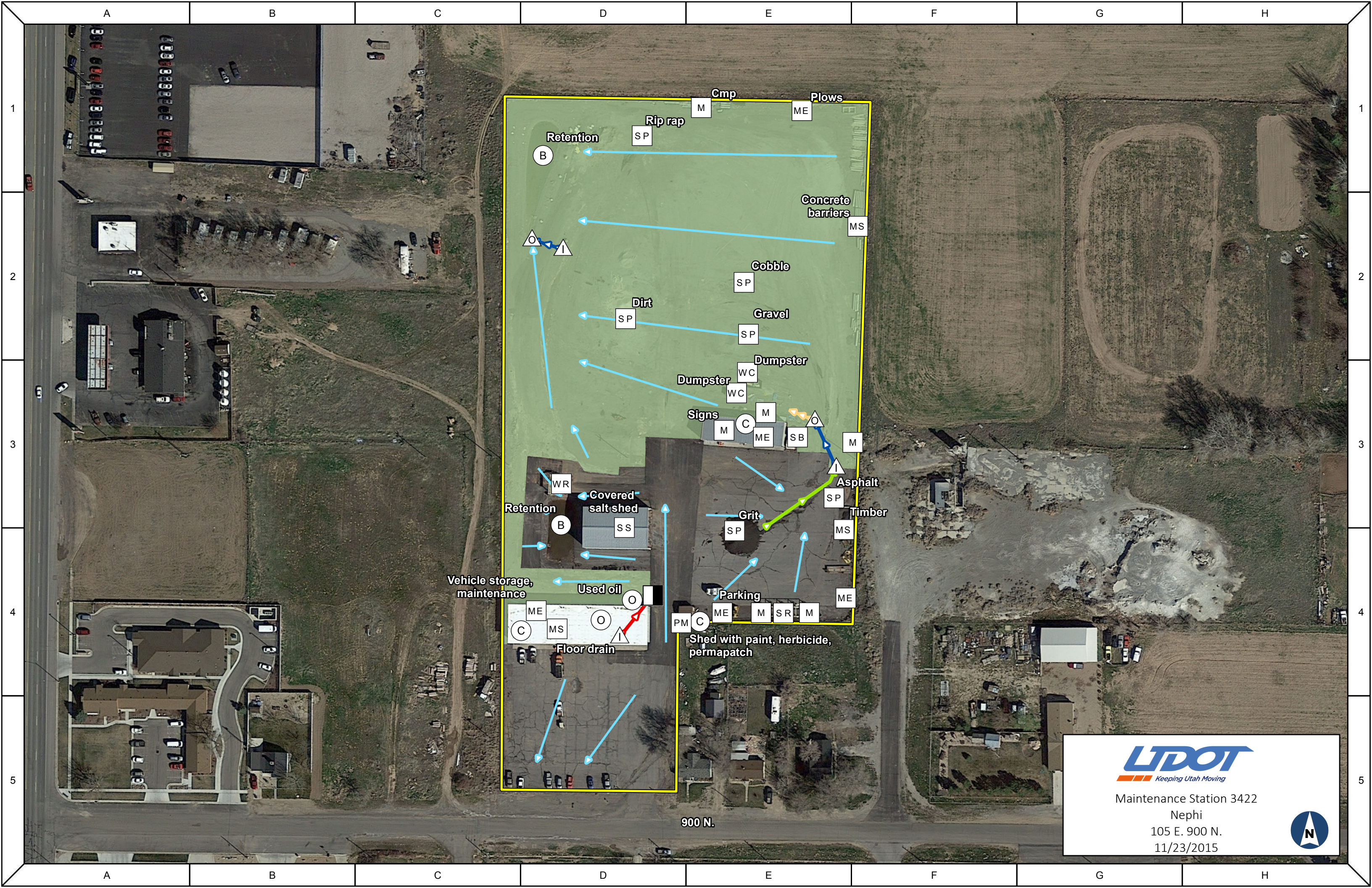
 Waste Container




Maintenance Station 3422  
Nephi  
105 E. 900 N.  
11/23/2015









  
 Keeping Utah Moving

Maintenance Station 3422  
 Nephi  
 105 E. 900 N.  
 11/23/2015



900 N.



**ATTACHMENT B:**  
**Operations and Maintenance Program**  
**(Standard Operating Procedures and**  
**Resources)**

## **Resources for Standard Operating Procedures**

Below are some additional resources and information about the Standard Operating Procedures that are conducted at this facility.

### **Inventory Control:**

Region and Central warehouses have eliminated chlorinated solvents from inventories and now stock citrus-based solvents. Good BMPs for inventory control:

#### **Inventory Management**

- Buy only what is needed over a 3-month period
- Rotate inventory so older material is used first
- Store materials in a manner to prevent spills, leaks, or damage to containers
- Use secondary containment where prudent
- Use an inventory tracking system
- Label all containers with contents, date of purchase, date opened
- Don't accept free samples you won't use
- Be licensed to use restricted chemicals
- Read and become familiar with labels
- Use environmentally safe chemicals
- Keep absorbent materials readily accessible; renew supply to handle a 55-gallon drum rupture.

### **Waste Management:**

All hazardous wastes are defined by characteristics that are harmful to human health and the environment. A chemical product (including liquids, gases, solids, powders, etc.) becomes a waste when it is released from its original container in an uncontrolled manner. Proper waste management must include knowledge of each product's and/or waste material's properties. This aids in determining proper handling and disposal. Properties that are "characteristic" and define hazardous waste are listed in the box below.

#### **Characteristic Wastes\***

- Ignitable
- Corrosive
- Reactive
- Toxic



*\*40 CFR, Part §261.20-261.24*

Characteristic wastes are regulated by federal, state, and local laws and codes. These waste characteristics are carefully defined in the Code of Federal Regulations, (CFR) Title 40, and Part 260. Review of regulations covering a particular waste stream is necessary to determine how to properly manage, transport, and safely dispose of it. Careful handling and multi-copy paperwork that tracks waste generation to final disposal (“cradle to grave”) is required.

### **Waste Segregation:**

Characteristic wastes should be stored and segregated according to their properties. Some wastes can be incompatible, causing chemical reactions that can lead to toxic gas production and/or spontaneous ignition. Product Material Safety Data Sheets aid in determining proper handling and disposal. Keep waste containers tightly closed and stored in a well-ventilated area. Storage times do not exceed UDOT’s Small Quantity Generator status of 180 days. Likewise, quantity stored should not exceed 2200 pounds per month (approximately 4 drums). Arrangements are made for disposal with a State contracted hazardous waste disposal company to have the wastes removed.

### **Spill Response & Emergency Preparedness**

First response agencies shall be called when UDOT employees and/or its agents observe **any hazardous material/s release to water bodies, 1 gallon or more of hazardous chemical/s, 25 gallons of hydrocarbons (fuel, oil) or more are released to the environment** (see Attachment D for US D.O.T. Hazardous Materials definition and classifications). Call down lists are posted at maintenance stations and provide the Department of Environmental Quality’s (DEQ’s) 24-hour emergency response number.

**Maintenance Emergency Call Down List**

Immediately Contact	
Dispatch	911
Station Supervisor	435-660-0671
Area Supervisor	801-433-2260
Region Stormwater Program Coordinator	801-227-8023
Division of Water Quality Pretreatment Program Coordinator	801-536-4383
<b>24 Hour Emergency Phone Number for Incident Spills</b>	<b>801-536-4123</b>
Within ½-hour contact	
District or Maintenance Engineer	801-222-3436
Local Health Department	435-623-0696
Region Safety/Risk Manager	801-227-8015
Hazardous Waste Spills	801-538-6170
Large Spills And/or Water Affected	
Releases Affecting "Waters of the State" or involving Petroleum Products	801-538-6146
National Response Center	800-424-8802

*Report spills immediately. Begin cleanup ASAP.*

*Obtain help from experts!*

Maintenance Stations - Good Housekeeping Checklist	
<b>Used Oil &amp; Fuels</b>	
Drum oily rags for an industrial cleaner to process and recycle. Do not add liquids to drum. Keep drum lid closed when not in use.	
Collect used oil in maintenance station's used oil tank or collect in drums stored within lined and bermed secondary containment at construction staging areas.	
Pierce used oil filters and allow to drain for a minimum of 24 hours. Wrap empty filters in newspaper and dispose in dumpster.	
Label as "Used Oil" tanks or drums and secure with padlocks to deter illegal dumping. Used crankcase oil is recyclable and therefore considered non-hazardous. Utah has many certified oil recyclers. The Division of Solid and Hazardous Waste in DEQ has a variety of resources listed on their website: <a href="http://www.deq.utah.gov/ProgramsServices/programs/waste/usedoil/#facilities">http://www.deq.utah.gov/ProgramsServices/programs/waste/usedoil/#facilities</a> <a href="https://deq.utah.gov/waste-management-and-radiation-control/used-oil-recycling-program">https://deq.utah.gov/waste-management-and-radiation-control/used-oil-recycling-program</a>	
<b>Solvents, Chemicals, Herbicides</b>	
Eliminate chlorinated solvent usage. These solvents generate hazardous waste, are toxic to environment and carcinogenic to humans. Use citrus-based solvents in their place. Secure tight fitting lids on volatile substances to prevent evaporation and spills.	
Use contained and self-draining parts washers. If warranted, consider a solvent recycling/regeneration parts washer. No hazardous waste is generated.	
Do not aerate solvents, thinners, or fuels as a disposal method. This is an air quality regulation violation and is subject to fines.	
No open containers in and around work site. Use spigots and hand pumps on drums and 5-gallon containers. When mixing chemicals such as herbicides, pour concentrate slowly to avoid "glug and splash" from vacuum created in container.	
<b>Vehicle Maintenance</b>	
Regularly inspect and maintain station equipment. Repair seals and leaks as practicable and use absorbent materials where necessary.	
Never hose hazardous materials down drains or off pavement. Avoid spreading hazardous waste to the environment.	
Use drip pans and/or absorbent pads under work that can release fuels, oils, solvents, and chemicals that will produce characteristic wastes.	
<b>Security</b>	
Secure maintenance stations and construction staging areas with locked gates when unoccupied.	
Use and maintain a supply of personal protective equipment appropriate to work (i.e. gloves, protective eyewear, coveralls, etc).	
Keep a supply of absorbent materials/spill prevention kit at hand for accidental spills. Learn proper disposal methods from MSDS.	

