Salem City

Permit No. UTR090000

Salem City

Storm Water Management Plan

Effective February 15, 2014

Submitted to:

State of Utah

Department of Environmental Quality
Division of Water Quality

Submitted by:

Salem City, Public Works Department

Revised: March 2021

Originaly prepared by:

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Salem City

Storm Water Management Plan

Abbreviations

BMP	Best Management Practice
DEQ	Department of Environmental Quality
EPA	Environmental Protection Agency
IDDE	Illicit Discharge Detection and Elimination
LID	Low Impact Development
MS4	Municipal Separate Storm Sewer System
NPDES	National Polluant Discharge Elimination System
O&M	Operation and Maintenance
PHF	Pesticides, Herbicides, and Fertilizers
SOP	Standard Operating Procedures
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
TMDL	Total Maximum Daily Load
UAC	Utah Administrative Code
UPDES	Utah Polluant Discharge Elimination System

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1.0 Coverage Under This Permit

1.1. Authority to Discharge

This General Permit authorizes the discharge, to Waters of the State of Utah, of storm water from a Small MS4 as that term is defined in R317-8-1.6(14) and Part 7.39. of this Permit. This authorization is subject to all of the terms and conditions of this Permit. This General Permit does not authorize discharges prohibited under Part 1.4. of this Permit.

Salem City is an urbanized area located in Utah County, Utah south of Spanish Fork and north of Elk Ridge and Woodland that serves 6,423 inhabitants according to the 2010 census. Salem incorporated areas are tributary to Salem Lake, High Line Canal, Salem Canal, South Field Canal, Beer Creek, and with various area wetlands which ultimately contribute to Utah Lake. The City manages a variety of storm water infrastructure including curb inlet boxes, sumps, retention basins, detention basins, and several other conveyance mechanisms to treat and transport storm water throughout the City.

Beer Creek and Utah Lake are both classified as impaired water bodies with a defined total maximum daily load (TMDL). Beer Creek has a TMDL for ammonia and chlorine while Utah Lake has a TMDL for un-ionized ammonia and total dissolved solids (TDS).

Until 2013, storm water permitting was covered under the State general discharge permit. In 2013 the State required Salem City to develop a Storm Water Management Plan (SWMP) and apply for separate coverage. This SWMP has been developed to limit, to the maximum extent practicable, the discharge of pollutants to the Salem City Municipal Separate Storm Sewer System (MS4). This SWMP separately addresses the execution of the minimum control measures to limit the discharge of pollutants in the following sections. The development and implantation of this SWMP will fulfill the requirements under the State of Utah's Utah Pollutant Discharge Elimination System (UPDES) Permit No. UTR090000 Authorization to Discharge Municipal Storm Water dated August 1, 2010 to July 31, 2015 in accordance with Part 1.1 authority to discharge in the UTR090000.

This document has been organized and updated to follow the permit organization of UTR090000 dated March 1, 2016 to February 28, 2021. The effective MS4, best management practices (BMPs), and standard operating procedures (SOPs) that Salem has adopted, or will be adopting, to comply with the permit requirements are listed in the following sections. This SWMP has been organized to present permit in blue text followed by black text which describes how Salem City's SWMP will comply with each specific requirement. **For organizational consistency, the State of Utah's UPDES permit numbering has been duplicated in this document.**

Start Date	Due Date	Frequency	Task	Responsible Party
1/29/2014	2/5/2014	One time	City Council to pass motion adopting SWMP	Engineering Division
2/1/2014	2/13/2014	One time	Send NOI and SWMP to State	Engineering Division
August 2014	October 2014	Annually	Review SWMP and complete annual report	Engineering Division
March 2016	June 2016	One time	Review new permit and update SWMP to meet additional requirements	Engineering Division

1.2. Permit Area and Eligibility

1.2.1.
This Permit covers all areas of the State of Utah except Indian Country (see Part 7.22. of this Permit for a definition of "Indian Country").

1.2.1.1.
No operator of a Small MS4 described in 40 CFR 122.32 may discharge from that system without authorization from the *Division*. (See Utah Administrative Code Section R317-8-3.9(1)(h)(1)(a), which sets forth the Permitting requirement, and R317-8-1.10(13), which incorporates 40 CFR 122.32 by reference.) Authorization to discharge under the terms and conditions of this Permit is granted if:

1.2.1.1.1
It applies to an operator of a Small MS4 within the State of Utah but not within Indian Country;

1.2.1.1.2
The operator is not a "large" or "medium" MS4 as defined in 40 CFR 122.26(b)(4) or (7);

1.2.1.1.3
The operator submits a Notice of Intent (NOI) in accordance with Part 2.0 of this Permit;

1.2.1.1.4
The MS4 is located fully or partially within an urbanized area as determined by the latest Decennial Census by the Bureau of Census;

1.2.1.1.5
The operator is ordered by the *Division* to obtain coverage under this Permit, as provided in the UPDES rules, R317-8.

1.2.2.
The following are types of authorized discharges:

1.2.2.1.
Storm water discharges. This Permit authorizes storm water discharges to waters of the State from the Small MS4s identified in 1.2.1., except as excluded in Part 1.4.

1.2.2.2.
Non-storm water discharges. The following non-storm water discharges do not need to be addressed unless the Permittee or the *Division* identifies these discharges as significant sources of pollutants to Waters of the State or as causing or contributing to a violation of water quality standards:

- Water line flushing
- Landscape irrigation
- Diverted stream flows
- Rising ground waters
- Uncontaminated ground water infiltration
- Uncontaminated pumped ground water
- Discharges from potable water sources
- Foundation drains
- Air conditioning condensate
- Irrigation water
- Springs

- Water from crawl space pumps
- Footing drains
- Lawn watering runoff
- Individual residential car washing
- Flows from riparian habitats and wetlands
- Dechlorinated swimming pool discharges
- Residual street wash water
- Dechlorinated water reservoir discharges
- Discharges or flows from emergency firefighting activity

1.3. Local Agency Authority

This Permit does not pre-empt or supersede the authority of local agencies to prohibit, restrict, or control discharges to storm drain systems or other water courses within their jurisdiction.

1.4. Limitations on Coverage

This Permit does not authorize:

1.4.1.

Discharges that are mixed with sources of non-storm water unless such non-storm water discharges are in compliance with a separate UPDES Permit or are determined not to be a substantial contributor of pollutants to Waters of the State.

1.4.2.

Storm water discharges associated with industrial activity as defined in Utah Administrative Code (UAC) R317-8-3.9(6)(c).

1.4.3.

Storm water discharges associated with construction activity as defined in UAC R317-8-3.9(6)(d)(10) and R317-8-3.9(6)(d)(11).

1.4.4.

Storm water discharges currently covered under another Permit.

1.4.5.

Discharges that would cause or contribute to in-stream exceedances of water quality standards as contained in UAC R317-2.

1.4.6.

Discharges of any pollutant into any Waters of the State for which a Total Maximum Daily Load (TMDL) has been approved by EPA unless the discharge is consistent with the TMDL. This consistency determination applies at the time a Notice of Intent is submitted. If conditions change after coverage is issued, the coverage may remain active provided the conditions and requirements of Part 3.1. of this Permit are complied with.

2.0 Notice of Intent and Storm Water Management Program Requirements

2.1. New Applicants

The requirements of this Part apply only to Permittees not covered under the previous General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems, i.e. New Applicants. Permittees that were covered under the previous MS4 general Permit and have submitted a notice of intent (NOI) at least 180 days prior to the expiration date of the previous Permit, are covered by this Permit and instead must follow the requirements of Part 2.3.

2.1.2.

New applicants must meet the following application requirements. The Notice of Intent (NOI) must include submittal of the Storm Water Management Program (SWMP) document. Detailed information on SWMP requirements can be found in Part 4.0 of this Permit.

2.1.3.

Within 180 days of notification from the *Division*, the operator of the MS4 shall submit a NOI form as provided by the Division at http://www.deq.utah.gov/Permits/water/updes/stormwatermun.htm. (The *Division* retains the right to grant permission for a later submission date upon good cause shown). One original completed NOI shall be submitted, by mail or hand delivery to:

Attention: UPDES IES
Department of Environmental Quality
Division of Water Quality
195 North 1950 West
PO Box 144870
Salt Lake City, UT 84114-4870

2.1.4.

Late submittal of an NOI is prohibited (unless permission has been granted by the *Division*). If a late NOI is submitted, authorization is only for discharges that occur after Permit coverage is granted. The *Division* reserves the right to take appropriate enforcement actions for any unpermitted discharges.

2.1.5.

Where application is made by a new applicant that has assumed operational control of an MS4 for which coverage under this Permit was previously held by a separate entity, the Division may determine that the new applicant shall comply with the Permit requirements in this Permit, as directed for Renewal Permittees. Notification shall be made by the *Division* of this requirement in writing to the New Applicant prior to issuance of Permit coverage.

2.1.6.

Implementation of the Permittee's SWMP must include the six minimum control areas, including Measurable Goals, described in Part 4.2. Measurable Goals for each of the program areas must include, as appropriate, the year by which the Permittee will undertake required actions, including interim milestones and the frequency of the action if applicable.

2.1.7.

Implementation of the Permittee's SWMP as described in the Permittee's application is required to begin within 30 days after the completed application is submitted. The Permittee must fully develop and implement the SWMP as discussed in Part 4.0 of the Permit by the end of the Permit term unless a more restrictive timeframe is indicated.

2.1.8.
If an Operator is designated by the Division as requiring Permit coverage later than one year after the effective date of this General Permit, the Division may approve alternative deadlines that would allow the Permittee to have its program areas implemented.

2.2. Contents of the Notice of Intent

The Notice of Intent requires, at a minimum, the following information:

2.2.1.
Name, address, and telephone number of the principal executive officer, ranking elected official or other duly authorized employee in charge of municipal resources used for implementation of the SWMP;

2.2.2.
Name(s)/ identification of Waters of the State as defined by UAC R317-1-1.32 that receive discharges from the Permittee's MS4;

2.2.3.
Name of the person responsible for overseeing implementation and coordination of the SWMP;

2.2.4.
Summary description of the overall water quality concerns, priorities, and measurable goals specific to the Permittee that were considered in the development of the SWMP;

2.2.5.
The SWMP document shall consist of, at a minimum, a description of the program elements that will be implemented (or already exist) for each of the SWMP minimum control measures. The plan must be detailed enough for the Division to determine the Permittee's general strategy for complying with the required items in each of the six minimum control measures in the SWMP document (see Part 4.2 of this Permit);

2.2.6.
Information on the chosen Best Management Practices (BMPs) and the measurable goals for each of the storm water minimum control measures in Part 4.2 of this Permit and, as appropriate, the timeframe by which the Permittee will achieve required actions, including interim milestones;

2.2.7.
Permittees which are applying as Co-Permittees shall each submit an NOI and individual SWMP document which will clearly identify the areas of the MS4 for which each of the Co-Permittees are responsible. Permittees which are relying on another entity (ies) to satisfy one or more of their Permit obligations shall include with the NOI, a summary of the Permit obligations that will be carried out by the other entity (ies). During the term of the Permit, Permittees may terminate or amend shared responsibility arrangements by notifying the Division, provided this does not alter implementation deadlines.

2.2.8.
Certification and signature requirements in accordance with Part 6.8.

2.3. Storm Water Management Program Plan Description for Renewal Permittees

2.3.1.
The requirements of this part apply only to Renewal Permittees that were previously covered under the last MS4 general Permit. New applicants are not required to meet the requirements of this Part and instead must follow the requirements of Part 2.0.

2.3.2.

Renewal Permittees must submit a revised SWMP document to the Division within 120 days of the effective date of this Permit, which includes at a minimum, the following information:

2.3.2.1.

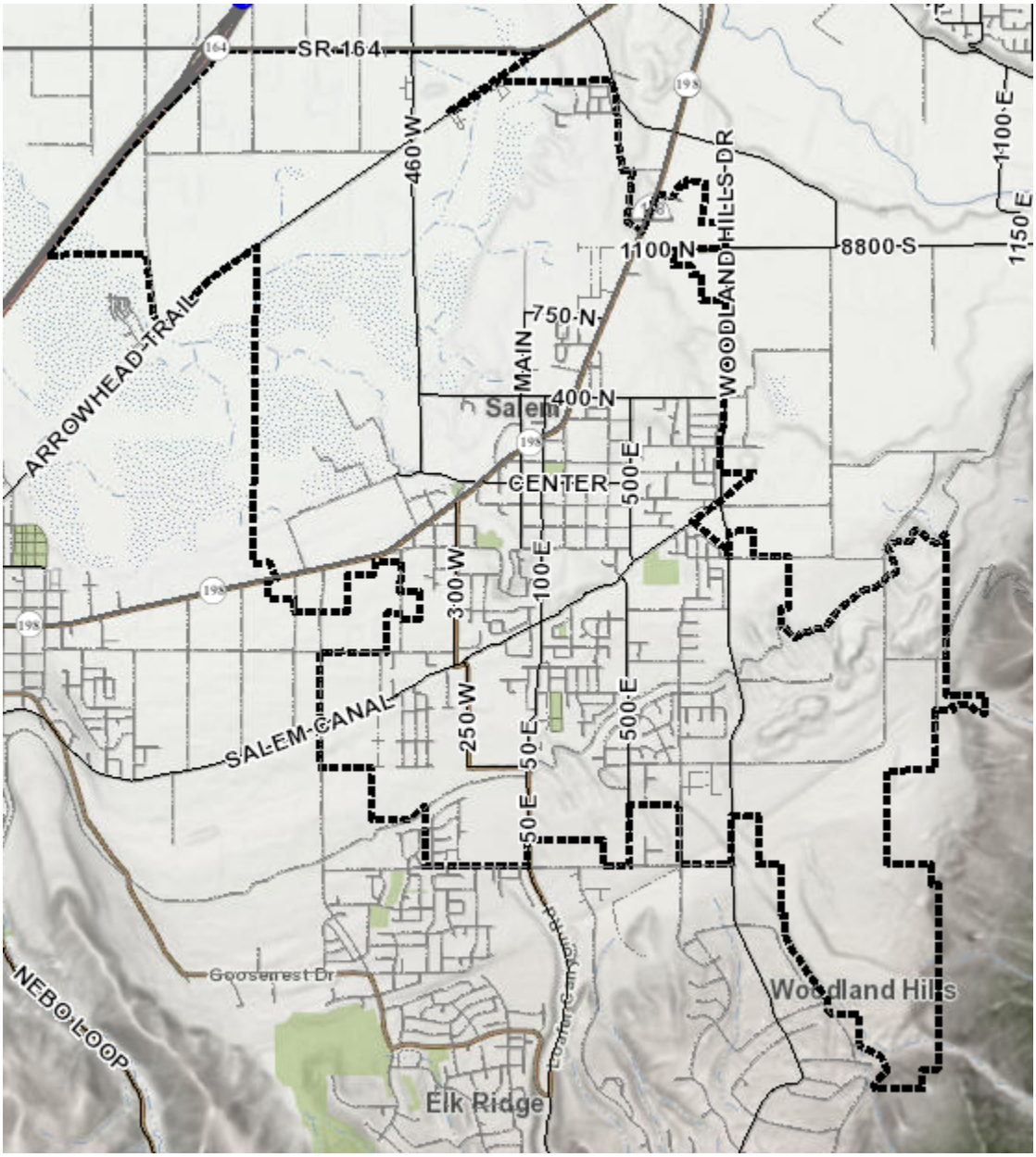
Permit number;

2.3.2.2.

MS4 location description and map;

MS4 location and boundaries can be viewed in Figure 1.

Figure 1



2.3.2.3.

Information regarding the overall water quality concerns, priorities, measurable goals, and interim milestones specific to the Permittee that were considered in the development and/or revisions to the SWMP document.

This SWMP has been developed to meet the requirements set forth in the UPDES UTR090000 permit and consists of the six minimum control measures established by the EPA for Phase II storm water discharges as addressed in the following sections. Implementation of these control measures are expected to result in reductions of pollutants discharged into receiving waters including sediments, trash, pathogens, fertilizers/nutrients, hydrocarbons, metals, pesticides, acid and base products, road salts and increased stream flow. These pollutants can negatively impact the environment as described in the following table.

Pollutant	Source	Impacts
Sediment	Construction sites, vehicle washing, agricultural sites, erosion	Destruction of aquatic habitat for fish and plants, transportation of attached oils, nutrients and other chemical contamination, increased flooding. Sediment can transport other pollutants that are attached to it including nutrients, trace metals, and hydrocarbons. Sediment is the primary component of total suspended solids (TSS), a common water quality analytical parameter.
Nutrients (Phosphorus, Nitrogen Potassium, Ammonia)	Fertilizers from agricultural operations, lawns and gardens; livestock and pet waste, decaying vegetation, sewer overflows and leaks.	Harmful algal blooms, reduced oxygen in the water, changes in water chemistry and pH. Nutrients can result in excessive or accelerated growth of vegetation, resulting in impaired use of water in lakes and other receiving waters.
Hydrocarbons (Petroleum Products, Benzene, Toluene, Ethyl benzene, Xylene)	Vehicle and equipment fluid leaks, engine emissions, pesticides, equipment cleaning, leaking fuel storage containers, fuel spills, parking lot runoff	These pollutants are toxic to humans and wildlife at very low levels. Carcinogenic. Teratogenic.
Heavy Metals	Vehicle brake and equipment wear, engine emissions, parking lot runoff, batteries, paint and wood preservatives, fuels and fuel additives, pesticides, cleaning agents	Metals including lead, zinc, cadmium, copper, chromium and nickel are commonly found in storm water. Metals are of concern because they are toxic to all life at very low levels. Carcinogenic. Teratogenic
Toxic Chemicals (Chlorides)	Pesticides, herbicides, dioxins, PCBs, industrial chemical spills and leaks, deicers, solvents	Chemicals are of concern because they are toxic to all life at very low levels. Carcinogenic. Teratogenic.
Debris/Litter/Trash	Improper solid waste storage and disposal, abandoned equipment, litter	Aesthetically unpleasant. Risk of decay product toxicity. Risk of aquatic animal entrapment or ingestion and death.
Pathogens (Bacteria)	Livestock, human, and pet waste, sewer overflows and leaks, septic systems	Human health risks due to disease and toxic contamination of aquatic life.

Each control measure will include Standard Operating Procedures (SOPs) and Best Management Practices (BMPs) necessary for proper storm water management. The BMPs and SOPs include specific tasks to meet the objective of each particular control measure. The BMPs and SOPs included in this SWMP will be implemented and reviewed throughout the permit term. This SWMP is intended to be a living document with BMPs added or

deleted as new BMPs arise or are found to be ineffective. Schedules for implementing the BMPs are provided along with each minimum control measure.

2.3.2.4.

A description of the program elements that will be implemented (or are already being implemented) in each of the six minimum control measures (see Part 4.0);

2.3.2.5.

A description of any modifications to ordinances or long-term/ongoing processes implemented in accordance with the previous MS4 general Permit for each of the six minimum control measures;

As, this is the first rendition of the SWMP no modifications have yet been implemented. However, this SWMP introduces several plans for the modification of City ordinances in the future. Specifically, Ordinance 13-3-120 Storms, Sewers, Drainage and 11-3-110 Unlawful Discharge will be revised to fulfill permit requirements set forth by this SWMP.

Start Date	Due Date	Frequency	Task	Responsible Party
2/15/2014	7/1/2014	One time	Add language to existing ordinance to comply with Section 4.2.3.2	Engineering Division
2/15/2014	7/1/2014	One time	Revise Ordinance 13-3-120 to include the minimum control measures	Engineering Division
2/15/2014	7/1/2014	One time	Revise Ordinance 11-3-110 to prohibit all discharges except those found in Section 1.2.2.2	Engineering Division
8/15/2014	8/15/2014	One time	Adopt Revised Ordinance 11-3-110	Engineering Division

2.3.2.6.

A description of how the Permittee intends to meet the requirements of the Permit as described in Part 4.0 by either referencing existing program areas that already meet the Permit requirements or a description and relevant measurable goals that include, as appropriate, the year by which the Permittee will achieve required actions, including interim milestones.

2.3.2.7.

Indicate the joint submittal (s) of Co-Permittees (if applicable) and the associated responsibility (ies) in meeting requirements of the SWMP.

2.3.2.8.

Certification and signature requirements in accordance with Part 6.8.

2.3.2.9.

The revised SWMP document must contain specific details for complying with the required items in each of the six minimum control measures contained within the SWMP document (See Part 4.2.).

3.0 Special Conditions

3.1. Discharges to Water Quality Impaired Waters

3.1.1.

Applicability: Permittees must:

3.1.1.1. Impaired Body Determination

Determine whether storm water discharge from any part of the MS4 contributes to a 303(d) listed (i.e., impaired) water body. A 303(d) list of impaired water bodies is available at http://www.deq.utah.gov/ProgramsServices/programs/water/wqmanagement/assessment/PreviousIR.htm . Water quality impaired waters means any segment of surface waters that has been identified by the Division as failing to support classified uses. If the Permittee has discharges meeting these criteria, the Permittee must comply with Part 3.1.2. below and if no such discharges exist, the remainder of this Part 3.1 does not apply.

According to the Utah 2008 and most recent 2010 Integrated Report 303 (d) lists, Salem City does not specifically discharge into any impaired waters. However, according to the EPA records from initial waste load analyses, Beer Creek and the recipient Utah Lake are both classified as impaired water bodies with a defined total maximum daily load (TMDL). Beer Creek has a TMDL for ammonia and chlorine (EPA TMDL ID#12331) while Utah Lake has a TMDL for un-ionized ammonia and total dissolved solids (EPA TMDL ID#1270, 32446).

3.1.1.2. TMDL Requirements

If the Permittee has "303(d)" discharges described above, the Permittee must also determine whether a Total Maximum Daily Load (TMDL) has been developed by the Division and approved by EPA for the listed waterbody. If there is an approved TMDL, the Permittee must comply with all requirements associated with the TMDL as well as the requirements of Part 3.1.2 below and if no TMDL has been approved, the Permittee must comply with Part 3.1.2. below and any TMDL requirements once it has been approved.

While Beer Creek is no longer classified as a TMDL, it historically had a TMDL associated with it. The historic Beer Creek TMDL (EPA TMDL ID#12331) was approved 11/23/2004 by the EPA for a total waste load allocation of 398 pounds/day of ammonia and a TMDL loading of total residual chlorine of 60 pounds per day to limit the impairment caused by the contaminates.

There are no storm water specific requirements within the Beer Creek TMDL that exceed the requirements of this permit.

3.1.2. Water Quality Controls for Discharges to Impaired Water Bodies

If the Permittee discharges to an impaired waterbody, the Permittee must include in its SWMP document a description of how the Permittee will control the discharge of the pollutants of concern. This description must identify the measures and BMPs that will collectively control the discharge of the pollutants of concern. The measures should be presented in the order of priority with respect to controlling the pollutants of concern.

None of the TMDLs that were identified were specifically due to storm water discharges. Salem does not discharge directly into Utah Lake; however, the City and Utah County have implemented BMPs to limit the City's use of fertilizers as well as inform the public about proper use of chemicals and the effect illicit discharges have on the Waters of the State.

3.1.3. Authorized Discharges with Potential to Violate Water Quality Standard

Where a discharge is already authorized under this Permit and is later determined to cause or have the reasonable potential to cause or contribute to the violation of an applicable water quality standard, the Division will notify the Permittee of such violation(s). The Permittee must take all necessary actions to ensure future discharges do not cause or contribute to the violation of a water quality standard and document these actions as required by the Division. If violations remain or re-occur, coverage under this Permit may be terminated by the Division and an alternative General Permit or individual Permit may be issued. Compliance with this requirement does not preclude any enforcement activity as provided by the Utah Water Quality Act for the underlying violation

3.2. Nitrogen and Phosphorus Reduction

3.2.1.

As part of the Permittee's Storm Water Management Program (SWMP), all Permittees must specifically address the reduction of water quality impacts associated with nitrogen and phosphorus in discharges from the MS4.

This SWMP has been developed to meet the requirements set forth in the UPDES UTR090000 permit and consists of the six minimum control measures established by the EPA for Phase II storm water discharges as addressed in the following sections. Implementation of these control measures are expected to result in reductions of pollutants discharged into receiving waters including the Nutrients Phosphorus and Nitrogen typically found in fertilizers from agricultural operations, lawns and gardens; livestock and pet waste, decaying vegetation, sewer overflows and leaks. These pollutants can negatively impact the environment.

3.2.1.1.

The Permittee can meet the requirements of this section through contribution to a collaborative program (e.g. storm water coalitions) to evaluate, identify, target, and provide outreach that addresses sources State-wide or within a specific region or watershed.

Salem is a member of the Utah County Storm Water Coalition. The Coalition will cover the requirements of the permit for this section.

3.2.1.2.

The Permittee must determine and target sources (e.g., residential, industrial, agricultural, or commercial) that are contributing to, or have the potential to contribute, nitrogen and phosphorus to the waters receiving the discharge authorized under this Permit.

Each control measure will include Standard Operating Procedures (SOPs) and Best Management Practices (BMPs) necessary for proper storm water management of nutrients. The BMPs and SOPs include specific tasks to meet the objective of each particular control measure. Schedules for implementing the BMPs are provided along with each minimum control measure.

3.2.1.3.

The Permittee must prioritize which targeted sources are likely to obtain a reduction in nitrogen and phosphorus discharges through education. The Permittee must distribute educational materials or equivalent outreach to the prioritized targeted sources. Educational materials or equivalent outreach must describe storm water quality impacts associated with nitrogen and phosphorus in storm water runoff and illicit discharges, the behaviors of concern, and actions that the target source can take to reduce nitrogen and phosphorus. The Permittee may incorporate the education and outreach to meet this requirement into the education and outreach strategies provided in accordance with Permit Part 4.2.1.

Salem will prioritize and target sources likely to obtain a reduction in nitrogen and phosphorus discharge through education. Part 4.2.1. identifies how Salem and the County will provide and document information given to the targeted sources for contributing nutrients, specifically including nitrogen and phosphorus, to the waters receiving the discharge authorized under this Permit.

Start Date	Due Date	Frequency	Task	Responsible Party
January 2017	December 2017	One Time	Prioritize targeted sources for additional nitrogen and phosphorus reduction education.	Storm Water Coordinator

3.3. Co-Permittees

3.3.1.

Two or more operators of interrelated or neighboring Small MS4s may apply as Co- Permittees.

3.3.2.

In order to be Permitted as Co-Permittees, the MS4(s) must each submit an NOI complete with BMP measurable goals and implementation milestones. Each description of the MS4(s) Storm Water Management Program Plan(s) must clearly describe which Permittees are responsible for implementing each of the control measures.

3.3.3 .

Each Co-Permittee is individually liable for:

3.3.3.1.

Permit compliance for discharges from portions of the MS4 where it is the operator and for areas within its legal jurisdiction;

3.3.3.2.

Ensuring that the six minimum control measures described in Part 4.2 are implemented for portions of the MS4 where it is the operator and in areas within its legal jurisdiction; and

3.3.3.3.

If any Permit conditions are established for specific portions of the MS4, Co- Permittees need only comply with the Permit conditions relating to those portions of the MS4 for which they are the operator.

3.3.4.

Each Co-Permittee is jointly liable for compliance with annual reporting requirements listed in Part 5.5, except that a Co-Permittee is individually liable for any parts of the annual report that relate exclusively to portions of the MS4 where it is the operator.

3.3.5.

Specific Co-Permittees are jointly liable for Permit compliance on portions of the MS4 as follows:

3.3.5.1.

Where operational or storm water management program implementation authority over portions of the MS4 has been transferred from one Co-Permittee to another in accordance with legally binding interagency agreements, both the owner and the operator may be jointly liable for Permit compliance on those portions of the MS4; and;

3.3.5.2.

Where one or more Co-Permittees jointly own or operate a portion of the MS4, each owner/operator is jointly liable for compliance with Permit conditions on the shared portion of the MS4.

4.0 Storm Water Management Program

Permittees covered under the previous General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems, i.e. Renewal Permittees, are expected to have fully implemented all of the following six minimum control measures as required in the previous Permit term. Permittees that were newly designated during the previous Permit term have 5 years from the date of their submitted NOI to develop, fully implement and enforce their Storm Water Management Program (SWMP). A Renewal permittee must continue to implement its SWMP designed to reduce the discharge of pollutants from the MS4 as described in the application and submittals provided in accordance with the previous MS4 General Permit, while updating its SWMP document pursuant to this Permit. This Permit does not extend the compliance deadlines set forth in the

previous MS4 General Permit unless specifically noted. All requirements contained in this renewal Permit are effective immediately unless an alternative timeframe is indicated.

4.1. Requirements

4.1.1. Requirements for SWMP

All Permittees must develop, implement, and enforce a SWMP designed to reduce the discharge of pollutants from the MS4, protect water quality, and satisfy the appropriate water quality requirements of the Utah Water Quality Act. The SWMP must include the six minimum control measures described in Part 4.2 of this Permit.

This SWMP has been developed to limit, to the maximum extent practicable, the discharge of pollutants to the Salem City Municipal MS4. This SWMP separately addresses the execution of the six minimum control measures in the following sections. The development and implementation of this SWMP is to fulfill requirements under the State of Utah UPDES Permit No. UTR090000 Authorization to Discharge Municipal Storm Water dated March 1, 2016 to February 28, 2021 in accordance to Part 1.1 Authority to Discharge of the UTR090000.

4.1.1.1. Implementation of SWMP

The SWMP shall be developed and implemented in accordance with the schedules contained in Part 4.0. of this Permit.

Salem City has implemented numerous BMPs to protect their storm water infrastructure, and has been taking measures to protect water quality for many years. This SWMP will document a number of BMPs that are already in place, as well as present a schedule to implement additional measure to ensure compliance with UTR090000.

4.1.2. Ongoing Documentation of SWMP

Each Permittee shall have an ongoing documentation process for gathering, maintaining, and using information to conduct planning, set priorities, track the development and implementation of the SWMP, evaluate Permit compliance/non-compliance, and evaluate the effectiveness of the SWMP implementation.

The City currently utilizes a number of BMPs, storm water design standards, and standard operating procedures to manage storm water quantity and quality throughout the City. One of the first major challenges to implementing the SWMP will be a detailed documentation program of the existing City procedures.

The initial documentation program will consist of opening an e-mail account for the MS4 program. Inspection forms will be completed in the field via paper forms then the forms will then be digitized and e-mailed to the MS4 account. At a later time, smart phones tablets and laptops will be utilized to digitize results and be e-mailed to the account. This will allow inspection forms to be easily searchable and readily available for reference.

The City's existing crews will be responsible for completing the appropriate form. For example, the storm water crew will report applicable O&M activities and their location, date, etc. Street crews will record street sweeping activities while water and sewer crews note flushing, repair and construction activities which could affect storm water quality. As the program expands, the municipal inspectors will utilize the same system to complete construction inspections of Illicit Discharge Detection and Elimination (IDDE) tracking the progress of post construction BMPs as well as construction inspections using the state form.

This e-mail account will serve as the digital archive for all inspections that will be frequently backed up and stored at a secondary offsite location. As the program expands, additional standardized forms will be developed. Also, this documentation method will be periodically reevaluated to investigate improved method, expanded, and/or modified as needed to ensure compliance, efficiency, and ease of use for the crews.
Initially the documentation program will document:

1) Pre-construction meetings
2) SWPPP reviews

3) Storm drain cleaning activities
4) Street sweeping activities
5) Inspections of key City facilities
6) Participation with the County Storm Water Coalitions meetings
7) Monthly newsletters
8) Business licensing & storm water education materials

As other components of the program are developed, additional documentation will be recorded at this e-mail address including:

1) IDDE inspections
2) Enforcement actions
3) Constructions site inspections
4) Post construction inspections

Start Date	Due Date	Frequency	Task	Responsible Party
March 2014	April 2014	One time	Develop standard SOP document form	Engineering Division
April 2014	April 2014	One time	MS4 email, web form and calendar setup and working	Engineering Division
May 2014	May 2014	One time	MS4 email address added to county activity reporting list	Engineering Division
May 2014	September 2014	One time	Develop standard email subjects for documenting SWMP activities in storm water account	Engineering Division

4.1.2.1. Tracking of SWMP

Each Permittee shall track the number of inspections performed, official enforcement actions taken, and types of public education activities implemented as required for each SWMP component. This information shall be provided to the Division upon request and used by the Division to determine compliance with this Permit.

As noted in the Part 4.1.2, these activities will be reported electronically to a dedicated email address. Public education and public involvement activities are currently conducted by, and tracked within the Utah County Storm Water Coalition system. On, or before, June 1st, 2014, Salem City will implement procedures to document the Coalition activities in their system as outlined in the previous sections.

4.1.2.2. Annual Fiscal Analysis

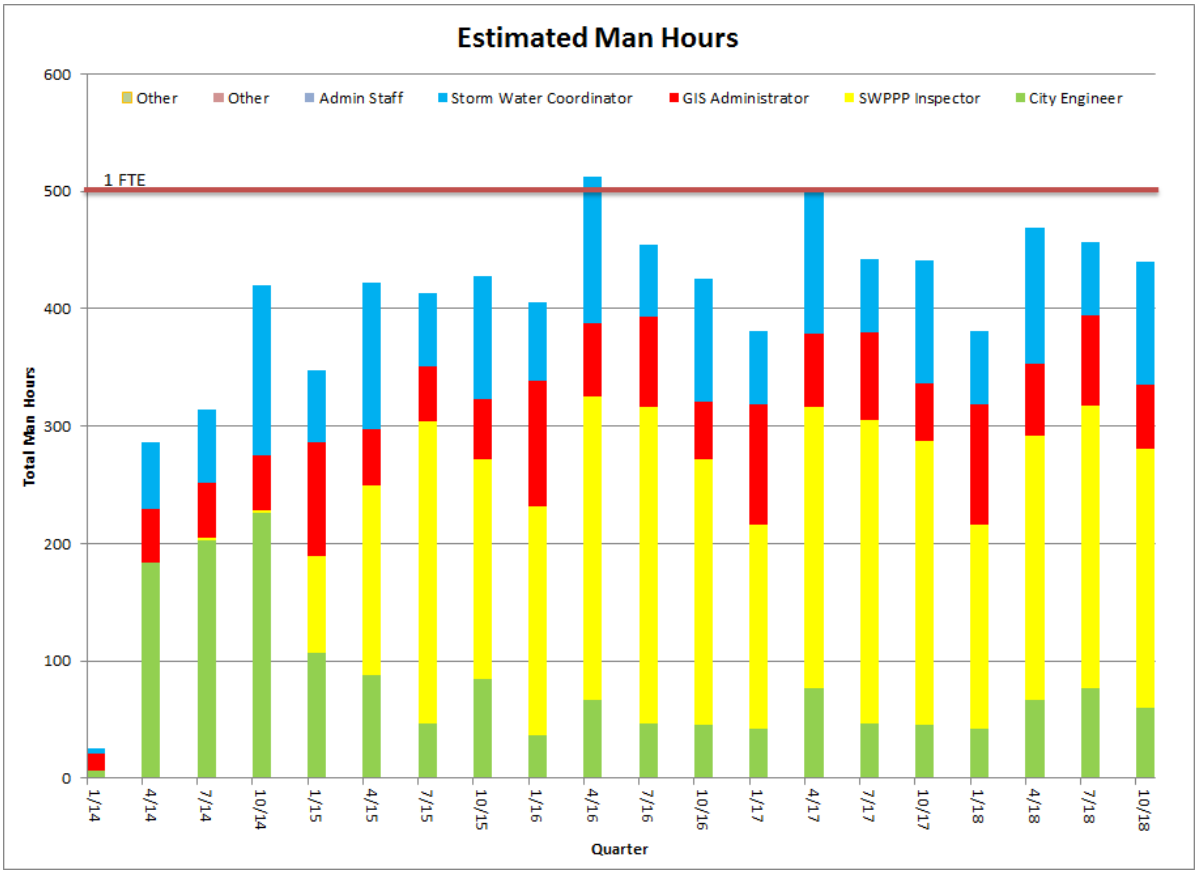
Each Permittee must secure the resources necessary to meet all requirements of this permit. Each Permittee must conduct an annual analysis of the capital and operation and maintenance expenditures needed, allocated, and spent as well as the necessary staff resources needed and allocated to meet the requirements of this permit, including any development, implementation, and enforcement activities required. Each Permittee must submit a summary of its fiscal analysis with each annual report.

Responsibility for implementation of the Storm Water Management Program is divided between Salem City and the Utah County Storm Water Coalition. For the City, most of the work is performed by the Public Works Department and other applicable Divisions and Departments; the administration of the entire program is done by the Engineering Division. The City entered into an agreement entitled, "*Interlocal Cooperation Agreement for NPDES Phase II Storm Water Public Education and Outreach Best Management Practice Compliance*", which delegates Utah County and the Cities' responsibility for administration of the Interlocal Cooperation Agreement that will be recorded in the documentation when adopted. The newest revision of the agreement is currently in the process of being adopted.

Within the City, the majority of work need to comply with this permit will be completed by personnel in the Public Works Department with administration of the program through the Engineering Division. Management and oversight of the City's responsibilities under the storm water management program is funded through the City's general fund.

The City will investigate the implementation of a storm water utility fund to augment the costs of executing the initiatives set forth in this SWMP. As the program is implemented, it is anticipated that adjustments to the storm water utility will be utilized to ensure sufficient resources remain dedicated to meet the program requirements. The revenue source for the work performed by the Utah County Storm Water Coalition is an assessment to the participating municipalities.

The vast majority of costs associated with the program are anticipated to be man hours through a combination of existing City Staff, additional personal and possibly contractors from time to time. The graph below presents an estimate of the staff time required, by quarter, to implement and maintain the program. The intent of this estimate is to ensure that department budgets and staffing can adequately plan and maintain resources required to support this program.



Start Date	Due Date	Frequency	Task	Responsible Party
August 2014	NA	Annual	Annual Fiscal Analysis	Engineering Division
2/1/14	2/15/14	One Time	Adopt NPDES Phase II agreement for Interlocal cooperation from the coalition	Engineering Division

4.1.3. BMP Implementation

The SWMP document shall include BMPs that the Permittee or another entity will implement for each of the storm water minimum control measures.

This SWMP thoroughly discusses the detailed implementation of BMPs in the following sections for each of the minimum control measures. BMPs, as defined by Utah's Small MS4 General Permit, are the "schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of Waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control facility site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage."

The BMPs that are prevalent to several of the control measures established in this SWMP include, but are not limited to, establishing SOPs, good housekeeping practices, employee and public training, routine inspections, and preventative maintenance. The City currently uses a number of structural and operational BMPs to limit storm water discharge of pollutants. As part of the SWMP, the City will improve their documentation of the use of these BMPs by developing a standard reporting format, and documenting one or more existing procedure as described in more detail in Part 4.2.6.4. Once all the existing City procedures and BMPs are documented one procedure will be reviewed & improved or a new procedure implemented. These procedures will include:

1) Street sweeping and disposal of materials
2) Storm drain catch basin & collection network cleaning
3) Park lawn mowing and chemical application
4) Snow removal and salting procedures
5) City construction BMPs (SWPPP)
6) Fire hydrant flushing
7) City facility inspections
8) Material storage, handling, use, and disposal
9) Vehicle washing and maintenance
10) Spill response
11) Construction inspection
12) Post construction inspections
13) Enforcement actions

Start Date	Due Date	Frequency	Task	Responsible Party
October 2018	NA	Quarterly	See Part 4.2.6.4 for documentation and review of BMPs/SOPs	Engineering Division

4.1.3.1. Measurable Goals Summary of BMPs

The measurable goals for each of the BMPs shall include, as appropriate, the months and years in which the Permittee will undertake required actions, including interim milestones and the frequency of the actions.

A table summarizing the dates to complete each activity described herein is in Appendix A. Additionally, space has been provided within the document to track the completion and performance of each BMP. These performance metrics will be evaluated at least annually and updated, replaced, and revised as needed.

4.1.3.2. Person Responsible

The SWMP document shall indicate the person or persons responsible for implementing or coordinating the BMPs contained within the SWMP document.

Dale Carter, Storm Water Coordinator/SWPPP Inspector
dalec@salemcity.org

(801) 423-2770 ext. 235

See Key Staff on Page xii of this document.

4.1.3.3. Identification of Roles and Responsibilities

The revised SWMP document shall clearly identify the roles and responsibilities of all offices, departments, divisions, or sub-sections and if necessary other responsible entities and it shall include any necessary agreements, contracts, or memorandum of understanding (MOUs) between said entities that affect the implementation and operation of the SWMP. Necessary agreements, contracts, and MOUs shall deal with coordination or clarification of the responsibilities associated with the detection and elimination of improper connections or illicit discharges to the MS4, BMP coordination or other coordinated programs or sensitive issues of unclear or overlapping responsibility. Such agreements, contracts, and MOUs shall be retained by the Permittee as required by the SWMP document.

A document clearly identifying the roles and responsibilities of all offices, departments, divisions, sub-sections, and other responsible entities, will be developed by December 2017 and included herein in this SWMP in Appendix D. This document will include any necessary agreements, contracts, or MOUs dealing with coordination or clarification of the responsibilities associated with the detection and elimination of improper connections or illicit discharges to the MS4, BMP coordination or other coordinated programs or sensitive issues of unclear or overlapping responsibility. Such agreements, contracts, and MOUs shall be retained by the City as required by the SWMP document.

Start Date	Due Date	Frequency	Task	Responsible Party
January 2017	December 2017	One Time	Develop roles and responsibilities document in accordance with Part 4.1.3.3. and include in Appendix C.	Storm Water Coordinator

4.2. Minimum Control Measures

The six minimum control measures that must be included in the storm water management program are:

4.2.1. Public Education and Outreach on Storm Water Impacts

The Permittee must implement a public education and outreach program to promote behavior change by the public to reduce water quality impacts associated with pollutants in storm water runoff and illicit discharges. Outreach and educational efforts shall include a multimedia approach and shall be targeted and presented to specific audiences for increased effectiveness. The educational program must include documented education and outreach efforts for the following four audiences: (1) residents, (2) institutions, industrial and commercial facilities, (3) developers and contractors (construction), and (4) MS4-owned or operated facilities. The minimum performance measures which should be based on the land uses and target audiences found within the community include:

This measure is intended to achieve greater public support for the storm water management program and greater compliance through education. An informed public can significantly contribute to the success of the program.

Education is emphasized in this SWMP because of its cost-effectiveness. It is a proactive approach because it prevents pollution rather than reactively treating pollution after it has occurred. Salem's Education and Outreach Program, partnered with the Utah County Storm Water Coalition, includes involvement in:

- Fourth Grade Educational Program
- Utah County Storm Water Coalition
- Community/Residential Outreach Program
- Commercial Outreach Program
- Urban Development Outreach Program
- City Employees Training Program

The Salem City Public Works Department will continue coordinating with and participating in the Utah County Storm Water Coalition for the purpose of providing further education and training to the targeted audience with regards to storm water quality.

The Utah County Storm Water Coalition is a coalition of local agencies whose purpose is to reduce the load of pollutants entering storm drains and receiving waters, through education. The Coalition meets to coordinate new educational materials and programs, further storm water program development and inform all members of new regulations or storm water workshops.

A budget for the educational program is established annually based upon the population of the participating members. The type of media and the distribution schedule are to be discussed by Utah County Storm Water Coalition members to more effectively target the public. The Utah County Storm Water Coalition current members are:

Alpine City
Cedar Hills City
Lehi City
Mapleton City
Payson City
Provo City
Spanish Fork City
Utah County
American Fork City
Highland City
Lindon City
Orem City
Pleasant Grove City
Salem City
Springville City
Vineyard City

Specifically, the coalition BMPs will include:

1. Regular meeting to discuss, upcoming regulations, and educational trainings for the county

2. An educational booth will be available to be scheduled and manned by the participating cities for City festivities.

Year	**Measurable Goal Action Summary:**	Document date(s), events, and attendees
2016		
2017		
2018		
2019		
2020		
2021		

3. A countywide, quarterly storm water newsletter will be written and distributed to all residents, institutions, industrial and commercial facilities, and MS4-owned and operated facilities by the participating cities. The newsletter will be published by the Utah County Storm Water Coalition.

Year	**Measurable Goal Action Summary:**	Document the date newsletter was mailed (save copy in MS4 email system)
2016		
2017		
2018		
2019		
2020		
2021		

4. Fourth Grade Educational Program.
   - The objective of this program is to provide students with educational materials, demonstrations and outreach events regarding the impact of daily activities on storm water quality.
   - The Utah County Storm Water Educational Program is a storm water quality lesson taught by a teacher hired by the Utah County Storm Water Coalition. The lesson is interesting, easy to present and lasts approximately 25 minutes. The presentation begins with a container of clean water (tap water) that represents the rainwater that produces storm water runoff. Step by step different "contaminants" are added to the container, such as vegetable oil (oil), pet waste (dog food), dirt

(sediment), twigs (floatables), and paper (litter). The presentation demonstrates the importance of preventing litter and keeping the storm drain system clean. The purpose of the presentation is to visually display the types of pollutants in storm water, the sources of each pollutant, and their impacts. The teacher asks questions about the rain cycle, where the rain water flows too, and how pollutants are picked up along the way. At the end of the presentation an activity book and other educational materials regarding storm water are given to the students.

Year	Measurable Goal Action Summary:	Document date, school, and number of students taught
2016		
2017		
2018		
2019		
2020		
2021		

5. Salem currently sends out monthly newsletters and will continue to utilize this existing platform to communicate with and educate the public on storm water quality related topics.

Start Date	Due Date	Frequency	Task	Responsible Party
3/31/14	NA	Bi-Monthly	Attend coalition meeting	Utah County Storm Water Coalition, Storm Water Coordinator
3/31/14	NA	Bi-Monthly	Document coalition activities (booth used, Newsletters, Pamphlets, 4th grade education, and other)	Utah County Storm Water Coalition, Engineering Division, City Storm Water Coordinator

4.2.1.1. Pollutants Targeted

Target specific pollutants and pollutant sources determined by the Permittee to be impacting, or have the potential to impact, the beneficial uses of receiving water. This includes providing information which describe the potential impacts from storm water discharges; methods for avoiding, minimizing, reducing and /or eliminating the adverse impacts of storm water discharges; and the actions individuals can take to improve water quality, including encouraging participation in local environmental stewardship activities, based on the land uses and target audiences found within the community;

The Engineering and Storm Drain Divisions, in conjunction with the Utah County Storm Water Coalition, will continue to improve the educational program. The program will educate the target audience about impacts from storm water discharge and illicit discharge, behaviors of concern, methods to avoid, minimize, and reduce impact of storm water discharge and actions one can take to improve water quality. The pollutants that are of most concerned with are sediments, pathogens, nutrients with specific targeting of nitrogen and phosphorus, fertilizers, pesticides, herbicides, hydrocarbons, metals, road salts, detergents, chemicals, acid or base products,

solid or liquid waste products, and human or animal wastes. The program will specifically focus on sources of TDS, fertilizers, and other TMDLs throughout the county that note municipal storm water as a contributing factor.

This program will integrate many other facets of the SWMP to provide information to our targeted audience which describe the potential impacts from storm water discharges and illicit discharges, , behaviors of concern, methods for avoiding, minimizing, reducing and/or eliminating pollutants from entering the MS4 and actions individuals can take to improve water quality, including encouraging participation in local environmental stewardship activities.

4.2.1.2. Information Given to the General Public

Provide and document information given to the general public of the Permittee's prohibitions against and the water quality impacts associated with illicit discharges and improper disposal of waste. The Permittee must at a minimum consider the following topics. These topics are not inclusive and the Permittee must focus on those topics most relevant to the community: maintenance of septic systems; effects of outdoor activities such as lawn care (use of pesticides, herbicides, and fertilizers); benefits of on-site infiltration of storm water; effects of automotive work and car washing on water quality; proper disposal of swimming pool water; and proper management of pet waste.

The Engineering Division will provide and document information given to the general public of prohibitions against illicit discharges and improper disposal of waste along with the associated negative impacts. The main topics of education include: hazardous waste disposal, effects of lawn care activities (use of pesticides, herbicides and fertilizers as well as yard waste disposal), automotive work and car washing, and proper management of pet waste. Publications will be disseminated in conjunction with the Utah County Storm Water Coalition, which will include education pamphlets, quarterly newsletters, and informational booths during City festivals.

Specifically, information regarding the impacts associated with illicit discharges and improper disposal of waste will be distributed 4 times a year on the City newsletter and also available on the City website at the link below. In addition, there will be a monthly reference in the newsletter to the county coalition.
http://www.salemCity.org/news-letters.htm

In addition, information from the County will be distributed 4 times a year on the County newsletter and also be available at the link below.
http://www.utahcounty.gov/Dept/PubWrks/StormWaterNewsletters.asp

Information will be also distributed at the Salem Day Grand Parade in the form of hand outs and promotional items.
http://www.salemcity.org/salem-days-grand-parade.htm

Start Date	Due Date	Frequency	Task	Responsible Party
May 2014	NA	Monthly	Document monthly Salem newsletter and distribution (includes parades, fairs, etc.)	Utah County Storm Water Coalition, Engineering Division, Storm Water Coordinator

Year	Measurable Goal Action Summary:	Document City newsletter content and publication quarter		
Quarter	First	Second	Third	Forth
2016				

2017				
2018				
2019				
2020				
2021				

4.2.1.3. Information Given to Institutions and Industrial and Commercial Facilities

Provide and document information given to institutions, industrial, and commercial facilities on an annual bases of the Permittee's prohibition against and the water quality impacts associated with illicit discharges and improper disposal of waste. The Permittee must at a minimum consider the following topics. These topics are not inclusive and the Permittee must focus on those topics most relevant to the community: proper lawn maintenance (use of pesticides, herbicides and fertilizer); benefits of appropriate on-site infiltration of storm water; building and equipment maintenance (proper management of waste water); use of salt or other deicing materials (cover/prevent runoff to storm system and contamination to ground water); proper storage of materials (emphasize pollution prevention); proper management of waste materials and dumpsters (cover and pollution prevention); and proper management of parking lot surfaces (sweeping). This education can also be a part of the Illicit Discharge Detection and Elimination measure detailed in Part 4.2.3.

The Engineering and Business License Division will provide and document information regarding the storm water quality impacts associated with illicit discharges and improper disposal of waste to established institutions, industrial, and commercial facilities once a year through a newsletter and to new entities applying for a license or a building permit. The main topics of education include:

- Effects of lawn care activities (use of pesticides, herbicides and fertilizers as well as yard waste disposal)
- Proper management of waste water (illicit connections to the storm drain system)
- Proper management of parking lot surfaces and use of salt or other deicing materials (sweeping and salt storage)
- Proper storage and management of raw materials and waste materials (emphasize pollution prevention and Industrial Multi Sector General Permit (MSGP).
- Pesticide, Herbicide, and Fertilizer Educational Program: Information along with educational materials is to be presented to businesses and industries regarding the potential impact to receiving waters due to the over-application and misapplication of pesticides, herbicides, and fertilizers. General information regarding pesticide, herbicide, and fertilizer application will be distributed via brochures, information booths and industrial training events.
- Information for targeted sources identified in Part 3.2.1.3. for reduction in nitrogen and phosphorus including description of storm water quality impacts in storm water runoff and illicit discharges, the behaviors of concern, actions these sources can take to reduce these nutrients. Pollution Prevention and the UPDES MSGP: Federal and State Regulations and educational materials will be distributed to inform specific institutions, businesses and industries located within the City that effects storm water quality resulting from exposure of industrial activities. These will be distributed by various City departments.

Starting on or before September 1st, 2014, documentation will be distributed as part of the business licensing process. Existing business institutions, industrial and commercial facilities will also be informed as part of their business license renewal process. In addition, City staff will visit and inspect known problem areas to inform the business owners of current City ordinances and educate about proper procedures.

The distribution of information will be tracked by including the MS4 e-mail on all business licensing distributions.

Start Date	Due Date	Frequency	Task	Responsible Party
September 2014	NA	Quarterly	Verify and update institutions, industrial and commercial facilities storm water packet distribution with business licensing	Utah County Storm Water Coalition, Engineering Division, Storm Water Coordinator

Year	Measurable Goal Action Summary:	Informational packet reviewed & updated (distribution is tracked by e-mail)		
2016				
2017				
2018				
2019				
2020				
2021				

4.2.1.4. Information Given to Engineers, Construction Contractors, and Developers

Provide and document information given to engineers, construction contractors, developers, development review staff, and land use planners concerning the development of storm water pollution prevention plans (SWPPPs) and BMPs for reducing adverse impacts from storm water runoff from development sites. This education can also be a part of the Construction Site Storm Water Runoff minimum control measure detailed in Part 4.2.4.

The Engineering Division has adopted the Utah/EPA SWPPP template for construction activities along with the City New Construction Permit to help reduce the adverse impacts from storm water runoff from development sites. A pre-construction meeting is held between an Engineering Division SWPPP Inspector and the developer to go over the permit requirements, SWPPP template, erosion controls, sediment controls, good housekeeping controls and post-construction controls (described at more length in Part 4.2.4).

Start Date	Due Date	Frequency	Task	Responsible Party
September 2014	NA	Quarterly	Verify and update construction storm water packet distribution	Engineering Division Storm Water Inspector

- Training sessions regarding UPDES regulations; SWPPP development, review and management, BMP selection and maintenance; SWPPP Inspections and other topics will be offered through the Utah County Storm Water Coalition once a year.

Year	Measurable Goal Action Summary:	Document training dates, attendance and course description
2016		

2017	
2018	
2019	
2020	
2021	

- The Engineering Department will document the number of pre-construction meetings held with engineers, construction contractors, and land developers regarding Storm Water Pollution Prevention Plans SWPPPs.

Year	**Measurable Goal Action Summary:**	Document number of pre-construction meetings
2016		
2017		
2018		
2019		
2020		
2021		

4.2.1.5. Information and Training Given to City Employees

Provide and document information and training given to employees of Permittee-owned or operated facilities concerning the Permittee's prohibition against and the water quality impacts associated with illicit discharges and improper disposal of waste. The Permittee must at a minimum consider 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 de-icing 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); and proper maintenance of parking lot surfaces (sweeping).

The Engineering Division in conjunction with each Division or Department will provide and document information and training regarding the impacts associated with illicit discharges and improper disposal through a variety of means:

1) Starting on or before June 1st, 2014, information will be posted on information boards and updated once per quarter. The information will be specific to each building's general purpose (i.e. mechanics will

receive training on proper disposal of used oil, while parks staff will receive information about chemical use and storage).

Year	Measurable Goal Action Summary:	Document topics
2016		
2017		
2018		
2019		
2020		
2021		

2) At least once per year starting 2015 department managers will hold training meetings which include at least one water quality topic in conjunction to meeting with other permit requirements outlined in Parts 4.2.3.11, 4.2.4.5, 4.2.5.6, and 4.2.6.9.

Year	Measurable Goal Action Summary:	Document topics and date of training
2016		
2017		
2018		
2019		
2020		
2021		

Start Date	Due Date	Frequency	Task	Responsible Party
May 2014	NA	Bi-Annual	Formal Employee Training Posted on bulletin boards	Utah County Storm Water Coalition, Engineering Division, Storm Water Coordinator/Inspector

November 2014	NA	Bi-Annual	Formal Employee Training Meetings including topics as outlined in Parts 4.2.1.5, 4.2.3.11, 4.2.4.5, 4.2.5.6, and 4.2.6.9	Utah County Storm Water Coalition, Engineering Division, Storm Water Coordinator/Inspector

4.2.1.6. Information Given to MS4 Engineers, Development Land Planners and Plan Review Staff Regarding Low Impact Development (LID) Practices

Provide and document information and training given to MS4 engineers, development and plan review staff, land use planners, and other parties as applicable to learn about Low Impact Development (LID) practices, green infrastructure practices, and to communicate the specific requirements for post-construction control and the associated Best Management Practices (BMPs) chosen within the SWMP.

The Engineering Division will explore various LID post-construction BMPs which can be adopted by the City to work with the types of soils and terrains within the City. The design manual will have provisions in place so that LIDs can be evaluated on a case by case basis. Training opportunities will be sought within the next 24 months to help develop this program and design manual standards.

Year	**Measurable Goal Action Summary:**	Number of LID information distributed
2016		
2017		
2018		
2019		
2020		
2021		

Start Date	**Due Date**	**Frequency**	**Task**	**Responsible Party**
February 2014	June 2015	Quarterly	Create and update design manual which will include LID alternatives	Engineering Division

4.2.1.7. Program Evaluation

An effective program must show evidence of focused messages and audiences as well as demonstration that the defined goal of the program has been achieved. The Permittee must define the specific messages for each audience. The Permittee must identify methods that will be used to evaluate the effectiveness of the educational messages and the overall education program. Any methods used to evaluate the effectiveness of the program must be tied to the defined goals of the program and the overall objective of changes in behavior and knowledge.

The Utah County Storm Water Coalition will administer public surveys. The survey will determine what type of information should be conveyed to the public. The follow up survey will also question the public about their actions to help refocus future educational messages, rather than just their knowledge. The purpose of the survey

will be to give the Utah County Storm Water Coalition an idea as to how effectively the education program is working. Examples of questions are: 1) what do you do with your grass clippings; 2) do you dispose of your household hazardous wastes, and 3) etc. The survey will be developed and implemented with the assistance of a survey consultant.

Year	Measurable Goal Action Summary:	Survey Dates, pre survey score, post survey score
2016		
2017		
2018		
2019		
2020		
2021		

Start Date	Due Date	Frequency	Task	Responsible Party
December 2014	NA	Annually	Document survey dates, survey score, and evaluation	Utah County Storm Water Coalition, Engineering Division, Storm Water Coordinator

4.2.1.8. BMP Rational

The Permittee must include written documentation or rationale as to why particular BMPs were chosen for its public education and outreach program.

Salem City is a member of the Utah County Storm Water Coalition and it was agreed that the Coalition would cover the Public Education and Outreach Program requirements of the permit for all of the participating communities. The BMPs have been developed and refined for many years by neighboring communities and generally determined to be effective. In the future, Salem will take a more active role in evaluating and modifying BMPs.

4.2.2. Public Involvement/Participation

The Permittee must implement a program that complies with applicable State and Local public notice requirements. The SWMP shall include ongoing opportunities for public involvement and participation such as advisory panels, public hearings, watershed committees, stewardship programs, environmental activities, other volunteer opportunities, or other similar activities. The Permittee should involve potentially affected stakeholder groups, which include but is not limited to, commercial and industrial businesses, trade associations, environmental groups, homeowners' associations, and education organizations. The minimum performance measures are:

This measure is intended to provide opportunities for the public to play an active role in both the development and implementation of the storm water management program. An active community is important to the success

of the program. The BMPs in this chapter not only serve to involve the public, but also serve to educate the public on storm water issues. The program includes:

- Program Description/Establishing Standard Operating Procedures (SOPs)
- Comment Opportunities
- Public Notice Compliance Requirements
- Public Participation

The Public Involvement/Participation Program section of this SWMP addresses the requirements of applicable State and Local public notice requirements. Community participation provides for broader public support, shorter implementation schedules, a broader base of expertise, and the development of important relationships with other community and government programs. The sections described in this chapter include opportunities for the public to play an active role in the development and implementation of the storm water management program. Such opportunities will include advisory panels and public hearings. Efforts to reach out and engage potentially affected stakeholder groups, which include but is not limited to, commercial and industrial businesses, trade associations, environmental groups, homeowner associations, and education organizations regarding the implementation of new storm water rules and regulations to foster public input. The Public Works Department will review the SWMP once a year.

Start Date	Due Date	Frequency	Task	Responsible Party
August 2014	NA	Annually	Review storm water management plan and complete annual report	Engineering Division, Storm Water Coordinator

Year	Measurable Goal Action Summary:	The advisory board will be the primary advisory panel, document meetings dates and outcome
2016		
2017		
2018		
2019		
2020		
2021		

4.2.2.1. Comment Opportunities

Permittees shall adopt a program or policy directive to create opportunities for the public to provide input during the decision making processes involving the development, implementation and update of the SWMP document including development and adoption of all required ordinances or regulatory mechanisms.

The Engineering Division will provide opportunities for public involvement in the constant development, updates and implementation of the storm water management program, including development and adoption ordinances through the implementation of a web-based system to accept comments about the storm water program. Ordinances will be modified in accordance with Utah law, providing the public numerous opportunities to contribute and voice concerns.

Start Date	Due Date	Frequency	Task	Responsible Party
February 2014	August 2014	One time	Create and adopt revised ordinance	Engineering Division

Year	Measurable Goal Action Summary:	Record dates of public hearings and ordinances being discussed
2016		
2017		
2018		
2019		
2020		
2021		

4.2.2.2. Public Review of SWMP

Renewal Permittees shall make the revised SWMP document available to the public for review and input within 120 days from the effective date of this Permit. New Applicants shall make the SWMP document available to the public for review and input within 180 days of receiving notification from the Division of the requirement for Permit coverage.

The Engineering Division will provide opportunities for public involvement in the constant development, updates and implementation of the storm water management program, including development and adoption ordinances through the development of a web based system to accept and incorporate comments and suggestions about the storm water program within 120 days from the effective date of this Permit.

4.2.2.3.

A current version of the SWMP document shall remain available for public review and input for the life of the Permit. If the Permittee maintains a website, the latest version of the SWMP document shall be posted on the website within 120 days from the effective date of this Permit and shall clearly denote a specific contact person and phone number or email address to allow the public to review and provide input for the life of the Permit.

The Public Works Department, as administrator of the Storm Water Management Program, will make the 2016-2021 SWMP documents available to the public online for review and input by June 23th, 2016 at the link below.

http://www.salemcity.org/

The SWMP document will remain available for public review and input for the life of the permit on the City web site and will allow the public to review and provide input. Any modifications to the SWMP will be made available.

Start Date	Due Date	Frequency	Task	Responsible Party
2/1/2014	2/13/2014	One time	Publish SWMP on city website and provide method for public to comment	Engineering Division

6/10/2016	6/23/2016	One time	Publish SWMP on city website and provide method for public to comment for the life of the document	Engineering Division

Year	Measurable Goal Action Summary:	Document number of comments received on SWMP and answers given
2016		
2017		
2018		
2019		
2020		
2021		

4.2.2.4.

The Permittee must at a minimum comply with State and Local public notice requirements when implementing a public involvement/participation program.

The City will comply with State and Local public notice requirements as part of the implementation of the public involvement/participation program. Public notice requirements will be met in accordance with the State Administrative Procedures Act as found in the link below. Public notices shall be published online. Public comments will be received and appropriate responses will be given documented.

http://le.utah.gov/UtahCode/section.jsp?code=63G-4

Year	Measurable Goal Action Summary:	Document dates of public notices & topic
2016		
2017		
2018		
2019		
2020		
2021		

4.2.3. Illicit Discharge Detection and Elimination (IDDE)

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

This measure is intended to minimize illicit discharges (discharges other than storm water) into the storm drain system. Storm drain systems are not designed to accept, convey, or discharge non-storm water flows. Eliminating illicit discharges helps prevent pollutants from entering receiving waters and maintain the infrastructure. The program includes:

- Storm Drain System Map
- City Ordinances
- Dry Weather Screening Program
- Illicit Discharge Detection
- IDDE Education and Public Outreach

The Illicit Discharge Detection and Elimination Program section of this SWMP addresses non-storm water flows that are discharged into receiving waters through storm water conveyance systems. The program will implement BMPs and SOP's to assist in detection, the identification, and elimination of illicit discharges. This program will also focus on prevention of new illicit discharges to the storm water system by means of education, regulations, and a spill prevention and response program.

This program will also be integrated with the Public Education and Outreach program to promote awareness of the importance of protecting the storm water system from illicit discharges and their impact to receiving waters. The following BMPs describe implementation tasks and assessment tasks to be completed by the City for the Illicit Discharges and Improper Disposal Program.

4.2.3.1. Storm Drain System Map

Maintain a current storm sewer system map of the MS4 showing the location of all municipal storm sewer outfalls with the names and location of all State waters that receive discharges from those outfalls, storm drain pipe and other storm water conveyance structures within the MS4.

The Engineering Division and GIS Administrator will maintain and update a storm drain system map showing the location of all municipal storm sewer outfalls with the names and location of all the Waters of the State that receive discharges from the MS4 storm water conveyance system. The system map will be updated and procedures developed for inspections during the first year before conducting inspections.

Year	**Measurable Goal Action Summary:**	Document number of storm water infrastructure, facilities and outfalls mapped
2016		
2017		
2018		
2019		
2020		
2021		

Start Date	Due Date	Frequency	Task	Responsible Party
January 2014	NA	Annual	Update and verify system map, document all discharge locations	GIS Administer

4.2.3.2. Ordinances Pertaining to Illicit Discharges

Effectively prohibit, through ordinance or other regulatory mechanism, non-storm water discharges to the MS4, including spills, illicit connections, illegal dumping and sanitary sewer overflows ("SSOs") into the storm sewer system, require removal of such discharges consistent with Part 4.2.3.6 of this Permit, and implement appropriate enforcement procedures and actions. The Permittee must have a variety of enforcement options in order to apply escalating enforcement procedures as necessary for the severity of violation and/or the recalcitrance of the violator. Exceptions are discharges pursuant to a separate UPDES Permit (other than the UPDES Permit for discharges from the MS4) and non-storm water discharges listed in Part 1.2.2.2.

Title 11-3-110 prohibits unlawful discharge where "It is unlawful to discharge to any natural outlet within the City, or in any area under the jurisdiction of the City, any sewage or other polluted waters, except where suitable treatment has been provided." An SSO is a discharge of untreated sanitary wastewater. SSOs are illegal and must be eliminated. All SSOs must be reported to the Division of Water Quality and to the Permittee's local wastewater treatment plant.

The ordinance will be revised to more closely mimic the requirements of this program to prohibit all discharges except those allowed in 1.2.2.2 of this permit. The revisions will be completed by August 1st, 2014.

Year	Measurable Goal Action Summary:	Document updates to the ordinance
2016		
2017		
2018		
2019		
2020		
2021		

Start Date	Due Date	Frequency	Task	Responsible Party
March 2014	August 2014	One Time	Adopt ordinance regarding illicit discharges	Storm Water Coordinator, Engineering Division and City Attorney
March 2014	August 2014	One Time	Adopt revisions to comply with Section 4.2.3.2	Storm Water Coordinator, Engineering Division and City Attorney

4.2.3.2.1.

The IDDE program must have adequate legal authority to detect, investigate, eliminate and enforce against non-storm water discharges, including illegal dumping, into the MS4. Adequate legal authority consists of an effective ordinance, by-law, or other regulatory mechanism. The documented IDDE program that is included in the Permittee's SWMP must include a reference or citation of the authority the Permittee will use to implement all aspects of the IDDE program.

An IDDE program will be developed and implemented by January 2015 with authority to detect, investigate, and eliminate non-storm water discharges. The program will be enforced though updated and new City ordinances in accordance with this SWMP.

Start Date	Due Date	Frequency	Task	Responsible Party
June 2014	December 2014	One Time	Develop procedure to locate priority IDDE areas	Engineering Division and City Attorney
December 2014	NA	Annual	Review and Update priority IDDE areas	Engineering Division, GIS Admin., and City Attorney

4.2.3.3.

Implement a written a plan to detect and address non-storm water discharges to the MS4, including spills, illicit connections, sanitary sewer overflows and illegal dumping. The plan shall include:

The Engineering Division will develop and adopt written standard operating procedures (SOPs) for the dry weather screening program that will comply with 4.2.3.4 to detect and eliminate non-storm water discharges to the MS4. These procedures will be reviewed and updated annually and any changes will be documented. The SOPs will be enforceable by City ordinances by December 2014. The dry weather screening activities will start after the mapping activities are complete. It is anticipated the dry weather screening inspections will start in 2015.

4.2.3.3.1. Procedures for Locating Priority Areas

Written systematic procedures for locating and listing the following priority areas likely to have illicit discharges (if applicable to the jurisdiction):

- Areas with older infrastructure that are more likely to have illicit connections;
- Industrial, commercial, or mixed-use areas;
- Areas with a history of past illicit discharges;
- Areas with a history of illegal dumping;
- Areas with onsite sewage disposal systems;
- Areas with older sewer lines or with a history of sewer overflows or cross-connections;
- Areas upstream of sensitive water bodies; and
- Other areas the Permittee determines to be likely to have illicit discharges.

The Permittee must document the basis for its selection of each priority area and create a list of all priority areas identified in the system. This priority area list must be updated annually to reflect changing priorities.

The Engineering Divisions will use the above written systematic procedures for locating areas that are likely to have illicit discharges; the criteria for selecting these areas will include the areas applicable in the permit Part 4.2.3.2.1.

The Engineering Division will create a weighted matrix to prioritize areas of concern and will create and update, as needed, a list of all priority areas identified in the system. The Engineering Division will document the basis for its selection of each priority area. The list will be updated once a year to reflect changing priorities and will be kept on the department's O&M Manual. Refer to Part 4.2.3.2.1. for the associated tasks.

4.2.3.3.2. Field Inspection of Priority Areas

Field inspection of areas which are considered a priority area as identified in Permit Part 4.2.3.3.1. Compliance with this provision shall be achieved by inspecting each priority area annually at a minimum. All field assessment activities shall utilize an inspection form to document findings.

The Engineering Division will conduct field assessment activities for the purpose of verifying outfall locations and detecting illicit discharges during the periods of dry weather. Outfalls identified by the Engineering Division as Priority Areas will be visually inspected annually. Field assessment activities will be documented on an inspection form. All inspections will be recorded at the City's storm water e-mail address.

Year	Measurable Goal Action Summary:	Document number of priority areas inspected
2020		

Start Date	Due Date	Frequency	Task	Responsible Party
January 2017	December 2017	One Time	Document the basis for selection of each priority area and create a list of all priority areas identified in the system	Engineering Division, Storm Water Coordinator
January 2017	NA	Annually	Conduct dry weather screenings and investigations on all outfalls identified as priority areas	SWPPP Inspector

4.2.3.3.3. Dry Weather Screening

Dry weather screening (see Definition 7.13) activities for the purpose of verifying outfall locations and detecting illicit discharges that discharge within the Permittee's jurisdiction to a receiving water. All outfalls shall be inspected at least once during the 5-year Permit term. Dry weather screening activities shall utilize an inspection form to document findings.

The Engineering Division will conduct field assessment activities for the purpose of verifying outfall locations and detecting illicit discharges during the periods of dry weather. Visual inspections of at least 20 percent of all known outfalls will be inspected quarterly and all outfalls should be inspected at least once during the permit term. Field assessment activities will be documented on an inspection form. All inspections will be recorded at the City's storm water tracking software.

Year	Measurable Goal Action Summary:	Document number of out falls inspected
2020		36

Start Date	Due Date	Frequency	Task	Responsible Party
June 2014	January 2015	One Time	Develop written IDDE screening SOP and inspection forms	Engineering Division, Storm Water Coordinator
January 2015	NA	Monthly	Conduct dry weather screenings and investigations	SWPPP Inspector

4.2.3.3.4 Reporting Dischargers for Separate UPDES Permit

If the Permittee discovers or suspects that a discharger may need a separate UPDES Permit (e.g., Industrial Storm Water Permit, Dewatering Permit), the Permittee shall notify the Division.

The Engineering Division will develop an SOP that will include procedures for inspectors to follow to notify the Division when Salem City discovers or suspected that a discharger may need a separate UPDES Permit.

Start Date	Due Date	Frequency	Task	Responsible Party
January 2017	December 2017	One Time	Develop SOP for the city to notify for the Division of a discharger that may need a separate UPDES Permit	Engineering Division

4.2.3.4. Illicit Discharge Source Tracing

Implement standard operating procedures (SOPs) or similar type of documents for tracing the source of an illicit discharge; including visual inspections, and when necessary, opening manholes, using mobile cameras, using field tests of selected chemical parameters as indicators of discharge sources, collecting and analyzing water samples for the purpose of determining sanctions or penalties, and/or other detailed inspection procedures.

The Engineering Division will develop an SOP (noted in Part 4.2.3.5.1) that will include procedures for inspectors to follow when a suspected IDDE is located, including working upstream to find and document the source, collect samples when necessary, and enforcement procedures once the source is determined. The procedure will also include spill response procedures to minimize the discharge of pollutants.

4.2.3.5. Illicit Discharge Response

Implement standard operating procedures (SOPs) or similar type of documents for characterizing the nature of, and the potential public or environmental threat posed by, any illicit discharges found by or reported to the Permittee by the hotline or other telephone number described in 4.2.3.9. These procedures shall include detailed instructions for evaluating how the discharge shall be immediately contained and steps to be taken for containment of the discharge. Compliance with this provision will be achieved by initiating an investigation immediately upon being alerted of a potential illicit discharge.

The Engineering Division will update and implement procedures on its O&M manual for characterizing the nature of, and the potential environmental threat posed by an illicit discharge found by or reported to the City by public through the Police or Fire Department's dispatch phone number or advertised illicit discharge phone numbers. These procedures will include detailed instructions for evaluating how the discharge shall be immediately contained and steps to be taken for containment of the discharge. The department will investigate the source and will involve other parties if necessary.

Start Date	Due Date	Frequency	Task	Responsible Party

March 2014	December 2014	One Time	Develop SOP for police and hotline response of IDDE post public work number on website	Engineering Division

4.2.3.5.1. IDDE Inspection Report

When the source of a non-storm water discharge is identified and confirmed, the Permittee must record the following information in an inspection report: the date the Permittee became aware of the non-storm water discharge, the date the Permittee initiated an investigation of the discharge, the date the discharge was observed, the location of the discharge, a description of the discharge, the method of discovery, date of removal, repair, or enforcement action; date, and method of removal verification. Analytical monitoring may be necessary to aid in the identification of potential sources of an illicit discharge and to characterize the nature of the illicit discharge. The decision process for utilizing analytical monitoring must be fully documented in the inspection report.

After the source of a non-storm water discharge is identified and confirmed, the Engineering Division will record the following information on an inspection report that will contain:

- The date the City became aware of the non-storm water discharge
- The date the City initiated the investigation of the discharge
- The date the discharge was observed
- The location of the discharge
- The description of the discharge
- The method of discovery
- The date and method of verification, removal, repair or enforcement action
- The decision process for utilizing analytical monitoring/sampling to aid in the identification of the potential source of an illicit discharge and characterization of the nature of an illicit discharge

Year	Measurable Goal Action Summary:	Document number of IDDE inspected
2020		

4.2.3.6. Ceasing Illicit Discharges

Implement standard operating procedures (SOPs) or similar type of documents for ceasing the illicit discharge, including notification of appropriate authorities; notification of the property owner; technical assistance for removing the source of the discharge or otherwise eliminating the discharge; follow-up inspections; and escalating enforcement and legal actions if the discharge is not eliminated. Illicit discharges to the MS4 are prohibited and any such discharges violate this Permit and remain in violation until they are eliminated. Upon detection, the Permittee shall require immediate cessation of improper disposal practices upon confirmation of responsible parties in accordance with its enforceable legal authorities established pursuant to Part 4.2.3.2.1 of this Permit.

Upon detection of an illicit discharge, the Engineering Division or its appointees will require the immediate cessation of improper disposal practices upon confirmation of the responsible parties.

The City will develop and implement standard operating procedures on its O&M Manual for ceasing illicit discharges that will include:

- Notification of appropriate authorities
- Notification of the property owners
- Technical assistance for removing/eliminating the source of the discharge
- Follow-up inspection
- Escalating enforcement and legal actions if the discharge is not eliminated

Start Date	Due Date	Frequency	Task	Responsible Party
March 2014	December 2014	One Time	Develop SOP for the sewers collections department for ceasing illicit discharges	Engineering Division

4.2.3.6.1. IDDE Investigation Documentation

All IDDE investigations must be thoroughly documented and may be requested at any time by the *Division*. If a Permittee is unable to meet the minimum performance measures outlined in Parts 4.2.3.5. or 4.2.3.6., the Permittee must immediately submit to the *Division* written documentation or rationale describing the circumstances why compliance with the minimum performance measures was not possible. All IDDE documentation shall be retained by the Permittee as required by the SWMP document.

The Engineering Division or its appointees will thoroughly investigate and document all illicit discharges. All of the investigation documentation and procedures will be kept on the Engineering Division the SWMP electronic files.

Year	Measurable Goal Action Summary:	Document number of inspections & type of inspection Screening, complaint response, or other
2020		

4.2.3.7. Improper Disposal of Waste

Permittees shall inform public employees, businesses, and the general public of hazards associated with illicit discharges and improper disposal of waste.

Part 4.2.1.3 in Public Education and Outreach Program covers this requirement.

4.2.3.8. Household Hazardous Waste Collection

Permittees shall promote or provide services for the collection of household hazardous waste.

Part 4.2.1.2 in Public Education and Outreach Program covers this requirement where information regarding hazardous waste and proper disposal will be provided to the public.

4.2.3.9. Reporting Hotline

Permittees shall publicly list and publicize a hotline or other local telephone number for public reporting of spills and other illicit discharges. A written record shall be kept of all calls received, all follow-up actions taken, and any feedback received from public education efforts.

The Public Works Department phone number (801-423-2770) and the coalition hotline number (801-851-7873) will be listed and advertised to the public for the reporting of spills and other illicit discharges. The public may also call the Police or Fire Departments to report any activities. The Public Works Department will train with the Fire and Police Departments to coordinate and document the number of calls received and follow-up actions taken under the SOPs specified in Part 4.2.3.5. In addition, these phone numbers will also be listed and advertised to collect feedback from the public education efforts as specified in Part 4.2.3.6.1.

Year	Measurable Goal Action Summary:	Document number of calls received, information received, action taken, and feedback received
2020		

4.2.3.9.1. Spill Response Procedures

The Permittee must develop a written spill/dumping response procedure, and a flow chart for internal use, that shows the procedures for responding to public referrals of illicit discharges, the various responsible agencies and their contacts, and who would be involved in illicit discharge incidence response, even if it is a different entity other than the Permittee. The procedure and list must be incorporated as part of the IDDE program and incorporated into the Permittee's SWMP document. The list must be maintained and updated as changes occur.

The Engineering Division in conjunction with the Fire and Police Departments will develop a written spill/dumping response procedure and flow chart, that shows the procedures for responding to illicit discharges/spills, the various responsible agencies and their contacts, and who would be involved in illicit discharge incidence response. The procedure and list will be incorporated as part of the IDDE program and incorporated as part of each department's O&M manual IDDE program. This plan will be updated as changes occur.

Start Date	Due Date	Frequency	Task	Responsible Party
June 2014	NA	Annual	Review and Update spill/dumping response procedure and internal flow chart	Engineering Department, Fire Department Chief

Year	Measurable Goal Action Summary:	Document and describe changes to the spill response plan
2020		

4.2.3.10. IDDE Program Evaluation

Permittees shall implement procedures for program evaluation and assessment which includes maintaining a database for mapping, tracking of the number and type of spills or illicit discharges identified; and inspections conducted.

The Engineering Department will adopt procedures for the IDDE program evaluation and assessment that will include a database for mapping, tracking of the number and type of spills or illicit discharges and inspections conducted. This program will be evaluated annually as part of the annual report.

4.2.3.11. IDDE Employee Training

Permittees shall at a minimum, ensure that all staff, contracted staff, or other responsible entities receives annual training in the IDDE program including identification, investigation, termination, cleanup, and reporting of illicit discharges including spills, improper disposal, and illicit connections. All Permittees shall ensure that all new hires are trained immediately upon hire and annually thereafter, at a minimum. Follow-up training shall be provided as needed to address changes in procedures, methods or staffing. The Permittee shall provide training to all field staff that as part of their normal job responsibilities might come into contact with or otherwise observe an illicit discharge or illicit connection to the MS4. The Permittees shall also train office personnel who might receive initial reports of illicit discharges. Training shall include how to identify a spill, an improper disposal, or an illicit connection to the MS4 and proper procedures for reporting the illicit discharge. Training records must be kept and shall include dates, activities or course descriptions, and names and positions of staff in attendance. The Permittee shall include a summary of such training in the annual report.

The Engineering Divisions will develop an IDDE training program and will at a minimum, ensure annual training for City employees, contracted staff, and other responsible entities. New hires will be trained immediately upon hire and annually thereafter. Follow The IDDE training will include how to identify a spill, an improper disposal, or an illicit connection to the MS4 and proper procedures for reporting the illicit discharge (described at more

length in Part 4.2.6.9) and documented in accordance with Part 4.1. The training program will utilize DVD training information provided by Utah County Storm Water Coalition.

Start Date	Due Date	Frequency	Task	Responsible Party
January 2017	December 2017	One Time	Develop IDDE training program	Engineering Department,

Year	Measurable Goal Action Summary:	Document training dates, staff attendance and course descriptions.
2020		

4.2.3.12. IDDE Documentation

The Division reserves the right to request documentation or further study of a particular non-storm water discharge of concern, to require a reasonable basis for allowing the non-storm water discharge and excluding the discharge from the Permittee's program, and to require inclusion of the discharge in the Permittee's program, if water quality concerns cannot otherwise be reasonably satisfied.

As specified in Part 4.1.2, ongoing documentation will be established and available for review upon request.

4.2.4. Construction Site Storm Water Runoff Control

All Permittees shall review as necessary, implement and enforce a program to reduce pollutants in any storm water runoff to the MS4 from construction sites with a land disturbance of greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale according to the minimum performance measures listed below. Public and private projects, including projects proposed by the Permittee's own departments and agencies, shall comply with these requirements. The minimum performance measures are:

This measure is intended to minimize polluted storm water runoff from construction activities. Construction activities can contribute significant levels of sediment to storm water runoff if erosion and sediment controls are not implemented. The program includes:

- Program Description/Establishing SOPs
- City Ordinances
- SWPPP
- Construction Site Inspections
- City Personnel Training
- Record Keeping of Permitted Sites

The City will develop and implement a Construction Site Storm Water Runoff Control Program to reduce pollutants in any storm water runoff to the MS4 from sites with a land disturbance greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale. Public and private projects, including projects proposed by the City's own departments and agencies will comply with these requirements.

The ordinance will address any kind of land disturbance activities that disturb an area greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale. The ordinance also requires storm water pollution prevention controls on sites that do not meet the description mentioned above. Because the state is currently in the process of revising the current construction general permit, the City intends to delay adoption of this ordinance until the new construction permit is complete.

4.2.4.1. Erosion Requirements

Revise as necessary and enforce an ordinance or other regulatory mechanism that requires the use of erosion and sediment control practices at construction sites. The ordinance or other regulatory mechanism shall, at a minimum, be equivalent with the requirements set forth in the most current UPDES Storm Water General Permit for Construction Activities which can be found at http://www.deq.utah.gov/Permits/water/updes/stormwatercon.htm. The ordinance or other regulatory mechanism shall include sanctions to ensure compliance. The ordinance or other regulatory mechanism shall apply, at a minimum, to construction projects disturbing greater than or equal to one acre and to construction projects of less than one acre that are part of a larger common plan of development or sale. Existing local requirements to apply storm water controls at sites less than 1 acre or not part of a Common Plan of Development may be retained.

Starting in April 2014, the City will require contractors to submit an erosion control plan in the form of a SWPPP before final approval and submit evidence of a Notice of Intent (NOI) prior to construction.

Start Date	Due Date	Frequency	Task	Responsible Party
April 2014	April 2014	One Time	Add SWPPP requirements to storm water general permit requirements for construction activities	Engineering Division and City Attorney
April 2014	December 2014	One Time	Update construction storm water ordinance to comply with state updates	Engineering Division and City Attorney

December 2014	December 2014	One Time	Adopt construction storm water ordinance to comply with state updates	Engineering Division and City Attorney
January 2017	December 2017	One Time	Update construction storm water ordinance to comply with state updates	Engineering Division and City Attorney

4.2.4.1.1 SWPPP Requirement

The ordinance or other regulatory mechanism shall, at a minimum, require construction operators to prepare a Storm Water Pollution Prevention Plan (SWPPP) and apply sediment and erosion control BMPs as necessary to protect water quality, reduce the discharge of pollutants, and control waste such as, but not limited to, discarded building materials, concrete truck washout, chemicals, litter and sanitary waste at the construction site that may cause adverse impacts to water quality. The SWPPP requirements must be, at a minimum, equivalent with the SWPPP requirement set forth in the UPDES Storm Water General Permit for Construction Activities, which can be found at:
http://www.deq.utah.gov/Permits/water/updes/stormwatercon.htm .

The City will require contractors to first develop a SWPPP for all construction greater than 1 acre or common plan of development by April 2014.

Start Date	Due Date	Frequency	Task	Responsible Party
April 2014	December 2014	One Time	Develop enforcement mechanism(s) and penalties for non-compliance	Engineering Division and City Attorney
December 2014	December 2014	One Time	Adopt enforcement code changes	Engineering Division and City Attorney

4.2.4.1.2 UPDES Permit Coverage Verification

Permittees shall ensure construction operators obtain and maintain coverage under the current UPDES Storm Water General Permits for Construction Activities for the duration of the project. Coverage can be obtained by completing a NOI as well as renewed online at
https://secure.utah.gov/account/login.html?returnToUrl=https%3A//secure.utah.gov/stormwater/uii_authentication .

The City requires contractors to submit an erosion control plan in the form of a SWPPP and submit evidence of a Notice of Intent (NOI) prior to construction. Construction operators are required to maintain coverage until evidence of an approved Notice of Termination (NOT). The city conducts and documents SWPPP reviews and inspections in accordance with Part 4.2.4. The construction storm water inspection evaluation form for SWPPP compliance includes verification that the contractor's NOI is included. The NOI will be verified as current at the time of inspection.

Start Date	Due Date	Frequency	Task	Responsible Party
March 2017	NA	Annual (minimum)	Verify permit status is current for all active construction sites in compliance with 4.2.4.1.2.	Storm Water Coordinator

Year	Measurable Goal Action Summary:	Document permit status and effective end date for all active UPDES Storm Water permits for construction activities.

2020	All active permits are available upon request and tracked on Salem's Storm Water tracking software

4.2.4.1.3 Inspection Access to Private Properties

The ordinance shall include a provision for access by qualified personnel to inspect construction storm water BMPs on private properties that discharge to the MS4.

The Salem City Ordinance 1-2-060 for Right of Entry for Inspection states, "Whenever necessary to make an inspection to enforce any ordinance or resolution, or whenever there is a reasonable cause to believe there exists an ordinance or resolution violation in any building or upon the premises within the jurisdiction of this City, any authorized official of the City may, upon presentation of proper credentials, enter such building or premises at all reasonable times to inspect the same or to perform any duty imposed upon him/her by ordinance; provided, that except in emergency situations or when consent of the owner and/or occupant to the inspect ion has been otherwise obtained, he shall give the owner and/or occupant, if they can be located after reasonable effort, 24 hours written notice of the authorized official's intention to inspect. The note which is transmitted to the owner and/or occupant shall state that the property owner and/or occupant has the right to refuse entry and that in that event, inspection may be made only upon issuance of a search warrant by a duly authorized magistrate or judge."

Year	**Measurable Goal Action Summary:**	Document updates to the storm water ordinance regarding private property access
2020		

4.2.4.2. Enforcement Mechanism

Develop a written enforcement strategy and implement the enforcement provisions of the ordinance or other regulatory mechanism which shall include:

As specified in Salem City Ordinance 1-2-080, when there is "No other penalty is prescribed, a violation of any provision or ordinance duly enacted by the City council shall be punished as a Class B misdemeanor." It also states that "Whenever the penalty prescribed for a violation of any ordinance is set forth as an infraction, a Class C Misdemeanor, a Class B Misdemeanor or a Class A Misdemeanor, the penalty attaching to such designation shall be the same as that set forth by Utah state law." The City will add specific storm water violations to the ordinances in 2014 and amend them as necessary as the program develops.

4.2.4.2.1 Enforcement Procedures Plan

Standard operating procedures (SOPs) or similar type of documents that include specific processes and sanctions to minimize the occurrence of, and obtain compliance from violators which shall include appropriate, escalating enforcement procedures and actions.

An enforcement procedures plan will be developed to include specific processes and sanctions to minimize the occurrence of violations, and obtain compliance from violators. The plan will include appropriate, escalating enforcement procedures and actions. Any proposed ordinances will include the available sanctions for enforcement.

The Engineering Division standard operating procedures to obtain compliance from violations associated with operators of land disturbance activity sites will follow the below stages:

- A verbal warning with specific amount of time is given to the operator to correct the deficiency

- An Notice of Violation (NOV) is issued describing the violation to be corrected and additional time given to correct the deficiency with the threat to stop work, insurance of citation, or both
- A stop work order is issued, this can be verbal or in writing. All work must be stopped except for the activity needed to repair deficiency. At this point, a citation could be issued depending on the severity or recurrence of the problem
- A citation is issued to appear in court to face possible fines even after the deficiency is corrected
- Call of bond to repair deficiency

4.2.4.2.2 Tracking Enforcement Actions

Documentation and tracking of all enforcement actions.

The Engineering Division Inspector will document and track all of the enforcement actions and will continue to do so. The tracking system mechanism includes the use of tracking software and GIS mapping.

Year	Measurable Goal Action Summary:	Document Number of enforcement actions
2020		

4.2.4.3. SWPPP Review Procedures

Develop and implement SOPs or similar type of documents for pre-construction Storm Water Pollution Prevention Plan (SWPPP) review and keep records for, at a minimum, all construction sites that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, to ensure plans are complete and in compliance with State and Local regulations. Permittees shall keep records of these projects for five years or until construction is completed, whichever is longer. Prior to construction, the Permittee shall:

The Engineering Division procedures will be developed to establish that a SWPPP will be prepared and submitted to the City for review before the contractor can obtain the UPDES permit. The plan will include possible sources of storm water pollutants and Selection of Best Management Practices (BMPs) to reduce or eliminate pollutant impacts.

Start Date	Due Date	Frequency	Task	Responsible Party
June 2014	June 2014	One Time	Sign up for city account on State SWPPP database https://secure.utah.gov/account/login.html?returnToUrl=https%3A%2F%2Fsecure.utah.gov%2Fstormwater%2Fuii_authentication	Engineering Division
January 2015	NA	Monthly	Verify SWPPP reviews are properly documented	Storm Water Coordinator
January 2015	NA	Monthly	Review construction SWPPP plans and comment places where LID could be better utilized	Storm Water Inspector

4.2.4.3.1 SWPPP Pre-Construction Review

Conduct a pre-construction SWPPP review which includes a review of the site design, the planned operations at the construction site, planned BMPs during the construction phase, and the planned BMPs to be used to manage runoff created after development.

The Engineering Division will conduct a SWPPP pre-construction review meeting starting in 2015 with the contractor after ordinances, standard operating procedures, and checklist are developed where it will include a review of the site design, the planned operations at the construction site, planned BMPs during the construction phase, and the planned post-construction BMPs to manage runoff created after development. Preconstruction meetings and contractor education pamphlets are described in more detail in Part 4.2.1.4.

4.2.4.3.2 SWPPP Review Check List

Incorporate into the SWPPP review procedures the consideration of potential water quality impacts and procedures for pre-construction review which shall include the use of a checklist.

The Engineering Division reviews each SWPPP considering the potential water quality impacts. Procedures for the SWPPP review include ensuring that all the proper SWPPP BMPs and documentation is included on this document before the land disturbance permit is issued. Potential to incorporate LID into the design is also considered. The City will develop a form for inspections before June 1st, 2014.

Start Date	Due Date	Frequency	Task	Responsible Party
February 2014	June 2014	One Time	Develop SWPPP review check list see Part 4.2.4 for requirements	Engineering Division

4.2.4.3.3 Priority Construction Sites

Identify priority construction sites considering the following factors at a minimum:

- Soil erosion potential;
- Site slope;
- Project size and type;
- Sensitivity of receiving waterbodies;
- Proximity to receiving waterbodies; and,
- Non-storm water discharges and past record of non-compliance by the operators of the construction site.

The Engineering Division will identify as priority construction sites, sites that discharge directly into Waters of the State, or are otherwise deemed to have a high probability of effecting water quality considering at a minimum, soil erosion potential, site slope, project size and type, sensitivity of receiving waterbodies, proximity to receiving waterbodies, and non-storm water discharges and past record of non-compliance by the operators of the construction site. The SWPPP review check list will contain a box denoting if the project is classified as "high priority."

Start Date	Due Date	Frequency	Task	Responsible Party
February 2017	December 2017	One Time	Develop procedure to identify Priority Construction Site. See Part 4.2.4.3.3. for requirements	Engineering Division

4.2.4.4. SOPs for Site Inspections and Enforcement

All Permittees shall develop and implement SOPs or similar type of documents for construction site inspection and enforcement of construction storm water pollution control measures. The procedures must clearly define who is responsible for site inspections as well as who has authority to implement enforcement procedures. The Permittee must have the authority to the extent authorized by law to impose sanctions to ensure compliance with the local program. These procedures and regulatory authorities must be written and documented in the SWMP. The construction site storm water runoff control inspection program must provide:

The Engineering Division SWPPP Inspector will be the person responsible for site inspections that disturb an area greater than one acre or are part of a common plan of development. Construction projects that require SWPPPs

will be determined in the project review phase and the inspector(s) notified of approved projects as part of the pre-construction meeting.

Inspection and enforcement SOP's will be developed in the first year of the permit prior to starting site inspections in accordance with Part 4.2.4.4.1.

Start Date	Due Date	Frequency	Task	Responsible Party
December 2014	June 2015	One Time	Prepare to start SWPPP inspections of all construction sites with SWPPP plans. Download state form, develop SOP for inspectors, and identify inspector(s)	Engineering Division, Storm Water Inspector
June 2015	NA	Monthly	Complete SWPPP inspections on all active construction projects with SWPPP plans. High priority sites require 2 inspections per month	Storm Water Inspector

4.2.4.4.1 Construction Site Inspection Checklist

Inspections of all new construction sites with a land disturbance of greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale at least monthly by qualified personnel using the Construction Storm Water Inspection Form (Checklist) found on the Division's website at http://www.deq.utah.gov/Permits/water/updes/stormwatermun.htm .

The Engineering Division will develop inspection procedures by June 1st, 2015 for all construction sites with a land disturbance of greater than one acre, including projects less than one acre that are part of a larger common plan of development or sale at least monthly by qualified personnel using the Construction Storm Water Inspection Form.

4.2.4.4.2 Construction Site Inspection

The Permittee must inspect all phases of construction: prior to land disturbance, during active construction, and following active construction. The Permittee must document in its SWMP the procedure for being notified by construction operators/owners of their completion of active construction so that verification of final stabilization and removal of all temporary control measures may be conducted. This procedure must be provided to the construction operator/owner before active construction begins.

Responsible Party: Storm Water Inspector

Permittee will track construction progress with ongoing inspections of each site. If site is under an acre, it has to have 70% vegetation and downstream covers removed and inlets cleaned if necessary, before permittee allows a NOT inspection. NOI can be transferred to homeowner if not at 70%, if home owner is doing their own landscaping making them responsible for bmp's and corrections if needed.

When contractors have filed an NOT through the EPA NeT the permittee receives an email about the request which in turn the permittee can deny the contractor if not satisfied or approved.

The permittee uses the Pre-site & NOT Inspection form that's on the DWQ site at https://documents.deq.utah.gov/water-quality/stormwater/DWQ-2018-012310.pdf

The SWPPP Inspector will inspect all phases of construction until the termination of the project. All sites will be inspected by the City Inspector on a monthly basis and priority sites will be inspected every two weeks. Inspections will be documented on the state form and emailed for documentation. All inspections will follow the inspection SOP. Procedures for termination notification by the operator of a permitted site to verify the final

stabilization and removal of all temporary control measures will be developed. The procedure will be provided to the construction operator/ owner before active construction begins.

Start Date	Due Date	Frequency	Task	Responsible Party
January 2017	December 2017	One Time	Prepare procedures for notification of termination by the operator of a permitted site in compliance with Part 4.2.4.4.2.	Engineering Division, Storm Water Inspector

4.2.4.4.3 Biweekly Inspections of Construction Sites

Inspections by the MS4 of priority construction sites defined in Part 7.36 must be conducted at least biweekly (every two weeks) using the Construction Storm Water Inspection Form (Checklist) found on the Division's website at http://www.deq.utah.gov/Permits/water/updes/stormwatermun.htm.

The SWPPP Inspector will inspect sites with the priority designation (as determined during the SWPPP review) at least biweekly using the standard construction inspection SOP.

4.2.4.4.4 Inspection Enforcement

Based on site inspection findings, the Permittee must take all necessary follow-up actions (i.e., re-inspection, enforcement) to ensure compliance in accordance with the Permittee's enforcement strategy. These follow-up and enforcement actions must be tracked and documented.