## **Dumpster Maintenance SOP**

### **Purpose**

- This SOP is designed to mitigate discharges of pollutants from waste receptacles and dumpsters.

### **Pollutants and BMPs**

- Pollutants associated with dumpsters: litter, debris, petroleum products, sediments, total suspended solids, and chlorides
- List of BMPs in place: dumpster with a lid, concrete pad

### **Site Considerations**

- Do not overfill dumpsters and waste receptacles.
  - Separate landfill waste from other recyclable waste to save space in dumpsters.
  - Keep enough dumpsters onsite to contain the volume of waste that is generated at or brought to the facility.
- All dumpsters must have lids, and any dumpsters with drain openings in them are required to have plugs.
  - Lids must be undamaged and be able to cover the opening of the dumpsters.
  - Lids must be on dumpsters and closed while not in use.
  - Plugs for dumpster drains must be inserted and seal the drain while the dumpster is not being emptied. Only drain dumpsters so that the waste water enters a BMP, such as an oil/water separator, before the sanitary sewer or other containment to be disposed of.
- Dumpsters must be clearly identified and accessible onsite.
  - Any bins that are dedicated to recycling materials must be labeled as such.
- This facility has two dumpsters onsite
  - They can be found at the following locations: north/east corner of lot.
  - The site also contains the following dedicated recycling containers: one onsite.

### **Inspection**

- While performing the weekly and quarterly facility inspections, inspect all dumpsters and recycling containers onsite.
  - Look at the condition of the dumpsters. If there are holes, warping, punctures, or other defects, replace the container.
  - Look at the area surrounding dumpsters. If there is trash, debris, staining, or other waste around the dumpster areas, clean the affected area. It may be necessary to train staff on proper waste disposal procedures.
  - Inspect the lids of the dumpsters. If they are damaged or missing, replace them. If the lids are not covering the dumpster, close the lids.
  - Inspect dumpsters for drain plugs. If the plugs are damaged or missing, replace the plugs.
  - Are the dumpsters and recycling containers labeled? If not, label them.

### **Documentation**

- All dumpsters and recycling containers must be identified on the site map of the facility Stormwater Pollution Prevention Plan (SWPPP)
- Keep documentation of all training in the SWPPP; utilize the training records sheet located in Attachment E: Training Information.

## **Hazardous Materials and Waste Management SOP**

### **Purpose**

- Hazardous materials and wastes can pose a serious threat to water quality if it enters the storm drain system. Ensuring that the proper containers and appropriate procedures are used to store and dispose of hazardous wastes is a crucial Best Management Practice (BMP) to mitigate threats to water quality.
- UDOT maintenance facilities frequently contain hazardous materials and wastes as a part of normal maintenance operations. Specific classes of hazardous materials are found in Attachment D: Hazardous Materials References of the facility Stormwater Pollution Prevention Plan (SWPPP).

### **Pollutants and BMPS**

- Pollutants associated with hazardous materials and waste activities: petroleum products, solvents, degreasers, chlorides, heavy metals
- List of BMPs in place: spill pallets, drip pans, concrete containment, berms, containers with secure lids, spill kit

### **Facility Considerations**

- Hazardous materials and waste should have a dedicated storage area on the site, which removes potential contact with stormwater.
  - Keep hazardous wastes in a secured area where access to the material is limited to non-UDOT personnel.
  - Keep different types of hazardous waste separated from contact with each other and do not mix hazardous wastes.
  - Storage areas must have some form of secondary containment, such as lipped trays, berms, drip pans or concrete containment structures. Design BMPs to prevent any stormwater run-on to the area.
- This facility normally stores the following hazardous materials and waste:
  - Motor oils and weed herbicide
- All storage containers or containment systems should meet the United States Department of Transportation (USDOT) specifications for storing the waste.
  - All containers must be marked clearly as “hazardous waste” and also identify the type of waste stored in the container.
- All containers for hazardous waste must have lids that can be sealed, and only should be opened when adding or removing waste from the container.
  - There are types of containers that do not need to be opened to add or remove wastes, but are instead pumped, or filled. For these containers, ensure that the nozzles, pumps, or hoses are secured, closed, and not leaking after use.
- Keep an emergency spill response kit located near the storage areas for hazardous waste in case of spills or leaks.

### **Inspection**

- During stormwater inspections, all areas where hazardous materials are stored must be inspected. The areas onsite which store hazardous waste include:
  - The maintenance station and chemical storage building.
- While inspecting hazardous waste storage areas, consider the following features.
  - Are the storage containers in good condition, free from any defects?
  - Is the area where wastes are stored free from drips, leaks, or staining?
  - Do all containers have lids, and are the lids secured and closed on the containers?
  - Is the secondary containment full, or almost full of spilled material?
  - Is an emergency spill kit stored near the hazardous waste? Does it contain enough material to mitigate the flow of the waste stored there?
  - Are the containers labeled with the appropriate names of the waste stored in them?

### **Documentation and Training**

- The facility must include, in its facility SWPPP Safety Data Sheets (SDS), each type of hazardous waste stored onsite.
  - Keep the SDS in a location where any personnel who is responsible to handle, transport, inspect, or dispose of hazardous waste has access.
  - Update the SDS any time that the facility begins to accept new or different hazardous wastes. If the facility stops accepting a type of hazardous waste, it is acceptable to remove the SDS for that chemical.
- All personnel who handle, inspect, or dispose of hazardous waste must be trained on the proper handling, disposal, and spill response procedures for the hazardous wastes stored at the facility.
  - Log and store training records in the facility SWPPP in Attachment E: Training Information.
  - Include any certifications that personnel obtain within the SWPPP.
- A hazardous waste manifest must be used for all hazardous waste shipments. The manifest must be completed before shipping and transferring custody of hazardous waste to another operator. Keep a copy of the manifest onsite.
- The facility site map contained in the SWPPP must identify all areas where hazardous materials are stored onsite. If the facility accepts new hazardous wastes, or changes the location onsite where they are stored, the SWPPP must be updated.

## **Liquid Waste Control SOP**

### **Purpose**

- The purpose of this Standard Operating Procedure (SOP) is to identify stormwater threats from UDOT operations and the storage of liquid wastes at UDOT facilities.
- There are multiple types of liquid wastes, and certain materials have particular storage, discharge, or disposal requirements. This SOP will outline general storage, disposal and maintenance strategies to prevent liquid wastes from entering the storm drain system.
- UDOT facilities commonly use and store hazardous materials, a list of hazardous materials can be found in Attachment D: Hazardous Materials References of the facility Stormwater Pollution Prevention Plan (SWPPP). Consult any Safety Data Sheets (SDS), local disposal authorities, or manufacturer's specifications on specific hazardous materials for particular storage or disposal requirements.
- This SOP is not meant to address dewatering discharges. For more information on dewatering wastes and requirements, consult the General Permit for Construction Dewatering and Hydrostatic Testing, found on the UDEQ website at:  
<https://documents.deq.utah.gov/water-quality/surface-water/updes/DWQ-2013-011661.pdf>

### **Pollutants and BMPs**

- Pollutants associated with liquid waste activities: petroleum products, sediments, total suspended solids, heavy metals, nutrients,
- List of BMPs in place: concrete containment area, containers with sealed or secure lids, spill kit, oil/water separator

### **Site Considerations**

- If any liquid waste has a SDS, the facility must have those included with the SWPPP. Any personnel who handle, transport or dispose of SDS listed materials must know the location of the SDS onsite.
  - This facility stores the following liquid wastes onsite: used motor oil and unused motor oils
  - The following liquid wastes have SDS stored in the facility SWPPP: information on used and unused motor oils are in the SDS book in station.
- All liquid waste areas must have an emergency spill kit accessible, and the kit should have the appropriate materials to deal with the types of spills from materials stored onsite.
- All liquid waste should be stored in a designated area. The area should have no contact with stormwater precipitation or run-on.
  - Areas that are under cover provide the best protection from stormwater.
  - If the area receives sheet flow from other areas, the storage area should have Best Management Practices (BMPs) that either prevent runoff from entering the storage area or diverts the flow away from it.
- Wherever possible, all stored liquid waste must have a secondary containment units available to capture any leaks or spills that may occur during the disposal of waste, or because of deteriorating containers.
  - Ensure that containers are sized to hold an appropriate amount of liquid.



- Different sized containment systems serve different functions, smaller secondary containment is better at containing drips or spills from the storage container, where large containment units are better suited to catch container failure, damage, or substantial spills.
- All storage containers must have a lid that completely closes and seals the liquid waste inside. Open topped containers such as 55 gallon drums with the lids removed pose a high risk for tipping, spilling, or sloshing.
- When transporting liquid waste containers, seal all lids properly, and verify that the container is in good condition.
  - If possible, transport liquid in small, manageable containers, especially if transporting them by hand. Larger, heavier containers have a higher risk of spills and a larger volume of spilled material.

## **Inspections**

During the weekly visual and quarterly comprehensive inspections of UDOT facilities, inspect each liquid waste storage area.

- Look at the area surrounding the waste storage area:
  - Is there evidence of any staining, or spilled material from the waste storage area? If so, determine whether the problem is from a defective container, loose lids on the container, or if it is the result of spills from filling or emptying the waste container.
    - Replace all defective containers
    - Put all lids onto the containers and verify that they seal properly. If they do not, replace the lids.
    - If spills are the result of filling or emptying the waste containers, clean the affected areas and retrain personnel on proper disposal and clean-up procedures.
  - Is the area separated from stormwater contact? Is there evidence that sheet flow from other areas has entered the waste storage areas?
    - If so, repair or replace any deficient BMPs in the area.
    - Look for other areas on the site where the waste can be stored to prevent contact with stormwater.
    - Add additional BMPs to prevent contact with stormwater.
- Look at the liquid waste container:
  - Is the container in good condition? Does it have any holes, rust, punctures, or other defects that may cause a spill or discharge from the container?
    - If so, repair the container, or if that is not possible, replace the container.
    - Lift the container, or check the areas around the container to make sure there are no defects at the base that may not be visible at first glance.
  - Does the container have a lid?
    - If not, get one.
    - Verify that the lid fits the container.
    - Verify that the lid is on and seals the container.