The Engineering Division SWPPP Inspector will take all necessary follow-up actions (re-inspection, enforcement) to ensure compliance in accordance with City Ordinances. Enforcement actions will be tracked and documented by e-mailing all actions to the MS4 account.

4.2.4.4.5 Reporting Hotline

Permittees shall publicly provide and publicize a hotline or other local telephone number for public reporting of storm water related issues on construction sites, such as tracking onto streets. Records of violations, enforcement actions and corrective actions taken shall be tracked and documented.

The Public Works Department phone number (801-423-2770) and the coalition hotline number (801-851-7873) will be listed and advertised to the public for the reporting of storm water related issues on construction sites. The public may also call the Police or Fire Departments to report any activities. The Public Works Department will train with the Fire and Police Departments to coordinate and document the number of calls received and follow-up actions taken under the SOPs specified in Part 4.2.3.5. In addition, these phone numbers will also be listed and advertised to collect feedback from the public education efforts as specified in Part 4.2.3.6.1.

Start Date	Due Date	Frequency	Task	Responsible Party
January 2017	December 2017	One Time	Develop SOP for police and hotline response of storm water related issues on construction sites and post on website	Engineering Division, Storm Water Coordinator

Year	Measurable Goal Action Summary:	Document number of calls received, information received, violations, enforcement actions and corrective actions taken
2020		

4.2.4.5. City Personnel Training

The Permittee must ensure that all staff whose primary job duties are related to implementing the construction storm water program, including permitting, plan review, construction site inspections, and enforcement, are annually trained to conduct these activities. The training can be conducted by the MS4 or outside training can be attended. Such training must extend to third-party inspectors and plan reviewers as well. The Permittee shall ensure that all new hires are trained upon hire and before commencing storm water related duties and annually thereafter, at a minimum. Follow-up training shall be provided as needed to address changes in procedures, methods or staffing. The training records to be kept include dates, activities or course descriptions, and names and positions of staff in attendance.

The Engineering Division will train annually staff whose primary job duties are related to implementing the construction storm water program, including permitting, plan review, construction site inspections, and enforcement. New hires will be trained upon hire and before commencing storm water related duties and annually thereafter. The training will be conducted by the Engineering Division personnel or a third party. Third party training events for inspectors and plan reviewer will be conducted through the Utah County Storm Water Coalition. Training records will include dates, course description and names and positions of staff in attendance and recorded in Section 4.2.1.5.

Year	Measurable Goal Action Summary:	Document training dates, attendance (inc. positions) and course description
2020		
2021		

4.2.4.6. Record Keeping of Permitted Sites

All Permittees shall implement a procedure to maintain records of all projects disturbing greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale. Permittees shall keep records which include but are not limited to, site plan reviews, SWPPPs, inspections and enforcement actions including verbal warnings, stop work orders, warning letters, notices of violation, and other enforcement records. Permittees shall keep records of these projects for five years or until construction is completed, whichever is longer.

Initially all inspections will be e-mailed, to the MS4 account to provide a record of all inspections, enforcement actions, and other pertinent information. Monthly the inspector will review the account to ensure inspections are being properly documented. This account will also house copies of the original SWPPP, SWPPP review sheets, pre-construction meeting notes, etc. As the program develops the City may choose to investigate alternative tracking software.

4.2.5. Long-Term Storm Water Management in New Development and Redevelopment (Post-Construction Storm Water Management)

All Permittees shall revise as necessary, implement and enforce a program to address post-construction storm water runoff to the MS4 from new development and redevelopment construction sites disturbing greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, according to the minimum performance measures listed below. The objective of this control measure is for the hydrology associated with new development to mirror the pre-development hydrology of the previously undeveloped site or to improve the hydrology of a redeveloped site and reduce the discharge of storm water. The water quality considerations of this minimum control measure do not replace or substitute for water quantity or flood management requirements implemented on the local level for new developments. The water quality controls may be incorporated into the design of structures intended for flow control; or water quality control may be achieved with separate control measures. The program must apply to private and public development sites, including roads.

The minimum performance measures are:

This measure is intended to minimize the impact to storm water quality caused by development and redevelopment. The increase in impervious areas caused by development can cause an increase in the type and quantity of pollutants in runoff. Prior planning and design to minimize pollutants in runoff from these areas is an important component to storm water quality management. The Program includes:

- Program Description/Establishing SOPs
- City Ordinance Modifications
- Design Standards for Post-Construction Water Controls
- Review of Post-Construction Water Controls
- SOPs for Inspections and Enforcement
- City Personnel Training
- Post-Construction BMP Inventory

The Engineering Division will update the post-construction storm water management program to address runoff from new development and redevelopment construction sites disturbing an area greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale to the MS4.

The objective of this program is for the hydrology associated with the new development to mirror the pre-development hydrology of the previously undeveloped site or to improve the hydrology of a redeveloped site and reduce the discharge of storm water.

Start Date	Due Date	Frequency	Task	Responsible Party
February 2017	December 2017	One Time	Review and revise as necessary ordinance and design manual for compliance with 4.2.5	Engineering Division

Year	Measurable Goal Action Summary:	Document Revisions to the Storm Water Design Manual
2020		
2021		

4.2.5.1. Post Construction Ordinances

Develop and adopt an ordinance or other regulatory mechanism that requires long-term post-construction storm water controls at new development and redevelopment sites. The ordinance or other regulatory mechanism

shall apply, at a minimum, to new development and redevelopment sites that discharge to the MS4 and that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale. Existing local requirements to apply storm water controls at smaller sites shall be retained. The ordinance or other regulatory mechanism shall require BMP selection, design, installation, operation and maintenance standards necessary to protect water quality and reduce the discharge of pollutants to the MS4.

The Engineering Division will update the Storm Water Regulations to address storm water controls at new development and redevelopment sites with post-construction considerations that will be developed by 2017. The structural post-construction BMP selection, design, installation and operation for each site will be reviewed to make sure it will perform adequately in the soil and terrain conditions for the particular site before approval per the Engineering Division. The Engineering Division will continuously update post- construction BMPs that will minimize impacts from development runoff to the MS4.

Year	Measurable Goal Action Summary:	Document the changes in regulations
2020	Updated and implemented Salem City Storm Water Management and Discharge Control Ordinance and Salem City Storm Water Maintenance Agreement 11/18/020	

4.2.5.2. Enforcement Responsibilities

Implement an enforcement strategy and implement the enforcement provisions of the ordinance or other regulatory mechanism. Procedures for enforcement of BMPs include:

The City will develop SOPs for the inspection and maintenance requirements for long term BMPs on or before February 1st, 2015.

Start Date	Due Date	Frequency	Task	Responsible Party
February 2014	February 2015	One Time	Develop SOP for post construction inspections and enforcement actions. See 4.2.5.2.1, 4.2.5.5, 4.2.5.5.3 for details.	Engineering Division

Year	Measurable Goal Action Summary:	Document the number of enforcement actions taken
2020	3	

4.2.5.2.1. Enforcement Procedures and Actions

Procedures that include specific processes and sanctions to minimize the occurrence of, and obtain compliance from, chronic and recalcitrant violators which shall include appropriate, escalating enforcement procedures and actions.

The procedures and actions to gain compliance from violators will be developed over the next year but are anticipated to include the following components:

- The enforcement options are detailed on the proposed City Ordinances
- BMP Inspection prior to accept of site improvements
- Maintenance easements must be properly recorded in the land record
- Maintenance arrangements with third parties will be arranged through appropriate legal means

- Periodic inspections of private and City owned or operated post-construction BMPs by personnel or SWPPP Inspector
- If a third party property is not maintained or repaired within the time allowed by the City, the City will perform the maintenance and repairs at its expense, and bill the same to the property owner
- Notification to owners of a problem location, specifying time of compliance
- Other actions include: notice of violation, stop work orders, cease and desist orders, and citations

4.2.5.2.2. Documentation for Post-Construction BMP Requirements

Documentation on how the requirements of the ordinance or other regulatory mechanism will protect water quality and reduce the discharge of pollutants to the MS4. Documentation shall include:

- How long-term storm water BMPs were selected;
- The pollutant removal expected from the selected BMPs; and
- The technical basis which supports the performance claims for the selected BMPs.

The City GIS databases and email will be used to keep an inventory of all new Post-Construction BMPs starting on March 15th, 2014. Each BMP is reviewed and approved by the Engineering division during the permitting process. The selection process includes what the intended objective of the BMP was; the targeted pollutants the BMP would help control, how effective this BMP will be and the requirements for implementing this BMP.

Start Date	Due Date	Frequency	Task	Responsible Party
March 15th, 2015	NA	Monthly	Verify new post construction BMPs have been uploaded to GIS database	GIS Administrator

4.2.5.3. Post-Construction Controls Standards for Development and Redevelopment Projects

The Permittee's new development/redevelopment program must have requirements or standards to ensure that any storm water controls or management practices for new development and redevelopment will prevent or minimize impacts to water quality. BMPs must be selected that address pollutants known to be discharged or anticipated to be discharged from the site.

The Engineering Division will create requirements and standards to ensure that any storm water controls or management practices for development and redevelopment projects will prevent or minimize impacts to water quality and will verify BMPs selected address pollutants known to be discharged or anticipated to be discharged from the site.

4.2.5.3.1 New Developments Post Construction

The Permittee's new development/redevelopment program shall include non-structural BMPs such as requirements and standards to minimize development in areas susceptible to erosion and sediment loss; to minimize the disturbance of native soils and vegetation; to preserve areas in the municipality that provide important water quality benefits; to implement measures for flood control; and to protect the integrity of natural resources and sensitive areas.

Salem City requires new development/redevelopment to maintain certain non-structural BMPs to protect and minimize disturbance of Sensitive Lands in accordance with Salem City Municipal Code Title 11 Chapter 9 Flood Damage Prevention, Title 13 Subdivisions, and accepted industry standards including requiring relevant U.S. Bureau of Reclamation and Army Corps of Engineers permits.

4.2.5.3.2 Post Construction Controls

For new development or redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, the program shall include a process which requires the evaluation of a Low Impact Development (LID) approach which encourages the implementation of BMPs that infiltrate, evapotranspiration or harvest and use storm water from the site to

protect water quality. Structural controls may include green infrastructure practices such as rainwater harvesting, rain gardens, permeable pavement, and vegetated swales. If a LID approach cannot be utilized, the Permittee must document an explanation of the reasons preventing this approach and the rationale *for the chosen alterative controls* on a case by case basis for each project.

Since 2010, rainwater harvesting is legal in the State of Utah. Depending on the volume of rainwater collected and stored for beneficial use, the Permittee must meet the requirements of the Utah Division of water Rights to harvest rainwater found on their website: http://waterrights.utah.gov/forms/rainwater.asp.

The Engineering Division will develop a process to evaluate a Low Impact Development (LID) approach which encourages the implementation of structural BMPs, where practicable.

If LID practices are proposed to be used on a site, the Engineering Division will review and evaluate the proposal to make sure it will perform adequately in the soil and terrain conditions for the particular site before approval. If LID practices cannot be utilized on a site, the Engineering Division will document an explanation of the reasons preventing this approach and the rationale for the chosen alternative controls for each project. Meetings and actions taken to advance LID will be documented as part of Parts 4.2.1.6 and 4.2.4.3.3 and 4.2.5.5.3.

Start Date	Due Date	Frequency	Task	Responsible Party
February 2017	February 2018	One Time	Develop SOP for evaluating and documenting implementation of LID approach for each project. See 4.2.1.6. 4.2.5.3.3, & 4.2.5.5.3. for details.	Engineering Division

4.2.5.3.3 Retrofit of Existing Storm Infrastructure

The Permittee must develop a plan to retrofit existing developed sites that are adversely impacting water quality. The retrofit plan must be developed to emphasize controls that infiltrate, evapotranspiration, or harvest and use storm water discharges. The plan must include a ranking of control measures to determine those best suited for retrofitting as well as those that could later be considered for retrofitting. The Permittee must include the following when developing the criteria for the retrofit plan:

- Proximity to waterbody
- Status of waterbody to improve impaired waterbodies and protect unimpaired waterbodies
- Hydrologic condition of the receiving waterbody
- Proximity to sensitive ecosystem or protected area
- Any upcoming sites that could be further enhanced by retrofitting storm water controls
- Volume of Storm Water discharge

The MS4 general permit for Salem requires the retrofitting of existing unmanaged and/or inadequately managed stormwater runoff in impaired waters. While new development is required to manage stormwater on-site, older developments may have been constructed before stormwater management was required or modern criteria were established. Retrofits include new installations or upgrades to existing Best Management Practices (BMPs) in developed areas where there is a lack of adequate stormwater treatment. Stormwater retrofit goals may include, among other things, the correction of prior design or performance deficiencies, flood mitigation, disconnecting impervious areas, improving recharge and infiltration performance, addressing pollutants of concern, demonstrating new technologies, and supporting stream restoration activities.
Starting in the third year of the program (2016), the City will begin the process of mapping, documenting, and inspecting existing BMPs within the City. As the mapping develops priority sites will be identified (using the criteria above) and added to the routine inspection schedule. Potential improvements to this system will be revaluated in 2018.

Existing sites which are found to be contributing to the depredation of water quality the Engineering Division will develop a plan, on a case by case basis to retrofit existing developed sites to minimize impacts. The retrofit plan will be developed to emphasize controls that infiltrate, evapotranspire, or harvest and use storm water discharges.

Salem City has ranked the following City owned and operated sites in order of the highest priority to the lowest using the six criteria listed above and (requirements to the Small MS4 UPDES Permit 4.2.6.9

Start Date	Due Date	Frequency	Task	Responsible Party
January 2016	NA	Quarterly	Develop map of existing post construction BMPs and identify priority sites	GIS Administrator
June 2018	July 2018	One Time	Identify existing city owned facilities that require modification	Engineering Division

Fiscal Year	Measurable Goal Action Summary:	Document Number of Retrofit Rankings
7/2020-6/2021	**Salem Pond:** For the fiscal year of 7/2020-6/2021 Salem City has budgeted for the purchases and installation of sand/silt traps before the 9 outfalls that discharge directly into Salem Pond. The sand/silt trap will catch sediment and debris collected off of the hard surfaces before being discharged into Salem Pond during a rain event or snow melt/runoff. For the outlet leaving the sand/silt traps, the discharge pipe will be screened and the discharge area will have 4" minus rock or other type of rip rap to armer against any erosion that might otherwise occur along the ponds banks. After installation, the sand/silt traps will be put on a cleaning schedule and maintained by Salem City's Public Works Dept.	
7/2021-6/2022	**Parks Department Facility:** Beer Creek borders the south and west sides of the Parks Dept Facility building and the hard surface areas are graded to drain into Beer Creek which is a direct contributor to Utah Lake. Salem is proposing to have LID (Low Impact Development) installed and operational in the 7/2021-6/2022 fiscal year. The LID's that would be put in between Beer Creek and The Parks building consist of a: a) Vegetated Filter Strips to minimize flow velocities and filter sediment and associated nutrients and other pollutants from sheet flow runoff from impervious surfaces b) Bioswales can be effectively used to initially treat and convey runoff to bioretention areas or infiltration structures c) A sand/silt separator to catch water from the hard surface between the two Parks buildings then outfall into beer Creek with rip rap and a screen at the outlet. This is pending if regrading and design of hard surface area can't fully utilize plans A and B d) Along Beer Creek on the south side of main the Parks building, curbing or a high berm will be installed to prevent runoff or tracking from entering Beer Creek and channeling water to the treatment options, also prevent any bank sluffing or erosion.	
7/2022-6/2023	**Bridlewood Pond:** Besides a natural spring, the storm water that is collected on main street from 400 N to approximately 700 N flows into the private pond of Bridlewood Country Estates then outfalls onto the adjoining Christensen property to the West that turns into a natural Vegetated filter of agricultural land.	

	In order to treat the majority of storm water and remove as much sediment as possible before the out falls, we plan to install sand/silt separators before the two outfalls located at 485 N Main St and 22 W 400 N. The location of separators would be placed into Salem's PUE along Main St to intercept storm water to be the most effective for sediment removal. The discharge pipe will be screened and the discharge area will have 4" minus rock or other type of rip rap to armer against erosion that might otherwise occur along the pond's banks. Salem is proposing to have separators installed and operational in the 7/2022-6/2023 fiscal year.

Retrofitting Salem's Existing Storm Water BMP's (Better Management Practices).

Retrofitting is a common approach where an existing BMP is either:

a) Converted into a different BMP that employs more effective treatment

Mechanism

b) Enhanced by increasing its treatment volume and/or increasing its hydraulic retention time

c) Restored to renew its performance through major sediment cleanouts, vegetation

Salem City will prioritize and add to the retrofit sites of the storm water capital facilities plan so they no longer adversely impact water quality.

4.2.5.3.4 Hydrological Methods for Determining Storm Water

Each Permittee shall develop and define specific hydrologic method or methods for calculating runoff volumes and flow rates to ensure consistent sizing of structural BMPs in their jurisdiction and to facilitate plan review. Within 180 days from the effective date of this Permit, new development or redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale must manage rainfall on-site, and prevent the off-site discharge of the precipitation from all rainfall events less than or equal to the 90th percentile rainfall event. This objective must be accomplished by the use of practices that are designed, constructed, and maintained to infiltrate, evapotranspire and/or harvest and reuse rainwater. The 90th percentile rainfall event is the event whose precipitation total is greater than or equal to 90 percent of all storm events over a given period of record. If meeting this retention standard is technically infeasible, a rational shall be provided on a case by case basis for the use of alternative design criteria. The project must document and quantify that infiltration, evapotranspiration and rainwater harvesting have been used to the maximum extend technically feasible and that full employment of these control are infeasible due to site constraints.

The storm drainage criteria and design guidelines as specified in Part 4.2.5.4 apply to all storm drainage plans in Salem City. The City Engineer will review the plans and has the authority to modify the criteria and guidelines to meet changing or unusual needs or conditions. By August 26, 2016, the Engineering Division will revise the guidelines to meet the above criteria. Project documentation will include quantify that infiltration, evapotranspiration and rainwater harvesting have been used to the maximum extend technically feasible and rational shall be provided if full employment of these control are infeasible due to site constraints.

Start Date	Due Date	Frequency	Task	Responsible Party

June 2016	September 2016	One-Time	Modify design guidelines for calculating runoff volumes to comply with Part 4.2.5.3.4.	Engineering Division

4.2.5.4. Site Plan Review of Post-Construction Storm Water Controls

All Permittees shall adopt and implement procedures for site plan review which evaluate water quality impacts. The procedures shall apply through the life of the project from conceptual design to project closeout. Prior to construction, Permittees shall:

The Engineering Division has procedures in place for reviewing the proposed post-construction BMPs. Prior to site plan approval; the Engineering Division will review the plans and specify any preferred design.

4.2.5.4.1 Post-Construction Plan Review

Review post-construction plans for, at a minimum, all new development and redevelopment sites that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, to ensure that the plans include long-term storm water management measures that meet the requirements of this minimum control measure.

The Engineering Division procedures establish that a SWPPP will be prepared and submitted to the City for review before the contractor can obtain the approval for construction over an acre or part of a larger common plan of development. The plan must include possible sources of storm water pollutants and Selection of Best Management Practices (BMPs) to reduce or eliminate pollutant impacts. The SWPPPs will be reviewed and discussed with the contractor at the preconstruction meeting as described in the permit. The SWPPP pre-construction review meeting will include a review of the site design, the planned operations at the construction site, planned BMPs during the construction phase, and the planned post-construction BMPs to manage runoff created after development. Preconstruction meetings and contractor education pamphlets are described in more detail in Part 4.2.1.4 and 4.2.4.3.

4.2.5.4.2 Preferred Design Specifications

Permittees shall provide developers and contractors with preferred design specifications to more effectively treat storm water for different development such as industrial parks, commercial strip malls, retail gasoline outlets, restaurants, parking lots, automotive service facilities, street and road construction, and projects located in, adjacent to, or discharging to environmentally sensitive areas.

The Engineering Division will review and revise procedures as stated in 4.2.5.2. The inclusion of preferred design criteria for post construction BMP controls to more effectively treat storm water discharges will be evaluated.

As part of the site plan design review process the Engineering Division will provide developers and contractors with preferred design criteria to more effectively treat storm water for different development types though updates to the design criteria.

4.2.5.4.3 Storm Water Documentation

Permittees shall keep a representative copy of information that is provided to design professionals; and if information is distributed to a large number of design professionals at once, the dates of the mailings and lists of recipients.

The Engineering Division will keep a representative copy of information that is provided to design professionals. The City does not plan on mailing information to a large number of design professionals; instead, design professionals will be directed to the City website below where they can download pertinent information once it becomes available. Training seminars may be offered through the Utah County Storm Water Coalition; if so, attendance and material presented will be documented.

http://www.salemcity.org/building-department.htm

4.2.5.5. SOPs for Inspections and Enforcement of Post-construction Storm Water Control Measures

All Permittees shall adopt and implement SOPs or similar type of documents for site inspection and enforcement of post-construction storm water control measures. These procedures must ensure adequate ongoing long-term operation and maintenance of approved storm water control measures.

The Engineering Division has adopted and implemented SOPs for site inspections and enforcement of post-construction storm water control measures.. These procedures will ensure adequate ongoing long-term operation and maintenance of approved private and City owned or operated storm water control measures. For SOP's refer to Appendices D-I in this SWMP manual.

4.2.5.5.1 SOPs for Inspections and Enforcement of Post-construction Storm Water Control Measures

The ordinance or other regulatory mechanism shall include provisions for and post-construction access for Permittees to inspect storm water control measures on private properties that discharge to the MS4 to ensure that adequate maintenance is being performed. The ordinance or other regulatory mechanism may, in lieu of requiring that the Permittee's staff inspect and maintain storm water controls on private property, instead require private property owner/operators or qualified third parties to conduct maintenance and provide annual certification that adequate maintenance has been performed and the structural controls are operating as designed to protect water quality. In this case, the Permittee must require a maintenance agreement addressing maintenance requirements for any control measures installed on site. The agreement must allow the Permittee to conduct oversight inspections of the storm water control measures and also account for transfer of responsibility in leases and/or deeds. The agreement must also allow the Permittee to perform necessary maintenance or corrective actions neglected by the property owner/operator, and bill or recoup costs from the property owner/operator as needed.

The Salem City Ordinance 1-2-060 for Right of Entry for Inspection states, "Whenever necessary to make an inspection to enforce any ordinance or resolution, or whenever there is a reasonable cause to believe there exists an ordinance or resolution violation in any building or upon the premises within the jurisdiction of this City, any authorized official of the City may, upon presentation of proper credentials, enter such building or premises at all reasonable times to inspect the same or to perform any duty imposed upon him/her by ordinance; provided, that except in emergency situations or when consent of the owner and/or occupant to the inspect ion has been otherwise obtained, he shall give the owner and/or occupant, if they can be located after reasonable effort, 24 hours written notice of the authorized official's intention to inspect. The note which is transmitted to the owner and/or occupant shall state that the property owner and/or occupant has the right to refuse entry and that in that event, inspection may be made only upon issuance of a search warrant by a duly authorized magistrate or judge."

As specified in Salem City Ordinance 1-2-080, when there is "No other penalty is prescribed, a violation of any provision or ordinance duly enacted by the City council shall be punished as a Class B misdemeanor." It also states that "Whenever the penalty prescribed for a violation of any ordinance is set forth as an infraction, a Class C Misdemeanor, a Class B Misdemeanor or a Class A Misdemeanor, the penalty attaching to such designation shall be the same as that set forth by Utah state law."

Specific fines for storm water violations will be included in ordinance revisions, noted in Part 2.3.3.1.

Year	Task	Responsible Party
12/23/2020	Updated and implemented Salem City Storm Water Management and Discharge Control Ordinance and Salem City Storm Water Maintenance Agreement 11/18/020	MS4 Coordinator or qualified designated employee

4.2.5.5.2 BMP inspections during installation

Permanent structural BMPs shall be inspected at least once during installation by qualified personnel. Upon completion, the Permittee must verify that long-term BMPs were constructed as designed.

The Engineering Division will inspect and document structural BMPs at least once during installation and upon completion by the Engineering Division Public Works Inspectors and/or SWPPP Inspector during routine construction SWPPP inspections as part of existing SOPs.

4.2.5.5.3 Inspection Report

Inspections and any necessary maintenance must be conducted annually by either the Permittee or through a maintenance agreement, the property owner/operator. On sites where the property owner/operator is conducting maintenance, the Permittee shall inspect those storm water control measures at least once every five years, or more frequently as determined by the Permittee to verify and ensure that adequate maintenance is being performed. The Permittee must document its findings in an inspection report which includes the following:

- Inspection date;
- Name and signature of inspector;
- Project location
- Current ownership information
- A description of the condition of the storm water control measure including the quality of: vegetation and soils; inlet and outlet channels and structures; catch basins; spillways; weirs, and other control structures; and sediment and debris accumulation in storage as well as in and around inlet and outlet structures;
- Specific maintenance issues or violations found that need to be corrected by the property owner or operator along with deadlines and re-inspection dates.

The Engineering Division will inspect and maintain structural BMPs owned or operated by the City annually in 2016 using the standard post-construction inspection SOP developed in 4.2.5.2. Facilities that are owned/operated by a private entity will also be inspected and maintained by the owner/operator as specified in the maintenance agreement with the City. The Engineering Division Inspector will inspect and document storm water controls at least **once every five years**, or as specified in the maintenance agreement.

Start Date	Due Date	Frequency	Task	Responsible Party
August 2015	January 2016	One Time	Develop post construction SOPs and forms	SWPPP Inspector
March 2016	NA	Quarterly	Inspect post construction BMPs	SWPPP Inspector

4.2.5.6. City Personnel Training

Permittees shall ensure that all staff involved in post-construction storm water management, planning and review, and inspections and enforcement receive adequate training on an annual basis. Training shall be provided or made available for staff in the fundamentals of long-term storm water management through the use of structural and non-structural control methods. The training records to be kept include dates, activities or course descriptions, and names and positions of staff in attendance. The Permittee shall ensure that all new hires are trained upon hire and before commencing storm water related duties and annually thereafter, at a minimum. Follow-up training shall be provided as needed to address changes in procedures, methods or staffing.

The Engineering Division will provide training for all staff involved in post-construction storm water management, planning, review, inspections and enforcement in accordance to Part 4.2.5.6. Training will include reviewing City Ordinances and Storm Water Drainage Plans. The training records will include the training date, course description, and names and positions of staff in attendance.

Training events are also described and documented in Part 4.2.1.5, 4.2.3.11, 4.2.4.5, and 4.2.6.9 of this document.

4.2.5.7. Inventory of Post Construction Structural BMPs

The Permittee must maintain an inventory of all post-construction structural storm water control measures installed and implemented at new development and redeveloped sites that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale. This inventory shall include both public and private sector sites located within the Permittee's service area.

The GIS Department in conjunction with the Engineering Division will start to maintain an inventory of all post-construction structural storm water control BMPs throughout the County. This inventory will include both public and private sites located within the County boundaries and service areas.

4.2.5.7.1. Post Construction Storm Water Inventory

Each entry to the inventory must include basic information on each project, such as project's name, owner's name and contact information, location, start/end date, etc. In addition, inventory entries must include the following for each project:

- Short description of each storm water control measure (type, number, design or performance specifications);
- Short description of maintenance requirements (frequency of required maintenance and inspections); and
- Inspection information (date, findings, follow up activities, prioritization of follow-up activities, compliance status).

The Post Construction Storm Water Inventory entry will include basic information such as:

- Project Name and Location
- Owner's name and contact information
- BMP description
    - Storm water control measure (type, number, design or performance specifications);
    - Maintenance requirements (frequency of inspections and maintenance)
- Installation date
- Inspection history

4.2.5.7.2. Updates to the Inventory

Based on inspections conducted pursuant to Part 4.2.5.5., the Permittee must update the inventory as appropriate where changes occur in property ownership or the specific control measures implemented at the site.

Salem City will update the long-term stormwater controls inventory through the following procedure.

1. All new long-term stormwater controls, public and private, will be inspected and GPS located during construction.
2. The online Salem City GIS map will be updated based on the new constructions.
3. At the end of each development/redevelopment, the City Stormwater Operations and Maintenance Supervisor will receive a report of the new controls, public and private.
4. If a long-term stormwater control changes from private to public, the City Stormwater Operations and Maintenance Supervisor will receive a report.

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Start Date	Due Date	Frequency	Task	Responsible Party
March 2021	NA	Monthly	Update and verify inventory for changes in property ownership or post construction control measures	GIS Administrator

4.2.6. Pollution Prevention and Good House Keeping for Municipal Operators

All Permittees shall implement a program for Permittee-owned or operated facilities, operations and structural storm water controls that includes standard operating procedures (SOPs), pollution prevention BMPs, storm water pollution prevention plans or similar type of documents and a training component that have the ultimate goal of preventing or reducing pollutant runoff of pollutants to the MS4 and Waters of the State.. All components of the program shall be included in the SWMP document and must identify the department (and where appropriate, the specific staff) responsible for performing each activity described in this section. The Permittee must develop an inventory of all such Permittee-owned or operated facilities. The Permittee must review this inventory annually and update as necessary. The minimum performance measures are:

This measure is intended to ensure a reduction in the amount and type of storm water pollutants by establishing routine activities in the operation and maintenance of municipal operations that affect storm water runoff. Setting particular guidelines for source controls and materials management is an important component to storm water quality management. The Program includes:

- Operation and Maintenance Program Description/Establishing SOPs
- Facilities Inventory
- High Priority Facilities and Activities
- Inspection of Facilities
- City Personnel Training

The Pollution Prevention and Good Housekeeping Program of this SWMP addresses routine activities in the operation and maintenance of City owned facilities, drainage systems, roadways, parks and open spaces, and other municipal operations to reduce pollutants entering the storm drain system.
Various City Departments and Divisions have prepared an operations and maintenance manual (O&M Manual) for the City owned facilities and City activities with standard operating procedures (SOPs) for the maintenance and proper operation of structural storm water controls along with a training component that has the ultimate goal of preventing or reducing pollutant runoff from the City owned facilities and operations. All of the components of the O&M program will be included in this document. It will identify the department and the staff responsible for performing each activity described in this section.

4.2.6.1. Inventory of City Owned or Operated Facilities

Permittees shall develop and keep current a written inventory of Permittee-owned or operated facilities and storm water controls that may include but is not limited to:

- Composting facilities
- Equipment storage and maintenance facilities
- Fuel farms
- Hazardous waste disposal facilities
- Hazardous waste handling and transfer facilities
- Incinerators
- Landfills
- Landscape maintenance on municipal property
- Materials storage yards
- Pesticide storage facilities
- Public buildings, including libraries, police stations, fire stations, municipal buildings, and similar Permittee-owned or operated buildings
- Public parking lots
- Public golf courses
- Public swimming pools
- Public works yards
- Recycling facilities
- Salt storage facilities

- Solid waste handling and transfer facilities
- Street repair and maintenance sites
- Vehicle storage and maintenance yards
- Permittee-owned and/or maintained structural storm water controls

The Engineering Division in conjunction with other City Divisions and Departments created an inventory of City owned facilities that can be viewed in the following section. This list will be reviewed annually and updated as necessary. The care and maintenance of each facility will be assigned to a specific Division or Department for its care and maintenance.

Facilities covered under the General UPDES Permit for Storm Water Discharges Associated with Industrial Activities will maintain a Storm Water Pollution Prevention Plan (SWPPP).

A map of City facilities will be continuously updated on the link below.
http://160.7.240.30/salem%20utilities/

Inventory of City Owned Facilities

Buildings

- Salem Government Offices 30 W 100 SOUTH SALEM UT 84653-3106
- Salem Court House 30 W 100 SOUTH SALEM UT 84653-3106
- Salem Police Department 30 W 100 SOUTH SALEM UT 84653-3106
- Salem Civic Bldg./Community Center 151 W 350 SOUTH SALEM UT 84653
- Salem Library 59 S MAIN SALEM UT 84653

Parks

- Salem Recreation Office 60 N 100 EAST SALEM UT 84653
- Downtown Ballpark 60 N 100 EAST SALEM UT 84653
- Heritage Park 300 W CENTER SALEM UT 84653
- Loafer View Rec Complex 600 E SALEM CANAL RD SALEM UT 84653
- Knoll Park 300 S 200 WEST SALEM UT 84653
- Riding Club/City Compost Site ARROWHEAD TRAIL ROAD SALEM UT 84653
- Soccer Park 1100 S 300 E SALEM UT 84653

Cemetery

- Salem City Cemetery 150 E 1000 SOUTH SALEM UT 84653

Power Plant

- Salem Public Works/Electric 681 W Arrowhead RdSALEM UT 84653

Waste Water

- Salem Waste Water Treatment Plant 1100 N 17500 WEST SALEM UT 84653
  - NPDES# 4952 (Regulated and Permitted under another State Agency)
  - UT0020249
  - http://iaspub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110010134194

Fire Department

- Salem Fire/Ambulance Station 30 W 100 SOUTH SALEM UT 84653-3106
-

Start Date	Due Date	Frequency	Task	Responsible Party
March 2014	NA	Annually	Develop / review SWPPP plans for city facilities listed in 4.2.6.1	Storm Water Coordinator
January 2015	NA	Annually	Review inventory of city owned facilities identify "high risk facilities" (4.2.6.3) List of exempt facilities 4.2.6.4.2	Storm Water Coordinator, GIS Administrator

4.2.6.2. Pollutant Discharge Potential Assessment

All Permittees shall assess the written inventory of Permittee-owned or operated facilities, operations and storm water controls identified in Part 4.2.6.1. for their potential to discharge to storm water the following typical urban pollutants: sediment, nutrients, metals, hydrocarbons (e.g., benzene, toluene, ethylbenzene and xylene), pesticides, chlorides, and trash. Other pollutants may be associated with, but not generated directly from, the municipally-owned or operated facilities, such as bacteria, chlorine, organic matter, etc. Therefore, the Permittee must determine additional pollutants associated with its facilities that could be found in storm water discharges. A description of the assessment process and findings must be included in the SWMP document.

The Engineering Division in conjunction with other City Departments and Divisions will assess the City owned facilities and operations annually for their potential to discharge to storm water systems the following typical urban pollutants annually. A description of the assessment process and findings will be included on each O&M Manual.

4.2.6.3. High Priority Facilities and Activities

Based on the assessment required in Part 4.2.6.2., the Permittee must identify as "high-priority" those facilities or operations that have a high potential to generate storm water pollutants. Among the factors that must be considered in giving a facility a high priority ranking is the amount of urban pollutants stored at the site, the identification of improperly stored materials, activities that must be performed outside (e.g., changing automotive fluids), proximity to waterbodies, poor housekeeping practices, and discharge of pollutant(s) of concern to impaired water(s).

The Engineering Division in conjunction with other City Divisions and Departments will identify facilities as "high priority" based on the pollutant discharge potential assessment of each facility or operations that have a high potential to generate storm water pollutants. The factors that will be considered in giving a facility a high priority ranking will be the amount of urban pollutants stored at the site, the identification of improperly stored materials, activities that must be performed outside, proximity to water bodies, poor housekeeping practices, and discharge of pollutants of concern to impaired waters by January 1st, 2016.

Public Works Shop	Parks Dept. Shop	Civic Center	RV Dump	Knoll Park

Start Date	Frequency	Task	Responsible Party
September 2020	Monthly	Inspect, document and report High Priority Facilities for potential pollutants	Storm Water Coordinator

4.2.6.4. High Priority Facilities SWPPPs

Within 180 days from the effective date of this Permit, the Permittee shall develop and implement a Storm Water Pollution Prevention Plan (SWPPP) or similar type document for each "high priority" Permittee-owned or operated facility. The SWPPP shall identify potential sources of pollution that may reasonably be expected to affect the quality of storm water discharges associated with activity from the facility. The SWPPP shall describe and ensure the

implementation of standard operating procedures (SOPs) that are to be used to reduce the pollutants in storm water discharges associated with activity at the facility and to ensure compliance with the terms and conditions of this Permit. This document shall be tailored and retained at all "high priority" facility locations. The SWPPP shall include a site map showing the following information:

- Property boundaries;
- Buildings and impervious surfaces;
- Directions of storm water flow (use arrows);
- Location of structural control measures;
- Location and name of the nearest defined drainage(s) which could receive runoff from the facility, whether it contains water or not;
- Locations of all storm water conveyances including ditches, pipes, basins, inlets, and swales;
    - 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;
    - Materials storage or disposal areas;
- Locations where significant spills or leaks have occurred;
- Locations of all visual storm water monitoring points;
- Locations of storm water inlets and outfalls, with a unique identification code for each outfall and an approximate outline of the areas draining to each outfall;
- Locations of all non-storm water discharges;
- Locations of sources of run-on to your site from adjacent property.

Each City Department or Division overseeing a "high priority" Permittee-owned or operated will develop and implement a Storm Water Pollution Prevention Plan (SWPPP) or O&M Manual tailored for and to be retained at each "high priority" facility location. The SWPPP or O&M Manual will include a site map in compliance with Part 4.2.6.4. of the permit and shall identify potential sources of pollution that may reasonably be expected to affect the quality of storm water discharges associated with activity from the facility. The SWPPP will include the SOPs and BMPs that are currently in place to manage storm water runoff in accordance with Part 4.2.6.6.
Once existing practices are updated and documented, the sites will be inspected in compliance with Part 4.2.6.5. of this permit to ensure implementation of these documents to be used to reduce the pollutants in storm water discharge in compliance with the terms and conditions of this Permit.

Start Date	Due Date	Frequency	Task	Responsible Party
June 2016	February 2018	One Time	Develop and implement or update a SWPPP or O&M manual for each "high priority" city-owned or operated facility identified in Part 4.2.6.3. and in compliance with Part 4.2.6.4.	Storm Water Coordinator, GIS Administrator, Engineering Division
November 2020	February 2021	Review Annually	Develop and implement or update a SWPPP for each "high priority" city-owned or operated facility identified in Part 4.2.6.3. and in compliance with Part 4.2.6.4.	Storm Water Coordinator, Engineering Division

4.2.6.5. Inspection of City Owned or Operated Facilities

The following inspections shall be conducted at "high priority" Permittee-owned or operated facilities:

Each" high-priority" city-owned or operated facility will undergo weekly visual inspections, quarterly comprehensive inspections, and quarterly visual observations of storm water discharges at its facility.

Start Date	Due Date	Frequency	Task	Responsible Party
May 2014	NA	Annually	Develop / review inspection check list for each high priority facility	Engineering Division
September 2016	NA	Weekly	Complete weekly visual inspection of high priority sites	Department or Division operating facility
September 2016	NA	Quarterly	Complete quarterly visual observation of storm water discharges of high priority sites	Storm Water Inspector
September 2014	NA	Quarterly	Complete quarterly comprehensive inspection of high priority sites	Storm Water Inspector
January 2021	NA	Weekly	Complete weekly visual inspection of high priority sites	Storm Water Coordinator

4.2.6.5.1 Weekly Visual Inspections

The Permittee must perform weekly visual inspections of "high priority" facilities in accordance with the developed SOPs to minimize the potential for pollutant discharge. The Permittee must look for evidence of spills and immediately clean them up to prevent contact with precipitation or runoff. The weekly inspections must be tracked in a log for every facility and records kept with the SWMP document. The inspection log should also include any identified deficiencies and the corrective actions taken to fix the deficiencies.

Commented [DC1]: This and the highlighted one below contradict each other

Each Department or Division will perform weekly visual inspections of their "high priority" facilities or areas of the facilities that each department is responsible for in accordance with their SWPPP or O&M Manual to minimize the potential for pollutant discharge. Any spill discovered will be documented and cleaned up immediately to prevent contact with precipitation or runoff.

The weekly inspections will be tracked ONLY IF ACTION ITEMS ARE REQUIRED in a log by each Department or Division and records kept in their SWPPP or O&M Manual reporting section. The inspection log will include the date of an identified deficiency and the date corrective actions were taken to remedy the deficiency. Copies of these logs will be loaded annually to an electronic file for each department.

4.2.6.5.2 Quarterly Comprehensive Inspections

At least once per quarter, a comprehensive inspection of "high priority" facilities, including all storm water controls, must be performed, with specific attention paid to waste storage areas, dumpsters, vehicle and equipment maintenance/fueling areas, material handling areas, and similar pollutant-generating areas. The quarterly inspection results must be documented and records kept with the SWMP document. This inspection must be done in accordance with the developed SOPs. An inspection report must also include any identified deficiencies and the corrective actions taken to remedy the deficiencies.

Each Department or Division will perform, at least once per quarter, a comprehensive inspection of the "high priority" facilities identified. During the "high priority" facility inspections, specific attention will be given to:

- Waste storage areas
- Dumpsters
- Vehicle and equipment maintenance areas
- Fueling areas
- Material handling areas

- Pollutant-generating areas

These quarterly inspections will be documented by sending copies to the tracking software and records kept with the SWPPP or O&M Manual and done in accordance to the SWPPP or O&M Manual SOPs. The report will include identified deficiencies and the corrective actions taken to remedy the deficiencies.

Year	Measurable Goal Action Summary:	The Engineering Division will make sure that all of the inspections are being performed and data gathered in the correct electronic files. Document dates of department file review.
2020	Starting 3/2020-9/2020 monthly inspections on all City owned facilities have been performed then cut back to quarterly starting the last quarter of 2020	
2021		

4.2.6.6.3 Quarterly Visual Observation of Storm Water Discharges

At least once per quarter, the Permittee must visually observe the quality of the storm water discharges from the "high priority" facilities (unless climate conditions preclude doing so, in which case the Permittee must attempt to evaluate the discharges four times during the wet season). Any observed problems (e.g., color, foam, sheen, turbidity) that can be associated with pollutant sources or controls must be remedied to prevent discharge to the storm drain system. Visual observations must be documented and records kept with SWMP document. This inspection must be done in accordance with the developed SOPs. The inspection report must also include any identified deficiencies and corrective actions taken to remedy the deficiencies.

The Engineering Division SWPPP Inspector will visually observe the quality of storm water discharges from "high priority" facilities. Any observed problems such as color, foam, sheen, or turbidity that can be associated with pollutant sources or controls will be remedied to prevent discharge to the storm drain system. Remedies that will require modification to structural controls will be presented to the Public Works Department for approval where temporary remedies will be implemented during that period of time. Visual observations will be documented and records kept with the SWMP document.

Start Date	Due Date	Frequency	Task	Responsible Party
September 2014	NA	Quarterly	Wet weather inspection of runoff from high priority sites	SWPPP Inspector

Year	Measurable Goal Action Summary:	Document number of inspections conducted
2020	New SOP's added: IDDE Illicit Discharge Observation, IDDE Tracing Illicit Discharges, IDDE Removing Illicit Discharges	
2021		

4.2.6.6. Standard Operating Procedures (SOPs) by Facility Type and/ or Activity

SOPs shall be developed and implemented for the following types of facilities and/or activities listed below:

4.2.6.6.1. Buildings and Facilities

SOPs shall address, but is not limited to: Permittee-owned or operated offices, police and fire stations, pools, parking garages, and other Permittee-owned or operated buildings or utilities. The SOPs must address the use, storage and disposal of chemicals and ensure through employee training, that those responsible for handling these products understand and implement the SOPs. All Permittee-owned or operated facilities must develop and ensure that spill prevention plans are in place, if applicable, and coordinate with the local fire department as necessary. The SOPs must address dumpsters and other waste management which includes, but is not limited to, cleaning, washing, painting and other maintenance activities. The Permittee must include a description of schedules and SOPs for sweeping parking lots and keeping the area surrounding the facilities clean to minimize runoff of pollutants. All Permittees must develop an inventory of all floor drains inside all Permittee-owned or operated buildings. The inventory must be kept current. The Permittee must ensure that all floor drains discharge to appropriate locations.

. Each Department or Division that has an impact on storm water discharging to the municipal separate storm sewer system (MS4) including City owned or operated offices, police and fire stations, swimming pools, parking lots, etc. will create or update their SWPPPs or O&M Manuals and SOPs to include the following items:

- Address the use, storage and disposal of chemicals and ensure, through employee training, that those responsible for handling these products understand and implement SOPs
- All City owned or operated facilities will ensure that spill prevention plans are in place
- The SOPs will address dumpsters and other waste management which includes, but is not limited to cleaning, washing, painting and other maintenance activities
- The O&M program will include schedules and SOPs for sweeping parking lots and keeping the area surrounding the facilities clean to minimize runoff of pollutants
- The City Departments and Divisions will develop an inventory, including a map, of all storm drains located on the property of all the City owned or operated buildings and facilities in their care
    - Each City Division and Department must ensure that only storm water is allowed into these drains and that the appropriate BMPs are in place to minimize pollutants from entering the MS4

Start Date	Due Date	Frequency	Task	Responsible Party
April 2014	NA	Quarterly	Document and Review one ongoing BMP/SOP for city buildings and facilities (offices, police and fire stations, swimming pool, parking lots, etc.) and one general BMP/SOP	Storm Water Coordinator

Year	Measurable Goal Action Summary:	Document Changes in Operating Procedures
2020	New SOP's added: Dumpster/Garbage Storage	
2021		

4.2.6.6.2. Material Storage Areas, Heavy Equipment Storage Areas and Maintenance Areas

Permittees shall develop and implement SOPs to protect water quality at each of these facilities owned or operated by the Permittee.

The City will develop and implement SOPs to protect water quality at each material storage area, heavy equipment storage area and maintenance area owned or operated by the City.

Start Date	Due Date	Frequency	Task	Responsible Party
May 2014	2016	Annually	Update list of facilities not covered under permit and document the controlling regulations for each facility	Engineering Division
April 2014	NA	Quarterly	Document and Review one ongoing BMP/SOP for material storage areas, heavy equipment storage areas, and maintenance areas and one general BMP/SOP	Storm Water Coordinator
August 2020		Annually	Update Sop's and train Staff to address changes in procedures	

Year	Measurable Goal Action Summary:	Document Additions or Changes in Operating Procedures
2020	New SOP's added: Vehicle and Equipment Storage, Vehicle Maintenance and Repair and Vehicle Fueling, Dumpster/Garbage Storage	
2021		

4.2.6.6.3. Parks and Open Space

SOPs shall address, but are not limited to: the proper application, storage, and disposal of fertilizer, pesticides, and herbicides including minimizing the use of these products and using only in accordance with manufacturer's instructions; sediment and erosion control; evaluation of lawn maintenance and landscaping activities to ensure practices are protective of water quality such as, proper disposal of lawn clippings and vegetation, and use of alternative landscaping materials such as drought tolerant plants. The SOPs must address the management of trash containers at parks and other open spaces which include scheduled cleanings and establishing a sufficient number of containers, and for placing signage in areas concerning the proper disposal of pet wastes. The SOPs must also address the proper cleaning of maintenance equipment, building exterior, trash containers and the disposal of the associated waste and wastewater. Permittees shall implement park and open space maintenance pollution prevention/good housekeeping practices at all park areas, and other open spaces owned or operated by the Permittee.

The Parks Division will update their SWPPP or O&M Manual SOPs to address:

- Proper application, storage, and disposal of fertilizers, pesticides, and herbicides proper including minimizing the use of these products and using only in accordance with manufacturers instruction
- Sediment and erosion control
- Lawn maintenance and landscaping activities that evaluate practices to ensure protection of water quality such as, proper disposal of lawn clippings and vegetation, and use alternative landscaping materials such as drought tolerant plants
- Management of trash containers at parks and other open spaces that include scheduled garbage pickup, number of containers, and signage in areas concerning proper disposal of pet wastes
- Cleaning of maintenance equipment, building exterior, trash containers and the disposal of the associated waste water

The Parks Division will implement pollution prevention and good housekeeping practices at their facilities through the implementation of these BMPs.

Start Date	Due Date	Frequency	Task	Responsible Party
April 2014	NA	Quarterly	Document and Review one ongoing BMP/SOP for the park's division and golf course and one general BMP/SOP	Storm Water Coordinator

Year	Measurable Goal Action Summary:	Document Changes in Operating Procedures
2020	SOP's added: Open Space Management, Mowing and Trimming, Dumpster/Garbage Storage	
2021		

4.2.6.6.4. Vehicle and Equipment

SOPs shall address, but are not limited to: SOPs that address vehicle maintenance and repair activities that occur on Permittee-owned or operated vehicles. BMPs should include using drip pans and absorbents under or around leaky vehicles and equipment or storing indoors where feasible. Fueling areas for Permittee-owned or operated vehicles shall be evaluated. If possible, place fueling areas under cover in order to minimize exposure. The O & M program shall include SOPs to ensure that vehicle wash waters are not discharged to the MS4 or Waters of the State. This Permit strictly prohibits such discharges.

All Divisions and Departments will update their SWPPP or O&M Manual SOPs to address vehicle maintenance and repair needs. Specifically, the Parks Division that maintains vehicles at their facilities will include BMPs such as drip pans and absorbents under or around leaky vehicles and equipment or storing indoors where feasible.

The Fueling area operated by the City is constantly monitored and evaluated according to the requirements of their MSGP SWPPP. Vehicle wash procedures will be addressed by all Departments and Divisions to ensure that wash waters are not discharged to the MS4 or Waters of the State.

Start Date	Due Date	Frequency	Task	Responsible Party
April 2014	NA	Quarterly	Document and Review one ongoing BMP/SOP for all divisions and departments addressing vehicle maintenance and repairs (specifically parks department) and one general BMP/SOP	Storm Water Coordinator

Year	Measurable Goal Action Summary:	Document Changes in Operating Procedures
2020	New SOP's added: Vehicle Fueling, Vehicle Maintenance and Repair, Vehicle Washing and Storage, Dumpster/Garbage Storage	
2021		

4.2.6.6.5. Roads, Highways, and Parking Lots

SOPS shall address, but are not limited to: SOPs and schedule for sweeping streets and Permittee-owned or operated parking lots and any other BMPs designed to reduce road and parking lot debris and other pollutants from entering the MS4; road and parking lot maintenance, including pothole repair, pavement marking, sealing and repaving; cold weather operations, including plowing, sanding, and application of deicing compounds and maintenance of snow disposal areas; right-of-way maintenance, including mowing, herbicide and pesticide application; and municipally-sponsored events such as large outdoor festivals, parades or street fairs. The Permittee must ensure that areas used for snow disposal will not result in discharges to receiving waters.

The Engineering Division SWPPP or O&M Manual will be reviewed annually and updated, if necessary, to describe in writing standard operating procedures for:

- Sweeping streets and other BMPs designed to reduce road debris and other pollutants from entering the MS4 including schedules disposal methods of waste removed
- Pothole repairs
- Pavement marking
- Sealing and repaving
- Plowing, application of deicing compounds, and maintenance of snow disposal areas
- Right of way maintenance including mowing and herbicide application
- Municipal sponsored events (parade and street fair clean up)

The Parks Division SWPPPs or O&M Manuals will be updated to describe in writing standard operating procedures for:

- Sweeping of parking lots and any other BMPs designed to reduce parking lot debris and other pollutants from entering the MS4
- Snow removal and application of deicing compounds

Start Date	Due Date	Frequency	Task	Responsible Party
April 2014	NA	Quarterly	Document or Review one ongoing BMP/SOP for material storage areas, heavy equipment storage areas, and maintenance areas and one general BMP/SOP	Engineering Division

Year	Measurable Goal Action Summary:	Document Changes in Operating Procedures
2016		
2017		
2018		
2019		

2020	New SOP's added: Street Sweeping and Parking Lots, Parking Lot Maintenance, Dumpster/Garbage Storage, Snow removal and De-icing
2021	

4.2.6.6.6. Storm Water Collection and Conveyance System

SOPs shall address, but are not limited to: SOPs and schedule for the regular inspection, cleaning, and repair of catch basins, storm water conveyance pipes, ditches and irrigation canals, culverts, structural storm water controls, and structural runoff treatment and/or flow control facilities. Permittees shall implement catch basin cleaning, storm water system maintenance, scheduled structural BMP inspections and maintenance, and pollution prevention/good housekeeping practices. Permittees shall prioritize storm sewer system maintenance, with the highest priority areas being maintained at the greatest frequency. Priorities should be driven by water quality concerns, the condition of the receiving water, the amount and type of material that typically accumulates in an area, or other location-specific factors. All Permittee-owned or operated storm water structural BMPs including but not limited to, swales, retention/detention basins or other structures must be inspected annually to ensure that they are properly maintained to reduce the discharge of pollutants into receiving waters. Permittees shall develop, ensure, and document proper disposal methods of all waste and wastewater removed from the storm water conveyance system. These disposal methods apply to, but are not limited to, street sweeping and catch basin cleaning. Materials removed from the MS4 should be dewatered in a contained impervious area and discharged to the local sanitary sewer (with approval of local authorities) where feasible. The solid material shall be stored and disposed of properly to avoid discharge to Waters of the State during a storm event. Any other treatment and disposal measures must be reviewed and approved by the Division. Some materials removed from storm drains and open channels may require special handling and disposal, and may not be authorized to be disposed of in a landfill.

The Engineering Division SWPPP or O&M Manual SOPs will be updated to describe standard operating procedures and schedules for the inspection, cleaning, maintenance and repair of:

- Detention/retention basins
- Catch basins
- Storm water conveyance pipes
- Ditches and irrigation canals
- Culverts
- Structural storm water control
- Structural runoff treatment
- Flow control facilities

The Division will create a storm sewer system maintenance map and schedule to document inspections. This data will be used to designate priority areas that will be maintained more frequently. Also, the SWPPP or O&M Manual SOPs will include proper documentation procedures and disposal methods of all waste and waste water removed from the storm water conveyance system.

Start Date	Due Date	Frequency	Task	Responsible Party
April 2014	NA	Quarterly	Document and Review one ongoing BMP/SOP for the storm water and conveyance system (catch basins, ditches and irrigation canals, culverts, flow control facilities, etc.) and one general BMP/SOP	Engineering Division

Year	Measurable Goal Action Summary:	The Engineering Division will meet with each department quarterly to help create, review or make changes to the O&M Manual SOPs and BMPs		
2016				
2017				
2018				
2019				
2020				
2021				

4.2.6.6.7. Other Facilities and Operations

Permittees shall identify any facilities and operations not listed above that would reasonably be expected to discharge contaminated runoff, and develop, implement, and document the appropriate BMPs and SWPPP to protect water quality from discharges from these sites.

Each Department or Division will identify any facility or operations that could reasonably be expected to discharge to the municipal separate storm sewer system (MS4) and update their SWPPP or O&M Manual SOPs to include facilities and operations not listed above that would reasonably be expected to discharge contaminated runoff.

Start Date	Due Date	Frequency	Task	Responsible Party
April 2014	NA	Quarterly	Document and Review one ongoing BMP/SOP by each department for other facilities and operations that could discharge to the MS4 and one general BMP/SOP	Storm Water Coordinator

Year	Measurable Goal Action Summary:	The Engineering Division will meet with each department annually to help create, review or make changes to the O&M Manual SOPs and BMPs		
2016				
2017				
2018				
2019				

2020				
2021				

4.2.6.7. Third Party Maintenance of Storm Water Facilities

If a Permittee contracts with a third-party to conduct municipal maintenance or allows private developments to conduct their own maintenance, the contractor shall be held to the same standards as the Permittee. This expectation must be defined in contracts between the Permittee and its contractors or the contractors of private developments. The Permittee shall be responsible for ensuring, through contractually-required documentation or periodic site visits that contractors are using appropriate storm water controls and following the standard operating procedures, storm water control measures, and good housekeeping practices of the Permittee.

The Engineering Division will allow private developments to be able to conduct their own maintenance and inspections of storm water BMPs and will be held to the same standards as City Personnel. These expectations will be defined through a proposed City Ordinance to insure through contractually required documentation or periodic site visits, that the owner of such storm water BMPs is following SOPs to maintain such controls. This permit requirement is also covered in Part 4.2.5 of this plan.

4.2.6.8. Flood Management Controls Design

The Permittee must develop and implement a process to assess the water quality impacts in the design of all new flood management structural controls that are associated with the Permittee or that discharge to the MS4. This process must include consideration of controls that can be used to minimize the impacts to site water quality and hydrology while still meeting project objectives. A description of this process must be included in the SWMP document

The Engineering Division will develop and implement a process to assess the water quality impacts in the design of all new flood management structural controls that are associated with discharges to the MS4. The process will include consideration of controls that can be used to minimize impacts to site water quality and hydrology while still meeting project objectives.
Description of this process is as follows:

- Developer submits proposed flood management structural control method
- Developer submits technical literature from manufacturer of selected pre-treatment control listing the pollutant removal capabilities of said pre-treatment control
- City Engineer reviews submitted technical literature and determines if the selected control's pollutant removal capabilities are acceptable

4.2.6.8.1. Existing Flood Management

Existing flood management structural controls must be assessed to determine whether changes or additions should be made to improve water quality. A description of this process and determinations should be included in the SWMP document.

Existing flood management structural controls will be assessed by the Engineering Division to determine whether changes or additions should be made to improve water quality. General standards pertaining to flooding are addressed in Title 14 of Salem City Ordinances. The City presently has several detention basins and associated storm infrastructure that were constructed with individual subdivisions or commercial site plans to address flood management.

The existing flood management structural controls will be assessed following the process listed below:

- Routine site visits (as described in Part 4.2.5.5.3)

- Condition assessment (as described in Part 4.2.5.5.3) where concerns to City Engineer's attention and Engineering Department determines proper corrective action

4.2.6.9. Public Construction Projects

Public construction projects shall comply with the requirements applied to private projects. All construction projects disturbing greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, owned or operated by the Permittee are required to be covered under the General UPDES Permit for Storm Water Discharges Associated with Construction Activities.

Public construction projects shall comply with the requirements applied to private projects. All construction projects disturbing greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, owned or operated by the Permittee are required to be covered under the General UPDES Permit for Storm Water Discharges Associated with Construction Activities.

4.2.6.10. City Personnel Training

The Permittees shall ensure that all employees, contracted staff, and other responsible entities that have primary construction, operation, or maintenance job functions that are likely to impact storm water quality receive annual training.. The Permittee shall identify target employees to participate in the training sessions and ensure that all such employees receive training upon being hired and annually thereafter, at a minimum. Training shall address the importance of protecting water quality, the requirements of this Permit, operation and maintenance requirements, inspection procedures, ways to perform their job activities to prevent or minimize impacts to water quality, SOPs and SWPPPs for the various Permittee-owned or operated facilities and procedures for reporting water quality concerns, including potential illicit discharges. Training records must be kept and shall include dates, activities or course descriptions, and names and positions of staff in attendance. Follow-up training shall be provided as needed to address changes in procedures, methods or staffing.

More specific information pertaining to employee training can be found in 4.2.1 of this document.

4.3. Sharing Responsibility

4.3.1.
Implementation of one or more of the six minimum measures may be shared with another entity, or the entity may fully take over the measure. A Permittee may rely on another entity only if:

4.3.2.
The other entity, in fact, implements the control measure;

4.3.3.
The particular control measure, or component of that measure, is at least as stringent as the corresponding Permit requirement; and

4.3.4.
The other entity agrees to implement the control measure through a written agreement. This obligation must be maintained as part of the description given in the Permittee's SWMP document. If the other entity agrees to report on the minimum control measure, the Permittee must supply the other entity with the reporting requirements contained in Part 5.5. of this Permit. If the other entity fails to implement the control measure, then the Permittee remains liable for any discharges due to that failure to implement.

4.3.5.
The Permittee conducts training of the responsible entity on the Permit requirements and applicable standard operating procedures.

4.4. Reviewing and Updating Storm Water Management Programs

4.4.1. Storm Water Management Program Review

Storm Water Management Program Review: All Permittees must conduct, at a minimum, an annual review of the SWMP document in conjunction with preparation of the annual report required in Part 5.5.

4.4.2. Storm Water Management Program Update

Storm Water Management Program Update: A Permittee may change the SWMP document during the life of the Permit in accordance with the following procedures:

4.4.2.1.

Changes adding (but not subtracting or replacing) components, controls, or requirements to the SWMP document may be made at any time upon written notification to the Division.

4.4.2.2.

Changes replacing an ineffective or unfeasible BMP specifically identified in the SWMP document with an alternate BMP may be adopted at any time, provided the analysis is clearly outlined and subsequently approved by the Division. An analysis shall include:

4.4.2.2.1

An explanation of why the BMP is ineffective or infeasible,

4.4.2.2.2

Expectations or report on the effectiveness of the replacement BMP, and

4.4.2.2.3

An analysis of why the replacement BMP is expected to achieve the goals of the BMP to be replaced, or has achieved those goals.

4.4.3.

Change requests or notifications must be made in writing and signed in accordance with Part 6.8.

4.4.4.

Change requests or notifications will receive confirmation and approval or denial in writing from the Division.

4.4.5.

Storm Water Management Program Updates required by the Division: The Division may require changes to the SWMP as needed to:

4.4.5.1.

Address impacts on receiving water quality caused, or contributed to, by discharges from the MS4;

4.4.5.2.

Include more stringent requirements necessary to comply with new Federal regulatory requirements; or

4.4.5.3.

Include such other conditions deemed necessary by the Division to comply with the goals and requirements of the Clean Water Act.

5.0 Narrative Standard, Monitoring, Recordkeeping and Reporting

5.1. Narrative Standard

It shall be unlawful, and a violation of this Permit, for the Permittee to discharge or place any waste or other substance in such a way as will be or may become offensive such as unnatural deposits, floating debris, oil, scum or other nuisances such as color, odor or taste, or conditions which produce undesirable aquatic life or which produces objectionable tastes in edible aquatic organisms; or concentrations or combinations of substances which produce undesirable physiological responses in desirable resident fish, or other desirable aquatic life, or undesirable human health effects, as determined by bioassay or other tests performed in accordance with standard procedures

5.2. Analytical Monitoring

Permittees are not required to conduct analytical monitoring (see definition in Part 7.3) during the effective term of this Permit, with the following exceptions:

5.2.1.
Water quality sampling may be required for compliance with TMDLs, pursuant to Part 3.1. of this Permit.

5.2.2.
Sampling or testing may be required for characterizing illicit discharges pursuant to Parts 4.2.3.4., 4.2.3.5., and 4.2.3.5.1 of this Permit.

5.2.3.
In the event that the MS4 elects to conduct analytical monitoring as part of its Storm Water Management Program, the Permittee is required to comply with Part 6.18. of this Permit.

5.3. Non-analytical Monitoring

5.3.1.
Non-analytical monitoring (see definition in Part 7.32.) such as visual dry weather screening is required to comply with Part 4.2.3.3.2 of this Permit.

5.4. Record keeping

5.4.1.
Permittees must keep all supplementary documents associated with this Permit (e.g., Storm Water Management Program (SWMP) document, SWMP Implementation Schedule) current and up to date to achieve the purpose and objectives of the required document.

5.4.2.
All modifications to supplementary documents must be submitted to the Division in accordance with Parts 4.4 and 6.8.

5.4.3.
The Division may at any time make a written determination that parts or all of the supplementary documents are not in compliance with this Permit, wherein the Permittee must make modifications to these parts within a time frame specified by the Division.

5.4.4.
The Permittee shall retain all required plans, records of all programs, records of all monitoring information, copies of all reports required by this Permit, and records of all other data required by or used to demonstrate

compliance with this Permit, for at least five years. This period may be explicitly modified by alternative provisions of this Permit or extended by request of the Division at any time.

5.4.5.
The Permittee must make records, including the Notice of Intent (NOI) and the SWMP document, available to the public if requested.

5.5. Reporting

5.5.1.
The Permittee must submit an annual report to the Division by October 1 for the reporting period of July 1 to June 30 of each year of the Permit term.

5.5.2.
The report must be submitted using the report form provided on the Division's website at http://www.deq.utah.gov/Permits/water/updes/stormwatermun.htm.

5.5.3.
The Permittee shall sign and certify the annual report in accordance with Part 6.8.

5.5.4.
Signed copies of the Annual Report and all other reports required herein, shall be submitted to:

Department of Environmental Quality
Division of Water Quality
PO Box 144870
195 North 1950 West
Salt Lake City, UT 84114-4870

6.0 Standard Permit Conditions

6.1. Duty to Comply

The Permittee must comply with all conditions of this Permit. Any Permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification; or for denial of a Permit renewal application. The Permittee shall give advance notice to the Division of any planned changes in the Permitted facility or activity, which may result in noncompliance with Permit requirements.

6.2. Penalties for Violations of Permit Conditions

The Act provides that any person who violates a Permit condition implementing provisions of the Act is subject to a civil penalty not to exceed $10,000 per day of such violation. Any person who willfully or negligently violates Permit conditions or the Act is subject to a fine not exceeding
$25,000 per day of violation. Any person convicted under UCA 19-5-115(2) a second time shall be punished by a fine not exceeding $50,000 per day.

6.3. Duty to Reapply

If the Permittee wishes to continue an activity regulated by this Permit after the expiration date of this Permit, the Permittee shall apply for and obtain a new Permit. The application shall be submitted at least 180 days before the expiration date of this Permit. Continuation of expiring Permits shall be governed by regulations promulgated at UAC R317-8-5 and any subsequent amendments.

6.4. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the Permitted activity in order to maintain compliance with the conditions of this Permit.

6.5. Duty to Mitigate

The Permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this Permit, which has a reasonable likelihood of adversely affecting human health or the environment.

6.6. Duty to Provide Information

The Permittee shall furnish to the Division, within a time specified by the Division, any information which the Division may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Permit, or to determine compliance with this Permit. The Permittee shall also furnish to the Division, upon request, copies of records required to be kept by this Permit.

6.7. Other Information

When the Permittee becomes aware that it failed to submit any relevant facts in a Permit application, or submitted incorrect information in a Permit application or any report to the Division, it shall promptly submit such facts or information.

6.8. Signatory Requirements

All notices of intent, storm water management programs, storm water pollution prevention plans, reports, certifications or information either submitted to the Division or that this Permit requires to be maintained by the Permittee, shall be signed, dated and certified as follows:

6.8.1.

All Permit applications shall be signed by either a principal executive officer or ranking elected official.

6.8.2.
All reports required by the Permit and other information requested by the Division shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

6.8.2.1.
The authorization is made in writing by a person described above and submitted to the Division, and,

6.8.2.2.
The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. A duly authorized representative may thus be either a named individual or any individual occupying a named position.

6.8.2.3.
Changes to authorization. If an authorization under Part 6.8.2. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part 6.8.2. must be submitted to the Division prior to or together with any reports, information, or applications to be signed by an authorized representative.

6.8.3.
Certification. Any person signing documents under this Part shall make the following 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."

6.9. Availability of Reports
Except for data determined to be confidential under the Government Records Access and Management Act (see particularly Utah Code Ann. § 63-2-309) and Utah Code Ann. § 19-1-3-6, all reports prepared in accordance with the terms of this Permit shall be available for public inspection at the office of the Division. As required by the Act, Permit applications, Permits and effluent data shall not be considered confidential.

6.10. Penalties for Falsification of Reports
The Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more than $10,000.00 per violation, or by imprisonment for not more than six months per violation, or by both. Utah Code Ann. § 19-5-115(4)

6.11. Penalties for Tampering
The Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this Permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six months per violation, or by both.

6.12. Oil and Hazardous Substance Liability
Nothing in this Permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties to which the Permittee is or may be subject under the "Act".

6.13. Property Rights

The issuance of this Permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or Local laws or regulations.

6.14. Severability

The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit shall not be affected thereby.

6.15. Requiring a Different Permit

The Division may require the Permittee authorized by this Permit to obtain an individual UPDES Permit. Any interested person may petition the Division to take action under this paragraph. The Division may require the Permittee authorized to discharge under this Permit to apply for an individual UPDES Permit only if the Permittee has been notified in writing that a Permit application is required. This notice shall include a brief statement of the reasons for this decision, an application form (as necessary), a statement setting a deadline for the Permittee to file the application, and a statement that on the effective date of the municipal UPDES Permit, coverage under this Permit shall automatically terminate. Permit applications shall be submitted to the address of the Division of Water Quality shown in Part 5.5. of this Permit. The Division may grant additional time to submit the application upon request of the applicant. If the municipality fails to submit in a timely manner a municipal UPDES Permit application as required by the Division, then the applicability of this Permit to the Permittee is automatically terminated at the end of the day specified for application submittal.

6.16. State/Federal Laws

Nothing in this Permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by UCA 19-5-117 and Section 510 of the Clean Water Act or any applicable Federal or State transportation regulations, such as but not limited to the Department of Transportation regulations.

6.17. Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Permit and with the requirements of the SWMP. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by the Permittee only when necessary to achieve compliance with the conditions of the Permit.

6.18. Monitoring and Records

6.18.1.

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

6.18.2.

The Permittee shall retain records of all monitoring information including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of the reports required by this Permit, and records of all data used to complete the application for this Permit, for a period of at least five years from the date of the sample, measurement, report or application. This period may be extended by request of the Division at any time.

6.18.3.
Records of monitoring information shall include:

6.18.3.1
The date, exact place, and time of sampling or measurements

6.18.3.2
The name(s) of the individual(s) who performed the sampling or measurements

6.18.3.3
The date(s) and time(s) analyses were performed;

6.18.3.4
The name(s) of the individual(s) who performed the analyses;

6.18.3.5
The analytical techniques or methods used; and

6.18.3.6
The results of such analyses

6.19. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under Utah Administrative Code ("UAC") R317-2-10, unless other test procedures have been specified in this Permit.

6.20. Inspection and Entry

The Permittee shall allow the Division or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

6.20.1.
Enter upon the Permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this Permit;

6.20.2.
Have access to and copy at reasonable times, any records that must be kept under the conditions of this Permit; and

6.20.3.
Inspect at reasonable times any facilities or equipment (including monitoring and control equipment).

6.20.4.
Sample or monitor at reasonable times, for the purposes of assuring Permit compliance or as otherwise authorized by law, any substances or parameters at any location.

6.21. Permit Actions

This Permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Permit modification, revocation and re-issuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Permit condition.

6.22. Storm Water-Reopener Provision

At any time during the duration (life) of this Permit, this Permit may be reopened and modified (following proper administrative procedures) as per UAC R317.8, to include, any applicable storm water provisions and requirements, a storm water pollution prevention plan, a compliance schedule, a compliance date, monitoring and/or reporting requirements, or any other conditions related to the control of storm water discharges to "Waters-of-State".

7.0 Definitions

Definitions related to this Permit and small municipal separate storm sewers (MS4s).

7.1.
“40 CFR” refers to Title 40 of the Code of Federal Regulations, which is the codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the Federal government.

7.2.
"Act" means the Utah Water Quality Act.

7.3.
“Analytical monitoring” refers to monitoring of waterbodies (streams, ponds, lakes, etc.) or of storm water, according to UAC R317-2-10 and 40 CFR 136 "Guidelines Establishing Test Procedures for the Analysis of Pollutants,” or to State or Federally established protocols for biomonitoring or stream bioassessments.

7.4.
“Beneficial Uses” means uses of the Waters of the State, which include but are not limited to: domestic, agricultural, industrial, recreational, and other legitimate beneficial uses.

7.5.
“Best Management Practices" (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of Waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control facility site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

7.6.
“CWA” means The Clean Water Act of 1987, formerly referred to as the Federal Water Pollution Control Act.

7.7.
"Co-Permittee" means any operator of a regulated Small MS4 that is applying jointly with another applicant for coverage under this Permit. A Co-Permittee owns or operates a regulated Small MS4 located within or adjacent to another regulated MS4. A Co- Permittee is only responsible for complying with the conditions of this Permit relating to discharges from the MS4 the Co-Permittee owns or operates. See also 40 CFR 122.26(b)(1).

7.8.
“Control Measure” refers to any Best Management Practice or other method used to prevent or reduce the discharge of pollutants to Waters of the State.

7.9.
“Common plan of development or sale” means one plan for development or sale, separate parts of which are related by any announcement, piece of documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, plat, blueprint, contract, Permit application, zoning request, computer design, etc.), physical demarcation (including contracts) that identify the scope of the project. A plan may still be a common plan of development or sale even if it is taking place in separate stages or phases, is planned in combination with other construction activities, or is implemented by different owners or operators.

7.10.
“Director” means the director of the Utah Division of Water Quality, otherwise known as the Division of the Utah Water Quality Board.

7.11.
“Division” means the Utah Division of Water Quality.

7.12.
"Discharge" for the purpose of this Permit, unless indicated otherwise, refers to discharges from the Municipal Separate Storm Sewer System (MS4).

7.13.
"Dry weather screening" is monitoring done in the absence of storm events to discharges representing, as much as possible, the entire storm drainage system for the purpose of obtaining information about illicit connections and improper dumping.

7.14.
“Escalating enforcement procedures” refers to a variety of enforcement actions in order to apply as necessary for the severity of the violation and/or the recalcitrance of the violator.

7.15.
“Entity” means a governmental body or a public or private organization.

7.16.
"EPA" means the United States Environmental Protection Agency.

7.17.
“General Permit” means a Permit which covers multiple dischargers of a point source category within a designated geographical area, in lieu of individual Permits being issued to each discharger.

7.18.
“Ground water” means water in a saturated zone or stratum beneath the surface of the land or below a surface water body.

7.19.
“High quality waters” means any water, where, for a particular pollutant or pollutant parameter, the water quality exceeds that quality necessary to support the existing or designated uses, or which supports an exceptional use.

7.20.
"Illicit connection" means any man-made conveyance connecting an illicit discharge directly to a municipal separate storm sewer.

7.21.
"Illicit discharge" means any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a UPDES Permit (other than the UPDES Permit for discharges from the municipal separate storm sewer) and discharges resulting from emergency firefighting activities.

7.22.
“Impaired waters” means any segment of surface waters that has been identified by the Division as failing to support classified uses. The Division periodically compiles a list of such waters known as the 303(d) List.

7.23.
“Indian Country” is defined as in 40 CFR §122.2 to mean:

7.23.1.
All land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation;

7.23.2.
All dependent Indian communities within the borders of the United States whether within the originally or subsequently acquired territory thereof, and whether within or without the limits of a state; and

7.23.3.
All Indian allotments, the Indian titles to which have not been extinguished, including right-of-ways running through the same.

7.24.
“Large MS4” Large municipal separate storm sewer system means all municipal separate storm sewers that are located in an incorporated place with a population of 250,000 or more as determined by the current Decennial Census by the Bureau of the Census.

7.25.
“Low Impact Development” (LID) is an approach to land development (or re-development) that works with nature to more closely mimic pre-development hydrologic functions. LID employs principles such as preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treat storm water as a resource rather than a waste product. There are many practices that have been used to adhere to these principles such as bioretention facilities, rain gardens, vegetated rooftops, rain barrels, and permeable pavements.

7.26.
"MS4" is an acronym for "municipal separate storm sewer system".

7.27.
"Maximum Extent Practicable" (MEP) is the technology-based discharge standard for Municipal Separate Storm Sewer Systems established by paragraph 402(p)(3)(B)(iii) of the Federal Clean Water Act (CWA), which reads as follows: “Permits for discharges from municipal storm sewers shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques, and system, design, and engineering methods, and other such provisions as the Administrator or the State determines appropriate for the control of such pollutants.”

7.28.
“Medium MS4” Medium municipal separate storm sewer system means all municipal separate storm sewers that are located in an incorporated place with a population of 100,000 or more but less than 250,000, as determined by the 1990 Decennial Census by the Bureau of the Census

7.29.
“Monitoring” refers to tracking or measuring activities, progress, results, etc.;

7.30.
"Municipal separate storm sewer system" means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) pursuant to paragraphs R317-8-1.6(4), (7), & (14), or designated under UAC R317-8-3.9(1)(a)5:

7.30.1.
that is owned or operated by a state, City, town, county, district, association, or other public body (created by or pursuant to State Law) having jurisdiction over disposal of wastes, storm water, or other wastes, including special districts under State Law such as a sewer district, flood control district or drainage district, or similar entity, or a designated and approved management agency under Section 208 of the CWA that discharges to Waters of the State;

7.30.2.
that is designed or used for collecting or conveying storm water;

7.30.3.
which is not a combined sewer; and

7.30.4.
which is not part of a Publicly Owned Treatment Works (POTW) as defined in 40 CFR 122.2.

7.31.
“NOI” is an acronym for “Notice of Intent” to be covered by this Permit and is the mechanism used to “register” for coverage under a general Permit.

7.32.
“Non-analytical monitoring” refers to monitoring for pollutants by means other than UAC R317- 2-10 and 40 CFR 136, such as visually or by qualitative tools that provide comparative or rough estimates.

7.33.
“Operator” is the person or entity responsible for the operation and maintenance of the MS4.

7.34.
"Outfall" means a point source as defined by UAC R317-8-1.5(34) at the point where a municipal separate storm sewer discharges to Waters of the State and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other Waters of the State and are used to convey waters of the State.

7.35.
“Phase II areas” means areas regulated under UPDES storm water regulations encompassed by Small MS4's (see definition 7.39.).

7.36.
“Priority construction site” means a construction site that has potential to threaten water quality when considering the following factors: soil erosion potential; site slope; project size and type; sensitivity of receiving waterbodies; proximity to receiving waterbodies; non-storm water discharges and past record of non-compliance by the operators of the construction site.

7.37.
“Redevelopment” is the replacement or improvement of impervious surfaces on a developed site.

7.38.
“Runoff” is water that travels across the land surface, or laterally through the ground near the land surface, and discharges to water bodies either directly or through a collection and conveyance system. Runoff includes storm water and water from other sources that travels across the land surface.

7.39.
“SWMP” is an acronym for storm water management program. The SWMP document is the written plan that is used to describe the various control measures and activities the Permittee will undertake to implement the storm water management plan.

7.40.
“SWPPP" is an acronym for storm water pollution prevention plan.

7.41.
"Small municipal separate storm sewer system" is any MS4 not already covered by the Phase I program as a medium or large MS4. The Phase II Rule automatically covers on a nationwide basis all Small MS4s located in "urbanized areas" (UAs) as defined by the Bureau of the Census (unless waived by the UPDES Permitting authority), and on a case-by-case basis those Small MS4s located outside of UAs that the UPDES Permitting authority designates.

7.41.1.
This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.

7.42.
"SOP" is an acronym for standard operating procedure which is a set of written instructions that document a routine or repetitive activity. For the purpose of this Permit, SOPs should emphasize pollution control measures to protect water quality.

7.43.
"Storm water" means storm water runoff, snowmelt runoff, and surface runoff and drainage.

7.43.
"Storm water management program" means a set of measurable goals, actions, and activities designed to reduce the discharge of pollutants from the Small MS4 to the maximum extent practicable and to protect water quality.

7.44.
"TMDL" is an acronym for "Total Maximum Daily Load" and in this Permit refers to a study that: 1) quantifies the amount of a pollutant in a stream; 2) identifies the sources of the pollutant; and 3) recommends regulatory or other actions that may need to be taken in order for the impaired waterbody to meet water quality standards.

7.45.
"Urbanized area" is a land area comprising one or more places and the adjacent densely settled surrounding area that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile.

7.46
"Waters of the State" means all streams, lakes, ponds, marshes, water-courses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private which are contained within, flow through, or border upon this state or any portion thereof, except bodies of water confined to and retained within the limits of private property, and which do not develop into or constitute a nuisance, or a public health hazard, or a menace to fish and wildlife which shall not be considered to be "Waters of the State" under this definition ("UAC" R317-1-1).

Appendix A

Notice of Intent

Appendix B

Implementation Schedule (No Longer in use)

Appendix C

Identification of Roles and Responsibilities

Bruce Ward, City Engineer
Works Director
brucew@salemcity.org
(801) 423-1035

Matt Marziale, Public
mattm@salemcity.org
(801) 423-1035

James Thomas, Streets and collections
jamest@salemcity.org
salemutfirechief@gmail.com
(801) 423-2770

Jim Ealey, Fire Chief
(801) 423-2770

Dale Carter, MS4/SWPPP Coordinator
dalec@salemcity.org
(801) 423-2770 ext.235

On Call Emergency
(801) 423-2312
Salemcity@alemcity.org

Scott Bird, Utah County Storm Water Coalition
ScottBi@utahcounty.gov
2855 South State Street
Provo, Utah 84606
(801) 851-8600

Aaron Painter, GIS Administrator
aaronp@payson.org
(801) 465-5266

Vaughn R. Pickell, AICP City Attorney Spanish Fork
vpickell@spanishfork.org
801-804-4670

Appendix D

Illicet Discharge Detection and Eliminatin Standard Operating Procedures

IDDE-Procedures-Dry-Weather-Inspections

Introduction

In most urban areas, the flow of water from a storm drain system is not a routine event during dry weather periods and, therefore, can be an indicator of illicit discharges (e.g., illegal dumping and unauthorized connections to a MS4). However, dry weather flows from an MS4 can be from other non-stormwater discharges, that would not be considered an illicit discharge and are a normal event for some MS4 outfalls (depending on location). These non-stormwater discharges could include: groundwater infiltration into the storm sewer system, irrigation return flow, foundation drain discharges, etc.

Outfall inspections will be conducted focusing on visually conspicuous evidence of possible illicit discharges to the MS4. Water quality sampling and analyses will not be conducted.

Definition of an Illicit Discharge

An illicit discharge is a release to a municipal storm sewer or drainageway that is not composed entirely of stormwater.

Illicit discharges can be categorized as either direct or indirect.

Examples of direct illicit discharges:

- Sanitary wastewater piping that is directly connected from a home to the storm sewer,
- Materials (e.g., used motor oil) that have been dumped illegally into a storm drain catch basin,
- A shop floor drain that is connected to the storm sewer, and
- A cross-connection between the sanitary sewer and storm sewer systems.

Examples of indirect illicit discharges:

- An old and damaged sanitary sewer line that is leaking fluids into a cracked storm sewer line, and

- A failing septic system that is leaking into a cracked storm sewer line or causing surface discharge into the storm sewer.

Typical illicit surface discharges that may be observed by field personnel include:

- Overflows of sanitary sewerage systems;
- Untreated radiator flushing wastewaters;
- Untreated engine degreasing wastes;
- Over-application of fertilizers, pesticides or herbicides onto landscaping and impervious surfaces;
- Dewatering of construction sites;
- Improper washing of concrete ready-mix trucks;
- Commercial use of soaps and detergents: used in cleaning pavement, vehicles and equipment outside;
- Latex/oil-based paints and solvents disposed of in gutters or inlets;
- Restaurant grease: improper disposal;
- Private/Public utilities improperly storing chemicals or maintaining equipment;
- Leaking dumpsters;
- Car lots for used and new vehicles dripping fluids on the pavement;
- Fuel spills;
- Hazardous materials dumped along the roadway; and
- Unidentified substances dumped in secluded areas.

Definition of Dry Weather Inspection

A dry weather period is a time interval during which less than 0.1 inch of rain is observed across a minimum of 72 hours. Unlike wet weather sampling, dry weather inspections are not intended to capture a "first flush" of stormwater discharge, rather they are intended to identify any/all discharges from a stormwater outfall during a period without recorded rainfall. The objective of inspections during a dry weather period is to characterize observed discharges and facilitate detection of illicit discharges.

Visual Conditions Analysis

For any visual observation of pollution in a stormwater outfall discharge, an investigation into the pollution source should occur, but the following are often true:

1. Foam: indicator of upstream vehicle washing activities, or an illicit discharge.
2. Oil sheen: result of a leak or spill.
3. Cloudiness: indicator of suspended solids such as dust, ash, powdered chemicals and ground up materials.
4. Color or odor: Indicator of raw materials, chemicals, or sewage.

5. Excessive sediment: indicator or disturbed earth of other unpaved areas lacking adequate erosion control measures.
6. Sanitary waste and optical enhancers (fluorescent dyes added to laundry detergent and some toilet paper): indicators of illicit discharge.
7. Orange staining: indicator of high mineral concentrations.
8.

Many of these observations are indicators of an illicit discharge. Examples of illicit discharges include: cross-connections of sewer services to engineered storm drain systems; leaking septic systems; intentional discharge of pollutants to catch basins; combined sewer overflows; connected floor drains; and sump pumps connected to the system (under some circumstances).

Although many of the parameters listed above are considered to be indicators of illicit discharge, the presence of a parameter is not absolute evidence of an illicit discharge.

Some of these indicators may occur naturally. Orange staining may be the result of naturally occurring iron, and therefore unrelated to pollution. Foam can be formed when the physical characteristics of water are altered by the presence of organic materials. Foam is typically found in waters with high organic content such as bog lakes, streams that originate from bog lakes, productive lakes, wetlands, or woody areas. To determine the difference between natural foam and foam cause by pollution, consider the following:

a. Wind direction or turbulence: natural foam occurrences on the beach coincide with onshore winds. Often, foam can be found along a shoreline and/or on open waters during windy days. Natural occurrences in rivers can be found downstream of a turbulent site.
b. Proximity to a potential pollution source: some entities including the textile industry, paper production facilities, oil industries, and firefighting activities work with materials that cause foaming in water. If these materials are released to a water body in large quantities, they can cause foaming. Also, the presence of silt in water, such as from a construction site can cause foam.
c. Feeling: natural foam is typically persistent, light, not slimy to the touch.
d. Presence of decomposing plants or organic material in the water.

Some of the indicators can have multiple causes or sources. For example, both bacteria and petroleum can create a sheen on the water surface. The source of the sheen can be differentiated by disturbing it, such as with a pole. A sheen caused by oil will remain intact and move in a swirl pattern; a sheen caused by bacteria will separate and appear “blocky”.

Bacterial or naturally occurring sheens are usually silver or relatively dull in color and will break up into a few small patches of sheen. The cause may indicate the presence of iron, decomposition of organic material or presence of certain bacteria. Bacterial sheen is not a pollutant but should be noted.

Optical enhancers at high concentrations are sometimes visible to the naked eye as a bluish-purple haze in the water. Optical enhancers are typically detected using clean, white cotton pads placed within the discharge for several days, dried, and viewed under a fluorometer. If the cotton pad fluoresces, optical enhancers are assumed to be present. The magnitude of the fluorescence, as measured in fluorescent units, can be used to correlate the concentration of optical enhancers in water to other samples collected locally.

FIELD INSPECTION FORMS

The Dry Weather Screening Inspection Form provides a record of routine screenings during dry weather events. Screenings shall be conducted by field staff on a routine basis.

ALLOWED DISCHARGES

NON-STORMWATER DISCHARGES THAT ARE PERMISSIBLE:

- water line flushing
- landscape irrigation
- diverted stream flows
- rising groundwaters
- uncontaminated groundwater infiltration
- uncontaminated pumped groundwater
- discharges from potable water sources
- foundation drains
- air conditioning condensation
- flows from riparian habitats and wetlands
- irrigation return flow
- springs
- water from crawl space pumps
- footing drains
- lawn watering
- individual residential car washing
- flows from riparian habitats and wetlands
- dechlorinated swimming pool discharges
- street wash water

PROHIBITED MS4 DISCHARGES

The following are considered to be illicit (illegal) discharges to the George Washington Memorial Parkway MS4 (this list is not considered all inclusive):

Sanitary wastewater sources such as:

- Sanitary wastewater (usually untreated) from improper sewerage connections, exfiltration or leakage;
- Effluent from improperly operating or improperly designed septic tanks; and
- Overflows of sanitary sewerage systems.

Automobile maintenance and operation sources such as:

- Untreated (e.g., through a well-maintained oil/water separator) commercial car wash wastewaters;
- Untreated radiator flushing wastewaters;
- Untreated engine degreasing wastes;

- Improper oil, gasoline, and other automotive fluids disposal;
- Leaky underground storage tanks; and
- Untreated leaking of oils, gasoline and other automotive fluids for automobiles.

Landscape irrigation sources such as:

- Direct spraying of fertilizers, pesticides or herbicides onto impervious surfaces; and
- Over-application of fertilizers, pesticides or herbicides onto landscaping.

Other sources such as:

- Laundry wastes;
- Non-contact cooling waters;
- Metal plating baths;
- Dewatering of construction sites;
- Washing of concrete ready-mix trucks;
- Contaminated sump pump discharges;
- Improper disposal of household toxic wastes;
- Spills from roadway and other accidents;
- Chemicals, hazardous materials, garbage, and sanitary sludge landfills and disposal sites;
- Commercial use of soaps and detergents; use in cleaning pavement, vehicles and equipment;
- Sediment from lack of or improper maintenance of erosion and sedimentation controls;
- Latex/oil-based paints & solvents;
- Trash and debris: littering and dumping, household or construction waste; and
- Restaurant grease: Improper disposal.

WET WEATHER OUTFALL INSPECTION

Outfalls from an engineered storm drain system can be in the form of pipes or ditches. Under current and pending regulations, it is important to inspect and document water quality from these outfalls under both dry weather and wet weather conditions. SOP 1, "Dry Weather Outfall Inspection", covers the objectives of that type of inspection. This SOP discusses wet weather inspection objectives and how they differ from dry weather inspection objectives. The primary difference is that wet weather inspection aims to describe and evaluate the first flush of stormwater discharged from an outfall during a storm, representing the maximum pollutant load managed by receiving water.

Definition of Wet Weather

A storm is considered a representative wet weather event if greater than 0.1 inch of rain fall and occurs at least 72 hours after the previously measurable (greater than 0.1 inch of rainfall) storm event. In some watersheds, based on the amount of impervious surface present, increased discharge from an outfall may not result from 0.1 inch of rain. An understanding of how outfalls respond to different events will develop as the inspection process proceeds over several months, allowing the inspectors to refine an approach for inspections.

Ideally, the evaluation and any samples collected should occur within the first 30 minutes of discharge to reflect the first flush or maximum pollutant load.

Typical practice is to prepare for a wet weather inspection event when weather forecasts show a 40% chance of rain or greater. If the inspector intends to collect analytical samples, coordination with the laboratory for bottle ware and for sample drop-off needs to occur in advance.

Visual Condition Assessment

The Outfall Inspection form should be used to document observations related to the quality of stormwater conveyed by the structure. Observations such as the following can indicate sources of pollution within the storm drain system:

- Oil sheen
- Discoloration
- Trash and debris

For any visual observation of pollution in a stormwater outfall discharge, an investigation into the pollution source should occur, but the following are often true:

- Foam: indicator of upstream vehicle washing activities, or an illicit discharge.
- Oil sheen: result of a leak or spill.
- Cloudiness: indicator of suspended solids such as dust, ash, powdered chemicals and ground up materials.
- Color or odor: Indicator of raw materials, chemicals, or sewage.
- Excessive sediment: indicator or disturbed earth of other unpaved areas lacking adequate erosion control measures.
- Sanitary waste and optical enhancers (fluorescent dyes added to laundry detergent): indicators of illicit discharge.
- Orange staining: indicator of high mineral concentrations.

Many of these observations are indicators of an illicit discharge. Examples of illicit discharges include: cross-connections of sewer services to engineered storm drain systems; leaking septic systems; intentional discharge of pollutants to catch basins; combined sewer overflows; connected floor drains; and sump pumps connected to the system (under some circumstances).

Although many of the observations are indicators of illicit discharge it should be noted that several of these indicators may also occur naturally. Orange staining may be the result of naturally occurring iron, and thus unrelated to pollution. Foam can be formed when the physical characteristics of water are altered by the presence of organic materials. Foam is typically found in waters with high organic content such as bog lakes, streams that originate from bog lakes, productive lakes, wetlands, or woody areas. To determine the difference between natural foam and foam cause by pollution, consider the following:

1. Wind direction or turbulence: natural foam occurrences on the beach coincide with onshore winds. Often, foam can be found along a shoreline and/or on open waters during windy days. Natural occurrences in rivers can be found downstream of a turbulent site.

2. Proximity to a potential pollution source: some entities including the textile industry, paper production facilities, oil industries, and firefighting activities work with materials that cause foaming in water. If these materials are released to a water body in large quantities, they can cause foaming. Also, the presence of silt in water, such as from a construction site can cause foam.
3. Feeling: natural foam is typically persistent, light, not slimy to the touch.
4. Presence of decomposing plants or organic material in the water.

Both bacteria and petroleum can create a sheen on the water surface. The source of the sheen can be differentiated by disturbing it, such as with a pole. A sheen caused by oil will remain intact and move in a swirl pattern; a sheen caused by bacteria will separate and appear ‘‘blocky’’. Bacterial or naturally occurring sheens are usually silver or relatively dull in color and will break up into a number of small patches of sheen. The cause may be presence of iron, decomposition of organic material or presence of certain bacteria. Bacterial sheen is not a pollutant but should be noted.

IDDE – Outfall Inspections

Refer to Salem City Storm Water Management Plan:

4.2.3.3.2. Field Inspection of Priority Areas

Field inspection of areas which are considered a priority area as identified in Permit Part 4.2.3.3.1. Compliance with this provision shall be achieved by inspecting each priority area annually at a minimum. All field assessment activities shall utilize an inspection form to document findings. The Engineering Division will conduct field assessment activities for the purpose of verifying outfall locations and detecting illicit discharges during the periods of dry weather. Outfalls identified by the Engineering Division as Priority Areas will be visually inspected annually.

4.2.3.3.3. Dry Weather Screening

Dry weather screening (see Definition 7.13) activities for the purpose of verifying outfall locations and detecting illicit discharges that discharge within the Permittee's jurisdiction to a receiving water. All outfalls shall be inspected at least once during the 5-year Permit term. Dry weather screening activities shall utilize an inspection form to document findings.

The Engineering Division will conduct field assessment activities for the purpose of verifying outfall locations and detecting illicit discharges during the periods of dry weather. Visual inspections of at least 20 percent of all known outfalls will be inspected annually and all outfalls should be inspected at least once during the permit term. Field assessment activities will be documented on an inspection form.

1. Preparation
    a. Know the past and present weather conditions. Conduct inspections during dry weather periods.
    b. Gather all necessary equipment including: tape measure, clear container, clipboard with necessary forms, flashlight, and camera.
    c. Obtain maps showing outfall locations and identifiers.
    d. Obtain outfall description and observations from previous inspections, so the outfall can be accurately identified and observations compared.

2. Process
    a. Perform an inspection of each outfall at least once per year. Whenever possible use the same personnel for consistency in observations.
    b. Identify each outfall with a consistent and unique identifier. Use maps and previous inspection reports to confirm the outfall identity and location.
    c. If dry weather flow is present at the outfall, then document and evaluate the discharge by completing the following steps:

        1. Collect field samples for visual observations in a clean, clear container and in a manner that avoids stirring up sediment that might distort the observation.
        2. Characterize and record observations on basic sensory and physical indicators (e.g., outfall condition, flow, odor, color, oil sheen) on the Outfall Inspection Form.
        3. Compare observations to previous inspections.
        4. If the flow does not appear to be an obvious illicit discharge (e.g., flow is clear, odorless, etc.), attempt to identify the source of the flow (groundwater, intermittent stream, etc.)
    d. If an illicit discharge (such as raw sewage, petroleum products, paint, etc.) is encountered or suspected, follow the procedure of SOP IDDE – Tracing Illicit Discharges.

3. Cleanup – as necessary

4. Documentation
    a. File completed outfall inspection forms.
    b. Update maps if new outfalls are observed and inspected.

SPILL RESPONSE SOP (updated 2/03/2021)

Spill Responses and Clean up

Any discharges in 24 hours equal to or in excess of the reportable quantities listed in 40 CFR 117, 40 CFR 110, and 40 CFR 302 will be reported to the National Response Center and the Division of Water Quality (DWQ) as soon as practical after knowledge of the spill is known to the permittee. The permittee shall submit within 14 calendar days of knowledge of the release a written description of: the release (including the type and estimate of the amount of material released), the date that such release occurred, the circumstances leading to the release, and measures taken and/or planned to be taken to the Division of Water Quality (DWQ), 288 North 1460 West, P.O. Box 144870, Salt Lake City, Utah 84114-4870. The Storm

Water Pollution Prevention Plan must be modified within14 calendar days of knowledge of the release to provide a description of the release, the circumstances leading to the release, and the date of the release. In addition, the plan must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate.

Materials	Media Released To	Reportable Quantity
Engine oil, fuel, hydraulic fluid	Land	25 Gallons
Paints, solvents, thinners	Land	100lbs (13 Gal)
Engine oil, fuel, hydraulic fluid	Water	Visible Sheen
Antifreeze, battery acid, gasoline, engine degreasers	Air, Land, Water	100lbs (13 gallons)

Refer to Salem's Outdoor and Spill response SOP. Small spills are generally handled by internal personnel and usually do not require an emergency response by police or fire department HAZMAT teams.