## **Documentation**

- All liquid storage areas must be identified on the site map in the facility Stormwater Pollution Prevention Plan (SWPPP).
  - If the site changes the location of the liquid waste containers, or adds additional containers, those changes must be reflected in the site map within seven days of the change.
- Any SDS for liquid waste that are stored onsite must be kept available and in a location for personnel to access in case of emergency.
- Keep records of all staff members who have been trained on the proper storage, transport, and disposal procedures in the SWPPP. Use the Attachment E: Training Information for the log which can be used to track training sessions.

## **Material Handling and Storage SOP**

### **Purpose**

- This Standard Operating Procedure (SOP) will lay out procedures to minimize stormwater contact with materials that are brought to, used, and stored in UDOT facilities.
- Since different facilities have different functions, tools, and materials stored onsite, the procedures in this SOP are concerned with general Best Management Practices (BMPs) to prevent pollutant discharges.

### **Pollutants and BMPs**

- Pollutants associated with material handling and storage: petroleum products, chlorides, heavy metals, pesticides
- List of BMPs in place: temperature controlled storage, covered storage, cabinets for containment

### **Site Considerations**

- If site conditions allow, keep all materials stored under cover, or inside of a building.
  - If this is not feasible, store materials off the ground and under temporary forms of cover.
    - This can be accomplished by placing materials on pallets to store them, and keeping them shrink wrapped until used, or by providing a tarp or other cover.
  - Provide perimeter control around areas that are exposed to runoff or sheet flow.
    - Berms, dikes, or other elevated platforms for storage will prevent sheet flow from coming into contact with stored materials.
- In locations where equipment is loaded to and from the storage area, keep an emergency spill kit in place in case of drips, spills, or other fluid discharges from vehicles.
- Keep all stored materials away from channelized stormwater conveyances and storm drain inlets.
- Keep the storage area clean, with proactive sweeping or cleaning routines to prevent the buildup of trash and debris.
- After unloading and storing materials, dispose of all packaging, transportation waste, containers, or other materials which could come in contact with stormwater and be transported to the storm drain system.
- Minimize the amount of materials stored onsite.
  - Consider surplussing old stock.
  - Consider limiting amounts of items or material until sufficient space is available to store more materials, or until the current supply is exhausted.
- This facility stores materials and supplies in the following locations
  - The maintenance station and enclosed building outside, northeast of station
  - The following materials have special storage needs: outside building has heating in order to keep the chemicals from freezing.
    - Those storage requirements include: heated building

### **Inspection**

- During the facility stormwater inspections, inspect all material storage areas.
- Are materials stored inside?

- Is there litter and debris in the storage area that could be carried or tracked outside and come into contact with stormwater? If so, clean the affected area and properly dispose of any waste.
- Is there a spill kit, or other containment measure to assist with the cleanup of any spills or leaks that occur in the delivery and loading process? If not, or if the kit has insufficient materials, replace the spill kit.
- Are materials stored outside?
  - If so, are materials covered and kept off the ground? Any materials that could come in contact with stormwater should be placed on pallets, or otherwise kept out of contact with stormwater.
  - Are the materials stored in an area that can come into contact with stormwater? Are there perimeter controls in place to prevent contact with stormwater? If the area has a tendency to flood, receive runoff, or is in the path of a channelized conveyance, consider moving the storage area to an area where those risks are minimized.
  - Does the type of material stored pose a threat to runoff? Inert materials that do not pose a risk to stormwater, and cannot be carried by runoff do not need the same level of BMP attention as materials that do.
    - For example, it is more important to store bags of dry mix cement off the ground and keep them under cover than it would be to keep PVC pipe off the ground and covered.
  - Is the area around the stored material free of debris, waste or other potential pollutants? Clean all affected areas and properly dispose of the waste.

### **Documentation**

- All storage areas should be identified on the site map located in the facility Stormwater Pollution Prevention Plan (SWPPP).
  - If the site handles and stores hazardous materials in these areas, or has potential pollutants that are not inert materials stored there, identify what those materials are on the map.
  - If the site changes the location or type of materials stored onsite, update the map to reflect those changes.

## **Salt Storage SOP**

### **Purpose**

- The purpose of this Standard Operating Procedure is to assist maintenance staff in reducing salt and deicing agent pollution from entering the stormwater system at UDOT facilities.

### **Pollutants and BMPs**

- Pollutants associated with salt storage: salt, chlorides, sediments, total suspended solids, heavy metals, nutrients
- List of BMPs in place: salt shed, retention basin, sweeping,

### **Site Considerations**

- All UDOT facilities must store road salt and deicing agents under a covering. All UDOT facilities that store salt and deicing agents onsite must have constructed sheds.
  - Only salt and/or grit should be stored in salt storage buildings.
  - Salt and deicing agents must be stored completely within their covered storage area except when adding or removing material from the piles. Avoid overfilling salt sheds.
  - Keep piles well groomed, and free from contact with other materials.
- Any salt piles that are stored outside must be covered.
  - The Utah Division of Water Quality (DWQ) may allow exceptions to this rule for areas where residual salt levels are high enough that salt runoff does not cause an additional threat. If this is the case, document all communications and agreements with DWQ and keep those records in the facility Stormwater Pollution Prevention Plan (SWPPP). Verify this information with the Station Supervisor or Region Stormwater Program Coordinator: Chad Cowan (435) 660-0671, Jordan Pogorzelski (801) 227-8023
- Loading sanding trucks is a source of spills and track-out from salt storage areas. Proactive housekeeping of these areas will substantially reduce salt discharges from the facility.
  - This facility loads salt into the sanders at the station salt shed.
  - While loading, refrain from overfilling the loader bucket or shake off any excess salt at the salt pile to prevent spills.
  - Reduce the speed of loading for salt and deicing agents into trucks to decrease spills. When leaving the station with loaded sanders, prevent spills by making slow turning movements within the yard and when exiting onto a public streets.
  - Do not overfill trucks while loading them for operation.
  - When loading activities are finished, sweep any excess salt back into the storage sheds, and/or dispose of any salt or deicing agent that has been contaminated by contact with other materials.
  - After loading salt into or out of the covered storage area, ensure that salt tracked out of the storage area is pushed back into the storage shed.
- Salt and deicing piles must be stored on impervious surfaces, if feasible.

### **Inspection**

- During the Weekly and Quarterly Comprehensive Inspections, inspect salt storage areas and the surrounding loading areas.
  - Look for any salt or deicing materials that have been spilled or tracked out of the storage area. Sweep any clean salt back into the shed to ensure that the salt pile in the shed has no possibility of contact with precipitation.
- Look at the surrounding area where salt is loaded into the sanding trucks. Is salt staining or runoff from the loading area present?
  - Clean the affected areas using dry methods such as sweeping. Return any salt or deicing agents that are uncontaminated to the storage area.

### **Documentation**

- All salt storage sheds must be identified on the site map of the facility SWPPP.
  - If the facility has a dedicated loading area or a structure to load salt trucks, identify it on the site map.
- Keep records on the Training Information log in Attachment E of the SWPPP for all staff members who have been trained on the proper handling of salt and deicing materials.

## **Solid Waste Management SOP**

### **Purpose**

- The purpose of this SOP is to prescribe methods to reduce and eliminate pollutant discharges generated through the storage or removal of solid wastes at UDOT facilities.
- The day-to-day maintenance of a UDOT facility as well as routine operations through the operating area of a facility can generate a large amount of solid waste, all of which need to be addressed as a part of UDOT pollutant generating operations.

### **Pollutants and BMPs**

- Pollutants associated with solid waste management: heavy metals, petroleum products, litter, debris, nutrients, solvents,
- List of BMPs in place: retention pond, dumpster with lid and plug, containment area for waste, waste containers with sealed or secure lids, decant area

### **Applications and Considerations**

- A maintenance station may store the following types of debris:
  - Maintenance waste such as construction debris, non-hazardous equipment waste, grindings, wood scrap, packaging and transport materials, asphalt, concrete, and similar materials.
  - Sediment, plant debris, grass clippings, or other material from right of way maintenance.
  - Litter, including plastic, paper, and other debris generated by the staff onsite, as well as cleaning activities in the right of way.
  - Any other wastes generated from the specific functions of the maintenance facility, such as scrap metal.
- For each type of waste, it is important to designate containers for the waste or areas of the maintenance facility for stockpiling waste:
  - Do not place containers or designate waste areas in locations on the site that are prone to flooding, or contact with stormwater if feasible.
  - Obtain sufficient disposal containers to store the volume of waste present at the site at any given time.
  - If material is stockpiled before disposal and not kept in containers, appropriate Best Management Practices (BMPs) should be utilized where feasible.
  - Whenever feasible, store waste under existing cover, as it will decrease the exposure of the waste to stormwater and/or pooling of water in containers.
- For all waste stored onsite, BMPs must be in place to prevent the discharge of pollutants from the site:
  - All bins and containers should be covered with lids, unless adding or removing waste.
  - All dumpsters must have lids that fully cover the opening, and plugs for all units with drain openings.
    - For all large roll-off dumpsters, it is not necessary to cover them at all times if the waste is contained within the bin. For example, if trash is bagged, and the

bin is not overfilled, it is not necessary to cover the bin. But if material is blown out of the dumpster, it is not contained.

- Stockpiles should have perimeter control and covers while not in use. Depending on the type of stockpiled waste, it may be necessary to keep it covered at all times. If stockpiles are only kept for short periods of time, continuous cover may not be needed.
- The maintenance facility must have a plan to properly dispose of all waste from their facility. This should include securing contract services or assigning personnel who are responsible to transport waste to an appropriate waste receiving facility.
  - This facility accepts the following waste that requires special disposal requirements:
    - N/A
    - This facility currently utilizes the Juab County Landfill to properly dispose of waste.