- Quickly control the spill by stopping or securing the spill source.
- This could be as simple as up righting a container and using floor dry or absorbent pads to soak up the spilled material. Wear gloves and protective clothing.
- Put spill material and absorbents in secure containers if any are available
- Consult the Facility Responsible Person and the MSDS for the spill and waste disposal procedures.
- Manage spill by dry-mopping or covering liquids with absorbents/towels. Collect/Sweep-up waste immediately with a broom or wet/dry vac, and dispose of in a lawful manner.
- In some instances, the area of the spill should **not** be washed with water. Use Dry Cleanup Methods and **never** wash spills down the drain, onto a storm drain or onto the driveway or parking lot. If water must be used, then use berms or other protective barriers to isolate polluted areas from storm drain inlets. Block off or seal storm drain inlets to prevent potential discharge. Collect and dispose of water in a lawful manner.
- Both the spilled material and the absorbent may be considered hazardous waste and must be disposed of in compliance with state and federal environmental regulations.

REPORTING SPILLS

To report illegal dumping/spills, contact your local stormwater pollution control agency.

Maintain appropriately stocked spill response kits at each facilities and locations where oil, chemicals, or other hazardous materials are handled and stored.

All chemical spills, regardless of size, should be reported as soon as possible to the Facility Responsible Person. The Facility Responsible Person will determine whether the spill has the potential to affect the environment outside of the facility and must be reported to 911 or Utah Department of Health Emergency Response: (801) 580.6681

Refer and provide information regarding spills using the **Spill or Incident Report Form** provided on pages 3 and 4.

Report shall be kept on record with facility SOP manual and with Salem's Storm Water Coordinator.

Spill or Incident Report Form

Site: _____ Primary Contact: _____

Date: _____ Incident Date: _____

Complete for any type of petroleum product or hazardous materials / waste spill or incident

Person Reporting Spill or Incident

Name:	**Address:**
Phone #:	**Signature:**

Type of Spill

Common name of spilled Substance:
Estimated Quantity Spilled:
Estimated Concentration:
Date of Spill:

LAND SPILL	WATER BODY SPILL
Name of Site:	**Water Body Name:**
Address:	**Location of Discharge:**
Description of area:	**Description of area:**

Actions Taken to:

Contain Spill:

To clean up spill or recover from incident:

To remove cleanup material:

To Prevent reoccurrence:

Person responsible for managing spill response:		
Name	**Signature**	**Phone**

Spill Notification List

Emergency 911

Salem City (801) 423-2770 ext.235 24-hour hotline (801) 420-2539

Salem City MS4 Coordinator (801) 367-0728

Utah County Stormwater Coalition (801) 851-7873

Utah Division of Environmental Quality spill hotline (801) 536-4123

LOCATING ILLICIT DISCHARGES

An "illicit discharge" is any discharge to an engineered storm drain system that is not composed entirely of stormwater unless the discharge is defined as an allowable non-stormwater discharge. Illicit discharges may enter the engineered storm drain system through direct or indirect connections, such as: cross-connections of sewer services to engineered storm drain systems; leaking septic systems; intentional discharge of pollutants to catch basins; combined sewer overflows; connected floor drains; and sump pumps connected to the system (under some circumstances). Illicit discharges can contribute high levels of pollutants, such as heavy metals, toxics, oil, grease, solvents, nutrients, and pathogens to receiving streams.

Illicit discharges can be located by several methods, including routine dry weather outfall inspections and catch basin inspections, which are described in, "Dry Weather Outfall Inspection" and, "Catch Basin Inspection and Cleaning".

Identifying Illicit Discharges

The following are often indicators of an illicit discharge from stormwater outfall:

1. Foam: indicator of upstream vehicle washing activities, or an illicit discharge.
2. Oil sheen: result of a leak or spill.
3. Cloudiness: indicator of suspended solids such as dust, ash, powdered chemicals and ground up materials.
4. Color or odor: Indicator of raw materials, chemicals, or sewage.
5. Excessive sediment: indicator of disturbed earth of other unpaved areas lacking adequate erosion control measures.
6. Sanitary waste and optical enhancers (fluorescent dyes added to laundry detergent): indicator of the cross-connection of a sewer service.
7. Orange staining: indicator of high mineral concentrations.

Both bacteria and petroleum can create a sheen on the water surface. The source of the sheen can be differentiated by disturbing it, such as with a pole. A sheen caused by oil will remain

intact and move in a swirl pattern; a sheen caused by bacteria will separate and appear ‘‘blocky’’. Bacterial sheen is not a pollutant but should be noted.

Citizen Call in Reports

Reports by residents and other users of a water body can be effective tools in identifying the presence of illicit discharges. Many communities have set up phone hotlines for this purpose, or have provided guidance to local police departments and dispatch centers to manage data reported in this manner. Municipal employees and the general public should receive education to help identify the signs of illicit discharges and should be informed how to report such incidents.

When a call is received about a suspected illicit discharge, the attached IDDE Incident Tracking Sheet shall be used to document appropriate information. Subsequent steps for taking action to trace, document, and eliminate the illicit discharge are described in the following sections.

Potential illicit discharges reported by citizens should be reviewed on an annual basis to locate patterns of illicit discharges, identify high-priority catchments, and evaluate the call-in inspection program.

Tracing Illicit Discharges

Whenever an illicit discharge is suspected, regardless of how it was identified, the attached IDDE Incident Tracking Sheet should be utilized. The Incident Tracking Sheet shall be provided to the appropriate authority (i.e., Board of Health, Department of Public Works, etc.), which shall promptly investigate the reported incident.

If the presence of an illicit discharge is confirmed by the authority, but its source is unidentified, additional procedures to determine the source of the illicit discharge should be completed.

1. Review and consider information collected when illicit discharge was initially identified, for example, the time of day and the weather conditions for the previous 72 hours. Also consider and review past reports or investigations of similar illicit discharges in the area.
2. Obtain storm drain mapping for the area of the reported illicit discharge. If possible, use a tracking system that can be linked to your system map, such as GIS.
3. Document current conditions at the location of the observed illicit discharge point, including odors, water appearance, estimated flow, presence of floatables, and other pertinent information. Photograph relevant evidence.
4. If there continues to be evidence of the illicit discharge, collect water quality data. This may include using field test kits or instrumentation, or collecting analytical samples for full laboratory analysis.

5. Move upstream from the point of observation to identify the source of the discharge, using the system mapping to determine infrastructure, tributary pipes, and drainage areas that contribute. At each point, survey the general area and surrounding properties to identify potential sources of the illicit discharge. Document observations at each point as well as with photographs.
6. Continue this process until the illicit discharge is no longer observed, which will define the boundaries of the likely source. If the source of the illicit discharge could not be determined by this survey, consider using dye testing, smoke testing, or closed-circuit television inspection to locate the illicit discharge.

Dye Testing

Dye testing is used to confirm a suspected illicit connection to a storm drain system. Prior to testing, permission to access the site should be obtained. Dye is discharged into the suspected fixture, and nearby storm drain structures and sanitary sewer manholes observed for presence of the dye. Each fixture, such as sinks, toilets, and sump pumps, should be tested separately. A third-party contractor may be required to perform this testing activity.

Smoke Testing

Smoke testing is a useful method of locating the source of illicit discharges when there is no obvious potential source. Smoke testing is an appropriate tracing technique for short sections of pipe and for pipes with small diameters. Smoke added to the storm drain system will emerge in connected locations. A third-party contractor may be required to perform this testing activity.

Closed Circuit Television Inspection

Televised video inspection can be used to locate illicit connections and infiltration from sanitary sewers. Cameras are used to record the interior of the storm drain pipes. They can be manually pushed with a stiff cable or guided remotely on treads or wheels. A third-party contractor may be required to perform this testing activity.

If the source is located, follow steps for removing the illicit discharge. Document repairs, new sanitary sewer connections, and other corrective actions required to accomplish this objective. If the source still cannot be located, add the pipe segment to a future inspection program.

Removing Illicit Discharges

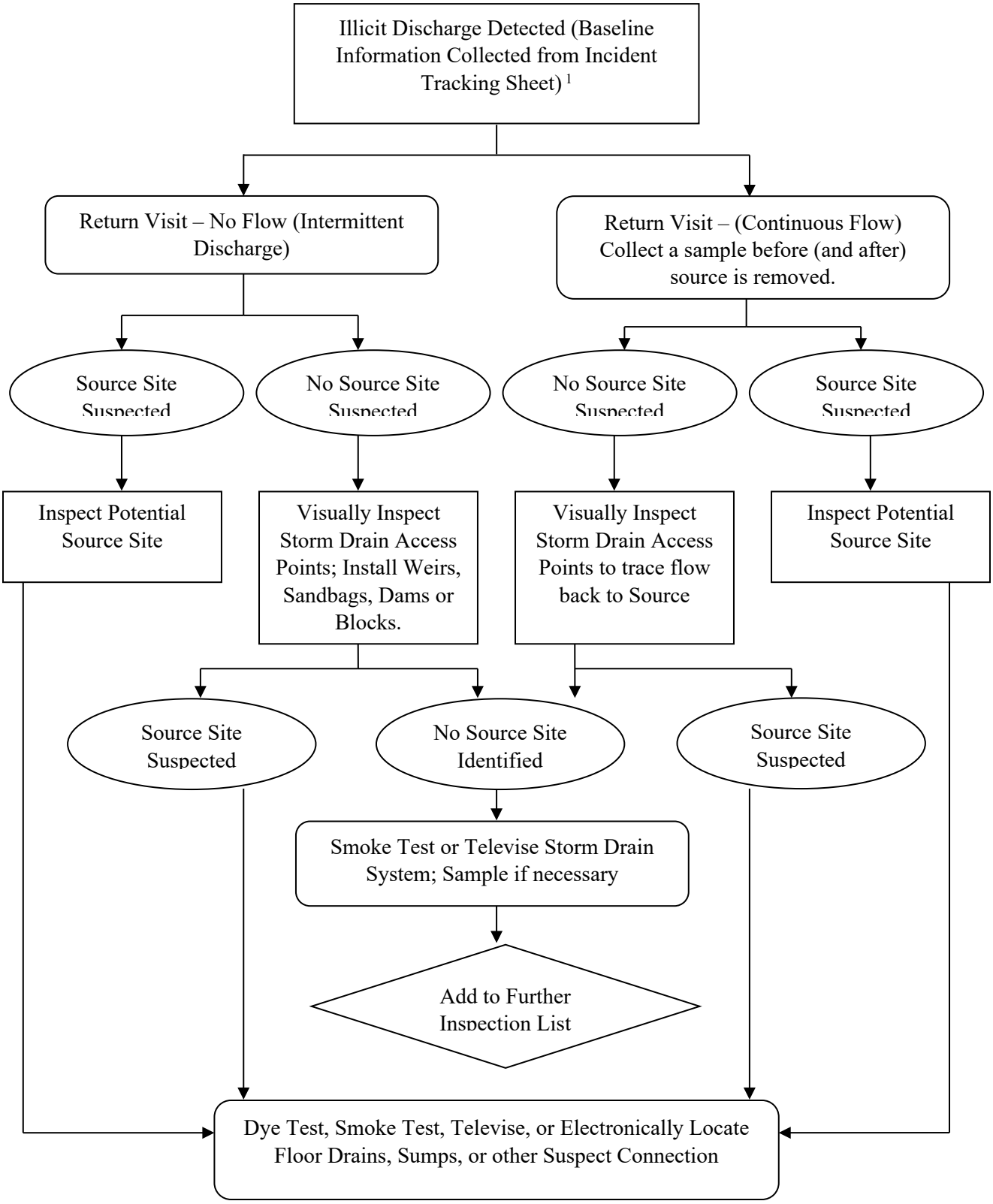
Proper removal of an illicit discharge will ensure it does not recur.

In any scenario, conduct a follow up inspection to confirm that the illicit discharge has been removed. Suspend access to the storm drain system if an "imminent and substantial danger" exists or if there is a threat of serious physical harm to humans or the environment.

1. SOP: Wet Weather Outfall Inspection
2. SOP: Catch Basin Inspection

Notification and Removal Procedures for Illicit Discharges into the Municipal Separate Storm Sewer System

Financially Responsible	Source Identified	Enforcement Authority	Procedure to Follow
Private Property Owner	One-time illicit discharge (e.g. spill, dumping, etc.)	Ordinance enforcement authority (e.g. Code Enforcement Officer)	• Contact Owner • Issue Notice of Violation • Issue fine
Private Property Owner	Intermittent or continuous illicit discharge from legal connection	Ordinance enforcement authority (e.g. Code Enforcement Officer)	• Contact Owner • Issue Notice of Violation • Determine schedule for removal • Confirm removal
Private Property Owner	Intermittent or continuous illicit discharge from illegal connection or indirect (e.g. infiltration or failed septic)	Plumbing Inspector or ordinance enforcement authority	• Notify plumbing inspector
Municipal	Intermittent or continuous illicit discharge from illegal connection or indirect (e.g. failed sewer line)	Ordinance enforcement authority (e.g. Code Enforcement Officer)	• Issue work order • Schedule removal • Remove connection • Confirm removal
Exempt 3rd Party	Any	USEPA	• Notify exempt third party and USEPA of illicit discharge


Illicit Discharge Detected (Baseline Information Collected from Incident Tracking Sheet) [1]
Return Visit – No Flow (Intermittent Discharge)
Return Visit – (Continuous Flow) Collect a sample before (and after) source is removed.
Source Site Suspected
No Source Site Suspected
No Source Site Suspected
Source Site Suspected
Inspect Potential Source Site
Visually Inspect Storm Drain Access Points; Install Weirs, Sandbags, Dams or Blocks.
Visually Inspect Storm Drain Access Points to trace flow back to Source
Inspect Potential Source Site
Source Site Suspected
No Source Site Identified
Source Site Suspected
Smoke Test or Televise Storm Drain System; Sample if necessary
Add to Further Inspection List
Dye Test, Smoke Test, Televise, or Electronically Locate Floor Drains, Sumps, or other Suspect Connection

IDDE- Tracing Illicit Discharges

Refer to the Salem city Storm Water Management Plan:

4.2.3.4. Illicit Discharge Source Tracing

Implement standard operating procedures (SOPs) or similar type of documents for tracing the source of an illicit discharge; including visual inspections, and when necessary, opening manholes, using mobile cameras, using field tests of selected chemical parameters as indicators of discharge sources, collecting and analyzing water samples for the purpose of determining sanctions or penalties, and/or other detailed inspection procedures.

The Engineering Division will develop an SOP (noted in Part 4.2.3.5.1) that will include procedures for inspectors to follow when a suspected IDDE is located, including working upstream to find and document the source, collect samples when necessary, and enforcement procedures once the source is determined. The procedure will also include spill response procedures to minimize the discharge of pollutants.

1. Preparation.
    a. Review / consider information collected when illicit discharge was initially identified and documented using Incident Tracking Form or Outfall Inspection Form.
    b. Obtain storm drain mapping for the area of the reported illicit discharge.
    c. Gather all necessary equipment including: tape measure, clear container, clipboard with necessary forms, flashlight, and camera (optional).
2. Process.
    a. Survey the general area / surrounding properties to identify potential sources of the illicit discharge as a first step.
    b. Trace illicit discharges using visual inspections of upstream points as a second step. Use available mapping to identify tributary pipes, catch basins, etc.
    c. If the source of the illicit discharge cannot be determined by a survey of the area or observation of the storm drain system, then consider the following additional steps;

1. Use weirs, sandbags, dams, or optical brightener monitoring traps to collect or pool intermittent discharges during dry weather.
2. Smoke test or televise the storm drain system to trace high priority, difficult to detect illicit discharges.
3. Dye test individual discharge points within suspected buildings.
4. Consider collecting bacterial samples of flowing discharges to confirm / refute illicit discharge.

d. If the source is located, follow SOP IDDE – Removing Illicit Discharges.
e. If the source cannot be found, add the location to a future inspection program.

3. Clean-up.
   a. Clean catch basin, clean storm drain, or initiate spill response, as applicable.

IDDE – Illicit Discharge Observation

Refer the Salem City Storm Water Management Plan:

4.2.3. Illicit Discharge Detection and Elimination (IDDE) All Permittees shall revise as necessary, implement and enforce an IDDE program to systematically find and eliminate sources of non-storm water discharges from the MS4 and to implement defined procedures to prevent illicit connections and discharges according to the minimum performance measures listed below. The IDDE program must be described in writing, incorporated as part of the Permittee's SWMP document, and contain the elements detailed in this part of the Permit.

Eliminating illicit discharges helps prevent pollutants from entering receiving waters and maintain the infrastructure. The program includes:

a. Storm Drain System Map

b. City Ordinances

c. Dry Weather Screening Program

d. Illicit Discharge Detection

e. IDDE Education and Public Outreach

The Illicit Discharge Detection and Elimination Program section of this SWMP addresses non-storm water flows that are discharged into receiving waters through storm water conveyance systems. The program will implement BMPs and SOP's to assist in detection, the identification, and elimination of illicit discharges. This program will also focus on prevention of new illicit discharges to the storm water system by means of education, regulations, and a spill prevention and response program.

4.2.3.11. IDDE Employee Training

Permittees shall at a minimum, ensure that all staff, contracted staff, or other responsible entities receives annual training in the IDDE program including identification, investigation, termination, cleanup, and reporting of illicit discharges including spills, improper disposal, and illicit connections. All Permittees shall ensure that all new hires are trained immediately upon hire and annually thereafter, at a minimum. Follow-up training shall be provided as needed to address changes in procedures, methods or staffing.

The Permittee shall provide training to all field staff that as part of their normal job responsibilities might come into contact with or otherwise observe an illicit discharge or illicit connection to the MS4. The Permittees shall also train office personnel who might receive initial reports of illicit discharges. Training shall include how to identify a spill, an improper disposal, or an illicit connection to the MS4 and proper procedures for reporting the illicit discharge. Training records must be kept and shall include dates, activities or course descriptions, and names and positions of staff in attendance.

1. Preparation

    a. Be alert for potential illicit discharges to the municipal storm water system while going about normal work activities.

2. Process

    a. Call the appropriate authority (i.e. department head, storm water specialist, construction inspector, code enforcement officer or supervisor) if you see any evidence of an illicit discharge.
    b. Assess the general area of the illicit discharge to see if you can identify the source.
    c. Whenever possible, take photographs of the suspected illicit discharge.
    d. Responding storm water department personnel or code enforcement officer will complete the following.

        1. Use the IDDE Incident Tracking Sheet to document observations.
        2. Obtain sample for visual observations and complete an Outfall Inspection Form, if applicable.
        3. Follow procedure of SOP IDDE - Tracing Illicit Discharges.

3. Clean – up

    a. Clean catch basin, clean storm drain, or initiate spill response, as needed. Follow relevant SOP's.

4. Documentation

    a. File all completed forms (i.e. Incident Tracking Form, Outfall Inspection Form, Catch Basin Cleaning Form, and Storm Drain Cleaning Log).
    b. Document any further action taken.

REPORTING SPILLS

To report illegal dumping/spills, contact your local stormwater pollution control agency.

Maintain appropriately stocked spill response kits at each facilities and locations where oil, chemicals, or other hazardous materials are handled and stored.

All chemical spills, regardless of size, should be reported as soon as possible to the Facility Responsible Person. The Facility Responsible Person will determine whether the spill has the potential to affect the environment outside of the facility and must be reported to 911 or Utah Department of Health Emergency Response: (801) 580.6681

Refer and provide information regarding spills using the **Spill or Incident Report Form** provided on pages 8 and 9.

Report shall be kept on record with facility SOP manual and with Salem's Storm Water Coordinator.

Outdoor Storage and Spill Response

When wash waters, leaked waste and spills enter the street and storm drain inlets, they flow untreated through the storm drain system to our local waterways, Beer Creek and eventually to Utah Lake. These pollutants can be toxic to fish, wildlife and people. ***Federal, State and local regulations prohibit discharge of anything but rain water into the storm drain.***

Good Housekeeping

- Train employees on Best Management Practices (BMP's) for material storage, spill prevention and response.
- Never dump oils, chemicals, mop water or other fluids into storm drain, gutter, street, drainage ditch, creek or any surface leading to a storm drain.
- Regularly inspect containers/equipment for wear and leaks. Replace as needed.
- Regularly inspect outdoor areas for leaks, chemicals, oil spills and loose litter. Clean up spills immediately! Sweep regularly to prevent debris and other materials from entering storm drain inlets.
- Store all materials inside if possible.

Outdoor Materials Management

- If materials must be stored outside, keep storage area tidy!
- Enclose items to prevent contact with rainfall/runoff. Do the following:
  Cover (by tarp, roof or in fully enclosed container)
  Elevate (on a shelf or on pallets)
  Use Secondary Containment (berms, spill containment pallets, double walled containers, sheds, etc.) for equipment and fluid storage containers that can potentially leak.
- Keep all lids/caps closed when not in use.
- Store materials as far as possible from storm drain inlets.
- Exercise care and planning when transferring liquids and powders to minimize spill potential.
- Schedule regular trash/recycling and hazardous waste hauler pick-ups as needed.
- Keep spill cleanup materials labelled and in easily accessible areas.

Cleaning Methods

- Clean outdoor areas and spills with "dry" cleaning methods such as sweeping, vacuuming, dry mopping and drying with absorbents or rags/towels.
- If water must be used, then use berms or other protective barriers to isolate polluted areas from storm drain inlets. Block of or seal storm drain inlets to prevent potential discharge. Collect and dispose of water in a lawful manner.
- Collect and dispose of non-hazardous wash waters in mop utility sink, toilet or sanitary sewer cleanout.
- Never wash equipment or materials to gutter, storm drain, street or creek.

Spill Response

- Keep spill kit updated, labeled and near high-risk areas (by outdoor storage area, loading docks). Include spill response plan/directions.
- Clean up surface residues that can wash into storm drain during a rain event.
- Contain the spill and protect nearby storm drains immediately.
- Manage spill by dry mopping or covering liquids with absorbents/towels.
- Collect/sweep-up waste immediately with broom or wet/dry vac and dispose of in a lawful manner.

What's in your spill kit?

1. To contain spills- Absorbent socks, barriers, storm drain inlet protection.
2. To manage spills- Absorbent granules or kitty litter, towels, pads, dry mop.
3. To collect waste- Wet/dry vac, broom, dustpan, gloves, disposal rags or bucket.

Waste disposal

- Learn about proper disposal options and hazardous waste disposal.
- Keep Safety Data Sheets (SDS) for all chemicals and metal accessible.
- Cleaning solutions, fluids that cannot be recycled and absorbent materials used to clean up fluids may need to be disposed of as hazardous waste.

Spill Reporting

- To report illegal dumping/spills, contact your local stormwater pollution control agency.
- If spill enters creek, call DEQ spill hotline at (801) 536-4123
- If significant or threatened spills of hazardous materials, responsible party must immediately call 911

Maintenance and Prevention

Prevention of spills is preferable to even the best response and cleanup. To mitigate the effects of a containment release, provide proper maintenance and inspection at each facility. To protect against containment release, adhere to the following:

- Ensure all employees are properly trained to respond in the case of a spill, understand the nature and properties of containment and understand the spill control materials and personal safety equipment.
- Maintain training records for at least three years from the date last worked at the facility.
- Provide yearly maintenance and inspection at all municipal facilities, paying particular attention to underground storage tanks. Maintain maintenance and inspection records on site or readily available.
- Implement good management practices where chemicals and hazardous waste are stored.
    1. Ensure storage in closed containers inside a building and on impervious surfaces wherever possible.
    2. If storage cannot be provided inside, ensure secondary containment for 110% of maximum volume of the storage container.
    3. Locate storage areas near maintenance areas to decrease the distance required for transfer.
    4. Provide accurate labels, Material Safety Data Sheets (MSDS) information and warnings for all stored materials.
    5. Regularly inspect storage areas for leaks.
    6. Ensure secure storage locations, preventing access by untrained or authorized persons.

Maintain appropriately stocked spill response kits at each facility and locations where oil, chemicals or other hazardous materials are handled and stored.

Stormwater pollution Control Agencies

Salem City (801) 423-2770 ext. 235 24-hour hotline (801) 420-2539

Salem City MS4 Coordinator (801) 367-0728

Utah County Stormwater Coalition (801) 851-7873

Utah Division of Environmental Quality spill hotline (801) 536-4123

Spill or Incident Report Form

Site: _____ Primary Contact: _____

Date: _____ Incident Date: _____

Complete for any type of petroleum product or hazardous materials / waste spill or incident

Person Reporting Spill or Incident

Name:	**Address:**
Phone #:	**Signature:**

Type of Spill

Common name of spilled Substance:
Estimated Quantity Spilled:
Estimated Concentration:
Date of Spill:

LAND SPILL	WATER BODY SPILL
Name of Site:	**Water Body Name:**
Address:	**Location of Discharge:**
Description of area:	**Description of area:**

Actions Taken to:

Contain Spill:

To clean up spill or recover from incident:

To remove cleanup material:

To Prevent reoccurrence:

Person responsible for managing spill response:		
Name	**Signature**	**Phone**

Spill Notification List

Emergency 911

Salem City (801) 423-2770 ext.235 24-hour hotline (801) 420-2539

Salem City MS4 Coordinator (801) 367-0728

Utah County Stormwater Coalition (801) 851-7873

Utah Division of Environmental Quality spill hotline (801) 536-4123

IDDE- Removing Illicit Discharges (9/14/2020)

1. Preparation
   a. Obtain available property ownership information for the source of the illicit discharge.

2. Process
   a. Determine who is financially responsible; and follow associated procedures as given below.

      For Private Property Owner:
      Contact Owner,
      Issue Notice of Violation for violations of the municipal ordinance, and determine
      schedule for removal.

      For Municipal Facility:
      Notify appropriate municipal authority or department head,
      Schedule removal, and
      Remove illicit connection.

   b. Suspend access to storm drain if threats of serious physical harm to humans or the environment are possible.

   c. Direct responsible party to initiate repairs / corrections / cleanup. Coordinate with enforcement official for escalating penalties in accordance with the municipal ordinance.

   d. Repair / correct cause of discharge if municipality is responsible. Schedule the work through the appropriate municipal authority or department head.

e. Seek technical assistance from the Utah County Health Department or Utah department of Water Quality, if needed.

3. Clean-up
   a. Confirm illicit discharge is removed or eliminated by follow-up inspection.

4. Documentation
   a. Maintain records of notice of violation and penalties.
   b. Document repairs, corrections, and any other actions required.

Spill Responses and Clean up

Any discharges in 24 hours equal to or in excess of the reportable quantities listed in 40 CFR 117, 40 CFR 110, and 40 CFR 302 will be reported to the National Response Center and the Division of Water Quality (DWQ) as soon as practical after knowledge of the spill is known to the permittee. The permittee shall submit within 14 calendar days of knowledge of the release a written description of: the release (including the type and estimate of the amount of material released), the date that such release occurred, the circumstances leading to the release, and measures taken and/or planned to be taken to the Division of Water Quality (DWQ), 288 North 1460 West, P.O. Box 144870, Salt Lake City, Utah 84114-4870. The Storm Water Pollution Prevention Plan must be modified within14 calendar days of knowledge of the release to provide a description of the release, the circumstances leading to the release, and the date of the release. In addition, the plan must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate.

Materials	Media Released To	Reportable Quantity
Engine oil, fuel, hydraulic fluid	Land	25 Gallons
Paints, solvents, thinners	Land	100lbs (13 Gal)
Engine oil, fuel, hydraulic fluid	Water	Visible Sheen
Antifreeze, battery acid, gasoline, engine degreasers	Air, Land, Water	100lbs (13 gallons)

Refer to Salem's Outdoor and Spill response SOP. Small spills are generally handled by internal personnel and usually do not require an emergency response by police or fire department HAZMAT teams.

- Quickly control the spill by stopping or securing the spill source.
- This could be as simple as up righting a container and using floor dry or absorbent pads to soak up the spilled material. Wear gloves and protective clothing.

- Put spill material and absorbents in secure containers if any are available
- Consult the Facility Responsible Person and the MSDS for the spill and waste disposal procedures.
- Manage spill by dry-mopping or covering liquids with absorbents/towels. Collect/Sweep-up waste immediately with a broom or wet/dry vac, and dispose of in a lawful manner.
- In some instances, the area of the spill should **not** be washed with water. Use Dry Cleanup Methods and **never** wash spills down the drain, onto a storm drain or onto the driveway or parking lot. If water must be used, then use berms or other protective barriers to isolate polluted areas from storm drain inlets. Block off or seal storm drain inlets to prevent potential discharge. Collect and dispose of water in a lawful manner.
- Both the spilled material and the absorbent may be considered hazardous waste and must be disposed of in compliance with state and federal environmental regulations.

REPORTING SPILLS

To report illegal dumping/spills, contact your local stormwater pollution control agency.

Maintain appropriately stocked spill response kits at each facilities and locations where oil, chemicals, or other hazardous materials are handled and stored.

All chemical spills, regardless of size, should be reported as soon as possible to the Facility Responsible Person. The Facility Responsible Person will determine whether the spill has the potential to affect the environment outside of the facility and must be reported to 911 or Utah Department of Health Emergency Response: (801) 580.6681

Refer and provide information regarding spills using the **Spill or Incident Report Form** provided on pages 4 and 5.

Report shall be kept on record with facility SOP manual and with Salem's Storm Water Coordinator.

IDDE – **Call-in Inspections** (updated 9/14/2020)

Refer to the Salem City Storm Water Management Plan:

4.2.3.6.1. IDDE Investigation Documentation

All IDDE investigations must be thoroughly documented and may be requested at any time by the Division. If a Permittee is unable to meet the minimum performance measures outlined in Parts 4.2.3.5. or 4.2.3.6., the Permittee must immediately submit to the Division written documentation or rationale describing the circumstances why compliance with the minimum performance measures was not possible. All IDDE documentation shall be retained by the Permittee as required by the SWMP document.

The Engineering Division or its appointees will thoroughly investigate and document all illicit discharges. All of the investigation documentation and procedures will be kept on the Engineering Division the SWMP electronic files.

1. Preparation

    a. Have a system in place to receive phone calls and collect information regarding suspected illicit discharges.

2. Process

    a. Use the Incident tracking Sheet to collect the appropriate information from the caller. Then, transfer the Incident tracking sheet to the proper authority (i.e. department head, storm water specialist, construction inspector, code enforcement officer, or other assigned personal).
    b. Promptly investigate reported incidents.
    c. If an illicit discharge of unknown source is confirmed, follow the procedure of SOP IDDE Tracing Illicit Discharges.
    d. If an illicit discharge known source is confirmed, follow the procedure of SOP IDDE Removing Illicit Discharges.

3. Clean-up

a. Clean catch basin, clean storm drain, or initiate spill response, as applicable. Follow relevant SOPs.

4. Documentation
   a. File all completed forms (i.e. incident tracking, catch basin cleaning, storm drain cleaning).
   b. Document any further action taken.
   c. Review incidents reported by citizens on an annual basis to look for patterns of illicit discharges and to evaluate the call-in inspection program.

Stormwater Pollution Control Agencies

Salem City (801) 423-2770 ext.235 24-hour hotline (801) 420-2539

Salem City MS4 Coordinator (801) 367-0728

Utah County Stormwater Coalition (801) 851-7873

Utah Division of Environmental Quality spill hotline number at (801) 536-4123

Appendix E

Pollution Prevention and Good Housekeeping Standard Operating Procedures

PRE-CONSTRUCTION SWPPP

Description: This section contains information and guidelines for protecting and preparing a construction site in accordance to Salem City's Storm Water Master Plan (SWMP) and the EPA's construction General Permit (CGP).

Applicability: Protecting construction sites and surrounding runoff areas prior to construction.

1. **Preparation**
   a. Conduct a pre-construction review of site and planed operations. Total area of site, area to be disturbed during the course of the project. Maximum are to be disturbed at one time.
   b. Review SWPPP requirements, workability and phasing as it pertains to the contractor.
   c. Physically inspect the project site and discuss contractors work plan and approach for providing efficient erosion control/stormwater compliance.

2. **Process**
   a. Review location of all BMPs, that correct installation for construction to manage runoff from slopes and drainage patterns created from site.
   b. Insure that procedures and BMPs are used that will protect water quality.

c. Encourage the use of low impact design (LID) and green infrastructure where opportunities exist.
d. Site features and sensitive areas to be protected/preserved

On-site Availability of your SWPPP

Contractor must keep a current copy of their SWPPP on site or at an easily accessible location so that it can be made available at the time of an on-site inspection or upon request by DWQ, the EPA or an MS4 inspector. The SWPPP can be stored electronically as long as personnel on-site can access it and make it available for inspector's review.

3. SWPPP MODIFICATIONS (CGP 7.5)

7.5.1 You must modify SWPPP, including the site map(s), within seven (7) days of any of the following conditions:

a. Whenever there's changes to the construction plans, storm water controls or other activities on site that are no longer accurately reflected in the SWPPP. There's no need to modify the SWPPP if the estimated dates in Part 7.3.2f change during the course of construction;
b. To reflect areas on the site map where operational control has been transferred (new general contractor or owner), note the change and date of transfer since initiating permit coverage;
c. If inspectors or investigations by DWQ or its authorized representatives determine that SWPPP modifications are necessary for compliance with this permit;
d. Where DWQ determines it is necessary to install and /or implement additional controls at your site in order to meet the requirements of this permit, the following must be included in the SWPPP: (1) A copy of any correspondence describing such measures and requirements; an (2) a description of the controls that will be used to meet such requirements.
e. To reflect any revisions to applicable federal, state or city requirements the effect the stormwater controls implemented at the site.

4. NON-STORMWATER DISCHARGES. (CGP sec 1.2.3 app a-k)

a. Discharges from emergency fire-fighting activities.
b. Fire hydrant testing
c. Properly managed landscape irrigation
d. Water used to wash vehicles and equipment, provided that there is no discharge of soaps, solvents or detergents used for such purposes.
e. Water used to control dust.
f. Potable water including uncontaminated water line flushing.
g. External building washdown, provided soaps, solvents and detergents are not used and external surfaces do not contain hazardous substances.
h. Pavement wash waters, provided spills or leaks of toxic or hazardous materials have no stormwater conveyance unless the conveyance is connected to a sediment basin, sediment trap or similarly effective control for the pollutants present. Per 2.2.5.d. Hosing off accumulated sediments on pavement into any stormwater conveyance is prohibited.
i. Uncontaminated air conditioning or compressor condensate.
j. Uncontaminated, non-turbid discharges of ground water (from natural sources) or spring water.
k. Foundation or footing drains where flows are not contaminated with process materials such as solvents, contaminated ground water or sediment from construction activity.

5. PROHIBITED DISCHARGES. (CGP)

a. 1.3.1 Wastewater from washing tools and vehicles after pouring, prepping or finishing concrete.
b. 1.3.2 Wastewater from washing and cleanout of stucco, paint, concrete from release oils, curing compounds and other construction materials.
c. 1.3.4 Soaps, solvents or detergents used in vehicle and equipment washing or external washdown.
d. 1.3.5 Toxic or hazardous substances from a spill or other release. To prevent the above listed prohibited non-stormwater discharges, operators must comply with the applicable prevention requirements in part **2.3 Pollution prevention requirements** (CGP)

CONSTRUCTION – During and Post Construction Site Inspection

Description; This section contains information and guidelines for protecting a construction site with BMPs and a SWPPP during and after the construction of a project.

Applicability; Protecting construction sites and surrounding runoff areas.

1. **Common Plan**
    1. All permittees shall review as necessary, implement and enforce a program to reduce pollutants in any storm water runoff to the MS4 from construction sites with a land disturbance of greater than or equal to one (1) acre, including projects less than one (1) acre that are part of a larger common plan of development or sale according the minimum performance measures listed below. Public and private projects, including projects proposed by the permittees own departments and agencies, shall comply with these requirements. The minimum performance measures are:
    2. This measure is intended to minimize polluted storm water runoff from construction activities. Construction activities can contribute significant levels of sediment to storm water runoff if erosion and sediment controls are not implemented. The program includes:
    3. Program Description/Establishing Standard Operating Procedures (SOP)
    4. City Ordinances
    5. Storm Water Pollution Prevention Plan (SWPPP)
    6. Construction Site Inspections
    7. Record keeping of permitted sites
    8. The ordinance will address any kind of land disturbance activities that disturb an area greater than or equal to one (1) acre, including projects less than one (1) acre that are part of a larger common plan of development or sale. The ordinance also requires Storm Water Pollution Prevention Plan controls on sites that do not meet the description mentioned above.
2. **Process**
    a. The ordinance or other regulatory mechanism shall, require construction operators to prepare a Storm water Pollution Prevention Plan (SWPPP) and apply sediment and erosion control Better Management Practices (BMP) as

necessary to protect water quality, reduce the discharge of pollutants and control waste such as but not limited to, discarded building materials, concrete washout, chemicals, litter and sanitary waste at the construction site that may cause adverse impacts to water quality. The SWPPP requirements must be, at a minimum, equivalent with the SWPPP requirement set forth in the UPDES Storm Water General Construction Permit (CGP) for construction activities, which can be found at: http://www.deq.gov/Permits/water/updes/stormwatercon.htm .

b. Salem City will require contractors to first develop a SWPPP for all construction greater than one (1) acre or common plan of development.
c. Salem City will require contractors to submit an erosion control plan in the form of a SWPPP and submit evidence of a Notice of Intent (NOI). Salem City will conduct and document SWPPP reviews and inspections in accordance with part 4.2.4. The construction storm water inspection evaluation form for SWPPP compliance includes verification that the contractors NOI is included. The NOI will be verified as current at the time of inspection.
d. Salem City ordinance 1-2-060 for the right of entry for inspections, states; " Whenever necessary to make an inspection to enforce any ordinance or resolution or whenever there is a reasonable cause to believe there exists an ordinance or resolution violation in any building or upon the premises within the jurisdiction of this city, any authorized official of the city may, upon presentation of proper credentials, enter such building or premises at all reasonable times to inspect the same or to perform any duty imposed upon him/her by ordinance; provided, the except in emergency situations or when consent or the owner and/or occupant to the inspection has been otherwise obtained, he shall give the owner and/or occupant, if they can be located after reasonable effort , 24 hours written notice of the authorized officials intention to inspect. The note which id transmitted to the owner and/or occupant shall state that the property owner and/or occupant has the right to refuse entry and that in that event, inspection may be made only upon issuance of a search warrant by a duly authorized magistrate or judge".

3. Priority Construction site

Identify priority construction site considering the following factors at a minimum.

a. Soil Erosion
b. Site slope
c. Project size and type
d. Sensitivity of receiving waterbodies
e. Proximity to receiving waterbodies
f. Non-storm water discharges and past record of non-compliance by the operators of the construction.

4. Construction Site Inspection

a. Salem City's SWPPP/MS4 inspector will inspect all phases of construction until the termination of the project.
b. All sites will be inspected by the City inspector on a monthly basis and priority sites will be inspected every two (2) weeks.
c. Inspections will be documented on the states form and emailed for documentation. All inspections will follow the inspection SOP.
d. The SWPPP inspector will inspect site with the priority designation (as determined during the SWPPP review) at least biweekly using the standard construction inspection SOP.
e. The Municipal SWPPP inspector will take all necessary follow-up actions (re-inspection, enforcement) to ensure compliance in accordance with Salem City's Ordinances. Enforcement actions will be tracked and documented by emailing all actions to the MS4 account/Inspector.
f. Procedures for Notice of Termination (NOT) by the operator of a permitted site to verify the final stabilization and removal of all temporary control measures will be developed. The procedure will be provided to the construction operator/owner before construction ends.

Dumpsters/Garbage Storage

Personnel must follow the correct procedure in accordance with this SOP. Personnel are responsible for determining the type of waste they need to dispose of and following procedure to ensure it is disposed of properly. Personnel are also responsible for reporting if instances of leakage, missing covers, or misuse of material receptacles.

Purpose

The purpose of this procedure is to ensure proper disposal of waste activities conducted by or overseen by facilities staff. In addition, this procedure outlines how to prevent discharges from dumpsters kept at the facilities yard and other locations on grounds, which could cause pollutants to enter storm sewers.

Managers & Supervisors

Managers and Supervisors are responsible for ensuring their staffs compliance with this procedure. Managers are to train their employees in the proper disposal of waste materials to prevent spills of potential pollutants into the storm sewer system. Managers and Supervisors are responsible for ensuring training is conducted with the most recent version of the SOP.

Personnel Performing the Job

Personnel must follow the correct procedures in accordance with this SOP. Personnel are responsible for determining the type of waste they need to dispose of and follow the procedure to ensure it is disposed of properly. Personnel are also responsible for reporting if instances of leakage, missing covers, or misuse of material receptacles.

Municipal Solid Waste is not regulated for special disposal and can be placed into a general waste dumpster. Examples include office waste, classroom waste and any general waste that is commonly disposed of in a general trash can for pick up by building services. Recyclable materials should be separated from this material and placed into the nearest recycling bin.

a. Staff are responsible for depositing their waste in the nearest appropriate trash can or general dumpster that's appropriate.
b. Building service staff whose responsibilities include emptying building trash cans, are responsible for collecting material from buildings and depositing them in the nearest

appropriate dumpster. Staff are responsible for closing the lid or door to the dumpster after depositing material inside.

c. Frontload trash container have tops that will remain closed when not in use.
d. Roll-off dumpsters will be covered when not in use. Tarps are acceptable dumpster cover provided they are in good condition and free from holes.
e. Staff are responsible for ensuring that their material makes it into the dumpster and debris is not left around the dumpster as a result of their disposal efforts.

Train employees on proper trash disposal.

a. Locate dumpsters and trash cans in convenient, easily observable areas.
b. Install berms, curbing, or vegetation strips storage areas to control water entering/ leaving storage areas.
c. Whenever possible store garbage containers beneath a covered structure or inside to prevent contact with storm water.

Process

a. Inspect garbage bins for leaks regularly, and have repairs made immediately by responsible party.
b. Request / use dumpsters, and trash cans with lids and without drain holes.
c. Locate dumpsters on a flat, hard surface that does not slope or drain directly into the storm drain system.

Clean-up

a. Keep areas around dumpsters and trash cans clean of all garbage.
b. Have garbage bins emptied regularly to keep from overfilling.
c. Wash out trash cans or dumpsters as needed to keep odors from becoming a problem.

Recyclable, Recoverable or Reusable Materials can be diverted from disposal in a landfill and accepted by Salem City's Recycling program. Staff are responsible for properly sorting as much of their recyclable, recoverable or reusable materials as possible to reduce environmental impact. Materials currently collected under this program include but are not limited to the following:

a. Metal including aluminum, steel, copper, tin and brass. Small quantities, including soda or tin cans, can be deposited into a designated recycling bin.
b. Cardboard should be flattened and placed into recycling bin. Container lids should be closed when not in use.
c. Electronics including CDs and DVDs, cell phones and chargers, used ink jet cartridges, computers, printers and TVs. Small electronics can be deposited at an E-recycling location.
d. Small quantities of glass including clear and colored glass. Windowpanes, mirrors, and laboratory glass are not permitted.

e. Plastic includes all numbered plastics (#7) such as coffee lids, yogurt cups, plastic bottles and caps, plastic bags and plastic wrap. Toxic substance containers such as motor oil or antifreeze are not permitted. Styrofoam is not permitted.
f. White paper includes white paper such as printer/copy paper and notebooks.

Construction Demolition Debris (CDD) includes material generated during renovation, construction or demolition of buildings, utilities or other infrastructures. CDD waste often includes bulky materials not generally found in the MSW including gypsum board, wood, metal, insulated metal, plastics concrete, brick, insulating material, rock, furniture and other building materials.

a. Major construction, renovation and demolition projects are expected to have their own CDD dumpster on site. This dumpster must be covered when not in use.
b. Smaller operation and maintenance projects may use the CDD dumpster currently located in the facility yard. Liquid waste should not be disposed of in container/dumpster.

Vehicle/Equipment washing and Storage.

Regular maintenance of both municipal and contracted vehicles and heavy equipment not only prolongs the life of municipal assets but also helps reduce the potential for leaking of fluids associated with normal wear and tear. Potential pollutants include fuels, oil, antifreeze, brake fluid, solvents, and battery acid. The goal of this written Standard Operating Procedure (SOP) is to provide guidance to municipal employees to help reduce the discharge of pollutants from the MS4 as a result of leaks from vehicles and equipment. If services are contracted with respect to vehicles and equipment, this SOP should be provided to the contractor. The contract should also specify that the contractor is responsible for compliance with all applicable laws.

Salem City undertakes various procedures in regards to its municipal vehicles and equipment.

Procedures

Salem City will implement the following procedures for municipally owned and operated vehicles and equipment to reduce the discharge of pollutants from the MS4:

Vehicle and Equipment Maintenance

Vehicle Storage

- Monitor vehicles and equipment for leaks and use drip pans as needed until repairs can be performed.
- When drip pans are used, avoid overtopping.
- Drain fluids from leaking or wrecked vehicles and parts as soon as possible. Dispose of fluids properly.
- Store and park vehicles on impervious surfaces and/or under cover or indoors whenever possible.

Vehicle Maintenance

- Conduct routine inspections of heavy equipment and vehicles to proactively identify maintenance needs or potential leaks.
- Perform routine preventive maintenance to ensure heavy equipment and vehicles are operating optimally.

- Recycle or dispose of waste properly and promptly.
- Sweep and pick-up trash and debris as needed.
- Do not dump any liquids or other materials outside, especially near or in storm drains or ditches.

Fueling

- Fueling areas owned or operated by the municipality should be covered.
- Fueling areas should be evaluated to ensure that pollutants (e.g., gasoline or oil) do not enter the MS4.

Material Management

- Store materials and waste in labeled containers under cover and in secondary containment.
- Chemicals should not be combined in containers.
- Hazardous waste must be labeled and stored according to hazardous waste regulations.
- Carefully transfer collected fluids from containers into designated storage areas as soon as possible.
- Store new and used batteries securely to avoid breakage. Store indoors or in secondary containment to contain potential acid leaks. Recycle used batteries.
- Conduct periodic inspections of storage areas to detect possible leaks.
- Do not wash or hose down storage areas unless there is prior approval to collect and discharge the water into the sanitary sewer. Use dry cleanup methods whenever possible.
- Keep lids on containers. Store them indoors or under cover to reduce exposure to rain.
- Proper spill protocol should be followed to prevent chemicals from entering the stormwater system.

Vehicle and Equipment Washing

Vehicle washing activities can result in the discharge of nutrients, sediment, petroleum products, and other contaminants to a surface water body or to an engineered drainage system.

Outdoor washing of municipal vehicles should be avoided unless a sand and silt separator for wash water in place. Where no alternate wash system is available, and full containment of wash water cannot be achieved, the following procedures shall be followed:

- Avoid discharge of any wash water directly to a surface water (e.g., stream, pond, drainage swale, etc.)
- Minimize use of water to the extent practical.

- Do not use solvents except in dedicated solvent parts washer systems or in areas not connected to a sanitary sewer.
- Grassy and pervious (porous) surfaces may be used to promote direct infiltration of wash water, providing treatment before recharging groundwater and minimizing runoff to an adjacent stormwater system. Pervious surfaces or other infiltration-based systems shall not be used within wellhead protection areas or within other protected resources.
- All adjacent engineered storm drain system catch basins shall have a sump. These structures shall be cleaned periodically.
- Solids and particulate accumulation from the washing area shall be completed through periodic sweeping and/or cleaning.
- Maintain absorbent pads and drip pans to capture and collect spills or noticeable leaks observed during washing activities.
- Designate separate areas for routine maintenance and vehicle cleaning. This helps prevent contamination of wash water by motor oils, hydraulic lubricants, greases, etc.
- Floor drains shall be connected to a sanitary sewer through a sand and silt separator. Floor drains discharging to adjacent surface water bodies or engineered storm drain systems shall be permanently plugged or otherwise abandoned before any vehicle wash activities are completed.

Heavy Equipment Washing Procedures

- Mud and heavy debris removal should occur on impervious surfaces or within a retention area.
- Maintain these areas with frequent mechanical removal and proper disposal of waste.
- Impervious surfaces with engineered storm drain systems should not discharge directly to a surface water.
- Floor drains should be connected to a sanitary sewer or tight tank. Floor drains discharging to adjacent surface waterbodies or engineered storm drain systems should be permanently plugged or otherwise abandoned before any vehicle wash activities are completed.
- Where the use of detergent cannot be avoided, use products that do not contain regulated contaminants. The use of biodegradable, phosphate-free detergent is preferred.
- Detergents should not be used in areas where oil/water separators provide pre-treatment of drainage.
- Maintain absorbent pads and drip pans to capture and collect spills or noticeable leaks observed during washing activities.