### **Inspections and Maintenance**

- During the Quarterly Comprehensive Inspection, inspect each designated waste container, as well as any stockpiles and storage areas.
- While inspecting those areas, look for any defects in the waste containers such as holes, punctures, or other problems.
  - Look for staining, rusting, or other discoloration from the containers in the area around the container. If there are such markings, investigate the area to look for any sources of liquid run-on into the area. Rusted or defective containers can leak and discharge pollutants into the storm drain system if not addressed.
- Look for any debris, trash, or spillage from the containers or waste storage areas. The presence of materials around the containers instead of in them may indicate that they have been overfilled, that personnel have accidentally spilled waste while putting it into the container, or that the wind may have blown some of it from the container.
- Check to ensure all lids, covers, tarps, or other BMPs are in place. Check all dumpsters to make sure the lids are closed, and any drain ports are properly plugged.
- If any container is defective and discharging waste, repair or replace it immediately. For stockpiles discharging waste, immediately put in place additional BMPs.
- Any debris or waste that is not in its proper waste container should be placed in its container immediately.
- Periodically review any waste removal agreements in place with third parties, to ensure that the type and volume of waste stored onsite is removed in a timely manner, to reduce the risk of discharging pollutants at the facility.

### **Documentation**

- If, during the course of weekly visual or quarterly comprehensive inspection, a deficiency is discovered, the problem must be immediately addressed, and recorded in the inspection form along with the corrective action that was taken.
- If there is a waste or hazardous material discharge that occurs during the course of work, it must be immediately cleaned up and the corrective actions recorded in the inspection form.



- Identify any location where waste is stored on the site map located in the SWPPP.
  - If the locations or types of stored waste change on the site, the SWPPP must be updated to reflect those changes.

## **Detention and Retention Basin SOP**

### **Purpose**

- This Standard Operating Procedure (SOP) is intended to help maintain detention and retention basins found on UDOT maintenance shed properties.

### **Pollutants and BMPs**

- Pollutants associated with activities involving detention and retention basins: petroleum products, sediments, total suspended solids, litter, debris, heavy metals, nutrients, chlorides, salt.
- List of BMPs in place: retention basin, detention basin, decant pad, berms, pumping and proper disposal of pond waste

### **Site Considerations & Procedures**

- The flow of stormwater runoff should be known in order to see what inlets receive or where the stormwater flows into the detention or retention basin.
  - This facility has these inlets that receive stormwater flows south of the station and north of salt shed.
  - This facility has a detention basin located north of the station.
  - This facility has a retention basin located south and west of the salt shed.
  - This facility's retention basin is this type of basin: asphalt.
- Look at the depth of the basin. If it is close to overflowing, identify any inlets the overflow would flow to and install inlet protection and block inlets.
- If the basin overflows, create a berm using sandbags to contain the flow.
- Contact pumping contractor to pump out pond and inform Region Stormwater Coordinator
- When cleaning out the basin, provide outlet protection to minimize the debris that might leave the basin during cleaning.
- Clean the basin of sediment by using a backhoe or front-end loader from the bottom if basin is lined with zero-void asphalt or concrete. Otherwise, use a vactor truck to clean the basin if it is plastic-lined.
  - This facility has an asphalt lined retention basin.
- Clean the concrete pads when finished using dry methods like sweeping and shoveling.
- Properly dispose of sediment and waste in properly contained areas on site. Decant waste at the decant pad onsite located: not onsite. Dispose off-site at the Juab County landfill.

### **Inspections**

- During the weekly visual and quarterly comprehensive inspection, inspect all areas of the detention and or retention basin.
  - Look for any trash or blockages near any of the inlet and outflow structures.
    - If there are any blockages or trash, remove and dispose of trash and debris.
  - Inspect the height of the vegetation if applicable. Schedule mowing if necessary.
  - Inspect the basin for any buildup of sediment. Schedule removal sediment if needed.

- Inspect the riprap around the outlet to determine if it is providing sufficient outlet protection. If not, notify the engineer for further inspection.
- Inspect the forebay and any pretreatment diversion structures for any sediment build-up. If so, remove and dispose of the sediment.
- Inspect any head gates in the basins to ensure they are function and do not require maintenance.
- Inspect the leak detection mechanism (if present) for any water leaking from the pond. If there is a leak, notify the Region Stormwater Coordinator for further inspection.
- If the basin has a liner, inspect the liner to make sure it is functional and sufficient. If damaged or found inoperable, notify Region Stormwater Coordinator for further inspection.

### **Documentation**

- All detention and retention basins should be identified on the site map and located in the facility Stormwater Pollution Prevention Plan (SWPPP).
- If the site makes any changes to the detention and or retention basin, update the map to reflect those changes.

## **Used Oil, Solvent and Cleaner SOP**

### **Purpose**

- This Standard Operating Procedure (SOP) is intended to reduce and eliminate spills and discharges of used oil, solvents and cleaners at UDOT facilities.

### **Pollutants and BMPs**

- Pollutants associated with used oil, solvents and cleaners: petroleum products, solvents, degreasers, chlorides, pesticides, nutrients, heavy metals, sediments, total suspended solids
- List of BMPs in place: used oil tank, concrete containment bin, metal cabinets, indoor storage, oil containers with secure or sealed lids, spill kit

### **Site Considerations**

- All used oil must be stored in secure containers that must have secondary containment.
- Make sure all used oil is properly disposed of in a used oil tank that has the proper containment liners. The tank should also be in its own containment bay that is closed off and doesn't allow for leaks.
  - This facility has a used oil storage tank located in the northeast corner of the station.
  - This facility has used oil containers located in the northeast corner of station
- Ensure all used oil storage from all truck maintenance is stored in a covered location.
- If used oil containers are stored outside, they must be under a covered area away from storm drains, with secondary containment measures in place.
- When transferring any oil, make sure it's done over an impervious surface or that a tarp be placed on the ground to catch any spills.
- Clean any used oil spills as soon as possible using dry methods.
- Store all cleaners and solvents indoors with secondary containment methods.
  - This facility storage of cleaners and solvents are located in the main station in a non-flammable storage cabinet.
- Treat all solvent and cleaner waste as hazardous waste and dispose of waste in the facility hazardous waste area or transfer to another facility for proper disposal.
  - This facility has a hazardous waste storage area located in the northeast corner of station.
  - This facility sends hazardous waste to a facility on contract with UDOT.

### **Inspections**

- During the weekly and quarterly inspections, inspect all used oil, solvent and cleaner storage areas and containers
- Inspect the containment area of the used oil.
  - Is there any evidence of oil leaks outside of the containment bay? If so, clean the spill using dry methods and report the faulty containment bay to the supervisor for repairs.

- Make sure a spill kit is nearby and that the spill kit is sufficient. If not, replace the spill kit.
- Inspect the oil containers
  - Is the lid to the container shut properly and air tight? If not, replace the oil container.
  - Check the container for signs of leaks or rust. If there are leaks and rust, replace the container.
- Inspect the storage area where the cleaners and solvents are stored.
  - Is there any evidence of leaks or spills? If so, clean the spill as soon as possible and inspect the containment area. Replace the containers if damaged or not sealed properly.
  - Check the secondary containment area. Is there any evidence of leaks? If so, replace or repair the secondary containment measure.

### **Documentation**

- All used oil and storage areas should be identified on the site map located in the facility Stormwater Pollution Prevention Plan (SWPPP).
  - If the site changes the location of the used oil or storage of the solvents or cleaners, the site map must be updated to reflect those changes.

## **Spill Prevention and Response SOP**

### **Purpose**

- This SOP will outline procedures and concerns to reduce and potentially eliminate discharges from maintenance operations and material storage at UDOT facilities.
- For hazardous materials, or materials that have specific disposal requirements, follow any manufacturer's guidelines or specifications to contain and clean up spills.

### **Pollutants and BMPs**

- Pollutants associated with spill prevention and control activities: petroleum products, solvents, pesticides, sediments, total suspended solids, litter, debris, heavy metals, nutrients, chlorides
- List of treatment BMPs in place: oil/water separator, spill kit, berms, secondary containment, master switch for vault electric pump, inline slide gates

### **Spill Response Procedures**

- If a spill occurs, utilize an appropriate spill kit to contain the material as soon as the spill occurs.
  - If the volume of the spill causes runoff, cover or dam any storm drain inlets that could receive flows from the spill. Do not allow the spill to enter the storm drain system.
  - If feasible, repair or remove the cause of the spill before cleaning the spilled material.
- Do not use hoses or other equipment to wash or spray down the spilled material. Washing material into a storm drain system, or into a Water of the State, is a violation of the UDOT MS4 permit. Washing certain material into the sanitary sewer system may not be allowed. Contact local sanitary sewer district manager or local government engineer for guidance.
  - This facility has sanitary sewer connections located in the northeast corner of the station.
  - The preferred cleanup method is always to use dry methods to clean the spill.
- When using absorbent materials to clean a spill, allow time to let the material be completely absorbed. Remove all the material and properly dispose of it afterwards.
  - Do not let the absorbed material stay in place for longer than necessary, or let it contact stormwater, or other runoff. If contaminated absorbent material enters the storm drain system, it is a violation of the UDOT MS4 permit.
- If pollutants enter the storm drain system or the sanitary sewer system, it may be necessary to report the spilled material to the Division of Water Quality (DWQ), the Area Supervisor, Region Stormwater Program Coordinator, or the local entity in charge of the sanitary sewer system. **You must immediately contact DWQ and the Nephi City Public Works for any spill that violates sanitary sewer pretreatment standards or a slug discharge.** For purposes of this subsection, a Slug Discharge is any Discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch Discharge, which has a reasonable potential to cause Interference or Pass Through, or in any other way violate the POTW's regulations, local limits or Permit conditions. These notifications cannot be made to voicemail. **Additionally, written notification must be made to the Nephi City Public Works and DWQ within 5-days.**

- This facility must report any spills of and fuel, oil and chemicals.