Employee Training

- Employees who perform work on/with municipal vehicles or equipment are trained annually on these procedures and the proper operation of related equipment.
- Employees are also trained on stormwater pollution prevention, illicit discharge detection and elimination (IDDE) procedures, and spill and response procedures.
- If services are contracted, the contractor should be given a copy of this and any applicable SOPs to ensure compliance with MS4 regulations.

Vehicle Maintenance and Repair Activities

The purpose of this procedure is to describe the proper means for maintaining vehicles and equipment that are used or stored outdoors at Salem City Facilities. Improperly maintained vehicles and equipment can generate spills or leaks that can enter the storm sewer system or generate contaminated stormwater runoff. Discharge of these contaminants into a storm drain is considered an "Illicit Discharge." Illicit discharges can result in significant fines from regulatory agencies.

Responsibility

- **a.** Managers are responsible for ensuring that staff who operate and maintain vehicles or equipment are familiar with and follow these procedures. Managers and supervisors are responsible for ensuring training is conducted with the most recent version of the SOP.
- **b.** Personnel are responsible for following the correct procedures for vehicle or equipment maintenance.
- **c.** Before using a vehicle or piece of equipment, operators should inspect it for any obvious signs of leaks or other maintenance problems.
- **d.** All vehicles or equipment should receive routine maintenance according to the manufacturer's guidelines, at minimum.
- **e.** Vehicle maintenance should occur, at minimum, once a year during State required vehicle inspection.

Unexpected repairs, spills or leaks

- **a.** For equipment or machinery that can be maintained on-site using in-house staff, proper precautions should be taken to ensure any leaks, spills, or drips from maintenance operations do not cause stormwater contamination. Ideally maintenance should occur indoors where equipment cannot come into contact with stormwater. In the event that maintenance cannot occur indoors efforts should be made to minimize the possibility of an illicit discharge or stormwater contamination. All maintenance activities should be conducted on an impervious surface as far as possible for stormwater conveyances, ditches, or drains. Additional precautions may include, but

are not limited to the use of tarps or drip pans under equipment during maintenance activities.

b. Upon identification of a problem with a vehicle or piece of equipment, it shall receive service as soon as possible. Notify appropriate maintenance personnel so the vehicle or equipment can be taken out of service and repaired. Precautions should be taken so that stormwater contamination or an illicit discharge does not occur before the equipment can be serviced. Spills and leaks should be cleaned up immediately upon discovery and contaminated material should be disposed of properly.

What to do:

a. Keep all work areas neat & well organized. Sweep up all trash & debris daily or as needed. Label containers, sign procedures, and designate work areas.

b. Conduct daily inspections to ensure that equipment & materials are being handled, disposed and stored correctly. Recycle or dispose of all wastes properly and promptly.

c. Have spill cleanup materials nearby. Clean up spills promptly, with DRY methods; cleanup is completed ONLY after absorbent disposed properly and rags disposed of properly or sent to industrial laundry.

d. Conduct maintenance and repair activities indoors or under cover whenever possible to minimize exposure of fluids to stormwater runoff.

e. Park vehicles to be maintained in the designated areas. Monitor parked vehicles closely for leaks; use drip pan as needed.

What <u>not</u> to do:

a. DO NOT let waste accumulate at or around the work place; more clutter equals more accident opportunities.

b. DO NOT transfer, pour or dispose of maintenance fluids outdoors near or in storm drains or ditches.

c. DO NOT wash or hose down the garage area except where the wash water will only enter the sanitary sewer drain as an approved discharge; use dry cleanup methods as often as possible.

d. DO NOT leave a leaking vehicle unattended; use a drip pan temporarily and then drain fluids if not being repaired and waiting for final deposition.

e. DO NOT mix waste oil, fuel, antifreeze or chlorinated solvents. Consult a hazardous waste hauler.

Annual Review of Procedure/Training

All managers and personnel who maintain or operate vehicles or equipment are responsible for reviewing this procedure with all employees who have these job duties at least once each

year. Any project managers who hire contractors to perform these job duties are required to convey the requirements of this procedure to the contractors.

VEHICLE – FUEL AND OIL HANDLING PROCEDURES

Spills, leaks, and overfilling can occur during handling of fuels and petroleum-based materials, even in small volumes, representing a potential source of stormwater pollution. This Standard Operating Procedure addresses a variety of ways by which fuels and petroleum-based materials can be delivered, as well as steps to be taken when petroleum products (such as waste oil) are loaded onto vehicles for offsite disposal or recycling. Delivery, unloading, and loading of waste oils are hereafter referred to as "handling".

The following shall observed

a. There is no smoking while fuel handling is in process or underway.
b. Sources of flame are kept away while fuel handling is being completed. This includes smoking, lighting matches, carrying any flame, or carrying a lighted cigar, pipe, or cigarette
c. The delivery vehicle's hand brake is set and wheels are chocked while the activity is being completed.
d. Catch basins and drain manholes are adequately protected.
e. No flammable liquid shall be unloaded from any motor vehicle while the engine is operating, unless the engine of the motor vehicle is required to be used for the operation of a pump.
f. The attending persons should watch for any leaks or spills.
    i. Any small leaks or spills should be immediately stopped and spilled materials absorbed and disposed of properly.
    ii. In the event of a large spill or one that discharges to surface waters or an engineered storm drain system, the facility representative shall activate the facility's Stormwater Pollution Prevention Plan (SWPPP) and report the incident as specified within.

Responding to a spill

In the event of a spill, follow these spill response and cleanup procedures:

a. If the facility has a Stormwater Pollution Prevention Plan (SWPPP), notify a member of the facility's Pollution Prevention Team, the facility supervisor, and/or the facility

safety officer.

b. Assess the contaminant release site for potential safety issues and for direction of flow.
c. Stop the contaminant release.
d. Contain the contaminant release through the use of spill containment berms or absorbents.
e. Protect all drains and/or catch basins with the use of absorbents, booms, berms or drain covers.
f. Clean up the spill.
g. Dispose of all contaminated products in accordance with applicable federal, state and local regulations.

Maintenance and Prevention Guidance

Prevention of spills is preferable to even the best response and cleanup. To mitigate the effects of a contaminant release, provide proper maintenance and inspection at each facility. To protect against contaminant release, adhere to the following guidance.

a. Ensure all employees are properly trained to respond in the case of a spill, understand the nature and properties of the contaminant, and understand the spill control materials and personnel safety equipment. Maintain training records of current personnel on site and retain training records of former personnel for at least three years from the date last worked at the facility.
b. Provide yearly maintenance and inspection at all municipal facilities, paying particular attention to underground storage tanks. Maintain maintenance and inspection records on site.
c. Provide yearly maintenance and inspection at all municipal facilities, paying particular attention to underground storage tanks. Maintain maintenance and inspection records on site.
d. Ensure storage in closed containers inside a building and on an impervious surface wherever possible.
e. If storage cannot be provided inside, ensure secondary containment for 110 percent of the maximum volume of the storage container.
f. Provide accurate labels, Material Safety Data Sheets (MSDS) information, and warnings for all stored materials.
g. Regularly inspect storage areas for leaks.

Employee Training

a. Employees who perform work with potential stormwater pollutants shall be trained once per year or as needed on proper spill procedures.

b. Employees are also trained on stormwater pollution prevention and illicit discharge detection and elimination (IDDE) procedures.

STREETS / STORM DRAIN – Street Sweeping and Parking Lots

Regular sweeping of streets and municipally-owned parking lots is important for maintaining clean and safe roadways. It also plays a vital role in keeping pollutants like sand, trash, and leaves out of the MS4. The goal of this written Standard Operating Procedure (SOP) is to provide guidance to municipal employees on street and parking lot sweeping procedures and frequencies to reduce the discharge of pollutants to the storm drainage system and receiving waters. If sweeping services are contracted, this SOP should be provided to the contractor. The contract should specify that the contractor is responsible for compliance with all applicable laws.

Sweeping Frequency

a. All streets should be swept and/or cleaned a minimum of once per year in the spring (with the exception of rural uncurbed roads with no catch basins or high-speed limited access highways).
b. Sweep as soon as possible after snow melt and following winter activities such as sanding to capture sand and debris before it is washed into the storm drainage system.
c. Consider more frequent sweeping for targeted areas based on pollutant load reduction potential, inspections, pollutant loads, catch basin cleaning or inspection results, land use, impaired waters, or other factors.

Sweeping Practices

a. Street sweeping should be conducted in dry weather. Sweeping should not be conducted during or immediately after rain storms.
b. Dry cleaning methods should be used whenever possible, with the exception of very fine water spray for dust control. Avoid wet cleaning or flushing of the pavement.
c. When necessary, enact parking bans to facilitate sweeping on busy streets.
d. Sweep in a manner that avoids depositing debris into storm drains.
e. Sweeping equipment (mechanical, regenerative air, vacuum filter, tandem sweeping) should be selected depending on the level of debris. Brush alignment, sweeper speed, rotation rate, and sweeping pattern should be set to optimal levels to manage debris.
f. Routinely inspect and perform maintenance on sweeping equipment to reduce the potential for leaks.

g. Sweepings are classified as solid waste. If not reused, they should be disposed of at solid waste disposal sites.
h. Salem will store sweepings intended for reuse in the Public Works Storage yard in accordance with MS4 regulations.

Documentation and Reporting

a. Prioritize cleaning routes to use at the highest frequency in areas with the highest pollutant loading.
b. Street maps are used to ensure all streets are swept at a specified interval
c. Number of miles cleaned or the volume or mass of material removed.

STREETS / STORM DRAIN – Snow Removal and De-icing

Winter road maintenance includes snow removal and the use of salt, sand, or deicers to ensure safe winter driving conditions. Proper maintenance procedures and use and storage of materials can help reduce the discharge of pollutants, such as sand and salt, from the MS4 and to receiving waters. The goal of this written Standard Operating Procedure (SOP) is to provide guidance to municipal employees on the use and storage of salt and sand, minimizing the use of salt, evaluating opportunities for use of alternative materials, and ensuring that snow disposal activities to not result in disposal of snow into surface waters. If services are contracted, this SOP should be provided to the contractor. The contract should specify that the contractor is responsible for compliance with all applicable laws.

Salem performs a variety of maintenance activities to ensure safe winter driving conditions on its roads and parking lots.

Procedures

Salem will implement the following winter maintenance procedures to reduce the discharge of pollutants from the MS4:

Equipment and Maintenance

a. Calibrate equipment to reduce and optimize salt use and ensure deicing agents are being used efficiently. Provide employee training on proper calibration procedures.
b. Do not overfill trucks with deicing materials as it may lead to spills.
c. Wash equipment using proper procedures to prevent pollutants from entering the stormwater system. Dry cleanup procedures should be used when possible. Vehicles dirtied from salt or sand application should be washed according to procedures in **SOP Vehicles- Vehicles and Equipment washing and storage.**
d. Regularly inspect and maintain equipment to reduce the potential for leaks. See **SOP Municipal-Vehicle Maintenance and repair activities** for more information.

Deicing

a. Minimize the use and optimize the application of sodium chloride and other salt1 (while maintaining public safety) and consider opportunities for use of alternative materials.

b. Remove as much snow as possible using mechanical means like plowing, blowing, or shoveling before deicing to reduce the need for road salt or other deicing chemicals.
c. Only apply road salt when the pavement temperature is above 15° F.
d. Avoid mixing road salt and sand. Doing so makes both the salt and sand work less efficiently and leads to over-application.
e. Only apply enough deicer so that plows can remove the snow and ice. Adjust the application rate of deicers based on the type of storm, type of agent used, and anti-icing and pre-wetting techniques used.
f. Perform unloading/loading of trucks on impervious surfaces whenever possible. These areas should be frequently cleaned and swept to reduce the tracking and runoff of salt and to capture any spills.

Storage of Deicing Materials

a. Prevent exposure of deicing product (salt, sand, or alternative products) storage piles to precipitation by enclosing or covering the storage piles. Implement good housekeeping, diversions, containment or other measures to minimize exposure resulting from adding to or removing materials from the pile. Store piles in such a manner as not to impact surface water resources, groundwater resources, recharge areas, and wells.
b. Store materials under covered or enclosed areas and on impervious surfaces.
c. Ensure that there are adequate drainage controls in storage areas to prevent runoff from entering the stormwater system.
d. Frequently sweep near the storage/loading areas to reduce the amount of salt, sand, or other materials that is tracked out.

Snow Storage and Disposal

a. Snow should not be pushed or dumped into waterbodies or wetlands, into stormwater drainage swales or ditches, or on top of catch basins.
b. Snow should not be stored near drinking water areas, waterbodies, or wetlands.
c. Avoid storing snow in areas that are unstable, areas of potential erosion, or high points where snow may melt and collect debris as runoff before it enters the stormwater system.
d. Consider practices such as living snow fences to contain snow piles and reduce snow drifting.

Open Space Management (updated 9/14/2020)

Parks and open space operations and maintenance activities commonly involve the operation of equipment such as mowers and tractors; disposal of waste from mowing, planting, weeding, raking, pruning, and trash collection; application of pesticides, herbicides, and fertilizers; cleaning and maintenance of park amenities such as play equipment, restrooms, and structures; and snow removal. These activities have the potential to generate contaminants such as sediments and toxic chemicals that may be picked up by rainwater, thereby entering the storm drainage system and receiving waters. The goal of this written Standard Operating Procedure (SOP) is to provide guidance to municipal employees to reduce the discharge of pollutants from the MS4 and to receiving waters as a result of parks and open space operations and maintenance. If services are contracted, this SOP should be provided to the contractor. The contract should specify that the contractor is responsible for compliance with all applicable laws.

Salem City performs a variety of operations and maintenance activities at its municipal parks and open spaces.

Procedures

Salem City will implement the following procedures at municipal parks and open spaces to reduce the discharge of pollutants from the MS4:

- Repair damage to landscaped or mulch or vegetated bare areas as soon as possible to prevent erosion. If there are areas of erosion or poor vegetation, repair them as soon as possible, especially if they are within 50 feet of a surface water.
- Remove (sweep or shovel) materials such as soil, mulch, and grass clippings from parking lots, streets, curbs, gutters, sidewalks, and drainage-ways.
- Do not clean up any unidentified or possibly hazardous materials found during maintenance; notify a supervisor immediately.

Maintenance

- Wastewater from power washing signs, structures, or bleachers cannot be discharged into the stormwater system.
- When painting park equipment, use a drop cloth and clean up any spills immediately.
- Do not leave open containers on the ground where they may accidentally tip over.

- Sweep parking lots with a street sweeper and dispose of street sweepings in designated areas.
- Never wash debris from parking lots into the storm drain.

Mowing

- Remove debris and trash from landscaped areas prior to mowing.
- Collect grass clippings and leaves after mowing. Do not blow or wash them into the street, gutter, or storm drains.
- Properly recycle or dispose of organic waste after mowing, weeding, and trimming.
- Reduce mowing frequencies wherever possible by establishing low/no-mow areas in lesser-used spaces.
- Brush off mowers (reels and decks) and tractors over grassy areas or in contained washout areas.
- Leave clippings on grassy areas or dispose of them in the trash or by composting.
- Do not hose off mowers over paved areas that drain into the MS4 or directly to surface waters.
- Follow proper vehicle and equipment maintenance procedures to prevent leaks (see SOP: Operations and Maintenance of (see SOP: Operations and Maintenance of Municipal Vehicles and Equipment)
- Do not allow grease from mowers to fall onto areas where they can be washed into the stormwater system.

Irrigation

- Repair broken sprinkler heads as soon as possible.
- Only irrigate at a rate that can infiltrate into the soil to limit run-off.
- Avoid irrigating close to impervious surfaces such as parking lots and sidewalks.

Landscaping

- When establishing new plantings, use alternative landscaping materials, such as drought resistant or native plants to reduce the need for irrigation and extensive application of fertilizers and pesticides.
- Follow proper fueling procedures for all equipment to ensure that petroleum products do not enter the stormwater system (see SOP: Vehicle Fueling).
- Fertilizers, herbicides, and pesticides should be properly used, stored, and handled.

Trash Management

- All waste and recycling containers must be leak-tight with tight-fitting lids or covers.
- Place waste and recycling containers indoors or under a roof or overhang whenever possible.
- Clean and sweep up around outdoor waste containers regularly.

- Arrange for waste and recyclables to be picked up regularly and disposed of at approved disposal facilities.
- Do not wash out waste or recycling containers outdoors or in a parking lot.
- Conduct periodic inspections of waste areas to check for leaks and spills.
- Ensure there are enough trash and recycling containers at appropriate areas.

Employee Training

- Employees who perform maintenance or other applicable work at municipal parks and open spaces are trained annually on these procedures and the proper operation of related equipment.
- Employees are also trained on stormwater pollution prevention, illicit discharge detection and elimination (IDDE) procedures, and spill and response procedures.
- If services are contracted, the contractor should be given a copy of this and any applicable SOPs to ensure compliance with MS4 regulations.

Mowing and Trimming (updated 9/14/2020)

Managers and supervisors are responsible for ensuring training is conducted with the most recent version of the SOP. Personnel are responsible for following the correct procedures for equipment maintenance.

Before using a piece of equipment, operators should inspect it for any obvious signs of leaks or other maintenance problems. All equipment should receive routine maintenance according to the manufacturer's guidelines, at minimum.

Equipment maintenance should occur, at minimum, once a year during State required vehicle inspection.

Program Protocols and Inspection: Program protocols represent the most appropriate BMP controls to address mowing, weeding, trimming, planting, waste management, irrigation, fertilizer and pesticide management. The following represent a comprehensive list of representative BMP protocols:

Mowing, Trimming and Weeding

- **a.** Avoid loosening soil when conducting mechanical or manual weed control; this could lead to erosion. Use mulch or other erosion control measures when soils are exposed.
- **b.** Collect lawn and garden clippings, prune waste, tree trimmings and weeds. Chip if necessary, and compost or dispose of at one of the City's green waste located at 675 N Arrowhead Dr, Salem.
- **c.** Place temporarily stockpiled material away from water sources, and berm or cover stockpile to prevent material releases to storm drains.

Planting

- **a.** Consider the location, species, size, function, and importance the vegetation may have on effecting drainage and erosion, hardiness, maintenance requirements and possible conflicts between preserving vegetation and the resulting maintenance needs.
- **b.** Consider using low water use groundcovers when planting or replanting.

Waste Management

- **a.** Dispose compost leaves, sticks or other collected vegetation at a permitted landfill. Do not dispose collected vegetation into waterways or storm drainage systems.
- **b.** Place temporarily stockpiled material away from water sources, flow-ways, and storm drain inlets, and berm or cover stockpiles to prevent material releases to the storm drain system. Stockpiled materials should be covered to minimize wind and water erosion of materials.
- **c.** Reduce the use of high nitrogen fertilizers that produce excess growth requiring more frequent mowing or trimming.
- **d.** Avoid landscape wastes in and around storm drain inlets by either using bagging equipment or by manually picking up the material.
- **e.** Irrigate slowly to prevent runoff and then only irrigate as much as is needed.
- **f.** Apply water at rates that do not exceed the infiltration rate of the soil.
- **g.** If bailing of muddy water is required (e.g. when repairing a water line leak), do not put it in the storm drain; pour over landscaped areas.

Pesticide, Herbicide and Fertilizer Management

- **a.** Only Certified Applicators will be allowed to make any pesticide applications. Exceptions will be made for training purposes, which are not required by the State to be certified. All applicators perform their duties under the direct supervision of a Certified Pesticide Applicator.
- **b.** Follow all federal, state, and local laws and regulations governing the use, storage, and disposal of fertilizers and pesticides and training of applicators.
- **c.** Do not use pesticides or herbicides if rain is expected and apply pesticides and herbicides only when wind speeds are low.
- **d.** Do not mix or prepare pesticides for application near storm drains. Mosquito chemicals are purchased premixed.
- **e.** Prepare the minimum amount of pesticide needed for the job and use the lowest rate that will effectively control the pest. Alternate chemical usage to reduce pest chemical resistance.
- **f.** Employ techniques to minimize off-target application (e.g. spray drift) of pesticides, including consideration of alternative application techniques. Use additives to reduce spray drift and reduce being washed off foliage by rain or irrigation.
- **g.** Calibrate fertilizer and pesticide application equipment to avoid excessive application.
- **h.** Sweep/blow pavement and sidewalks back towards lawn areas if fertilizer is spilled on these surfaces before applying irrigation water or before a rainfall event.
- **i.** Dispose of empty pesticide containers according to the instructions on the container label.

Inspection and Monitoring

- **a.** Inspect irrigation system periodically to ensure that the right amount of water is being applied and that excessive runoff is not occurring. Minimize excess watering and repair leaks in the irrigation system as soon as they are observed.
- **b.** Inspect pesticide/fertilizer equipment and transportation vehicles daily to repair obvious leaks and clean-up unintended spills before traveling.
- **c.** Inspect pesticide/fertilizer storage areas daily.
- **d.** Ensure all pesticides and fertilizers are maintained in dry storage enclosures and clean up any and all spills when observed.

Program to detect improper usage

a. Report all spills to the unit supervisor for tracking purposes.
b. Have spill cleanup materials readily available and in a known location.
c. Cleanup spills immediately and use dry methods if possible.
d. Properly dispose of spill cleanup materials.

Retention Basin Cleaning

Retention basins help minimize flooding and protect water quality by removing trash, sediment, decaying debris, and other solids from stormwater runoff. These materials are retained in a sump below the invert of the outlet pipe (older retention basins may not have a sump). Retention basin cleaning reduces foul odors, prevents clogs in the storm drain system, and reduces the loading of trash, suspended solids, nutrients, bacteria, and other pollutants to receiving waters. The goal of this written Standard Operating Procedure (SOP) is to provide guidance to municipal employees on retention basin inspection and cleaning to reduce the discharge of pollutants from the MS4. If services are contracted, this SOP should be provided to the contractor. The contract should specify that the contractor is responsible for compliance with all applicable laws.

Inspection and Cleaning Frequency

a. Each retention basin should be cleaned and inspected at least annually.
b. retention basins near construction activities (roadway construction, residential, commercial, or industrial development or redevelopment) or high-use areas should be inspected and cleaned more frequently if inspection finds excessive sediments or debris loadings.
c. Retention basins should be cleaned to ensure that they are no more than 50 percent full at any time. Establish inspection and maintenance frequencies needed to meet this "50 percent" goal. If a retention basin sump is more than 50 percent full during two consecutive inspections, document the findings, investigate the contributing drainage area for sources of excessive sediment loading, and, if possible, address the contributing sources. If no contributing sources are found, increase the inspection and cleaning frequencies of the sump.
d. d. Street sweeping performed on an appropriate schedule will reduce the amount of sediment, debris, and organic matter entering the retention basins, which will in turn reduce the frequency with which they need to be cleaned. Streets and Parking Lots for information on appropriate street sweeping frequencies. Street sweeping schedules should also be adjusted based on retention basin inspection findings, with more frequent sweepings for areas with higher retention basin loads.

Inspection and Cleaning Procedures

retention basin inspection and cleaning procedures should address both the grate opening and the retention basin structure, including the sump and any inlet and outlet pipes. Document any and all observations about the condition of the retention basin structure and water quality (an inspection form and log of retention basins cleaned or inspected are included in the attachments). Collect data on the condition of the physical basin structure, its frame, and the grate, as well as on the quality of stormwater conveyed by the structure. Observations like those below can indicate sources of pollution within the storm drain system

a. Oil sheen
b. Discoloration
c. Trash and debris

In general, adhere to the following procedures when inspecting and cleaning retention basins.

a. Work upstream to downstream in a given drainage network.
b. Clean sediment and trash off of grate.
c. Visually inspect the outside of the grate.
d. Remove the grate and visually inspect the inside of the retention basin to determine cleaning needs.

Documentation and Reporting

The following information should be documented and included in the municipality's annual report —use the retention basin inspection log provided in the attachments to document the information to include in the report

a. Metrics and other information used to reach the determination that the established plan for cleaning and maintenance is optimal for the M54 (include in the SWMP and first annual report).
b. Any action taken in response to excessive sediment or debris loadings.
c. Total number of retention basins.
d. Number of retention basins inspected.
e. Number of retention basins cleaned

Employee Training

a. Employees who perform retention basin cleaning and inspection are trained on these procedures and the proper operation of related equipment.
b. Employees are also trained on stormwater pollution prevention, illicit discharge detection and elimination (IDDE) procedures, and spill and response procedures.

Appendix F

High Priority Facility Inspection SOP's and High Priority Facility SWPPP's

HIGH PRIORITY FACILTY WEEKLY INSPECTION SOP Updated (1/2/2021)

Salem City will perform weekly visual inspections of "High Priority" facilities in accordance with this SOP to minimize the potential for pollutant discharge. The weekly inspections must be tracked in a log for every facility. The inspection log should also include any identified deficiencies and the corrective actions taken to fix the deficiencies using the **High Priority Facility Weekly Inspection checklist.**

HIGH PRIORITY FACILTIES LIST:

1. Public Works Dept. 681 W Arrowhead Rd
2. Parks Dept. 480 W 200 N
3. Civic Center 151 S 300 W
4. Knoll Park 200 W Salem Lake Dr
5. RV Dump 460 W 1100 N

An inspection report must include any identified deficiencies and corrective actions used to remedy the deficiencies

Weekly Visual Inspections will include:

1. Use a weekly log to track all visual inspections.
    a. Walk the perimeter of the facility.
    b. Walk the inside of perimeter and exterior buildings.
2. Things to look for and evaluate:
    a. Are storage areas being cleaned?
    b. Is there any oil or other chemicals not properly stored or covered if outside?

   c. Has there been any spills since last inspection? If yes how was it cleaned up and disposed of?
3. Are there any immediate deficiencies that need to be addressed like?
   a. Are chemicals stored properly?
   b. Is there a need to fix exterior BMP's?
   c. Uncontained chemical/garbage spill?

HIGH PRIORITY FACILTY QUARTERLY INSPECTION SOP (updated 02/2021)

Salem City will perform quarterly inspections of "High Priority" facilities in accordance with this SOP to minimize the potential for pollutant discharge. The quarterly inspections must be tracked in a log for every facility. The inspection log should also include any identified deficiencies and the corrective actions taken to fix the deficiencies using the **High Priority Facility Quarterly Inspection checklist.**

HIGH PRIORITY FACILTIES LIST:

6. Public Works Dept. 681 W Arrowhead Rd
7. Parks Dept. 480 W 200 N
8. Civic Center 151 S 300 W
9. Knoll Park 200 W Salem Lake Dr
10. RV Dump 460 W 1100 N

An inspection report must include any identified deficiencies and corrective actions used to remedy the deficiencies

Quarterly Inspections will include:

4. Use a quarterly log to track all visual inspections.
   c. Walk the perimeter of the facility.
   d. Walk the inside of perimeter and exterior buildings.
   e. Document and report any deficiencies.
5. Top things to look for and evaluate:
   a. Waste storage areas
   b. Vehicle and equipment maintenance areas
   c. Vehicle and equipment storage areas

   d. Fueling station
   e. Yard where soils and recyclable materials are stock piled.
   f. Floor drains
   g. Storm drain inlets
   h. Outfalls associated with the property
6. Are there any immediate deficiencies that need to be addressed?
   a. Are chemicals stored and labeled properly?
   b. Look for evidence of spills at the site?
   c. If a spill is found assess the general area to identify its source
   d. Clean up spill immediately to prevent contact with precipitation or run off
   e. Is there a need to fix exterior BMP's?

HIGH PRIORITY FACILITY SWPPP

Knoll Park

200 W Salem Lake Dr

Salem, Utah, 84653

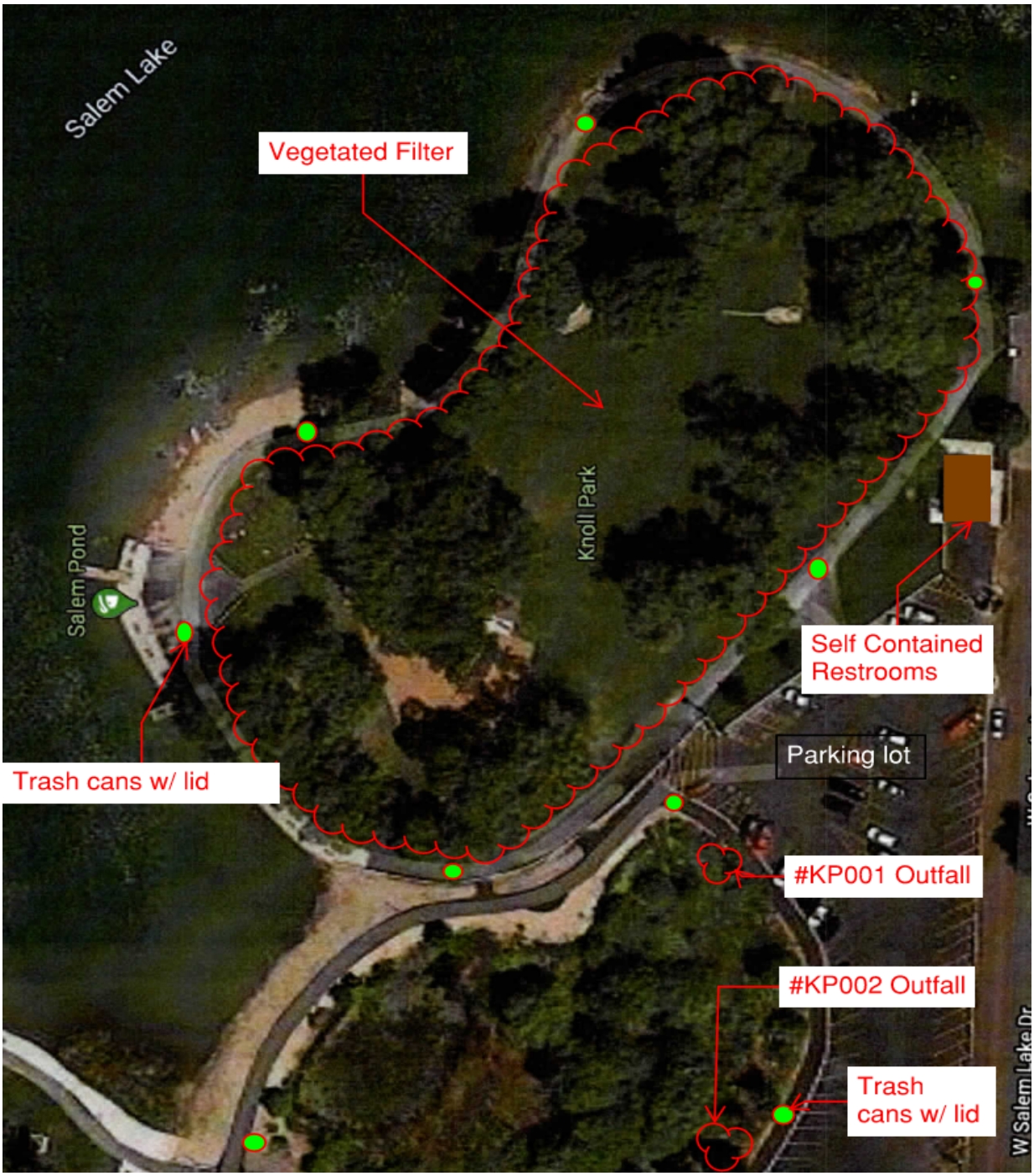
801.423.2770 ext. 235

dalec@salemcity.org

Updated:11/2020

Site Map

The attached map of the facility shows the locations of each spill response kit, the locations where the material identified on page 4 are normally stored or used, and the location of each storm drain or drainage ditch.



SWPPP FACILITY INSPECTIONS

In accordance with the Utah Small MS4 UPDES Permit 4.2.6.5.
The following inspections shall be conducted at ‘‘high priority’’ Permittee-owned or operated facilities:

4.2.6.5.1 Monthly visual inspections: The Permittee must perform monthly visual inspections of “high priority” facilities and related storm water outfalls in accordance with the developed SOPs to verify the performance of the BMPs and all other systems designed and placed to eliminate any pollutant discharge. The monthly inspections must be tracked in a log for every facility and records kept with the SWMP document. The inspection log should also include any identified deficiencies and the corrective actions taken to fix the deficiencies.

Each Department or Division will perform weekly visual inspections of their “high priority” facilities or areas of the facilities that each department is responsible for in accordance with their SWPPP or O&M Manual to minimize the potential for pollutant discharge. Any spill discovered will be documented and cleaned up immediately to prevent contact with precipitation or runoff.

The weekly inspections will be tracked ONLY IF ACTION ITEMS ARE REQUIRED in a log by each Department or Division and records kept in their SWPPP or O&M Manual reporting section. The inspection log will include the date of an identified deficiency and the date corrective actions were taken to remedy the deficiency. Copies of these logs will be loaded annually to an electronic file for each department.

4.2.6.5.2 Semi-Annual comprehensive inspections: At least twice per year, a comprehensive inspection of ‘‘high priority’’ facilities, including all storm water controls, must be performed, with specific attention paid to waste storage areas, dumpsters, vehicle and equipment maintenance/fueling areas, material handling areas, and similar pollutant generating areas. The semi-annual inspection results must be documented and records kept with the SWMP document. This inspection must be done in accordance with the developed SOPs. An inspection report must also include any identified deficiencies and the corrective actions taken to remedy the deficiencies.

Responsibilities:

Salem’s High Priority facilities develop and implement a spill prevention and response plan that includes an employee training component and has the ultimate goal of preventing or reducing pollutant runoff from the facility and to promote good housekeeping practices within the facility.

- The Facility Responsible Person has primary responsibility for coordinating the response to emergencies, including chemical spills.
- Supervisors should ensure that employees are familiar with these procedures

and receive necessary training.
- Annually review and train employees in applicable SOP's.

Emergency Contact Numbers

- Outside emergency services (police, fire department, ambulance service); 911
- Salem Fire Department HazMat: 801.423.2770
- National Response Center: (800) 424.8802
- Division of Water Quality (DWQ) 24-Hr Reporting: (801) 538.6146; (801) 536.4123
- Utah County Stormwater Coalition (801) 851-7873

Potential Sources of Pollutants

Potential sources of sediment to storm water runoff:

- Vehicle parking lot
- Trash from visitors to park
- Over filled garage containers
- Landscaping operations
- Tree trimming
- Site excavation operations

Potential pollutants and sources, other than sediment, to storm water runoff:

- Storage areas: Pesticides, Herbicides and Fertilizers
- Materials Storage Area—general building materials, solvents, aggregates, trash, and so on.
- Construction Activity—concrete pouring and building construction.
- Vehicle/Equipment used while maintaining park.
- Vehicles leaking oils/fluids in parking lot
- Self-contained restrooms

MATERIAL INVENTORY

Material	Amount	Location
Trash cans	6 cans minimum	Distributed throughout the park
Misc.		

Spill Prevention

To mitigate the effects of a contaminant release, provide proper maintenance and inspection at each facility. **Refer to Salem's Outdoor and Spill response SOP**. To protect against contaminant release, adhere to the following:

- Train employees on Best Management Practices (BMPs) for material storage, spill prevention and response.
- Never dump oils, chemicals, mop water or other fluids into a storm drain, gutter, street, drainage ditch, creek, or any surface leading to a storm drain.
- Regularly inspect outdoor areas for leaks, chemical/oil spills and loose litter. Clean up spills and leaks immediately. Sweep regularly to prevent debris and other materials from entering storm drain inlets.
- Exercise care and planning when transferring liquids and powders to minimize spill potential.
- All granular Pesticides, Herbicides and Fertilizers will be stored off the ground on pallets inside building or outside under a covered storage area away from the elements and comply with MSDS (Material Safety Data Sheets) recommendations.
- All fuel, oils and hazardous materials will be stored in its own labeled container and /or designated cabinet pending MSDS (Material Safety Data Sheets) recommendations.
- Equipment washing will be performed over an approved staging area where a sand/silt separator will intercept sediment or debris.
- Use secondary containment (berms, spill containment pallets, double walled containers, sheds, etc.) for equipment and fluid storage containers (barrels, carboys, etc.) that may leak.

Spill Responses and Clean up

Any discharges in 24 hours equal to or in excess of the reportable quantities listed in 40 CFR 117, 40 CFR 110, and 40 CFR 302 will be reported to the National Response Center and the Division of Water Quality (DWQ) as soon as practical after knowledge of the spill is known to the permittee. The permittee shall submit within 14 calendar days of knowledge of the release a written description of: the release (including the type and estimate of the amount of material released), the date that such release occurred, the circumstances leading to the release, and measures taken and/or planned to be taken to the Division of Water Quality (DWQ), 288 North 1460 West, P.O. Box 144870, Salt Lake City, Utah 84114-4870. The Storm Water Pollution Prevention Plan must be modified within14 calendar days of knowledge of the release to provide a description of the release, the circumstances leading to the release, and the date of the release. In addition, the plan must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate.

Materials	Media Released To	Reportable Quantity
Engine oil, fuel, hydraulic fluid	Land	25 Gallons
Paints, solvents, thinners	Land	100lbs (13 Gal)
Engine oil, fuel, hydraulic fluid	Water	Visible Sheen
Antifreeze, battery acid, gasoline, engine degreasers	Air, Land, Water	100lbs (13 gallons)

Refer to Salem's Outdoor and Spill response SOP. Small spills are generally handled by internal personnel and usually do not require an emergency response by police or fire department HAZMAT teams.

- Quickly control the spill by stopping or securing the spill source.
- This could be as simple as up righting a container and using floor dry or absorbent pads to soak up the spilled material. Wear gloves and protective clothing.
- Put spill material and absorbents in secure containers if any are available
- Consult the Facility Responsible Person and the MSDS for the spill and waste disposal procedures.
- Manage spill by dry-mopping or covering liquids with absorbents/towels. Collect/Sweep-up waste immediately with a broom or wet/dry vac, and dispose of in a lawful manner.
- In some instances, the area of the spill should **not** be washed with water. Use Dry Cleanup Methods and **never** wash spills down the drain, onto a storm drain or onto the driveway or parking lot. If water must be used, then use berms or other protective barriers to isolate polluted areas from storm drain inlets. Block off or seal storm drain inlets to prevent potential discharge. Collect and dispose of water in a lawful manner.
- Both the spilled material and the absorbent may be considered hazardous waste and must be disposed of in compliance with state and federal environmental regulations.

REPORTING SPILLS

To report illegal dumping/spills, contact your local stormwater pollution control agency.

Maintain appropriately stocked spill response kits at each facilities and locations where oil, chemicals, or other hazardous materials are handled and stored.

All chemical spills, regardless of size, should be reported as soon as possible to the Facility Responsible Person. The Facility Responsible Person will determine whether the spill has the potential to affect the environment outside of the facility and must be reported to 911 or Utah Department of Health Emergency Response: (801) 580.6681

Refer and provide information regarding spills using the **Spill or Incident Report Form** provided on pages 8 and 9.

Report shall be kept on record with facility SOP manual and with Salem's Storm Water Coordinator.

HIGH PRIORITY FACILITY SWPPP

Civic Center

151 S 300 W

Salem, Utah, 84653

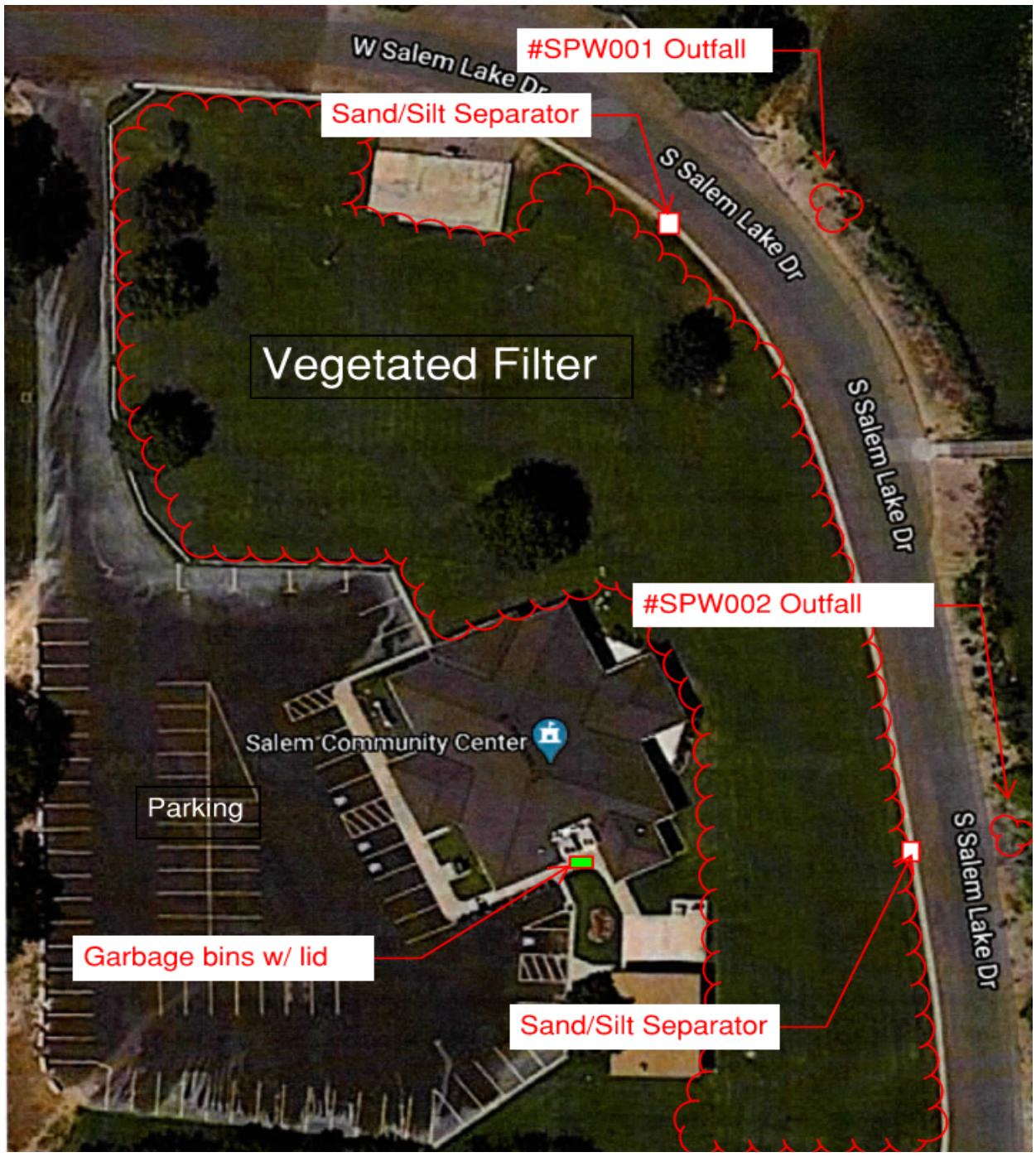
801.423.2770 ext. 235

dalec@salemcity.org

Updated:11/2020

Site Map

The attached map of the facility shows the locations of each spill response kit, the locations where the material identified on page 4 are normally stored or used, and the location of each storm drain or drainage ditch.



SWPPP FACILITY INSPECTIONS

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The weekly inspections will be tracked ONLY IF ACTION ITEMS ARE REQUIRED in a log by each Department or Division and records kept in their SWPPP or O&M Manual reporting section. The inspection log will include the date of an identified deficiency and the date corrective actions were taken to remedy the deficiency. Copies of these logs will be loaded annually to an electronic file for each department.

4.2.6.5.2 Semi-Annual comprehensive inspections: At least twice per year, a comprehensive inspection of "high priority" facilities, including all storm water controls, must be performed, with specific attention paid to waste storage areas, dumpsters, vehicle and equipment maintenance/fueling areas, material handling areas, and similar pollutant generating areas. The semi-annual inspection results must be documented and records kept with the SWMP document. This inspection must be done in accordance with the developed SOPs. An inspection report must also include any identified deficiencies and the corrective actions taken to remedy the deficiencies.

Responsibilities:

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Emergency Contact Numbers

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- Utah County Stormwater Coalition (801) 851-7873

Potential Sources of Pollutants

Potential sources of sediment to storm water runoff:

- Vehicle parking lot
- Trash bins
- Landscaping operations
- Site excavation operations

Potential pollutants and sources, other than sediment, to storm water runoff:

- Storage areas: Pesticides, Herbicides and Fertilizers
- Over spray and over broadcasting of fertilizers.
- Combined Staging Area ----minor equipment maintenance and hazardous waste storage.
- Materials Storage Area—general building materials, solvents, paints, trash, and so on.
- Vehicles leaking oils/fluids in parking lot

MATERIAL INVENTORY

Material	Amount	Location
De-icing	N/A	Stored at Parks Dept.
Trash Cans	2 minimum cans	South side of building

Spill Prevention

To mitigate the effects of a contaminant release, provide proper maintenance and inspection at each facility. **Refer to Salem's Outdoor and Spill response SOP**. To protect against contaminant release, adhere to the following:

- Train employees on Best Management Practices (BMPs) for material storage, spill prevention and response.
- Never dump oils, chemicals, mop water or other fluids into a storm drain, gutter, street, drainage ditch, creek, or any surface leading to a storm drain.
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- Exercise care and planning when transferring liquids and powders to minimize spill potential.
- All granular Pesticides, Herbicides and Fertilizers will be stored off the ground on pallets inside building or outside under a covered storage area away from the elements and comply with MSDS (Material Safety Data Sheets) recommendations.
- All fuel, oils and hazardous materials will be stored in its own labeled container and /or designated cabinet pending MSDS (Material Safety Data Sheets) recommendations.
- Equipment washing will be performed over an approved staging area where a sand/silt separator will intercept sediment or debris.
- Use secondary containment (berms, spill containment pallets, double walled containers, sheds, etc.) for equipment and fluid storage containers (barrels, carboys, etc.) that may leak.

Spill Responses and Clean up

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HIGH PRIORITY FACILITY SWPPP

Parks Department

480 W 200 N

Salem, Utah, 84653

801.423.2770 ext. 235

dalec@salemcity.org

Updated:11/2020

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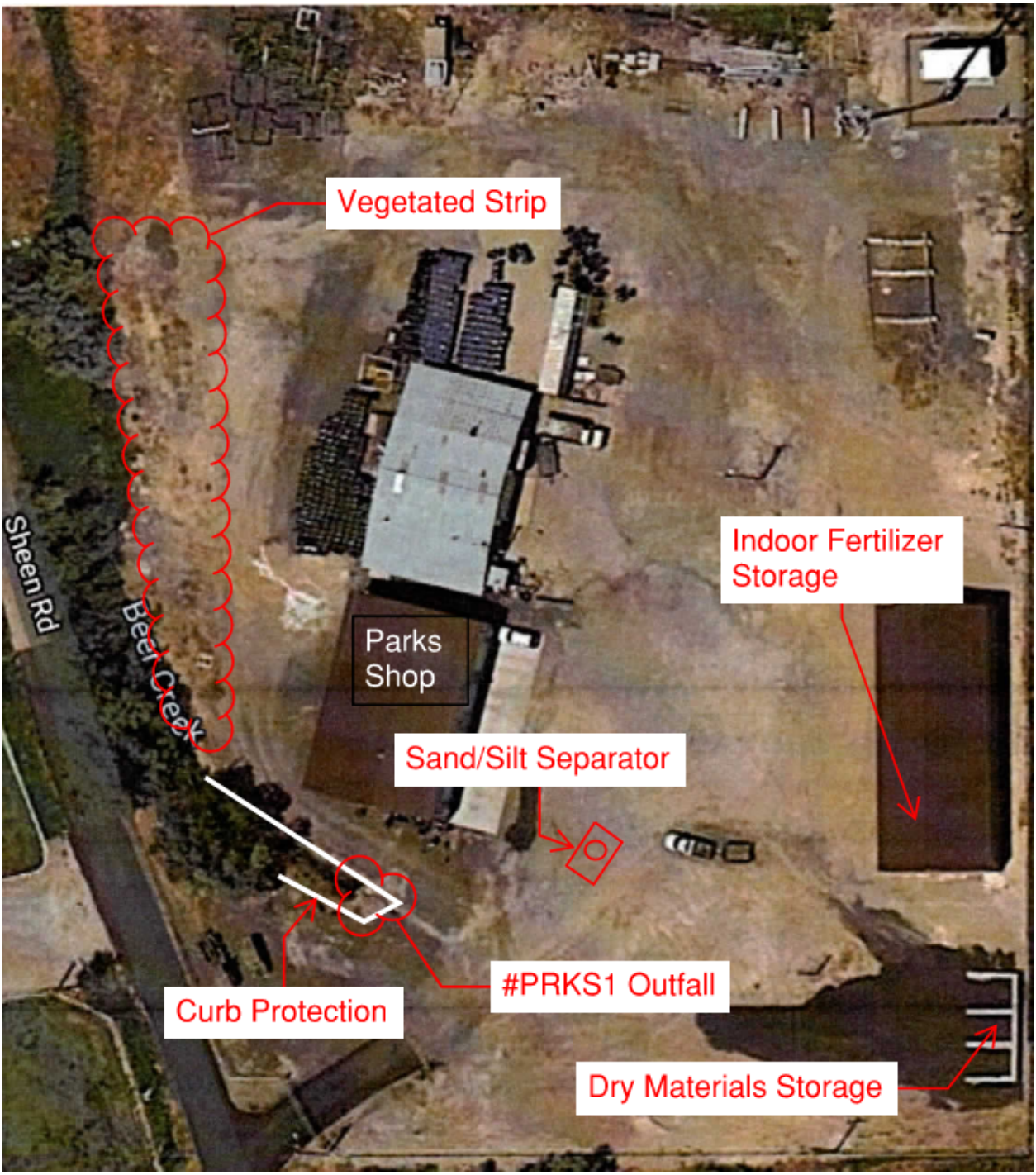

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Potential Sources of Pollutants

Potential sources of sediment to storm water runoff:

- Vehicle tracking
- Topsoil stockpiling
- Landscaping operations
- Site excavation operations

Potential pollutants and sources, other than sediment, to storm water runoff:

- Storage areas: Pesticides, Herbicides and Fertilizers
- Combined Staging Area—small fueling activities, minor equipment maintenance and hazardous waste storage.
- Materials Storage Area—general building materials, solvents, paints, aggregates, trash, and so on.
- Construction Activity—concrete pouring and building construction.
- Vehicle/Equipment washing.