### **Site Considerations**

- The site should designate areas to store liquids, wastes, and other materials that have a potential to cause spills, discharges, or leaks that are designed to reduce or eliminate contact with the stormwater or sanitary sewer system, and prevent runoff.
  - Storage areas should have cover.
  - Secondary containment, berms, or other barriers to prevent runoff are good ways to reduce the risk of discharge.
  - Any wastes or liquids that are stored inside must be in secondary containment to prevent any spills to the sanitary sewer system. All containers must be labeled correctly.
- Each storage area, fueling station, or other area where potential spills, leaks or discharges may occur must include a spill kit.
  - Spill kits should be tailored to clean the types of pollutants that are present in the area.
    - For example, around fueling areas all spill kits should have hydrocarbon absorbent materials.

### **Inspections**

- During the weekly visual and quarterly comprehensive inspections, inspect all areas where materials or operations with a potential for spills, leaks, or discharges are onsite.
  - Look for any signs of spills, leaks, or other material.
    - Clean all leaks and spills immediately.
    - Remove or repair any sources of pollutants, which are causing or could cause a discharge.
    - Look for any leaks in secondary containment measures near any sanitary sewer drains and connections. Clean any leaks and spills. Note any deficiencies to the Region Stormwater Program Coordinator or the Area Supervisor.
  - Look at the spill kits.
    - Do the spill kits have the appropriate material to address the potential pollutant sources that are present where they are stored?
    - Are the spill kits full? Replace or refill any kits that are empty or partially empty.

## **Sweeping and Vacuuming Operations SOP**

### **Purpose**

- Sweeping and vacuuming waste materials from the right of way is an effective means to reduce pollutants present on the right of way which can originate from the public or UDOT operations such as de-icing.
- Sweeping and vacuuming waste often contains contaminated stormwater that has commingled with contaminate wastes. It is important to note that the liquid waste is as important to contain as the solid waste from sweeping and vacuuming.

### **Pollutants and BMPs**

- Pollutants associated with sweeping and vacuuming operations: sediments, total suspended solids, litter, debris, heavy metals, nutrients, chlorides, solvents, degreasers, petroleum products
- List of BMPs in place: concrete containment bin, indoor garage storage for vehicle and equipment

### **Operations and Waste Storage Considerations**

- Whenever possible, sweeping and vacuuming waste should be transported to an approved facility that accepts it, instead of bringing it back to the maintenance facility. If the waste can be taken immediately to a receiving facility, it will prevent the need to set up other BMPs at the UDOT facility to contain the solid and liquid waste.
  - Facilities that choose to bring vacuuming and sweeping waste back to the facility must have the appropriate means to store the waste, and a plan to dispose of it properly.
    - Decanting wastewater into a retention pond is acceptable only if the facility does not use the receiving retention pond as makeup water for brine making operations.
  - If the site has a dedicated facility that was constructed for the sole purpose of storing or decanting vacuum and sweeping waste, the facility Stormwater Pollution Prevention Plan (SWPPP) should identify that facility on its site map.
    - None onsite
- Waste storage must be in an area where there is minimal to no exposure to stormwater, and where there is no risk of having runoff enter the storm drain system.
  - Berms can be used to prevent run-on to the storage area. Those berms must be watertight, and cannot allow any liquid that may be present in the waste to runoff from the area and create a discharge from the site.
    - Jersey barriers are insufficient to contain the waste storage.
  - If waste is stored on an impermeable surface such as asphalt, make sure there are no cracks, holes, defects, or other issues where it is stored. Discharges of pollutants to groundwater is a violation of the UDOT MS4 permit.
  - The following areas onsite can store waste from vacuuming and sweeping:
    - None onsite



- UDOT maintenance facilities are also responsible for preventing salt, sediment, or other pollutant track out from the facility onto the right of way.
  - If feasible, use dry methods such as hand brooms to clean any tracking off the site.
- Sweeping and vactor vehicles are stored at the following locations onsite
  - Located inside the vehicle storage within the site.
- This station does sweeping and vactoring of facility and field infrastructure one to three times a year
- Regularly clean and maintain all vehicles or equipment used in sweeping and vacuuming operations after use.
  - All maintenance and cleaning should be done in the appropriate areas of the facility to capture washwater runoff or any potential leaks or spills.
  - If vehicles leak or drip fluids, provide drip pans or other BMPs to contain any potential pollutants from leaving the area.

### **Inspection**

- During Weekly Visual and Quarterly Comprehensive Inspections, inspect all areas of the site where vacuum and sweeping equipment and/or waste is stored.
- While inspecting waste storage areas onsite, look for the following:
  - Is the waste storage area separated from stormwater run-on and runoff? If there is potential contact between stormwater run-on and the waste storage area, additional BMPs may be needed.
  - Are the berms or other perimeter BMPs in good condition? Repair or replace any perimeter controls that are defective.
  - Is there evidence of the waste decanting to an inappropriate location such as a storm sewer connection? If runoff from the waste pile is not draining to the appropriate place such as the retention pond, it may be necessary to move the waste pile, or change the site conditions to ensure runoff reaches the appropriate destination.
  - Have winds or other conditions caused debris from the waste pile to erode and pose a risk to stormwater? If precipitation, wind, or other weather conditions are anticipated, or have caused erosion of the waste pile to occur, utilize cover or other BMPs to prevent contact and reduce erosion.
    - Leaving the waste pile exposed for long periods of time will increase the risk of erosion. Decreasing the amount of time the pile is left to decant will decrease the risk of creating pollutant runoff.
- While inspecting vehicle and equipment storage areas, look for the following:
  - Are the vehicles stored in such a way to minimize contact with stormwater?
  - Is there evidence of leaks, spills, or other drips from the vehicles?
  - Is there any evidence of damaged vehicle parts that may cause a leak while the vehicle is in operation?
  - Are there drip pans and an emergency spill response kit in the storage area?

## **Vehicle and Equipment Maintenance SOP**

### **Purpose**

- The purpose of this SOP is to identify methods to reduce and eliminate pollutants associated with maintenance of vehicles and equipment at UDOT facilities.

### **Pollutants and BMPs**

- Pollutants associated with vehicle and equipment maintenance: oil and petroleum products, heavy metals, nutrients, solvents and degreasers
- List of BMPs in place: oil/water separator, spill kit, drip pans

### **Facility Considerations**

- Wherever feasible, all maintenance done on vehicles and equipment should be done under cover.
  - If the maintenance facility does not have cover to perform maintenance on vehicles and equipment, the facility should consider only performing maintenance on dry days with no chance of precipitation and/or coordinate with a nearby UDOT facility to use their covered bays.
  - If not feasible to perform the work elsewhere, secondary containment like drip pans and oil pans.
- Before any maintenance is done on vehicles and equipment, ensure that they are empty of any fluids that they may be holding in the tank.
  - Check any tank volume gauges and ensure that they read at zero or empty and conduct a physical inspection of the tank to view if any fluids are still in the tank.
  - If there is still fluid in the tank of the vehicle, dispose of that fluid in the proper holding tank or disposal location.
    - This facility has a holding tank or area for off-loading of fluid located not applicable for this station.
- Certain oils, when combined with water, can pass through an oil/water separator. Ensure that the vehicle or equipment that requires maintenance does not contain any emulsified products that can pass through an oil/water separator.
  - Oils and products that emulsify and pass through an oil/water separator include: TSS-1 oil, tech oil, chip oil, tack coat oil, asphalt polymer treatment, flush oil
- During the course of maintenance, ensure that pollution prevention measures are in place.
  - Drip pans, containment units, or other measures should be in place before work begins.
  - Emergency spill control measures such as oil absorbent, berms, and hydrocarbon mats should be on hand during maintenance so that response to any kind of spill or leak can be immediate and minimize pollutant discharges
- If maintenance is performed outside, cover nearby storm drain inlets which could receive runoff from oil and other fluids. Do not perform maintenance on top of channelized conveyances or on top of a storm drain inlet for any reason.
- While cleaning vehicle or equipment maintenance areas, use dry methods unless the area is connected to an oil water separator and a sanitary sewer and that connection has been confirmed and documented as part of the facility SWPPP.

- The Nephi maintenance building can be used for this purpose.
- All waste fluid generated during the course of maintenance should be stored in a leak proof container, with a lid and stored in the proper covered location when maintenance activities are finished.
  - Waste containers are to be stored in the main station, in a storage room.

## Inspections

- During the Weekly Visual and Quarterly Comprehensive Inspections, inspect all vehicles and significant equipment to assess their condition.
  - For certain types of vehicles, such as diesel vehicles, drips and leaks are inevitable and not always a sign that something is broken. For such vehicles, drip pans, bibs, or other oil containment units should always be in place. This does not exempt these vehicles from being inspected, as the drips and leaks can cause a potential illicit discharge.
  - Any vehicles or equipment that are prone to leaks should never be stored near or on stormwater conveyance systems, or in areas that are prone to flooding. The ideal location for such vehicles should be under cover, or in a building with a sanitary sewer connection.
    - Connections to a septic system are not sufficient to allow oils, or other vehicle fluid discharges. Systems that connect to treatment BMPs or sanitary sewers are acceptable.
  - All vehicle and equipment maintenance areas should be inspected during each inspection. Look for:
  - Fresh, wet staining in the area from any maintenance performed. This is typically caused by leaks and drips from vehicles, or small spills that occur during maintenance. Apply absorbent, and allow it to soak up the material, then dispose of the absorbent material properly.
  - A spill kit in the area that is stocked with sufficient materials. If the spill kit is empty or missing, refill or replace the kit.
  - Tracking of any potential pollutants out of the area. Apply absorbent to tracked oil, sweep up any debris that may be present, and provide drip pans to collect any future drips or leaks in the area.
  - Any waste fluid containers that are leaking, missing lids, or have rust, defects, or punctures. If there are any defects in the containers or missing lids, replace them and clean any liquid that may have spilled using absorbent.
- Before using any equipment or vehicles, perform a pre-trip or walkaround inspection.
- Any spills discovered, whether it be to the storm drain system or the sanitary sewer system, proper spill control procedures must be implemented and notification to the Region Stormwater Program Coordinator and Area Supervisor via the Weekly Inspection Form or direct contact is necessary. **If the spill reaches the storm drain system or sanitary system, notification to the Division of Water Quality or the Nephi City Public Works is necessary and must be done immediately. Additionally, the Nephi City Public Works and DWQ must be notified in writing within 5 days after the immediate notification.**

- **Inspect oil water separators monthly to make sure they are in working condition. Clean them at a minimum of every six months or as directed by the approved pretreatment program in your area if applicable.**
- Inspect and maintain any treatment BMPs and make sure they are in proper working condition.
- Inspect and maintain any pumps that are associated with treatment BMPs.