MATERIAL INVENTORY

Antifreeze	2-1gallon jugs	Utility room
Motor oil	5 boxes/30 quarts	Utility room
Used oil	N/A	
Hydraulic oil	5 gallons	Utility room
Solvents	N/A	
Gasoline	On utility truck in approved container with pump	
Fuel	N/A	
Fertilizer	180-50lb bags	Inside East auxiliary building
Salt, De-icing	45-50lb bags	Inside East auxiliary building

Spill Prevention

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- Exercise care and planning when transferring liquids and powders to minimize spill potential.
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- All fuel, oils and hazardous materials will be stored in its own labeled container and /or designated cabinet pending MSDS (Material Safety Data Sheets) recommendations.
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Refer to Salem's Outdoor and Spill response SOP. Small spills are generally handled by internal personnel and usually do not require an emergency response by police or fire department HAZMAT teams.

- Quickly control the spill by stopping or securing the spill source.
- This could be as simple as up righting a container and using floor dry or absorbent pads to soak up the spilled material. Wear gloves and protective clothing.
- Put spill material and absorbents in secure containers if any are available
- Consult the Facility Responsible Person and the MSDS for the spill and waste disposal procedures.

- Manage spill by dry-mopping or covering liquids with absorbents/towels. Collect/Sweep-up waste immediately with a broom or wet/dry vac, and dispose of in a lawful manner.
- In some instances, the area of the spill should **not** be washed with water. Use Dry Cleanup Methods and **never** wash spills down the drain, onto a storm drain or onto the driveway or parking lot. If water must be used, then use berms or other protective barriers to isolate polluted areas from storm drain inlets. Block off or seal storm drain inlets to prevent potential discharge. Collect and dispose of water in a lawful manner.
- Both the spilled material and the absorbent may be considered hazardous waste and must be disposed of in compliance with state and federal environmental regulations.

REPORTING SPILLS

To report illegal dumping/spills, contact your local stormwater pollution control agency.

Maintain appropriately stocked spill response kits at each facilities and locations where oil, chemicals, or other hazardous materials are handled and stored.

All chemical spills, regardless of size, should be reported as soon as possible to the Facility Responsible Person. The Facility Responsible Person will determine whether the spill has the potential to affect the environment outside of the facility and must be reported to 911 or Utah Department of Health Emergency Response: (801) 580.6681

Refer and provide information regarding spills using the **Spill or Incident Report Form** provided on pages 8 and 9.

Report shall be kept on record with facility SOP manual and with Salem's Storm Water Coordinator.

HIGH PRIORITY FACILITY SWPPP

Public Works Department

681 W Arrowhead Rd

Salem, Utah, 84653

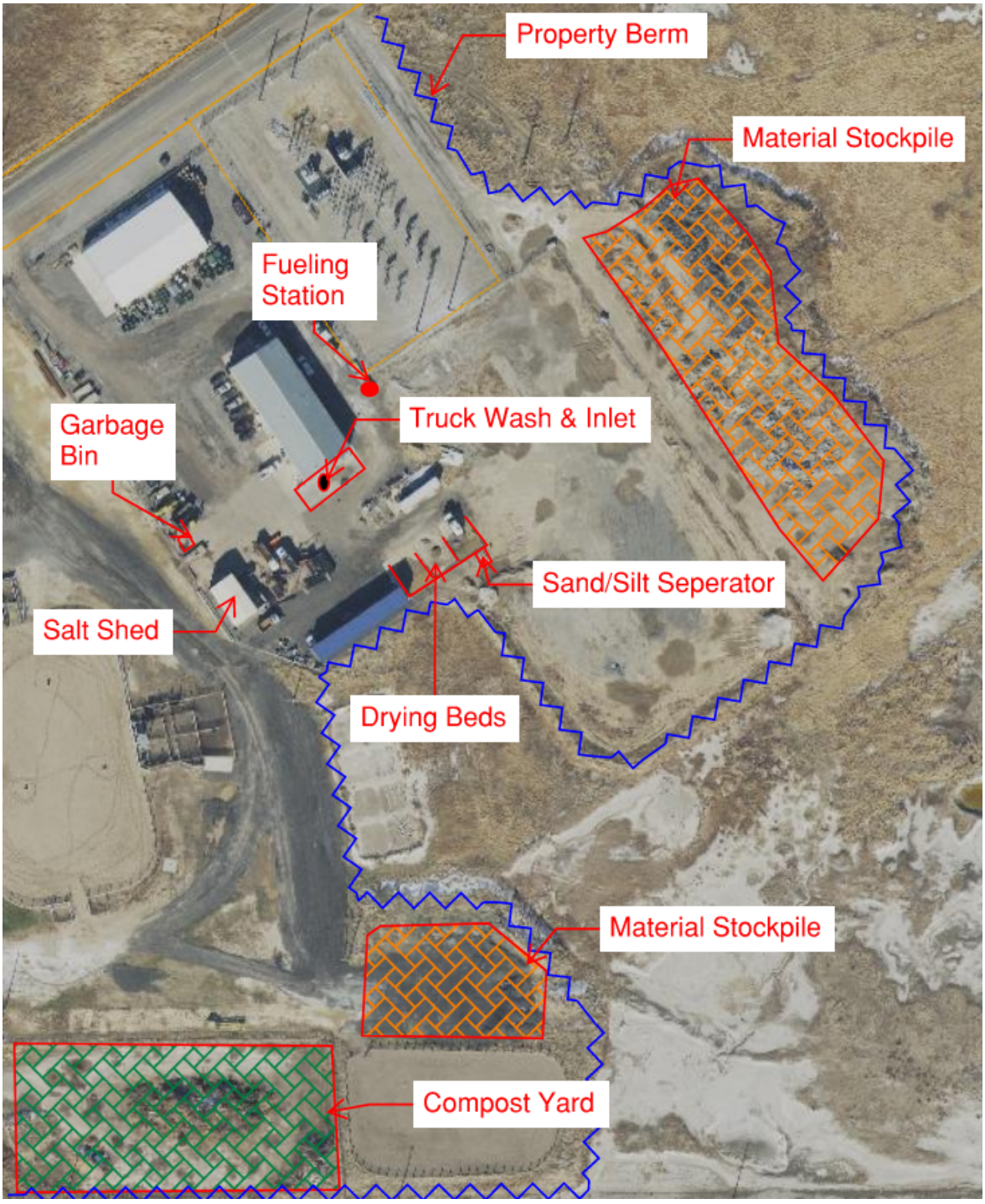
801.423.2770 ext. 235

dalec@salemcity.org

Updated:02/2021

Site Map

The attached map of the facility shows the locations of each spill response kit, the locations where the material identified on page 4 are normally stored or used, and the location of each storm drain or drainage ditch.



SWPPP FACILITY INSPECTIONS

In accordance with the Utah Small MS4 UPDES Permit 4.2.6.5.
The following inspections shall be conducted at "high priority" Permittee-owned or operated facilities:

4.2.6.5.1 Monthly visual inspections: The Permittee must perform monthly visual inspections of "high priority" facilities and related storm water outfalls in accordance with the developed SOPs to verify the performance of the BMPs and all other systems designed and placed to eliminate any pollutant discharge. The monthly inspections must be tracked in a log for every facility and records kept with the SWMP document. The inspection log should also include any identified deficiencies and the corrective actions taken to fix the deficiencies.

Each Department or Division will perform weekly visual inspections of their "high priority" facilities or areas of the facilities that each department is responsible for in accordance with their SWPPP or O&M Manual to minimize the potential for pollutant discharge. Any spill discovered will be documented and cleaned up immediately to prevent contact with precipitation or runoff.

The weekly inspections will be tracked ONLY IF ACTION ITEMS ARE REQUIRED in a log by each Department or Division and records kept in their SWPPP or O&M Manual reporting section. The inspection log will include the date of an identified deficiency and the date corrective actions were taken to remedy the deficiency. Copies of these logs will be loaded annually to an electronic file for each department.

4.2.6.5.2 Semi-Annual comprehensive inspections: At least twice per year, a comprehensive inspection of "high priority" facilities, including all storm water controls, must be performed, with specific attention paid to waste storage areas, dumpsters, vehicle and equipment maintenance/fueling areas, material handling areas, and similar pollutant generating areas. The semi-annual inspection results must be documented and records kept with the SWMP document. This inspection must be done in accordance with the developed SOPs. An inspection report must also include any identified deficiencies and the corrective actions taken to remedy the deficiencies.

Responsibilities:

Salem's High Priority facilities develop and implement a spill prevention and response plan that includes an employee training component and has the ultimate goal of preventing or reducing pollutant runoff from the facility and to promote good housekeeping practices within the facility.

- The Facility Responsible Person has primary responsibility for coordinating the response to emergencies, including chemical spills.
- Supervisors should ensure that employees are familiar with these procedures

and receive necessary training.
- Annually review and train employees in applicable SOP's.

Emergency Contact Numbers

- Outside emergency services (police, fire department, ambulance service); 911
- Salem Fire Department HazMat: 801.423.2770
- National Response Center: (800) 424.8802
- Division of Water Quality (DWQ) 24-Hr Reporting: (801) 538.6146; (801) 536.4123
- Utah County Stormwater Coalition (801) 851-7873

Potential Sources of Pollutants

Potential sources of sediment to storm water runoff:

- Vehicle tracking
- Topsoil stockpiling
- Landscaping operations
- Site excavation operations

Potential pollutants and sources, other than sediment, to storm water runoff:

- Storage areas: Fuel, Gasoline, Used/new oil
- Combined Staging Area—small fueling activities, minor equipment maintenance and hazardous waste storage.
- Materials Storage Area—general building materials, solvents, paints, aggregates, trash, and so on.
- Construction Activity—concrete pouring and building construction.
- Vehicle/Equipment washing.

MATERIAL INVENTORY

Material	Amount	Location
Antifreeze	8 Gallons	Storge loft in Public Works Building
Motor oil	90 Gallons	Public Works shop
Used oil	330 Gallons	Public Works shop

Hydraulic oil	90 Gallons	Public Works shop
Solvents	2 cases carb cleaner=24 12oz cans	Storge loft in Public Works Building
Gasoline	20 Gallons	Public Works shop
Salt, De-icing	350 Tons	Public Works contained salt shed
Fuel	1500 Gallon Capacity Tank	Outside, SE corner of Public Works Bldg. in double walled storage tank
Fuel Additives	13-32oz bottles	Storge loft in Public Works Building
Marking Paint	25 cases=300 cans	Storge loft in Public Works Building

Spill Prevention

To mitigate the effects of a contaminant release, provide proper maintenance and inspection at each facility. **Refer to Salem's Outdoor and Spill response SOP**. To protect against contaminant release, adhere to the following:

- Train employees on Best Management Practices (BMPs) for material storage, spill prevention and response.
- Never dump oils, chemicals, mop water or other fluids into a storm drain, gutter, street, drainage ditch, creek, or any surface leading to a storm drain.
- Regularly inspect outdoor areas for leaks, chemical/oil spills and loose litter. Clean up spills and leaks immediately. Sweep regularly to prevent debris and other materials from entering storm drain inlets.
- Exercise care and planning when transferring liquids and powders to minimize spill potential.
- All granular Pesticides, Herbicides and Fertilizers will be stored off the ground on pallets inside building or outside under a covered storage area away from the elements and comply with MSDS (Material Safety Data Sheets) recommendations.
- All fuel, oils and hazardous materials will be stored in its own labeled container and /or designated cabinet pending MSDS (Material Safety Data Sheets) recommendations.
- Equipment washing will be performed over an approved staging area where a sand/silt separator will intercept sediment or debris.

- Use secondary containment (berms, spill containment pallets, double walled containers, sheds, etc.) for equipment and fluid storage containers (barrels, carboys, etc.) that may leak.

Spill Responses and Clean up

Any discharges in 24 hours equal to or in excess of the reportable quantities listed in 40 CFR 117, 40 CFR 110, and 40 CFR 302 will be reported to the National Response Center and the Division of Water Quality (DWQ) as soon as practical after knowledge of the spill is known to the permittee. The permittee shall submit within 14 calendar days of knowledge of the release a written description of: the release (including the type and estimate of the amount of material released), the date that such release occurred, the circumstances leading to the release, and measures taken and/or planned to be taken to the Division of Water Quality (DWQ), 288 North 1460 West, P.O. Box 144870, Salt Lake City, Utah 84114-4870. The Storm Water Pollution Prevention Plan must be modified within14 calendar days of knowledge of the release to provide a description of the release, the circumstances leading to the release, and the date of the release. In addition, the plan must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate.

Materials	Media Released To	Reportable Quantity
Engine oil, fuel, hydraulic fluid	Land	25 Gallons
Paints, solvents, thinners	Land	100lbs (13 Gal)
Engine oil, fuel, hydraulic fluid	Water	Visible Sheen
Antifreeze, battery acid, gasoline, engine degreasers	Air, Land, Water	100lbs (13 gallons)

Refer to Salem's Outdoor and Spill response SOP. Small spills are generally handled by internal personnel and usually do not require an emergency response by police or fire department HAZMAT teams.

- Quickly control the spill by stopping or securing the spill source.
- This could be as simple as up righting a container and using floor dry or absorbent pads to soak up the spilled material. Wear gloves and protective clothing.
- Put spill material and absorbents in secure containers if any are available
- Consult the Facility Responsible Person and the MSDS for the spill and waste disposal procedures.
- Manage spill by dry-mopping or covering liquids with absorbents/towels. Collect/Sweep-up waste immediately with a broom or wet/dry vac, and dispose of in a lawful manner.

- In some instances, the area of the spill should **not** be washed with water. Use Dry Cleanup Methods and **never** wash spills down the drain, onto a storm drain or onto the driveway or parking lot. If water must be used, then use berms or other protective barriers to isolate polluted areas from storm drain inlets. Block off or seal storm drain inlets to prevent potential discharge. Collect and dispose of water in a lawful manner.
- Both the spilled material and the absorbent may be considered hazardous waste and must be disposed of in compliance with state and federal environmental regulations.

REPORTING SPILLS

To report illegal dumping/spills, contact your local stormwater pollution control agency.

Maintain appropriately stocked spill response kits at each facilities and locations where oil, chemicals, or other hazardous materials are handled and stored.

All chemical spills, regardless of size, should be reported as soon as possible to the Facility Responsible Person. The Facility Responsible Person will determine whether the spill has the potential to affect the environment outside of the facility and must be reported to 911 or Utah Department of Health Emergency Response: (801) 580.6681

Refer and provide information regarding spills using the **Spill or Incident Report Form** provided on pages 8 and 9.

Report shall be kept on record with facility SOP manual and with Salem's Storm Water Coordinator.

HIGH PRIORITY FACILITY SWPPP

RV Dump

1100 N 460 W

Salem, Utah, 84653

801.423.2770 ext. 235

dalec@salemcity.org

Updated:11/2020

Site Map

The attached map of the facility shows the locations of each spill response kit, the locations where the material identified on page 4 are normally stored or used, and the location of each storm drain or drainage ditch.

SWPPP FACILITY INSPECTIONS

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Responsibilities:

Salem's High Priority Facilities develop and implement a spill prevention and response plan that includes an employee training component and has the ultimate goal of preventing or reducing pollutant runoff from the facility and to promote good housekeeping practices within the facility.

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- Division of Water Quality (DWQ) 24-Hr Reporting: (801) 538.6146; (801) 536.4123
- Utah County Stormwater Coalition (801) 851-7873

Potential Sources of Pollutants

Potential sources of sediment to storm water runoff:

- Vehicles
- Trash
- Over filled garbage containers
- Raw sewage spill
- Grey water spill

Potential pollutants and sources, other than sediment, to storm water runoff:

- Vehicle/Equipment used while emptying trailer/RV
- Vehicles leaking oils/fluids
- Leaking hose or hose bib for cleaning

Spill Prevention

To mitigate the effects of a contaminant release, provide proper maintenance and inspection at each facility. **Refer to Salem's Outdoor and Spill response SOP**. To protect against contaminant release, adhere to the following:

- Proper signage with waste disposal instructions.
- Installing berms and containment curbing where applicable.
- Train employees on Best Management Practices (BMPs) for material storage, spill prevention and response.

- Never dump oils, chemicals, mop water or other fluids into a storm drain, gutter, street, drainage ditch, creek, or any surface leading to a storm drain.
- Regularly inspect outdoor areas for leaks, chemical/oil spills and loose litter. Clean up spills and leaks immediately. Sweep regularly to prevent debris and other materials from entering storm drain inlets.
- All fuel, oils and hazardous materials will be stored in its own labeled container and /or designated cabinet pending MSDS (Material Safety Data Sheets) recommendations.
- Equipment washing will be performed over an approved staging area where a sand/silt separator will intercept sediment or debris.
- Use secondary containment (berms, containment curb wall, etc.) for equipment and fluid storage containers (barrels, carboys, etc.) that may leak.

Spill Responses and Clean up

Any discharges in 24 hours equal to or in excess of the reportable quantities listed in 40 CFR 117, 40 CFR 110, and 40 CFR 302 will be reported to the National Response Center and the Division of Water Quality (DWQ) as soon as practical after knowledge of the spill is known to the permittee. The permittee shall submit within 14 calendar days of knowledge of the release a written description of: the release (including the type and estimate of the amount of material released), the date that such release occurred, the circumstances leading to the release, and measures taken and/or planned to be taken to the Division of Water Quality (DWQ), 288 North 1460 West, P.O. Box 144870, Salt Lake City, Utah 84114-4870. The Storm Water Pollution Prevention Plan must be modified within14 calendar days of knowledge of the release to provide a description of the release, the circumstances leading to the release, and the date of the release. In addition, the plan must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate.

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Refer to Salem's Outdoor and Spill response SOP. Small spills are generally handled by internal personnel and usually do not require an emergency response by police or fire department HAZMAT teams.

- Quickly control the spill by stopping or securing the spill source.

- This could be as simple as up righting a container and using floor dry or absorbent pads to soak up the spilled material. Wear gloves and protective clothing.
- Put spill material and absorbents in secure containers if any are available
- Consult the Facility Responsible Person and the MSDS for the spill and waste disposal procedures.
- Manage spill by dry-mopping or covering liquids with absorbents/towels. Collect/Sweep-up waste immediately with a broom or wet/dry vac, and dispose of in a lawful manner.
- In some instances, the area of the spill should **not** be washed with water. Use Dry Cleanup Methods and **never** wash spills down the drain, onto a storm drain or onto the driveway or parking lot. If water must be used, then use berms or other protective barriers to isolate polluted areas from storm drain inlets. Block off or seal storm drain inlets to prevent potential discharge. Collect and dispose of water in a lawful manner.
- Both the spilled material and the absorbent may be considered hazardous waste and must be disposed of in compliance with state and federal environmental regulations.

REPORTING SPILLS

To report illegal dumping/spills, contact your local stormwater pollution control agency.

Maintain appropriately stocked spill response kits at each facilities and locations where oil, chemicals, or other hazardous materials are handled and stored.

All chemical spills, regardless of size, should be reported as soon as possible to the Facility Responsible Person. The Facility Responsible Person will determine whether the spill has the potential to affect the environment outside of the facility and must be reported to 911 or Utah Department of Health Emergency Response: (801) 580.6681

Refer and provide information regarding spills using the **Spill or Incident Report Form** provided on pages 7 and 8.

Report shall be kept on record with facility SOP manual and with Salem's Storm Water Coordinator.

Appendix G

Automotive, Commercial and Small Business Pollution Prevention

CITY OF SALEM, UT

Businesses and Pollution Prevention

Stormwater runoff from industrial and commercial properties can be a major source of pollution that affects local waterways. Because stormwater (rainwater runoff) drains directly to waterways without filtration or treatment, controlling potential pollutants at business facilities is key to protecting water quality.

Businesses with outdoor operations, particularly those that process/store materials or repair/store vehicles outdoors, have the greatest potential to release pollutants. Proper storage of chemicals and materials, cleaning spills and leaks, and the use of covers and barriers can prevent pollutants from washing into stormwater drainage systems. Preparation and training for managing spills and the implementation of common pollution prevention *Best Management Practices* allow businesses to protect the community and environment while maintaining their own business objectives.

Common Pollutants

Pollutant Impacts on Water Quality

Sediment	Sediment is a common component of stormwater and can be a pollutant. Sediment can be detrimental to aquatic life (primary producers, benthic invertebrates and fish) by interfering with photosynthesis, respiration, growth, reproduction and oxygen exchange in water bodies. Sediment can transport other pollutants that are attached to it including nutrients, trace metals and hydrocarbons. Sediment is the primary component of total suspended solids (TSS) a common water quality analytical parameter.
Nutrients	Nutrients including nitrogen and phosphorous are the major plant nutrients used for fertilizing landscapes and are often found in stormwater. These nutrients can result in excessive or accelerated growth in vegetation such as algae resulting in impaired use of water in lakes and other sources of water supply.
Bacteria and Viruses	Bacteria and viruses are common contaminates of stormwater. For separate storm drain systems, sources of these contaminates include animal excrement and sanitary sewer overflow. High levels of indicator bacteria in stormwater have led to the closer of beaches, lakes and rivers to contact recreation such as swimming.

Oil and Grease	Oil and grease include a wide array of hydrocarbon compounds, some of which are toxic to aquatic organisms at low concentrations. Sources of oil and grease include leakage, spills, cleaning and sloughing associated with vehicle and equipment engines and suspensions, leaking and breaks in hydraulic systems, restaurants and waste oil disposal.
Metals	Metals including lead, zinc, cadmium, copper, chromium and nickel are commonly found in stormwater. Many of the artificial surfaces of the urban environment (galvanized metal, paint, automobiles or preserved wood) contain metals which enter stormwater as the surfaces corrode, flake, dissolve, decay or leach. Over half the trace metal load carried in stormwater is associated with sediments. Metals are of concern because they are toxic to aquatic organisms, can bioaccumulate (accumulate to toxic levels in aquatic animals such as fish) and have the potential to contaminate drinking water supplies.
Organics	**Organics may be found in stormwater** at low concentrations. Often synthetic organic compounds (adhesives, cleaners, sealants, solvents, etc.) are widely applied and may be improperly stored and disposed. In addition, deliberate dumping of these chemicals into storm drains and inlets causes environmental harm in waterways.
Pesticides	Pesticides (including herbicides, fungicides, rodenticides and insecticides) have been repeatedly detected in stormwater at toxic levels, even when pesticides have been applied in accordance with label instructions. As pesticides use has increased, so too have concerns about the adverse effects of pesticides on the environment and human health. Accumulation of these compounds in simple aquatic organisms provides an avenue or biomagnification through the food web, potentially resulting in elevated levels of toxins in organisms that feed on them such as birds and fish.
Gross Pollutants	Gross pollutants (trash, debris and floatables) may include heavy metals, pesticides and bacteria in stormwater. Typically resulting from an urban environment, industrial and construction sites, trash and floatables may create an aesthetic “eye sore” in waterways. Gross pollutants also include plant debris (such as levels of lawn clippings and leaves from landscape maintenance), animal excrement, viruses, vectors and depress the dissolved oxygen levels in streams, lakes and estuaries sometimes causing fish kills.

CITY OF SALEM, UT

Businesses and Pollution Prevention

Stormwater runoff from industrial and commercial properties can be a major source of pollution that affects local waterways. Because stormwater (rainwater runoff) drains directly to waterways without filtration or treatment, controlling potential pollutants at business facilities is key to protecting water quality.

Businesses with outdoor operations, particularly those that process/store materials or repair/store vehicles outdoors, have the greatest potential to release pollutants. Proper storage of chemicals and materials, cleaning spills and leaks, and the use of covers and barriers can prevent pollutants from washing into stormwater drainage systems. Preparation and training for managing spills and the implementation of common pollution prevention *Best Management Practices* allow businesses to protect the community and environment while maintaining their own business objectives.

Non-Stormwater Discharges

Description

Non-stormwater discharges (NSWDs) are flows that do not consist entirely of stormwater. Some non-stormwater discharges do not include pollutants and may be discharged to the storm drain if local regulations allow. These include uncontaminated groundwater and natural springs. There are also some non-stormwater discharges that typically do not contain pollutants and may be discharged to the storm drain with conditions. These include: potable water sources, fire hydrant flushing, air conditioner condensate, landscape irrigation drainage and landscape watering, emergency firefighting, etc.

However, there are certain non-stormwater discharges that pose an environmental concern. These discharges may originate from illegal dumping of industrial material or wastes and illegal connections such as internal floor drains, appliances, industrial processes, sinks, and toilets that are illegally connected to the nearby storm drainage system through on-site drainage and piping. These unauthorized discharges (examples of which may include: process waste waters, cooling waters, wash waters, and sanitary wastewater) can carry substances such as paint, oil, fuel and other automotive fluids, chemicals and other pollutants into storm drains.

Non-stormwater discharges will need to be addressed through a combination of detection and elimination. The ultimate goal is to effectively eliminate unauthorized non-stormwater

discharges to the stormwater drainage system through implementation of measures to detect, correct, and enforce against illicit connections and illegal discharges of pollutants on streets and into the storm drain system and downstream water bodies.

Approach

Initially the Discharger must make an assessment of non-stormwater discharges to determine which types must be eliminated or addressed through BMPs. The focus of the following approach is the elimination of unauthorized non-stormwater discharges. See other BMP Fact Sheets for activity-specific pollution prevention procedures.

General Pollution Prevention Protocols

- Implement waste management controls for waste handling and disposal.
- Develop clear protocols and lines of communication for effectively prohibiting non-stormwater discharges, especially those that are not classified as hazardous. These are often not responded to as effectively as they need to be.
- Manage and control sources of water such as hose bibs, faucets, wash racks, irrigation heads, etc. Identify hoses and faucets in the SWPPP, and post signage for appropriate use.

Non-Stormwater Discharge Investigation Protocols

Identifying the sources of non-stormwater discharges requires the Discharger to conduct an investigation of the facility at regular intervals. There are several categories of non-stormwater discharges:

- Visible, easily identifiable discharges, typically generated as surface runoff, such as uncontained surface runoff from vehicle or equipment washing; and
- Non-visible, (e.g., subsurface) discharges into the site drainage system through a variety of pathways that are not obvious.

The approach to detecting and eliminating non-stormwater discharges will vary considerably, as discussed below:

Visible and identifiable discharges

Conduct routine inspections of the facilities and of each major activity area and identify visible evidence of unauthorized non-stormwater discharges. This may include:

- Visual observations of actual discharges occurring;
- Evidence of surface staining, discoloring etc. that indicates that discharges have occurred;
- Pools of water in low lying areas when a rain event has not occurred; and

- Discussions with operations personnel to understand practices that may lead to unauthorized discharges.

If evidence of non-stormwater discharges is discovered:

- Document the location and circumstances, including digital photos;
- Identify and implement any quick remedy or corrective action (e.g., moving uncovered containers inside or to a proper location); and
- Develop a plan to eliminate the discharge. Consult the appropriate activity specific BMP Fact Sheet for alternative approaches to manage and eliminate the discharge.

CITY OF SALEM, UT

Preventing Storm Drain Pollution

Guidelines for Commercial and Light Industrial Facilities

Stormwater runoff from industrial and commercial properties can be a major source of pollution that affects local waterways. Because stormwater (rainwater runoff) drains directly to waterways without filtration or treatment, controlling potential pollutants at business facilities is key to protecting water quality.

Businesses with outdoor operations, particularly those that process/store materials or repair/store vehicles outdoors, have the greatest potential to release pollutants. Proper storage of chemicals and materials, cleaning spills and leaks, and the use of covers and barriers can prevent pollutants from washing into stormwater drainage systems. Preparation and training for managing spills and the implementation of common pollution prevention *Best Management Practices* allow businesses to protect the community and environment while maintaining their own business objectives.

By following proper housekeeping practices, your business can help reduce pollution flowing to Utah Lake and protect the ecosystem for animal and plant life and to protect our quality of life for future generations.

What's the Connection?

Whether your business is two blocks or ten miles from the water, it has two connections to Utah Lake. Indoor drains, such as sinks, toilets, and most floor drains convey wastewater through the sanitary sewer system to the treatment plant where the water is treated before its discharged into Beer creek to Utah Lake.

Outside your business, rainwater, wash water from buildings, road surfaces, vehicles and equipment pick up oil, grease, cleaning compounds, pesticides, paint, garbage and other pollutants. Storm drains carry these pollutants through the storm drain system directly into local creeks and Utah lake – they are not filtered or treated in any way!

So, What's the Big Deal?

Rain and wash water in the storm drain can pick up all sorts of pollutants. Soap, pesticides, cleaning compounds, coolants, degreasers, automotive fluids, paint, oil, trash and other materials. Even products labeled nontoxic or biodegradable can be harmful to sensitive

ecosystems. Polluted runoff is harmful to fish and wildlife. It can harm the environment and threaten the health of our children.

The soap, coolant or oil running into the storm drain from an individual property may not seem like a big deal but when commercial and light industrial facilities in Salem fail to clean up work sites, a lot of pollutants end up in Utah lake. In other words, seemingly small problems at your business add up to big pollution problems.

It's Also Against the Law!

Allowing discharge of wastes into storm drains is also against the law. If your business allows anything other than uncontaminated rain into the storm drain, you could be cited and held liable under federal, state and local regulations. The procedures outlined offer some simple suggestions to help you ensure that your business does the right thing.

Doing the Right Thing

By following these guidelines and making sure that your employees and contractors do too, you can help prevent storm drain pollution and keep your business in compliance. You'll also help protect our streams, fisheries and the plant and animal life that it supports for future generations. Remember, clean water isn't just good business, its everyone's business.

Cleaning

Wash water from cleaning often contains solvents, detergents and metals. Wash water should never be discharged to a street, gutter or storm drain. Contact your local wastewater treatment plant for guidance on what can and can't go to the sanitary sewer.

Equipment cleaning

- ✓ If possible, clean equipment inside and dispose of wash water to a sink or floor drain that connects to the sanitary sewer.
- ✓ If you must clean equipment outside, work in a bermed area where wash water can be collected and then pumped to an inside sanitary drain. Contact your local wastewater treatment plant for guidance on what can and can't go to the sanitary sewer.

Vehicle Cleaning

- ✓ If possible, wash vehicles at a commercial car wash where water is treated and recycled.
- ✓ If you routinely clean vehicles on-site, provide a bermed vehicle cleaning area with a wastewater collection and treatment system (such as an oil/water separator) which drains to the sanitary sewer system. Contact your local wastewater treatment plant for guidance on permit requirements for fleets.

- ✓ Do not allow soapy wash water to run into the street, gutter or storm drain. Wash where water will flow to a lawn, gravel, or unpaved area. Or contain soapy wash water within a bermed vehicle cleaning area and pump wash water to the sanitary sewer.
- ✓ Do not use solvents or acid-based degreasers in an area where wash water could flow to a street, gutter or storm drain. Instead, confine wash water within a bermed vehicle cleaning area where it can be pumped to an indoor sanitary drain (if allowed). Before using solvents or acid-based degreasers, contact your local wastewater treatment plant for wash water disposal options.
- ✓ Reuse or recycle wash water to minimize discharges to the sanitary sewer.

Building and Surface Cleaning

When cleaning sidewalks, plazas, and building surfaces, wash water is permitted to go into a street or storm drain ONLY if ALL of the following conditions are met:

- ✓ Oil or chemical spills have been cleaned up using spill absorbents or some other dry-cleaning method before cleaning with water. When oil or chemicals are absorbed, sweep the material up and dispose of it as hazardous waste.
- ✓ Surfaces are free of fresh oil stains and debris.
- ✓ You have swept the area thoroughly prior to cleaning with water.
- ✓ Wash water does not contain soap or other cleaning materials.

When using a cleaning compound, direct wash water runoff to a landscaped or dirt area, or cover storm drains with filter fabric and vacuum or pump wash water into a sanitary sewer drain. Contact your local wastewater treatment plant for guidance — harsh cleaning compounds may require permitting and/or pretreatment.

Never hose or sweep interior floor debris to an outside area. Use a broom or vacuum for inside floor cleaning. Collect and dispose of all debris in the garbage or as hazardous waste as appropriate.

Use a street sweeper to clean parking areas and roadways. Do not use water. Direct runoff to a landscaped or dirt area or filter runoff through a filter fabric to keep sand out of the storm drain. When finished, sweep up sand and debris.

Building Repair and Maintenance

Use and dispose of paint, paint thinner, metal filings, cutting oil and concrete properly to prevent them from entering the storm drain where they will harm local creeks. Also, make sure that your contractors follow these guidelines; you are responsible for your contractors' actions!

Painting

- ✓ When pressure washing to prepare surfaces for painting, test painted surfaces for the presence of lead. If lead is not present, place a protective cover of filter fabric over the drain to catch paint chips and dispose of the chips in the garbage. If lead is present, collect chips and wash water and dispose of both as hazardous waste. Better yet, use a dry-cleaning method such as scraping and sweeping and dispose of paint chips as hazardous waste.
- ✓ If using water-based paint, brush out excess paint then wash brushes and equipment in the sink. Never dispose of paint or rinse water in a landscaped area, street, gutter or storm drain.
- ✓ If using oil-based paint, brush out excess paint before cleaning with paint thinner. Filter and reuse thinner when possible. Dispose of paint sludge and thinner as hazardous waste.

Concrete

- ✓ Store concrete, grout, and mortar under cover and away from storm drains.
- ✓ Wash out concrete equipment, tools and trucks in a designated area where rinse water will flow onto a landscaped area or dirt pit. Let the water seep into the soil, leaving the cement residue behind. When the residue dries and hardens, dispose of it in the garbage. If you generate a large quantity of concrete, contact your local garbage hauler for disposal guidance. Alternatively, take concrete to a concrete recycling facility
- ✓ When washing exposed aggregate concrete, divert water to a dirt area where it will not run into a street, gutter or storm drain. If a suitable dirt area is not available, use sand bags to dam up the flow of wash water. Use a wet vac to collect the remaining sludge and then dispose of it in the garbage

Saw-Cut Slurry

- ✓ Do not allow saw cut slurry to go down a storm drain. Completely cover or barricade storm drain inlets when saw cutting. Block catch basin with protective devices such as a burlap bag containing 2-inch drain rock.
- ✓ Collect, evaporate and remove residue. Pick up all waste when you are finished in one location or at the end of each work day and schedule disposal. Minimize water use.
- ✓ Use an industrial vacuum for clean-up. Dispose of all liquids from saw cutting into a landscape area or to the sanitary sewer. Solids can be disposed of into the garbage.
- ✓ If saw cut slurry enters a storm drain catch basin, shovel or vacuum slurry into a garbage bin immediately.

Facility Equipment

Following an inspection and maintenance schedule and disposing of equipment byproducts (blowdown water, condensate, residues, melt water, etc.) properly will help keep pollutants out of storm drains, local creeks and Utah lake where they can harm animal and plant life.

Material Storage

- ✓ As a temporary storage option, use a tarp or plastic sheet to cover materials exposed to rainwater
- ✓ Install a roof over permanent outdoor storage areas, or store materials inside a building. Contact your local building and fire officials before beginning construction or relocating chemicals.
- ✓ Material storage areas should also have side protection, such as walls or curtains, to adequately shield materials from exposure to rainwater.
- ✓ Replace or repair leaky equipment and containers. Place drip pans or absorbent materials under leaky equipment and containers until they can be repaired.

HVAC, Chillers, Boilers, & Refrigerator Units

- ✓ Existing buildings with air conditioners can discharge noncontaminated condensate (condensate which does not contain descaling or anti-algal agents) to the storm drain.
- ✓ Direct HVAC contractors to dispose of flushing agent residues (descaling or anti-algal agents) in the sanitary sewer. The use of chemicals containing copper and tributyl tin is prohibited.
- ✓ Melt water from de-icing refrigeration units, cryogenic tanks, etc., may be disposed of in a storm drain as long as it does not contain any type of pollutant or come into contact with a pollutant (from drum and equipment storage nearby, for example).
- ✓ All treated boiler discharge and blowdown, including condensation, must be discharged to the sanitary sewer or reused or recycled in a closed loop system approved by your permitting agency.
- ✓ New buildings should be designed so that all discharges from air conditioner condensation lines drain to the sanitary sewer. Consult your local planning or building department for more information.

Air Compressors

- ✓ Inspect and maintain air compressors routinely. Air compressors produce small quantities of automatic blowdown water, which commonly contains lubricating oil or other potential pollutants. This may not be discharged to the storm drain. Discharge all

blowdown water to the sanitary sewer after contacting your local wastewater treatment plant for guidance.

- ✓ If the compressor has a frequent small bleed, use a drip pan to collect the water. Dispose of accumulated water into the sanitary sewer.
- ✓ Repair all fuel and oil leaks immediately. Use a drip pan until repairs are made. Clean any spilled fuel or oil using a spill absorbent or some other dry-cleaning method. When the spill is absorbed, sweep up the saturated absorbent and dispose of it as hazardous waste.

Loading Docks

- ✓ Pick up litter around loading docks regularly.
- ✓ Keep absorbent materials nearby in order to clean up or contain spills promptly.

Landscaping

- ✓ Never apply chemicals or rinse water from equipment that has contained fertilizers, pesticides or herbicides to vegetation within a 24-hour period of forecasted rain especially when handling liquids and powders.
- ✓ Use the least toxic product for the job.
- ✓ Use the recommended amount of chemical for the job. If using concentrate, mix only the amount you need and spray out all of the product. Rinse equipment over a landscaped area. Never pour rinse water down a storm drain.
- ✓ Dispose of excess lawn and garden chemicals as hazardous waste.
- ✓ Keep leaves, grass clippings, and other yard waste out of the streets, gutters and storm drains.

Storm Drain Maintenance

- ✓ Locate and label all storm drain inlets on your business site.
- ✓ Sweep up debris from parking lots and other paved areas regularly.
- ✓ Clean out all storm drain inlets on your property with a vacuum or shovel at least twice a year — just before the start of the rainy season and after the first major rain.

Spill Prevention and Cleanup

The majority of pollution that flows off a site can usually be avoided by taking precautions to prevent spills and cleaning spills up promptly if they do occur.

- ✓ Exercise care and planning to avoid potential spills, especially when handling liquids and powders.
- ✓ Maintain a regular inspection and repair schedule to prevent leaks from equipment and storage containers.
- ✓ Provide employees and contractors with absorbent materials for spill containment and cleanup. Keep spill prevention and cleanup materials in a location which is easy to find and easily accessible.
- ✓ Clean up spills immediately with a spill absorbent material. When the spill is absorbed, sweep up saturated absorbents and dispose as hazardous waste.
- ✓ Keep a supply of storm drain covers or plugs on hand. Make sure employees know where they are stored and how to use them. Keep these materials in a high-profile location.
- ✓ If you routinely handle liquids, your permitting agency may require that you install an emergency shut-off valve or storm drain plug that can be opened and closed in the nearest storm drain.

Sharing Information

Make sure employees and contractors know where to clean equipment and dispose of wash water.

Educating and Training Employees

- ✓ Storm drain pollution prevention begins and ends with effective employees and training.
- ✓ Train new employees on the procedures.
- ✓ Review guidelines regularly with all employees.

Overseeing Contractors

- ✓ You are responsible for your contractor's actions.
- ✓ Before beginning work, show contractors where to clean equipment and dispose of wash water.
- ✓ Make sure contractors know where emergency spill equipment is stored and how to use it.
- ✓ Incorporate pollution prevention practices into contract specifications.

THE BOTTOM LINE…

YOU ARE A CLEAN BUSINESS:

- ✓ **Tell your customers!**
- ✓ **Let your customers know what you're doing to prevent water pollution and encourage them to adopt clean water practices too.**

CITY OF SALEM, UT

Businesses and Pollution Prevention

Stormwater runoff from industrial and commercial properties can be a major source of pollution that affects local waterways. Because stormwater (rainwater runoff) drains directly to waterways without filtration or treatment, controlling potential pollutants at business facilities is key to protecting water quality.

Businesses with outdoor operations, particularly those that process/store materials or repair/store vehicles outdoors, have the greatest potential to release pollutants. Proper storage of chemicals and materials, cleaning spills and leaks, and the use of covers and barriers can prevent pollutants from washing into stormwater drainage systems. Preparation and training for managing spills and the implementation of common pollution prevention *Best Management Practices* allow businesses to protect the community and environment while maintaining their own business objectives.

Common Pollutants

Pollutant Impacts on Water Quality

Sediment	Sediment is a common component of stormwater, and can be a pollutant. Sediment can be detrimental to aquatic life (primary producers, benthic invertebrates, and fish) by interfering with photosynthesis, respiration, growth, reproduction, and oxygen exchange in water bodies. Sediment can transport other pollutants that are attached to it including nutrients, trace metals, and hydrocarbons. Sediment is the primary component of total suspended solids (TSS), a common water quality analytical parameter.
Nutrients	Nutrients including nitrogen and phosphorous are the major plant nutrients used for fertilizing landscapes, and are often found in stormwater. These nutrients can result in excessive or accelerated growth of vegetation, such as algae, resulting in impaired use of water in lakes and other sources of water supply.
Bacteria and Viruses	Bacteria and viruses are common contaminates of stormwater. For separate storm drain systems, sources of these contaminants include animal excrement and sanitary sewer overflow. High levels of indicator bacteria in stormwater have led to the closure of beaches, lakes, and rivers to contact recreation such as swimming.
Oil and Grease	Oil and grease include a wide array of hydrocarbon compounds, some of which are toxic to aquatic organisms at low concentrations. Sources of oil and grease include leakage, spills, cleaning and sloughing associated with vehicle and equipment engines

	and suspensions, leaking and breaks in hydraulic systems, restaurants, and waste oil disposal.
Metals	Metals including lead, zinc, cadmium, copper, chromium, and nickel are commonly found in stormwater. Many of the artificial surfaces of the urban environment (e.g., galvanized metal, paint, automobiles, or preserved wood) contain metals, which enter stormwater as the surfaces corrode, flake, dissolve, decay, or leach. Over half the trace metal load carried in stormwater is associated with sediments. Metals are of concern because they are toxic to aquatic organisms, can bioaccumulate (accumulate to toxic levels in aquatic animals such as fish), and have the potential to contaminate drinking water supplies.
Organics	Organics may be found in stormwater at low concentrations. Often synthetic organic compounds (adhesives, cleaners, sealants, solvents, etc.) are widely applied and may be improperly stored and disposed. In addition, deliberate dumping of these chemicals into storm drains and inlets causes environmental harm to waterways.
Pesticides	Pesticides (including herbicides, fungicides, rodenticides, and insecticides) have been repeatedly detected in stormwater at toxic levels, even when pesticides have been applied in accordance with label instructions. As pesticide use has increased, so too have concerns about the adverse effects of pesticides on the environment and human health. Accumulation of these compounds in simple aquatic organisms, such as plankton, provides an avenue for biomagnification through the food web, potentially resulting in elevated levels of toxins in organisms that feed on them, such as fish and birds.
Gross Pollutants	Gross Pollutants (trash, debris and floatables) may include heavy metals, pesticides, and bacteria in stormwater. Typically resulting from an urban environment, industrial sites and construction sites, trash and floatables may create an aesthetic ‘‘eye sore’’ in waterways. Gross pollutants also include plant debris (such as leaves and lawn-clippings from landscape maintenance), animal excrement, street litter, and other organic matter. Such substances may harbor bacteria, viruses, vectors, and depress the dissolved oxygen levels in streams, lakes and estuaries sometimes causing fish kills.

Appendix H

Salem City Storm Water Maintenance Agreement

Development Name: _____

Site Address: _____ _____Salem, Utah
Legal Description as follows:

Salem City Storm Water Maintenance Agreement

THIS AGREEMENT made and entered into this_____ day of_____ , 20___ , by and between_____ hereinafter called the "Landowner", and Salem City, a Municipal Corporation, WITNESSETH AS FOLLOWS:

WHEREAS, the Landowner wishes to improve, develop or redevelop real property located in Salem City, Utah County, State of Utah, which is described in more particular detail in the attached plan and incorporated herewith; and

WHERE AS, said development requires storm water detention and control facilities (hereinafter referred to as the Facilities) to be constructed according to designs and plans approved by Salem City; and

WHERE AS, the Landowner, for and in behalf of its administrators, executors, successors, heirs, or assigns, including any homeowner's association, recognizes and agrees that the health, safety, and welfare of the citizens of Salem City require that the Facilities be constructed on the property, and that the Facilities must be adequately maintained throughout the life of the development; and,

WHEREAS, the Salem City Code requires that the storm water facilities be constructed and adequately maintained by the Landowner, its administrators, executors, successors, heirs, or assigns including any homeowner's association.

NOW, THEREFORE, in consideration of the foregoing premises, the mutual covenants contained herein, and the following terms and conditions, the parties hereto agree as follows:

SECTION 1:

DEFINITIONS

For purposes of this agreement the following definitions shall apply;

1. Facilities: Facilities shall mean all storm water detention and control structures, flood control devices, or other improvements, which may include, but is not limited to all pipes, channels, or other structures and infrastructure built to convey storm water to the Facilities, as well as all structures, improvements, and vegetation provided to control the quantity and quality of the storm water which are required by Salem City in the site plan attached hereto.

2. Landowner: Landowner means the above party named herein, including its administrators, executors, successors, heirs or assigns, including any homeowner's association.

3. Salem City: Salem City means the City of Salem, a Utah Municipal Corporation in respect to authority to inspect and make repairs as contemplated shall include all authorized agents and employees of the City.

SECTION 2

FACILITIES CONSTRUCTION.

The Facilities shall be constructed by the Landowner in accordance with the plans and specifications for the development as contained in the attached site plan. The Landowner understands and agrees that modifications may be needed to make the system work properly after the facilities are installed, and agrees to make modifications and adjustments as may be required by Salem City.

SECTION 3:

MAINTENANCE.

The Landowner shall adequately maintain the Facilities in good working condition acceptable to Salem City and in accordance with the schedule of long-term maintenance activities agreed to by the parties and attached herewith. Adequate maintenance is herein defined as keeping the facilities in good working condition so that these facilities are performing their design functions, as maintaining the property so as to facility inspections and repairs as may be needed, and as replacing and/or modifying portions, or all of the system, as may be needed to maintain the intended function of the facility.

SECTION 4:

ACCESS.

The Landowner hereby grants permission to Salem City to enter upon the property, to inspect the Facilities, and perform actions whenever Salem City deems it necessary. Whenever possible, the City shall provide notice prior to entry. These actions shall be limited in scope to allow only those actions which are necessary to allow Salem City to inspect, ensure adequate maintenance, and to cause any repairs to be made which the City deems necessary. This shall include, but not be limited to prohibiting

the construction of structures or improvements that would impact or obstruct the intended purposes of the Facilities or restrict the ability of the Landowner or Salem City to inspect, maintain, or repair the Facilities.