### **Documentation**

- The facility SWPPP should contain the locations of all dedicated vehicle maintenance areas and the location of all emergency spill kits in the facility.
  - If the site adds, removes, or changes the locations of spill kits and maintenance areas, those changes must be reflected in the SWPPP.
- All spills and leaks should be contained and cleaned up. A Weekly Visual Inspection form should then be filled out and include the corrective actions to remedy the spill or leak.
- Document and maintain records of when the facility's oil water separator has been pumped out and cleaned by either UDOT staff or contracted professionals.

## **Vehicle and Equipment Washing SOP**

### **Purpose**

- This Standard Operating Procedure will lay out operational notes and site considerations to eliminate illegal/illicit discharges from vehicle and equipment washing operations at UDOT facilities.
- Vehicles used in UDOT Maintenance Operations may accumulate a variety of pollutants during their use in the right of way. It is important to ensure that during the process of washing vehicles and equipment that any pollutants brought back to the facility are only discharged to approved locations such as the sanitary sewer or retention pond.

### **Pollutants and BMPs**

- Pollutants associated with vehicle and equipment washing: petroleum products, sediment, total suspended solids, heavy metals, litter, and debris
- List of BMPs in place: retention pond, oil/water separator, berm

### **Site Considerations**

- In order to wash vehicles at UDOT facilities, the appropriate sanitary sewer connection or retention pond must be in place to receive the contaminated washwater. Vehicle washwater cannot be allowed to enter the storm drain system or groundwater as a result of UDOT activities. All vehicle washwater must be captured and contained.
  - Many UDOT facilities either have a retention pond, or a dedicated sanitary sewer connection that receives washwater from vehicle washing operations. This facility utilizes a retention pond to capture washwater.
- If the facility has a wash rack installed to assist with vehicle washing, ensure that it is sited so that all washwater from washing operations flows into the retention pond to capture the contaminated washwater.
  - For wash racks, ensure that vehicles are parked in the appropriately designated location of the wash rack. Oftentimes, wash racks are sited at grade breaks that drain towards the sanitary sewer connection or retention pond on one side of the rack. Ensure that the vehicle is parked on the correct side to direct flow into properly. This facility's wash rack is located north of salt shed adjacent to the retention pond. Vehicles must be washed on the pad of the wash rack.
- If the facility allows washwater runoff to enter a retention pond as a means of containment, the facility is responsible for keeping the pond from overflowing. Runoff from a retention pond that leaves the facility, or enters groundwater (by settling on dirt or vegetation) is an illegal discharge and a violation of UDOT's MS4 permit. A need to wash vehicles is not an acceptable reason to allow retention ponds to overflow.
  - If the pond is at risk of overflowing, reduce the volume of water that is used in vehicle washing, or consider washing vehicles at an alternate location until the water level drops.
  - If climate conditions prevent evaporation, and vehicle washing cannot be reduced or suspended, water can be pumped from the retention pond and taken to another UDOT facility that can accept the wastewater, or disposed of at an appropriate licensed waste

facility. If pumping is necessary it is advisable to drain and clean the pond during the summer season if possible to avoid further costly occurrences.

- Keep all wash rack areas free of trash, salt, sand, and sediment. This will reduce the amount of solids that enter the sanitary sewer or the retention pond and will reduce its maintenance.
- Do not wash vehicles or equipment on pervious surfaces, like dirt or vegetation. Non-stormwater discharges to groundwater are a violation of the UDOT MS4 permit.

### **Inspections**

- During the weekly and quarterly inspections, inspect all vehicle and equipment washing stations onsite.
- Inspect the vehicle wash area for the features specific to the facility:
  - Is all washwater draining from the wash area to the retention pond? If washwater is either not reaching or not captured by the retention pond, it will be necessary to wash vehicles in a different location, or install BMPs to change the washwater flow path to ensure it reaches the retention pond.
    - Berms can be a simple way to change the flow path of washwater.
  - Is the wash rack situated in such a way that it drains to the appropriate receiving body?
    - If the runoff from the wash rack is not completely captured by either the retention pond or the sanitary sewer connection, it will be necessary to change the location of the wash rack, or to change the location where vehicles are washed in the wash rack.
  - Is the retention pond overflowing, or close to overflowing? If so, immediately notify your Area Supervisor and suspend or reduce vehicle washing until a solution can be implemented.
- Is there waste, salt, sediment, debris, or other pollutants on the wash pad? If so, clean the area, and properly dispose of the waste. Minimizing the amount of pollutants that is allowed to enter the pond or the sanitary sewer will make maintenance of those systems easier, less costly, and more effective.

### **Documentation**

- All vehicle and equipment wash areas must be identified on the site map in the facility Stormwater Pollution Prevention Plan (SWPPP)
  - If the site changes the setup for vehicle washing, the SWPPP must be updated to reflect that change. Contact your region Stormwater Program Coordinator to notify them of needed changes to the SWPPP map.
- Any agreements to pump washwater from overflowing, or nearly overflowing, retention ponds must be documented and kept with the SWPPP. Records of where the washwater is disposed or transported to must be kept with the SWPPP, as the facility is responsible for ensuring that the contaminated water is disposed of correctly.
- Keep records of all staff members who have been trained on the proper washing procedures in the SWPPP and record in the Training Log section of the SWPPP.

**ATTACHMENT C:**  
**Inspection Documentation**

## Information Recorded in UDOT Facility Weekly Visual Inspection

### **Inspection and Facility Information**

- Time and Date of Inspection
- Inspector Name
- Email
- Username
- UDOT Region
- UDOT Facility

### **Weekly Visual Inspection**

- Did this facility have any spill(s), leak(s), or other deficiencies?
- Please select the type of deficiency that occurred.
  - If other, describe the spill(s), leak(s), or other deficiencies identified.
- What was the approximate quantity of spilled or leaked material?
- Is the spill, leak, or other deficiency contained on-site?
- What corrective actions were taken to immediately remedy the spill, leak, or other deficiencies?
  - If no, what circumstances prevented immediate corrective actions to be taken to remedy the spill, leak, or other deficiency?
  - What corrective actions were later taken to remedy the spill, leak, or other deficiency?

### **Notes, Photos, and Signature**



## **Information Recorded in UDOT Facility Quarterly Stormwater Discharge Inspection**

### **Inspection and Facility Information**

- Time and Date of Inspection
- Inspector Name
- Email
- Username
- UDOT Region
- UDOT Facility

### **Stormwater Discharge Questions**

- What is the source of runoff?
- Stormwater discharge odor:
  - If "other" odor, please describe:
- Stormwater discharge color:
  - If "other" color, please describe:
- Stormwater discharge clarity:
  - If "other" clarity, please describe:
- Stormwater discharge floatables:
  - If "other" floatables, please describe:
- Does the stormwater discharge appear to be contaminated?
  - If yes, what is the likely source of the contamination?
- What corrective actions were taken to immediately eliminate the source(s) of contamination?

### **Completion Previous Quarter**

- Did this maintenance station perform the Quarterly Visual Observation of Stormwater Discharge Inspection during last quarter?
  - Please choose the reason why an inspection was NOT completed last quarter.

### **Notes, Photos, and Signature**

## **Information Recorded in UDOT Facility Quarterly Comprehensive Stormwater Inspection**

### **Inspection and Facility Information**

- Time and Date of Inspection
- Inspector Name
- Email
- Username
- UDOT Region
- UDOT Facility

### **General Facility Information**

- Are the facility buildings in good maintenance?
  - If no, please describe:
- Are equipment storage areas maintained in a clean and orderly manner?
  - If no, please describe:
- Is the facility water supply system and culinary plumbing system in proper working order?
  - If no, please describe:
- Are spill kits and/or spill cleanup materials located onsite?
  - If no, please describe why this facility does not need spill clean up kits or materials:
- If this facility has a salt shed or salt storage, is all salt contained within the structure?
  - If no, please describe:

### **Sanitary Sewer and Septic System**

- Select the sanitary waste system of this facility.
- Is the sanitary sewer system in proper working order?
  - If no, please describe:
- Is the septic system in proper working order?
  - If no, please describe:
- Is the sewage vault system in proper working order?
  - If no, please describe:

### **Landscape and Irrigation**

- Does this facility have landscaping and/or irrigation?
- Is the irrigation system functioning properly (no leaks, breaks, etc.)?
  - If no, please describe:
- Are there any physical indicators of irrigation system runoff (sediment trails, pavement discoloration, etc.)?
  - If yes, please describe:
- If landscaping and/or vegetation is used as a BMP for erosion control, are the BMPs properly maintained?
  - If no, please describe:

**Outdoor Surfaces (asphalt/concrete, dirt/vegetation)**

- Are the impervious surfaces (asphalt/concrete) free of spills or leaks from pollutants?
  - If no, please describe:
- Are the pervious surfaces (dirt/vegetation) free of spills or leaks from pollutants?
  - If no, please describe:

**Stormwater Drainage System**

- Does the facility have a stormwater conveyance system?
- Is the stormwater conveyance system properly maintained?
  - If no, please describe:
- Does this facility have stormwater treatment BMPs?
- Are stormwater treatment BMPs properly maintained?
  - If no, please describe:

**Non-Hazardous Waste Storage**

- Does this facility have a trash container?
- Is the trash container located a reasonable distance away from a storm drain inlet?
  - If no, please describe:
- For waste containers with discharge ports near the bottom, are the ports plugged or sealed to prevent pollutant discharge?
  - If no, please describe:
- Does the trash container have a lid and is it kept closed?
  - If no, please describe:
- Does this facility accept or store street sweeper waste?
- Are street sweepings contained to prevent wind dispersion?
  - If no, please describe:
- Are street sweepings contained so that stormwater contact does not flow offsite, onto ground, or into the stormwater conveyance system?
  - If no, please describe:
- Does this facility accept or store vector waste?
- Is vector waste contained to prevent wind dispersion?
  - If no, please describe:
- Is vector waste contained so that stormwater contact does not flow offsite, onto ground, or into the stormwater conveyance system?
  - If no, please describe:

### **Hazardous Material and Waste Storage**

- Does this facility store or use hazardous material or waste?
- Do hazardous materials and wastes have spill containment BMPs?
- Are there spills or leaks in the area surrounding the spill containment?
  - If yes, please describe:
- Are there spills or leaks in the area surrounding the hazardous materials or waste?
  - If yes, please describe:
- For hazardous materials and waste stored outdoors, are these items stored off the ground, covered to prevent contamination of stormwater, and placed in containment?
  - If no, please describe:
- Are hazardous materials and waste stored and loaded a reasonable distance away from storm drain inlets?
  - If no, please describe:

### **Outdoor Storage of Raw Materials**

- Does this facility store raw materials outdoors?
- Are raw material storage areas located away from stormwater drainage paths or storm drain inlets?
  - If no, please describe:
- Is the stockpile maintained so that material is less likely to erode?
  - If no, please describe:

### **Vehicle and Equipment Maintenance and Repair**

- Does this facility have a vehicle and equipment maintenance area?
- Is there a readily accessible spill kit (with ample supplies) located in the vehicle and equipment maintenance areas to cleanup typical shop spills/leaks?
  - If no, please describe:
- Are the vehicle and equipment maintenance areas clean and organized?
  - If no, please describe:
- Are used cleanup materials and wastes removed and properly disposed of after use?
  - If no, please describe:
- Are BMPs used under leaking vehicles and equipment to prevent pooling spills and tracking?
  - If no, please describe:
- Are vehicle fluids prevented from leaving the maintenance area and discharging to drainage paths, storm drain systems, etc.?
  - If no, please describe:
- Are hazardous materials in the equipment maintenance area stored with spill containment?
  - If no, please describe:
- Is the area surrounding the spill containment free of spills/leaks?
  - If no, please describe:
- Are hazardous wastes stored in sealed containers?
  - If no, please describe:

### **Fuel Island & Aboveground Tanks - Leak and Spill Control**

- Does this facility have aboveground tanks and/or a fuel island?
- Does the fuel island have a spill kit (with ample supplies) readily accessible for small vehicular spills?
  - If no, please describe:
- Are used cleanup materials and waste removed and properly disposed of from the fueling area?
  - If no, please describe:
- Are proper fueling and spill cleanup instructions posted at the fueling area?
  - If no, please describe:
- Are automatic shutoff valves installed at each fueling pump?
  - If no, please describe:
- Are manual/emergency shutoff valves present at the fuel island?
  - If no, please describe:
- Are fuel pumps, hoses, and nozzles clean and free from leaks?
  - If no, please describe:
- Is there a spill containment system around aboveground fuel tanks?
  - If no, please describe:
- Is the spill containment system free of rainwater and spills/leaks?
  - If no, please describe:
- If a drain valve is present, is the spill containment drain valve closed?
  - If no, please describe:
- Are aboveground tanks located (or BMP controls in place) to prevent spilled fluids from discharging to drainage paths, storm drain systems, or watercourses?
  - If no, please describe:
- If there is a generator on site, is its fuel stored in secondary containment?
  - If no, please describe:
- Are portable fueling tanks (gas cans) leak free?
  - If no, please describe:
- Are portable fueling tanks stored in a flammable cabinet?
  - If no, please describe:

### **Similar Pollutant Generating Areas**

- If this facility has any other similar areas that may generate pollutants, have these areas been thoroughly inspected?
  - If no, please describe:
- Please note any issues or deficiencies found.

### **Illicit Discharges**

- Are the facility buildings and grounds, and perimeter free of illicit discharges originating from within this facility?
  - If no, please describe:

### **Notes, Photos, and Signature**

# Using the Survey123 App for Stormwater Inspections

## Downloading and Submitting Public Surveys

### Purpose:

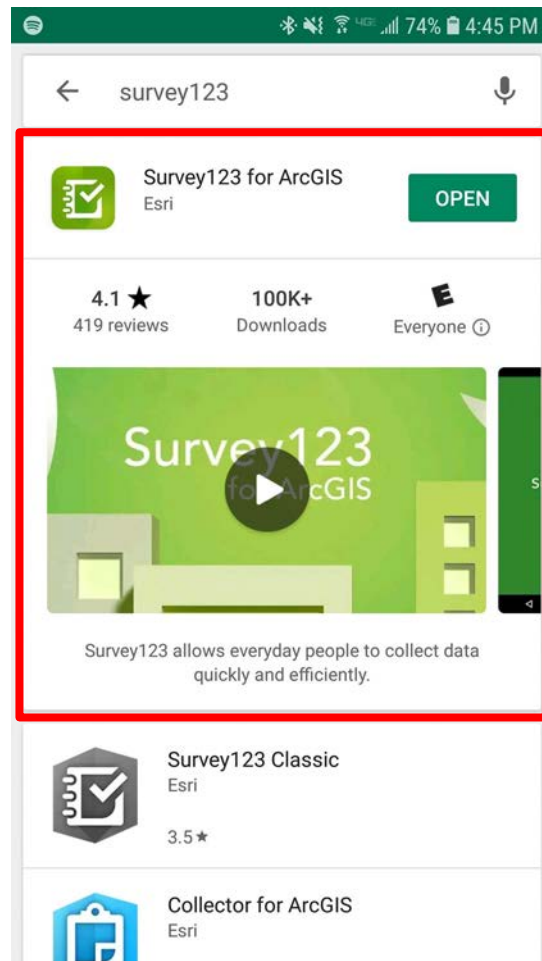
The stormwater team uses Survey123 app for Weekly Visual, Quarterly Comprehensive, and Quarterly Discharge stormwater inspections. Survey123 is compatible with mobile devices and allows you to complete inspections in areas without a reliable internet connection. Survey123 also allows you to add pictures, location, and other features not available in the Google Forms platform. This SOP has 2 sections:

- A. Getting Started with Survey123: Downloading the Survey123 app and Downloading Inspection Forms
- B. Completing and Submitting Inspections in Survey123

### A. Getting Started with Survey123

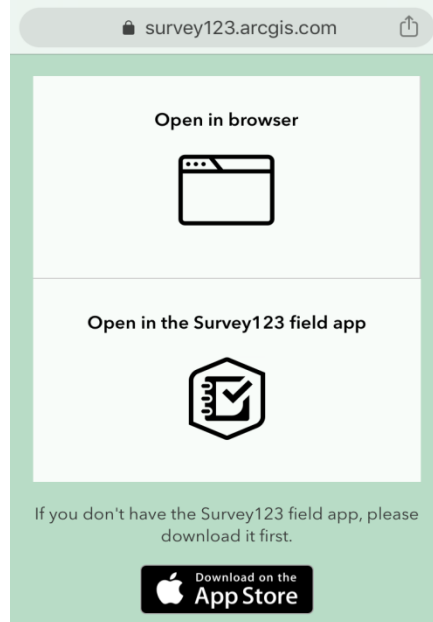
#### Downloading the Survey123 app

1. Open the App Store or Google Play Store and search “Survey123”. Install the Survey123 app.



## Accessing Forms in Survey123

1. All Maintenance Station and POE SWPPP inspections can be accessed at the following links.
  - a. **Maintenance Station SWPPP Inspections**
    - i. Weekly Visual Inspection: <https://arcg.is/GK548>
    - ii. Quarterly Stormwater Discharge Inspection: <https://arcg.is/5SXbD>
    - iii. Quarterly Comprehensive Inspection: <https://arcg.is/eCP41>
  - b. **POE SWPPP Inspections**
    - i. POE Weekly Visual Inspection: <https://arcg.is/Oq0GW5>
    - ii. POE Quarterly Stormwater Discharge Inspection: <https://arcg.is/ODWzzi>
    - iii. POE Quarterly Comprehensive Inspection: <https://arcg.is/1W9uH>
2. The links will bring you to a webpage that looks like this:



- If you are using a **phone or tablet**, select **“Open in the Survey123 field app”**. It will bring you to the following page:



- **Select Open in the Survey123 field app again.**

3. **Your device will open the Survey123 app and download the survey to your phone.** The survey will now be in your “My Surveys” homepage in the Survey123 app. **Next time you need to submit an inspection, you can go directly to the app.**

4. Make sure that the inspections that you have downloaded have the correct logos.

**Maintenance Station Inspections have all BLUE logos**



**SWPPP  
Weekly  
Visual  
Inspection**



**Quarterly  
Stormwater  
Discharge  
Inspection**



**Quarterly  
Comprehensive  
Stormwater  
Inspection**

**POE Inspections have all RED logos**



**POE  
Weekly  
Visual  
Inspection**



**POE  
Quarterly  
Stormwater  
Discharge  
Inspection**



**POE  
Quarterly  
Comprehensive  
Stormwater  
Inspection**

### Downloading Updates to Survey Forms in Survey123

Occasionally, there may be improvements made to the Survey123 forms. When this happens, you will need to **download updates to the form** so that you are using the updated version. **If you fill out an old version when a form has been updated, you will be unable to submit the old version of the form.**

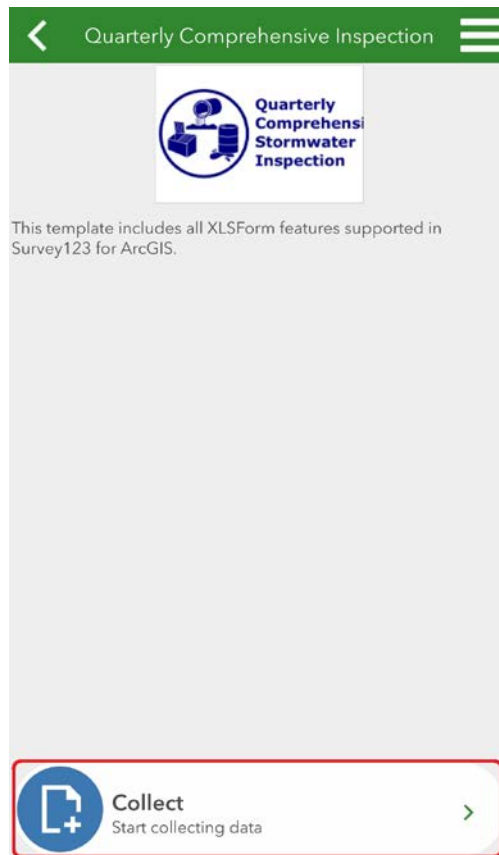
You will be notified by **email or text message when there is a new version** that needs to be updated. **A new link will be provided** along with the email or text. **Click the new link and follow steps 2-4 above to download the updated form.**



## B. Completing and Submitting Inspections in Survey123

### Completing an Inspection Form in Survey123

1. From the “My Surveys” page, tap the icon of the inspection that you need to complete.
2. Tap the “Collect” button at the bottom of the page.



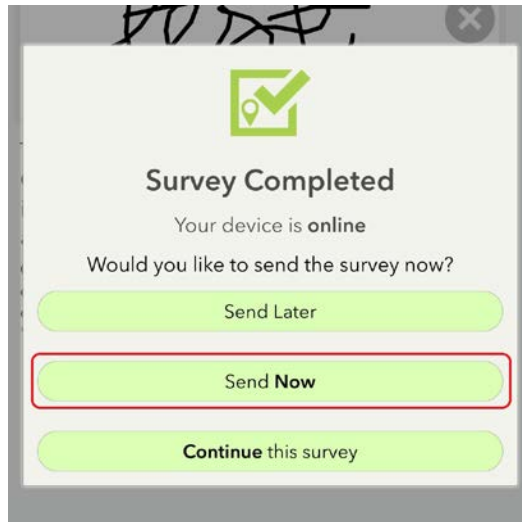
3. Fill out the information requested on the form. **Fields that are required have a red asterisk (\*).** You will not be able to submit the form if these fields are not complete. The date and time that you are filling out the form is automatically recorded.
4. Once you have **completed the form**, tap the **green check mark** in the lower right corner to submit the inspection form.

Thank you for completing the Quarterly Comprehensive Inspection. Please submit inspections for any satellite sheds you are also responsible for.

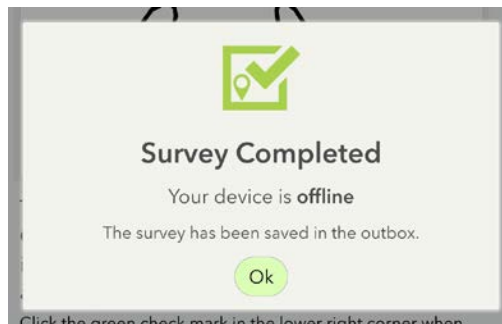
Click the green check mark in the lower right corner when complete. Then click "Send Now" to submit this inspection if online. If not online, the inspection will be saved in the "Outbox" to be uploaded later.



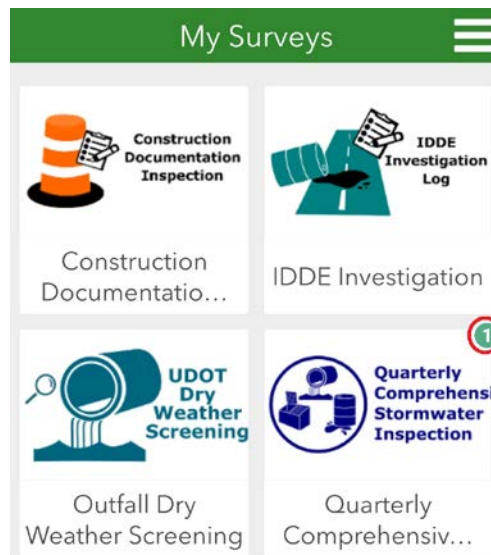
5. If you are connected to cellular data or wifi, you should click the **“Send Now”** button.



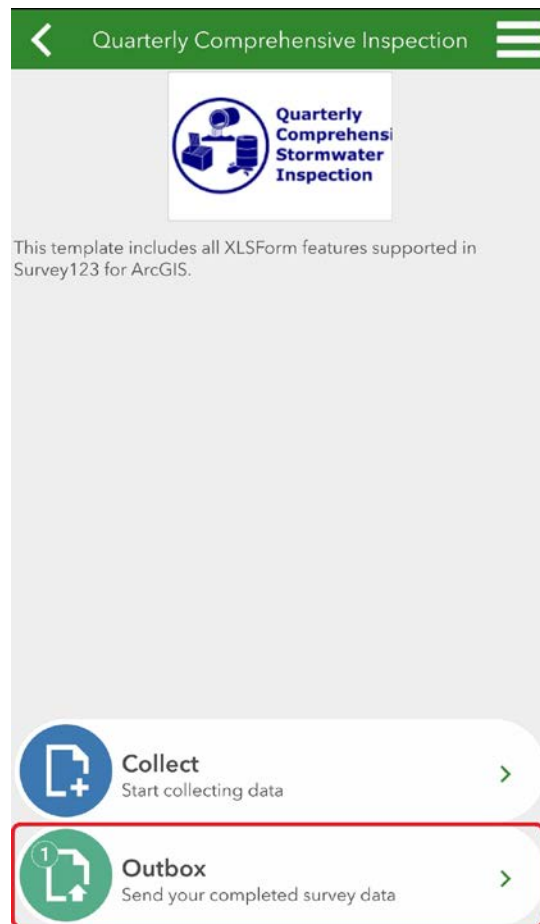
6. If your device is **not connected to cellular data or wifi**, you will get a message telling you that the device is offline and the form will be **saved to your outbox**.



7. Back on your home **“My Surveys”** screen, in the top right corner of the inspection form icon, you will see a **small green circle with a number in it**. This means that **you have a survey in the Outbox that is waiting to be submitted**.



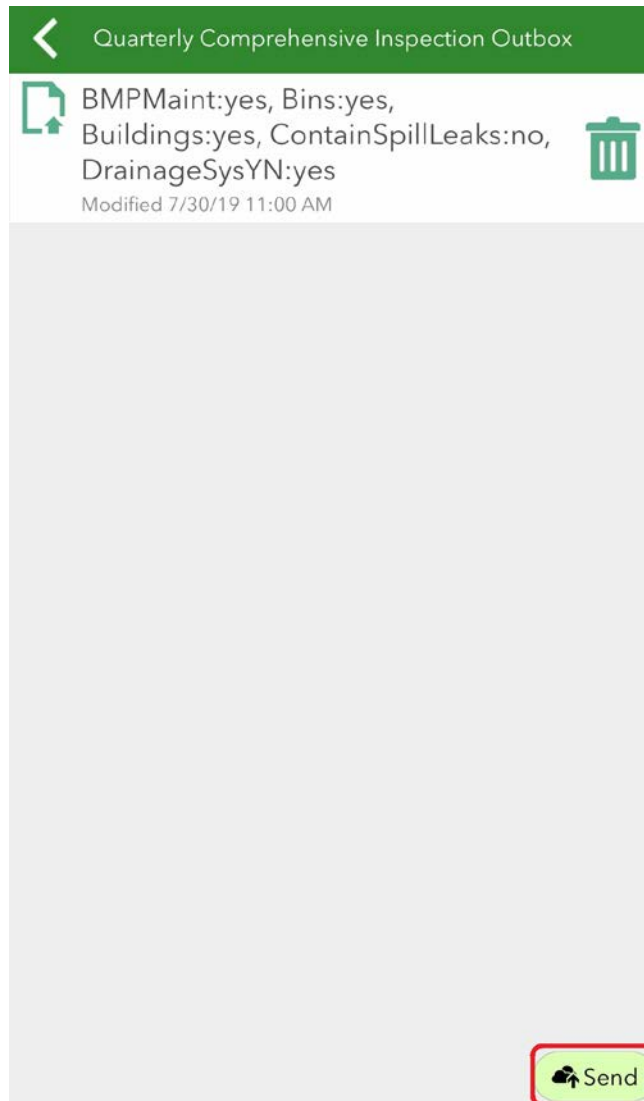
8. When you are connected to Wifi or have cellular data coverage, you will need to **submit any inspections that are in this outbox**. To do this, tap the survey icon, and tap the **“Outbox”** icon at the bottom of the survey page.



9. **If you need to go back and edit** anything you entered in the form, **tap the entry**.



10. To submit from the **Outbox**, tap the green **“Send”** button in the bottom right corner. When your outbox is empty, you should no longer see the outbox icon on the Inspection form page and there will be no green circle with numbers on your home page.



**ATTACHMENT D:  
Hazardous Materials References**

**DOT Definition of Hazardous Material:**

Any substance that poses an unreasonable risk to life, the environment, or property when not properly contained. A hazardous material is further defined as any substance or material that could adversely affect the safety of the public, handlers, or carriers during transportation.

**There are nine classes of hazardous materials:**

Hazard Class 1: Explosives	1.1 mass explosion hazard 1.2 projectile hazard 1.3 minor blast/projectile/fire 1.4 minor blast 1.5 insensitive explosives 1.6 very insensitive explosives
Hazard Class 2: Compressed Gases	2.1 flammable gases 2.2 non flammable compressed 2.3 poisonous, toxic
Hazard Class 3: Flammable Liquids	Flammable (flash point below 141°) Combustible (flash point 141°-200°)
Hazard Class 4: Flammable Solids	4.1 flammable solids 4.2 spontaneously combustible 4.3 dangerous when wet
Hazard Class 5: Oxidizers and Organic Peroxides	5.1 Oxidizer 5.2 Organic Peroxide
Hazard Class 6: Toxic Materials	6.1 Material that is poisonous 6.2 Infectious Agents
Hazard Class 7: Radioactive Material	Radioactive I Radioactive II Radioactive III
Hazard Class 8: Corrosive Material	Destruction of the human skin Corrode steel at a rate of 0.25 inches per year
Hazard Class 9: Miscellaneous	A material that presents a hazard during shipment but does not meet the definition of the other classes

# ATTACHMENT E: Training Information