SECTION 5:

FAILURE TO MAINTAIN FACILITIES.

In the event the Landowner fails to maintain the Facilities in good working order acceptable to Salem City and in accordance with the maintenance schedule incorporated in this Agreement, the City, in addition to any other remedies provided by State or City code, may, with due notice, enter the property and take whatever steps it deems necessary to return the Facilities to good working order. This provision shall not be construed to allow the City to erect any structure of a permanent nature on the property that is not included in the attached plan, or other agreement between the parties. It is expressly understood and agreed that Salem City is under no obligation to maintain or repair the Facilities. The decision to maintain or repair the Facilities shall be at Salem City's sole discretion and in no event shall this Agreement be construed to impose any such obligation on the City or to create any liability for the City refusing to undertake such a duty.

SECTION 6:

RECOUPMENT OF COSTS.

In the event Salem City performs work of any nature pursuant to the Agreement, or expends any funds in the performance of said work for labor, use of equipment, supplies, materials, and the like, the Landowner shall reimburse Salem City, with due notice, within thirty (30) days of receipt thereof for all the costs incurred by the City. If not paid within the prescribed time period, Salem City shall be entitled to record a lien against the real property in the amount of such costs. The actions described in this section are in addition to and not in lieu of any and all legal remedies available to Salem City as a result of the Landowner's failure to maintain the Facilities.

SECTION 7:

LIMITATION OF LIABILITIES.

It is the sole intent of this Agreement to insure the proper maintenance of the Facilities by the Landowner. As the facilities are not part of Salem City's Storm Water Collection System, this agreement does not create or extend any rights to immunity or liability protections provided by law to municipalities. ; This Agreement shall not be deemed to create or affect any additional liability of any party for damage alleged to result from or caused by storm water runoff, or to constitute a waiver of any immunity provided to Salem City through the Utah State Code or Constitution.

SECTION 8:

SEDIMENT ACCUMULATION.

Adequate maintenance shall include control of sediment accumulation resulting from the normal operation of the Facilities. The Landowner will make accommodation for the removal and appropriate disposal of all accumulated sediments.

SECTION 9:

ADOPTION AND INCORPORATION OF UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY STANDARDS AND SALEM CITY'S STORM WATER MANAGEMENT PLAN

The Parties agree to follow and comply with all requirements applicable to storm water detention and control facilities as by the Utah Department of Environmental Quality, Division of Water Quality, including the Small MS4 General UPDES Permit requirements, and by Salem City's Storm Water Management Plan as existing at the time of executing this agreement and as may be amended from time to time. The parties agree that these requirements and regulations are incorporated herein by this reference and that this agreement shall be deemed automatically amended to incorporate any and all changes and amendments made thereto after the signing of this agreement.

SECTION 10:

INSPECTIONS.

The Landowner shall perform an annual inspection of the Facilities. Salem City may require more frequent inspections should it have reason to believe that such inspections are necessary. All inspections shall be conducted by a qualified inspector. The results of all inspection shall be reported to Salem City using Maintenance Inspection Report attached to this agreement. All annual inspections shall be completed no later than September 1 of any given year. In addition, Salem City shall perform and inspection of the Facilities at least once every five years or more frequently as Salem may determine is necessary to ensure that adequate maintenance is being performed.

SECTION 11:

INDEMNITY

The Landowner indemnifies and holds harmless Salem City and its authorized agents and employees for any and all damages, accidents, casualties, occurrences or claims which might arise or be asserted against the City from the construction, presence, existence or maintenance of the facility or facilities by the Landowner. In the event a claim is asserted against the City, its authorized agents or employees, Salem City shall promptly notify the Landowner and the Landowner shall defend at its own expense any suit based on such claim. If any judgment or claims against Salem City, its authorized agents or employees shall be allowed, the Landowner shall pay for all costs and expenses in connection herewith.

SECTION 12:

COVENANT RUNNING WITH THE LAND.

This Agreement shall be recorded at the Utah County Recorder's Office and shall constitute a covenant running with the land and shall be binding on the Landowner, its administrators, executors, heirs, assigns and any other successors in interest, including any homeowner's association.

SECTION 13.

REMEDIES.

This Agreement may be enforced by proceedings at law or in equity by or against the parties hereto and their respective successors in interest. Any rights or remedies contained in this Agreement shall be in addition, and non-exclusive, to any rights existing under the Utah Code or that may exist under the common law.

SECTION 14:

ATTORNEYS FEES.

If any party retains, consults, or uses an attorney because of any breach, default, or failure to perform as required by this Agreement, the non-breaching/defaulting party shall be entitled to reasonable attorney's fees incurred before litigation is filed. In the event that any litigation is commenced to enforce or interpret this Agreement the prevailing party shall be entitled to its attorney's fees, expert witness expenses, and litigation related expenses, including but not limited to court costs.

SECTION 15:

THIRD PARTY BENEFICIARIES.

This Agreement shall be binding upon and inure solely to the benefit of the parties herein and is not intended to create contractual rights in any third party.

SECTION 16:

NO PARTNERSHIP.

Nothing contained in this Agreement shall be deemed to create any form of a partnership or joint-venture between Salem City and the Landowner.

SECTION 17:

UTAH LAW.

This Agreement shall be interpreted pursuant to the laws of the State of Utah.

SECTION 18:

INTEGRATED AGREEMENT.

This Agreement sets forth the entire agreement of the parties and supersedes all prior agreements, whether written or oral, that exists between the parties regarding the subject matter of this Agreement.

SECTION 19:

AMENDMENTS.

Except as expressly provided elsewhere in this Agreement, no provision of this Agreement may not be modified except in writing agreed to by both parties.

DATED THIS_____ DAY OF_____ , 20_____ .

SALEM CITY

Salem City Public Works. _____

Attest: Salem City Recorder. _____

DATED THIS_____DAY OF_____ , 20_____ .

LANDOWNER _____

NOTARIZATION

STATE OF UTAH)

): ss

COUNTY OF UTAH)

The above Agreement was executed on this_____ day of_____ , 20____ by

_____ , for and on behalf of_____ , the Landowner identified in the above signed Agreement. In executing this Agreement, the signer did swear before me that he is duly authorized to sign the agreement on behalf of the Landowner.

NOTARY PUBLIC_____

Appendix I

Salem City Storm Water Management and Discharge Control Ordinance

Ordinance No. 111820B

ROLL CALL

VOTING	YES	NO
KURT L CHRISTENSEN Mayor (votes only in case of tie)		
HOWARD CHUNTZ City Council member		
SETH SORENSEN City Council member		
DELYS SNYDER City Council member		
STERLING M. REES City Council member		
TIM DE DRAW City Council member		

I MOVE this ordinance be adopted: _____
City Council member

I SECOND the foregoing motion: _____
City Council member

WHEREAS, Salem City has been designated an MS4 category for storm water management; and

WHEREAS, the MS4 category requires significantly different rules and oversight than has been previously provided; and

WHEREAS, the purpose of this ordinance is to become compliant with federal and state requirements concerning the MS4 designation, including the following purposes:

a. Protect, maintain, and enhance the environment of Salem City.
b. Establish responsibilities for controlling and managing storm water runoff.
c. Protect the public health, safety, and the general welfare of the citizens of the City, by controlling discharges of pollutants to the City's storm water system and to maintain and improve the quality of the receiving waters into which the storm water outfalls flow, including, without limitation, lakes, rivers, streams, ponds, wetlands, and groundwater of the City.
d. Enable the City to comply with the National Pollution Discharge Elimination System permit (NPDES/UPDES), 40 CFR §122.26, and applicable state and federal laws and regulations.
e. Allow the City to exercise the powers granted by the Utah Code , which provides that, among other powers municipalities have with respect to storm water facilities, is the power to:
    i. Exercise general regulation over the planning, location, construction, and operation and maintenance of storm water facilities in the municipality, whether or not owned and operated by the municipality;
    ii. Adopt any rules and regulations deemed necessary to accomplish the purposes of this statute, including the adoption of a system of fees for services and permits;
    iii. Establish standards to regulate the quantity of storm water discharged and to regulate storm water contaminants as may be necessary to protect water quality;
    iv. Review and approve plans and plats for storm water management in proposed subdivisions or commercial developments;
    v. Issue permits for storm water discharges, or for the construction, alteration, extension, or repair of storm water facilities;
    vi. Suspend or revoke permits when it is determined that the permittee has violated any applicable ordinance, resolution, or condition of the permit;
    vii. Regulate and prohibit discharges into storm water facilities of sanitary, industrial, or commercial sewage or waters that have otherwise been contaminated; and
    viii. Expend funds to remediate or mitigate the detrimental effects of contaminated land or other sources of storm water contamination, whether public or private; and

WHEREAS, adoption of an enforcement ordinance is necessary for the City to enforce the provisions of the federal and state mandate without incurring the possibility of incurring large penalties itself;

NOW THEREFORE, be ordained and enacted by the Salem City Council as follows:

I.

Salem City Municipal Code, Title 11, Chapter 8, entitled "Storm Water Enforcement" is hereby created as follows:

TITLE 11 – PUBLIC UTILITIES AND SERVICES

Chapter 8 – Storm Water Enforcement

11-8-010. General.

(1) The City Engineer, or designee, shall administer the provisions of this ordinance.
(2) Nothing in this ordinance shall relieve any person from responsibility for damage they cause to other persons or property, nor impose upon Salem City, its officers, agents, or employees, any liability for damage to other persons or property.

11-8-020. Definitions.

(1) For the purpose of this Chapter, the following definitions shall apply: Words used in the singular shall include the plural, and the plural shall include the singular; words used in the present tense shall include the future tense. The word "shall" is mandatory and not discretionary. The word "may" is permissive. Words not defined in this section shall be construed to have the meaning given by common and ordinary usage within the storm water industry.
    1. "As Built Plans" means drawings depicting conditions as they were actually constructed.
    2. "Best Management Practices" or "BMPs" are physical, structural, and/or managerial practices that, when used singly or in combination, prevent or reduce pollution of water, that have been approved by the City and are hereby incorporated by reference into this ordinance as if fully set out therein. For purposes of this Chapter, the relevant BMP's are more particularly defined in the Salem City Storm Water Management Program.
    3. "BMP Manual" means the most recent documentation adopted by City which accepts specific Best Management Practices for use in City.
    4. "Channel" means a natural or artificial watercourse with a definite bed and banks that conducts flowing water continuously or periodically.
    5. "City" means Salem City.
    6. "City Engineer" means the Salem City Engineer or authorized designee.
    7. "City Storm Drain Representative" means the authorized storm water representative(s) responsible for inspection, enforcement, and other related matters pertaining to the City's

storm drain system. The City Engineer is a City Storm Drain Representative, and may appoint other city employees to also be City Storm Drain Representatives.

8. ‘‘City Storm Water System” means the storm system that receives runoff from public rights-of-way, natural waterways, or systems identified in a City easement, including facilities and components owned and/or operated by City.
9. ‘‘Community Water” means any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wetlands, wells, and other bodies of surface or subsurface water, natural or artificial, lying within or forming a part of the boundaries of Salem City.
10. ‘‘Contaminant’’ means any physical, chemical, biological, or radiological substance or matter in water.
11. ‘‘Design Storm Event’’ means a hypothetical storm event, of a given frequency interval and duration, used in the analysis and design of a storm water facility.
12. ‘‘Discharge” means dispose, deposit, spill, pour, inject, seep, dump, leak, or place by any means, or that which is disposed, deposited, spilled, poured, injected, seeped, dumped, leaked, or placed by any means including any direct or indirect entry of any solid or liquid matter into the City Storm Water System.
13. ‘‘Easement” means a non-possessory interest acquired by a person, party, firm, corporation, municipality or other legal entity that entitles the holder the right to use of the owner’s land in the manner specified in the easement documents.
14. ‘‘Erosion’’ means the removal of soil particles by the action of water, wind, ice, or other geological agents, whether naturally occurring or acting in conjunction with or promoted by anthropogenic activities or effects.
15. ‘‘Erosion and Sediment Control Plan” means a written plan (including drawings or other graphic representations) that is designed to minimize the accelerated erosion and sediment runoff at a site during construction activities.
16. ‘‘General Construction Storm Water Permit” is a permit required by the Utah Department of Environmental Quality, Division of Water Quality prior to commencing construction of any project within City.
17. ‘‘Hotspot’’ or ‘‘Priority ‘‘Area’’ means an area where land use or activities generate highly contaminated runoff, with concentrations of pollutants in excess of those typically found in storm water.
18. ‘‘Illicit connections’’ means either one of the following:
    i. Any drain or conveyance, whether on the surface or subsurface that allows a contaminated or illicit discharge to enter the storm drain system. Examples include, but are not limited to, any conveyance which allows non-storm water discharge such as sewage, processed wastewater, or wash water to enter the storm drain system, and any connections to the storm drain system from indoor drains or sinks regardless of whether said drain or connection had been previously allowed, permitted, or approved by a government agency; or
    ii. Any drain or conveyance connected to the storm drain system, whether or not such connection results in discharges into that system, which has not been (1) documented in plans, maps, or equivalent records submitted to the City, and (2) approved in writing by the City.

19. “Illicit discharge” means any discharge to the municipal separate storm sewer system (MS4) that is not composed entirely of storm water, storm water that is being discharged without an approved treatment methodology, and not specifically exempted under §11-8-030(4) of this ordinance. Illicit discharges include both direct connections (e.g. wastewater piping either mistakenly or deliberately connected to the storm water system) and indirect connections (e.g., infiltration into the storm water system or spills collected by drain inlets).
20. “Irrigation Ditches” means gravity irrigation ditches used by irrigation company shareholders having a right of water passageway by right-of-way, easement, or ownership. Irrigation ditches also include those facilities that function as a combined storm water and irrigation conveyance intended at times as a water routing and disposal system.
21. “Land Disturbance Permit” means a Salem City Land Disturbance Permit as adopted by the City.
22. “Land Disturbing Activity” means any activity on property that results in a change in the existing soil cover (both vegetative and non-vegetative) and/or the existing soil topography. Land-disturbing activities include, but are not limited to, development, re-development, demolition, construction, reconstruction, clearing, grading, filling, and excavation.
23. “Long-Term Storm Water Controls” is the storm water system using LID (Low Impact Development) for the 80th percentile storm with traditional or alternative methods of flood control.
24. “Maintenance” means any activity that is necessary to keep a storm water facility in good working order so as to function as designed. Maintenance shall include complete reconstruction of a storm water facility if reconstruction is needed in order to restore the facility to its original operational design parameters. Maintenance shall also include the correction of any problem on the property site that may directly impair the functions of the storm water facility.
25. “Maintenance Agreement” means a document recorded with the Utah County Recorder that acts as a property deed restriction, and which provides for long-term maintenance of storm water management facility or storm water best management practices.
26. “Municipal Separate Storm Sewer System,” “Municipal Separate Storm Water System,” or “MS4” means the storm water conveyance facilities owned or operated by City for the collection and transportation of storm water, including the streets and their drainage systems, catch basins, curbs, gutters, ditches, man-made channels, and storm drains.
27. “National Pollutant Discharge Elimination System Permit” or “NPDES permit” means a permit issued by the Utah Division of Environmental Quality pursuant to 33 U.S.C. §1342.
28. “Notice of Violation” or “N.O.V.” means whenever the City Storm Drain Representative finds that a person is in non-compliance with this ordinance, he/she will order compliance by giving written notice of violation to the responsible person. Requirements in this Notice are at the discretion of the City Storm Drain Representative, and may include monitoring, payment to cover costs relating to the non-compliance, and/or the implementation of Best Management Practices.

29. ‘‘Off-site Facility’’ means a structural BMP located outside the subject property boundary described in the permit application for land development activity, which provides an integral part of the storm drain system for a given parcel.
30. ‘‘On-site Facility’’ means a structural BMP located within the subject property boundary described in the permit application for land development activity.
31. ‘‘Peak Flow’’ means the maximum instantaneous rate of flow of water at a particular point resulting from a storm event.
32. ‘‘Person’’ means any individual, corporation, partnership, firm, association, company, or body politic organized or existing under the laws of this or any other state or country, including any agency of the State of Utah and the United States government, this includes both the singular and plural form of said groups, who acts to discharge to or otherwise influence City’s storm water system.
33. ‘‘Pre-Existing Conditions’’ means conditions of property in its native state or changed under approval by the City or changed property that is grandfathered.
34. ‘‘Priority Area’’ means ‘‘Hot Spot’’ as herein defined.
35. ‘‘Property Owner’’ means the owner of record of real property located within the boundaries of Salem City.
36. ‘‘Runoff’’ means that portion of the precipitation or other naturally or artificially occurring water on a drainage area that is discharged from the area into the Municipal Separate Storm Water System. Also, water produced by storms, surface drainage, snow and ice melt, and other water handled by the MS4.
37. ‘‘Salem City Storm Water Management Program’’ means those certain manuals, drawings, documents, specifications, ordinances, practices, and policies set in place by City to regulate, permit, manage, and otherwise oversee the discharge of storm water within the corporate boundaries of the City. This includes both those manuals and practices which are in place at the time of the passage of this ordinance and those which will yet be put in place, adopted, or revised in future actions.
38. ‘‘Sediment’’ means solid material, both mineral and organic, that is in suspension, is being transported, or has been moved from its site of origin by air, water, gravity, or ice and has come to rest on the earth's surface either above or below sea level or within any part of the storm drainage system.
39. ‘‘Sedimentation’’ means soil particles suspended in storm water that can or have settled in stream beds and which disrupt the natural flow of the stream or otherwise disrupt the intended storm drain system function.
40. ‘‘Sensitive Lands’’ means wetlands, slopes over 30% grade, and other unique features on land as designated by the City Engineer.
41. ‘‘Soils Report’’ means a study of soils on a subject property with the primary purpose of characterizing and describing the soils. The soils report shall be prepared by a qualified soils engineer, licensed in the State of Utah, who shall be directly involved in the soil characterization either by performing the investigation or by directly supervising employees.
42. ‘‘Stabilization’’ means providing adequate measures, vegetative and/or structural, that will prevent erosion.

43. "Storm water" means storm water runoff, snow melt runoff, surface runoff, street wash waters related to street cleaning or maintenance, infiltration, and drainage.
44. "Storm Water Design Standards and Regulations" means the Salem City storm water design standards and regulations adopted by the City as part of Salem City's Construction and Development Standards, the Salem City Municipal Code, policies, and other appurtenant documentation.
45. "Storm Water Master Plan" means the most recent version of the Salem City Storm Water Master Plan as adopted by City.
46. "Storm Water Management" means the programs adopted to maintain the quality and quantity of storm water runoff to pre-development levels.
47. "Storm Water Management Facilities System" means the drainage structures, conduits, ditches, combined sewers, sewers, and all device appurtenances by means of which storm water is collected, transported, pumped, treated, or disposed of.
48. "Storm Water Management Plan" means the drawings and other documents that comprise all the information and specifications for the programs, drainage systems, structures, BMPs, concepts, and techniques intended to maintain or restore quality and quantity of storm water runoff to pre-development levels.
49. "Storm Water Runoff" means water flow on the surface of the ground, resulting from precipitation.
50. "Storm Water Utility" means the storm water utility created by ordinance to administer the storm water management ordinance, and other storm water rules and regulations adopted by City.
51. "Structural BMPs" means devices that are constructed to control storm water runoff.
52. "Surface Water" includes waters upon the surface of the earth created naturally or artificially including, but not limited to, streams, ditches, lakes, reservoirs, ponds, sloughs, canals, or other bodies of water.
53. "SWPPP" means Storm Water Pollution Prevention Plan. A set of plans showing the location of the BMPs during the different phases of construction and system management.
54. "SWMP" means the developer's Storm Water Management Plan. A Technical Report including a copy of the Land Disturbance Permit, Notice of Intent (NOI) if applicable, Storm Water Pollution Prevention Plan during construction and post construction, storm water pollution prevention BMPs, spill prevention and countermeasure information, inspection records, and signed and dated Certification Statement from the Site Operator and the responsible person preparing the report.
55. "Watercourse" means a permanent or intermittent stream or other body of water, either natural or man-made, which gathers or carries surface water.
56. "Watershed" means all the land area that contributes runoff to a particular point along a waterway.
57. "UPDES" means the Utah Pollution Discharge Elimination System.

11-8-030. Land Disturbance Permits.

(1) When required.

a. Every person will be required to obtain a Land Disturbance Permit in the following cases:
    i. Land disturbing activity which generally disturbs one (1) or more acres of land.
    ii. Land disturbing activity of less than one (1) acre of land if such activity is part of a larger common plan of development that affects one (1) or more acres of land;
    iii. Land disturbing activity of less than one (1) acre of land, if in the discretion of the City Engineer, such activity poses a unique threat to water, or public health or safety;
    iv. The creation and use of borrow pits or those excavation sites used to generate fill and/or decorative material for off-site location.
    v. Development of a single family home, which is not part of a subdivision project.
    vi. Processing of earthen materials such as top soil and gravel screening.
    vii. Construction of parking lots.
    viii. Creation of an impervious area 0.25 acres/10,890 square feet constructed with compacted gravel, asphalt, concrete, or other impervious or semi-impervious material.
    ix. Creation or alteration of storm drain works or systems.
    x. Excavation or disturbance of more than 1,000 cubic yards of material in any non-agricultural earth moving activity.

(2) Drainage channels, waterways, and sensitive areas.

a. Property owners shall not fill wetlands or alter or restrict natural channels and waterways without proper permits.
b. Modifications of Sensitive Lands will require a Land Disturbance Permit and approval from all other responsible governing agencies.
c. Property owners proposing to redirect runoff, surface, and/or pipe flow to properties or facilities outside Salem City boundaries must provide written approval from the applicable governing agency.
d. Property owners are responsible for the protection of Channels located within their property in compliance with this ordinance.
e. Discharges or modifications to irrigation ditches or canals require written approval from the canal owners and applicable governing agencies.

(3) **Building permit.** No building permit shall be issued until the applicant has obtained a Land Disturbance Permit where the same is required by this ordinance.

(4) **Exemptions.** The following activities are exempt from the Land Disturbance Permit requirement:

a. Any emergency activity that is immediately necessary for the protection of life, property, or natural resources including activities required to promote public safety, repairs to water lines, and/or other City infrastructure repairs.
b. Nursery and agricultural operations conducted as permitted uses.
c. Any agricultural activity that is consistent with an approved farm conservation plan or a management plan prepared or approved by the appropriate government agency.

d. Additions or modifications to existing single family structures.
e. Landscape modifications resulting in disturbances below the limits identified in §11-8-030(1).
f. Excavation activities necessary for public purposes approved by City.

(5) Application for a Land Disturbance Permit.

a. Each application shall include the following information:
    i. Name of applicant;
    ii. Address of applicant;
    iii. Name, address, and telephone number of the Property Owner;
    iv. Address and legal description of the subject property including the tax serial/parcel number of the subject property;
    v. Name, address, and telephone number of the contractor and any subcontractor(s) who shall perform the land disturbing activity and who are responsible for the erosion and sediment control plan;
    vi. A statement indicating the nature, extent, and purpose of the land disturbing activity, including the size of the area for which the permit shall be applicable, and a schedule for the starting and completion dates of the land disturbing activity.
b. The applicant shall obtain from any other state or federal agency any other appropriate environmental permits that pertain to the property. However, the inclusion of those permits in the application shall not preclude the City Engineer from imposing additional development requirements and conditions, commensurate with this ordinance, on the development of property covered by those permits. Failure of the applicant to obtain the necessary permits may be a basis for denial of issuance of a Land Disturbance Permit.
c. Each application shall be accompanied by:
    i. A sediment and erosion control plan.
    ii. A Storm Water Management Plan providing for storm water management during the land disturbing activity and after the activity has been completed.
d. Each application for a Land Disturbance Permit shall be accompanied by payment of appropriate fees, as adopted by the Council in the annual budget or by resolution.

(6) Review and approval of application.

a. The City Engineer or designee will review each application for a land disturbance permit to determine its conformance with the provisions of this Chapter. Within 45 days after receiving an application, the City Engineer or designee shall provide one of the following responses in writing or via email:
    i. Approval of the permit application;
    ii. Approval of the permit application, subject to such reasonable conditions as may be necessary to secure the objectives of this Chapter; or
    iii. Denial of the permit application, indicating the reason(s) for the denial.
b. If the City Engineer or designee has granted conditional approval of the permit, the applicant shall submit a revised plan that conforms to the conditions established. However, the applicant shall be allowed to proceed with the land disturbing activity

provided it conforms to conditions established by the City Engineer, and further provided the revised plan is submitted within 15 days.

c. No land disturbing activities shall be allowed until the land disturbance permit has been approved.

(7) Permit duration.

a. Every land disturbance permit shall expire and become null and void if substantial work authorized by such permit has not commenced within one hundred eighty (180) calendar days of issuance, or is not complete within one year from the date of the preconstruction meeting.

(8) Notice of construction.

a. The applicant must notify the City Engineer ten (10) working days in advance of the commencement of construction. Regular inspections of the storm water management system construction shall be conducted by the City Engineer or designee. All inspections shall be documented and written reports prepared that contain the following information:
    i. The date and location of the inspection;
    ii. Whether construction is in compliance with the approved storm water management plan;
    iii. Variations from the approved construction specifications;
    iv. Any violations that exist.

(9) Performance bonds.

a. The City Engineer shall:
    i. Require the submittal of a performance bond in the form of an escrow bond, letter of credit, or cash. The bond must be drawn on financial institutions licensed to conduct business in the State of Utah. The bond shall be provided prior to issuance of a permit in order to ensure that the storm water pollution prevention practices are installed by the permit holder as required by the approved Storm Water Management Plan.
        1. The amount of the performance bond shall be the total estimated construction cost of the structural BMPs approved under the permit plus any reasonably foreseeable additional related costs, e.g., for administration, enforcement, etc.
        2. The performance bond shall be forfeited for failure to timely complete work specified in the Storm Water Management Plan.
        3. The applicant shall provide an itemized construction cost estimate, complete with unit prices, which shall be subject to acceptance, amendment, or rejection by the City Engineer.
        4. Alternatively, the City Engineer shall have the right to calculate the cost of construction cost estimates and revise the opinion of probable costs accordingly.

b. For single family residences, the performance bond is required in cash.

c. The bond may be released in full only upon completion and City approval of all final inspection punch list items and removal of all temporary control measures.

d. The City Engineer or designee will make a final inspection of the structural BMP to ensure that it is in compliance with the approved plan and the provisions of this Chapter. Provisions for a partial pro-rata release of the performance bond based on the completion of various development phases may be made at the discretion of the City Engineer.

11-8-040. Storm Water System Design and Management Standards.

(1) Irrigation ditches.

a. Existing irrigation ditches located on the site or straddling a site property boundary shall be piped with a sufficient size pipe to handle the irrigation need and shall be coordinated with the City Engineer and the irrigation company unless otherwise approved by the City Engineer.
b. Property Owners are responsible for the protection of irrigation ditches.
c. Discharges to private irrigation ditches require written approval from the ditch owner(s) and design shall comply with the terms of approvals and the Storm Water Design Standards and Regulations and the Land Disturbance Permit.
d. Piping of irrigation ditches and modification to the diversion boxes require the irrigation company to sign the plat or give written consent. If the City Engineer deems the conditions onerous, he/she may approve less onerous conditions. Design and coordination requirements shall comply with the Storm Water Design Standards and Regulations and the Land Disturbance Permit documents.

(2) Storm water design and BMP manuals.

a. Adoption. City adopts as its storm water design and best management practices (BMP) manuals the following publications, which are incorporated by reference in this Chapter as if fully set out herein:
    i. Salem City's Construction and Development Standards.
    ii. Salem City Storm Water Master Plan.
    iii. Guidance Document for Storm Water Management (prepared by the Salt Lake County Public Works Department).
b. These manuals include a list of acceptable BMPs and include specific design performance criteria and operation and maintenance requirements for each storm water practice. The manuals may be updated and expanded from time to time, at the discretion of the City Council, upon the recommendation of the City Engineer, based on improvements in engineering, science, monitory, and local maintenance experience. Storm water facilities that are designed, constructed, and maintained in accordance with these BMP criteria will be presumed to meet the minimum water quality performance standards.

(3) **General performance criteria for storm water management.** Unless granted a waiver or determined by the City Engineer to be exempt, the following post construction performance criteria shall be addressed for storm water management at all sites:

a. Design of storm drain systems in City boundaries and discharges into a Salem City storm drain system requires direct supervision of a Utah Registered Professional Engineer, and shall carry his/her seal.
b. All site designs shall control the peak flow rates of storm water discharge associated with design storms specified in this ordinance or in the BMP manual and reduce the generation of post construction storm water runoff to pre-construction levels or 100 year historical runoff flow rates. These practices should seek to utilize pervious areas for storm water treatment and to infiltrate storm water runoff from driveways, sidewalks, rooftops, parking lots, and landscaped areas to the maximum extent practical to provide treatment for both water quality and quantity.
c. Specific channel protection criteria shall be provided as prescribed in the BMP manual to protect stream channels from degradation.
d. Storm water discharges to critical areas with sensitive resources (i.e., cold water fisheries, recharge areas, water supply reservoirs) may be subject to additional performance criteria, or may need to utilize or restrict certain storm water management practices.
e. Storm water discharges from "hot spots" may require the application of specific structural BMPs and pollution prevention practices.
f. Prior to or during the site design process, applicants for land disturbance permits shall consult with the City Engineer or designee to determine if they are subject to additional storm water design requirements.
g. The calculations for determining peak flows as found in the BMP manual shall be used for sizing all storm water facilities.

(4) Minimum control requirements.

a. Storm water discharge during all construction activities shall comply with the terms of the Land Disturbance Permit, the Storm Water Design Standards and Regulations, and/or requirements set forth in the most recent edition of the International Building Code, and the State of Utah UPDES requirements.
b. Storm water designs shall meet the multi-stage storm frequency storage requirements as identified in the BMP manual unless the City Engineer has granted the applicant a full or partial waiver for a particular BMP under §11-8-060 of this ordinance.
c. Runoff rates from one lot to another may not exceed pre-existing conditions as defined by City, nor in such a manner that may unreasonably and unnecessarily cause more harm than formerly.
d. If hydrologic or topographic conditions warrant greater control than that provided by the minimum control requirements, the City Engineer or designee may impose additional requirements deemed necessary to control the volume, timing, and rate of runoff.

(5) **Storm water management plan requirements.** Property Owners are responsible to manage storm water runoff and sediment which originates on their property. This responsibility may extend to the defining of agreements, easements, and other appropriate measures to address storm water management. The storm water management plan shall include sufficient information to allow the City Engineer to evaluate the environmental characteristics of the project site, the potential impacts of all proposed development of the site, both present and

future, on the water resources, and the effectiveness and acceptability of the measures proposed for managing storm water generated at the project site. To accomplish this goal the storm water management plan shall comply with all requirements in the Storm Water Design Standards and Regulations.

a. Every person will be required to create a Long-Term Storm Water Controls in the following cases:
    i. Development or redevelopment which generally disturbs one (1) or more acres of land.
    ii. Development or redevelopment of less than one (1) acre of land if such Development or redevelopment is part of a larger common plan of development that affects one (1) or more acres of land;
    iii. Development or redevelopment of less than one (1) acre of land, if in the discretion of the City Engineer, development poses a unique threat to water, or public health or safety;

(6) **Maintenance Easements.** The applicant must ensure access to the site for the purpose of inspection and repair by securing all the easements needed. These easements must be properly recorded in the office of the Utah County Recorder.

(7) **Maintenance Agreement.** The Property Owner to be served by an on-site storm water management facility must execute a Maintenance Agreement for the storm water facilities. The maintenance agreement shall:

a. Assign responsibility for the maintenance and repair of the storm water facility to the Property Owner upon whose property the facility is located.
b. Provide for a periodic inspection by the Property Owner or qualified designee for the purpose of documenting maintenance and repair needs and ensure compliance with the purpose and requirements of this Chapter. The Property Owner will arrange for this inspection to be conducted by a qualified person as defined by the Utah Division of Water Quality who will submit a sealed report of the inspection to the City Engineer.
c. Grant permission to City's employees or agents to enter the property at reasonable times to inspect the storm water facility to ensure that it is being properly maintained.
d. Provide that the minimum maintenance and repair needs for detention and retention basins, and inlets and drainage pipes and any other storm water facilities including, but not limited to: the removal of silt, litter and other debris, the cutting of grass, grass cuttings and vegetation removal, and the replacement of landscape vegetation. It shall also provide that the Property Owner shall be responsible for additional maintenance and repair needs consistent with the needs and standards outlined in the BMP manual.
e. Provide that maintenance needs must be addressed in a timely manner, on a schedule to be determined by the City Engineer or designee.
f. Provide that if the property is not maintained or repaired within the prescribed schedule, City may perform the maintenance and repair at its expense, and bill the same to the Property Owner. The Maintenance Agreement shall also provide that City's cost of performing maintenance shall be a lien against the property until paid in full.

(8) **Dedication.** City shall have the discretion to accept the dedication of any existing or future storm water management facilities, provided such facility meets the requirements of this Chapter, and includes adequate and perpetual access and sufficient areas, by easement or otherwise, for inspection and regular maintenance. Any storm water facility accepted by City must also meet City's Construction and Development Standards and any other standards and specifications that apply to the particular storm water facility in question.

(9) **Sediment and Erosion Control Plans.** The applicant must prepare a sediment and erosion control plan for all construction activities that meets the requirements below.

a. The sediment and erosion control plan shall accurately describe the potential for soil erosion and sedimentation problems resulting from land disturbing activity and shall explain and illustrate the measures that are to be taken to control these problems. The length and complexity of the plan is to be commensurate with the size of the project, severity of the site condition, and potential for off-site damage. The plan shall be prepared by a qualified individual as defined by the State of Utah. The plan shall also conform to the requirements found in the BMP manual, and shall include at least the following:

i. Project Description - Briefly describe the intended project and proposed land disturbing activity including number of units and structures to be constructed and infrastructure required.

ii. A topographic map with contour intervals of five (5) feet or less showing present conditions and proposed contours resulting from land disturbing activity.

iii. All existing drainage ways, including intermittent and wet-weather drainage ways. Include any designated floodways or flood plains.

iv. A general description of existing land cover. Individual trees and shrubs do not need to be identified.

v. Stands of existing trees as they are to be preserved upon project completion, specifying their general location on the property. Differentiation shall be made between existing trees to be preserved, trees to be removed, and proposed planted trees. Tree protection measures must be identified, and the diameter of the area involved must also be identified on the plan and shown to scale. Information shall be supplied concerning the proposed destruction of exceptional and historic trees in setbacks and buffer strips, where they exist. Complete landscape plans may be submitted separately. The plan must include the sequence of implementation for tree protection measures.

vi. Approximate limits of proposed clearing, grading and filling.

vii. Approximate flows of existing storm water leaving any portion of the site.

viii. A general description of existing soil types and characteristics and any anticipated soil erosion and sedimentation problems resulting from existing characteristics.

ix. Location, size, and layout of proposed storm water and sedimentation control improvements.

x. Proposed drainage network.

xi. Proposed drain tile or waterway sizes.

xii. Proposed sizing for storm system piping, dewatering facilities, or other waterways.

xiii. Approximate flows leaving site after construction and incorporating water run-off mitigation measures. The evaluation must include projected effects on property adjoining the site and on existing drainage facilities and systems. The plan must address the adequacy of outfalls from the development: when water is concentrated, what is the capacity of waterways, if any, accepting storm water off-site; and what measures, including infiltration, sheeting into buffers, etc., are going to be used to prevent the scouring of waterways and drainage areas off-site, etc.

xiv. The projected sequence of work represented by the grading, drainage, and sedimentation and erosion control plans as related to other major items of construction, beginning with the initiation of excavation and including the construction of any sediment basins or retention facilities or any other structural BMP's.

xv. Specific remediation measures to prevent erosion and sedimentation run-off. Plans shall include detailed drawings of all control measures used; stabilization measures, including vegetation and non-vegetation measures, both temporary and permanent, will be detailed. Detailed construction notes and a maintenance schedule shall be included for all control measures in the plan.

xvi. Specific details for: the construction of rock pads, wash down pads, and settling basins for controlling erosion; road access points; eliminating or mitigating soil, sediment, and debris on streets and public ways to a level acceptable to the City Engineer or designee. Soil, sediment, and debris brought onto streets and public ways must be removed by the end of the work day by machine, broom, or shovel to the satisfaction of the City Engineer or designee. Failure to remove the sediment, soil, or debris shall be deemed a violation of this Chapter.

xvii. Proposed structures; location (to the extent possible) and identification of any proposed additional buildings, structures, or development on the site.

xviii. A description of on-site measures to be taken to recharge surface water into the ground water system through infiltration.

xix. Future phasing plans and impervious areas, if applicable.

11-8-050. Post Construction.

(1) **As built plans.** All applicants are required to submit actual as built plans for any structures located on-site after final construction is completed. The plan must show the final design specifications for all storm water management facilities and must be signed by a Registered Professional Engineer licensed to practice in Utah. A final inspection by the City Engineer or designee is required before any performance bond will be released. The City Engineer shall have the discretion to adopt provisions for a partial pro-rata release of the performance bond on the completion of various stages of development. In addition, certificates of occupancy shall not be granted until corrections to all BMP's have been made and accepted by the City

Engineer or designee. These requirements may be waived for single family residential sites or projects with minimal on-site storm water facilities as determined appropriate by the City Engineer.

(2) **Landscaping and stabilization requirements.** Any area of land from which the natural vegetative cover has been either partially or wholly cleared by development activities shall be revegetated according to a schedule approved by the City Engineer or designee. The following criteria shall apply to revegetation efforts:

a. Reseeding must be done with an annual or perennial cover crop accompanied by placement of straw mulch or its equivalent of sufficient coverage to control erosion until such time as the cover crop is established over ninety percent (90%) of the seeded area.

b. Replanting with native woody and herbaceous vegetation must be accompanied by placement of straw mulch or its equivalent of sufficient coverage to control erosion until the plantings are established and are capable of controlling erosion.

c. Any area of revegetation must exhibit survival of a minimum of seventy-five percent (75%) of the cover crop throughout the full year immediately following revegetation. Revegetation must be repeated in successive years until the minimum seventy-five percent (75%) survival rate for one (1) year is achieved.

d. In addition to the above requirements, a landscaping plan must be submitted with the final design describing the vegetative stabilization and management techniques to be used at a site after construction is completed. This plan will explain not only how the site will be stabilized after construction, but who will be responsible for the maintenance of vegetation at the site and what practices will be employed to ensure that adequate vegetative cover is preserved.

(3) **Inspection of storm water management facilities.** Periodic inspections of facilities shall be performed as provided for in this Chapter.

(4) **Records of installation and maintenance activities.** Parties responsible for the operation and maintenance of a storm water management facility shall make records of the installation of the storm water facility, and of all maintenance and repairs to the facility, and shall retain the records for at least five (5) years. These records shall be made available to the City Engineer or designee during inspection of the facility and at other reasonable times upon request.

(5) **Failure to meet or maintain design or maintenance standards.** If a responsible party fails or refuses to meet the design or maintenance standards required for storm water facilities under this ordinance, the City Engineer or designee, after reasonable notice, may correct a violation of the design standards or maintenance needs by performing all necessary work to place the facility in proper working condition. In the event that the storm water management facility becomes a danger to public safety or public health, the City Engineer or designee shall notify, in writing, the party responsible for maintenance of the storm water management facility. Upon receipt of that notice, the responsible person shall have 15 days to effect maintenance and repair of the facility in an approved manner. In the event that corrective action is not undertaken within that time, the City Engineer or designee may take necessary corrective action. The cost of any action by the City Engineer or designee under this section shall be charged to the responsible party, and may act as a lien against the property until paid in full.

11-8-060. Waivers.

(1) **General.** Every applicant shall provide for post construction storm water management as required by this Chapter, unless a written request to waive this requirement is filed and approved. Requests to waive the storm water management plan requirements shall be submitted to the City Engineer for approval.

(2) **Conditions for waiver.** The minimum requirements for storm water management may be waived in whole or in part upon written request of the applicant, provided that at least one of the following conditions applies:

a. It can be demonstrated that the proposed development is not likely to impair attainment of the objectives of this Chapter.

b. Alternative minimum requirements for on-site management of storm water discharges have been established in a storm water management plan that has been approved by the City Engineer or designee.

c. Provisions are made to manage storm water by an off-site facility. The off-site facility must be in place and designed to provide the level of storm water control that is equal to or greater than that which would be afforded by on-site practices. Further, the facility must be operated and maintained by an entity that is legally obligated to continue the operation and maintenance of the facility.

(3) **Downstream damage, etc. prohibited.** In order to receive a waiver, the applicant must demonstrate to the satisfaction of the City Engineer that the waiver will not lead to any of the following conditions downstream:

a. Deterioration of existing culverts, bridges, dams, or other structures;

b. Degradation of biological functions or habitat;

c. Accelerated stream bank or streambed erosion or siltation;

d. Increased threat of flood damage to public health, life, or property.

(4) **Land disturbance permit not to be issued where waiver requested.** No land disturbance permit shall be issued where a waiver has been requested until the waiver is granted. If no waiver is granted, the plans must be resubmitted with a storm water management plan.

11-8-070. Existing locations and developments.

(1) **Requirements for all existing commercial and industrial locations and developments.** The following requirements shall apply to all locations and development at which land disturbing activities have occurred previous to the enactment of this Chapter:

a. Denuded areas must be vegetated or covered under the standards and guidelines specified in the BMP manual and on a schedule approved by the City Engineer or designee.

b. Cuts and slopes must be properly covered with appropriate vegetation and/or properly designed retaining walls constructed.

c. Drainage ways shall be properly covered in vegetation or secured with rip-rap, channel lining, etc., to prevent erosion.

d. Trash, junk, rubbish, etc. shall be cleared from drainage ways.
e. Storm water runoff shall be controlled to the extent reasonable to prevent pollution of local waters. Such control measures shall include those methods and measures identified in the Salem City Storm Water Management Program.

(2) **Requirements for existing problem locations.** The City Engineer or designee shall, in writing, notify the owners of existing locations and developments of specific drainage, erosion, or sediment problems affecting such locations and developments, and the specific actions required to correct those problems. The notice shall also specify a reasonable time for compliance.

(3) **Inspection of existing facilities.** The City Engineer or designee may, to the extent authorized by state or federal law, establish inspection programs to verify that all storm water management facilities, including those built before as well as after the adoption of this Chapter, are functioning within design limits. These inspection programs may be established on any reasonable basis, including but not limited to: routine inspections; random inspections; inspections based upon complaints, or other notice of possible violations; inspection of drainage basins or areas identified as higher than typical sources of sediment or other contaminants or pollutants; inspections of businesses or industries of a type associated with higher than usual discharges of contaminants or pollutants or with discharges of a type which are more likely than the typical discharge to cause violations of City's NPDES/UPDES storm water permit; and joint inspections with other agencies inspecting under environmental or safety laws. Inspections may include, but are not limited to: reviewing maintenance and repair records; sampling discharges, surface water, groundwater, and material or water in drainage control facilities; and evaluating the condition of drainage control facilities and other BMPs.

(4) **Corrections of problems subject to appeal.** Corrective measures imposed by the City Engineer or designee under this section are subject to appeal under §11-8-110.

11-8-080. Illicit discharges.

(1) **Scope.** This section shall apply to all water generated on developed or undeveloped land entering the municipality's separate storm water system.

(2) **Prohibition of illicit discharges.** No person shall introduce or cause to be introduced into the municipal separate storm water system any discharge that is not composed entirely of storm water. The commencement, conduct, or continuance of any non-storm water discharge to the municipal separate storm water system is prohibited except as described as follows:

a. Uncontaminated discharges from the following sources:
    i. Water line flushing or other potable water sources,
    ii. Landscape irrigation or lawn watering with potable water or City's pressure irrigation water,
    iii. Diverted stream flows,
    iv. Rising ground water,
    v. Groundwater infiltration to storm drains,
    vi. Uncontaminated pumped groundwater,
    vii. Foundation or footing drains,

viii. Crawl space pumps,
ix. Air conditioning condensation,
x. Springs,
xi. Natural riparian habitat or wet-land flows,
xii. Swimming pools (if dechlorinated - typically less than one PPM chlorine),
xiii. Firefighting activities, and
xiv. Any other uncontaminated water source.
xv. Discharges specified in writing by the City Engineer as being necessary to protect public health and safety.
xvi. Dye testing is an allowable discharge if the City Engineer has so specified in writing.
xvii. The prohibition shall not apply to any non-storm water discharge permitted under an UPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the State of Utah Division of Water Quality, provided that the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that written approval has been granted for any discharge to the storm drain system.

(3) Prohibition of illicit connections.

a. The construction, use, maintenance, or continued existence of illicit connections to the separate municipal storm sewer system is prohibited.
b. This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.

(4) **Reduction of storm water pollutants by the use of best management practices.** Any person responsible for property or premises, which is, or may be, the source of an illicit discharge, may be required to implement, at the person's expense, the BMP's necessary to prevent the further discharge of pollutants to the municipal separate storm water system. Compliance with all terms and conditions of a valid NPDES permit authorizing the discharge of storm water associated with industrial activity, to the extent practicable, shall be deemed compliance with the provisions of this section.

(5) **Notification of spills.** Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting in, or may result in, illicit discharges or pollutants discharging into the municipal separate storm water system, the person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of such a release of hazardous materials the person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of non-hazardous materials, the person shall notify the City Engineer or designee in person or by telephone or facsimile no later than the next business day. Notifications in person or by telephone shall be confirmed by written notice addressed and mailed to the City Engineer or designee within three (3) business days of the telephone notice. If the discharge of prohibited materials emanates from a

commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three (3) years.

11-8-090. Enforcement.

(1) **Enforcement authority.** The City Engineer or designee shall have the authority to issue notices of violation, stop work orders, and citations, and to impose the civil penalties provided in this section.

a. With the issuance of a City storm water permit, the City Engineer or designee shall be permitted to enter and inspect facilities subject to this Chapter at all reasonable times and as often as necessary to determine compliance. Violations of this Chapter may result in penalties being assessed as established herein, or by other applicable laws.

(2) Notification of violation.

a. ***Written Notice***. Whenever the City Engineer or designee finds that any permittee or any other person discharging storm water has violated or is violating this Chapter or a permit or order issued hereunder, the City Engineer or designee may serve upon such person written notice of the violation. Within ten (10) days of this notice, an explanation of the violation and a plan for the satisfactory correction and prevention thereof, to include specific required actions, shall be submitted to the City Engineer or designee. Submission of this plan in no way relieves the discharger of liability for any violations occurring before or after receipt of the notice of violation.

b. ***Consent Orders.*** The City Engineer or designee is empowered to enter into consent orders, assurances of voluntary compliance, or other similar documents establishing an agreement with the person responsible for the noncompliance. Such orders will include specific action to be taken by the person to correct the noncompliance within a time period also specified by the order. Consent orders shall have the same force and effect as orders issued pursuant to paragraphs (d) and (e) below.

c. ***Show Cause Hearing.*** The City Engineer or designee may order any person who violates this ordinance or permit or order issued hereunder, to show cause why a proposed enforcement action should not be taken. Notice shall be served on the person specifying the time and place for the meeting with the City Engineer or designee, the proposed enforcement action and the reasons for such action, and a request that the violator show cause why this proposed enforcement action should not be taken. The notice of the meeting shall be served personally or by certified mail (return receipt requested) at least ten (10) days prior to the hearing.

d. ***Compliance Order.*** When the City Engineer or designee finds that any person has violated or continues to violate this Chapter or a permit or order issued thereunder, he/she may issue an order to the violator directing that, following a specific time period, adequate structures or devices, be installed or procedures implemented and properly operated to prevent future violations. Orders may also contain such other requirements as might be reasonably necessary and appropriate to address the noncompliance, including the construction of appropriate structures, installation of devices, self-monitoring, and management practices.

e. ***Cease and Desist Orders.*** When the City Engineer or designee finds that any person has violated or continues to violate this Chapter or any permit or order issued hereunder, the City Engineer or designee may issue an order to cease and desist all such violations and direct those persons in noncompliance to:
   i. Comply forthwith; or
   ii. Take such appropriate remedial or preventive action as may be needed to properly address a continuing or threatened violation, including halting operations and terminating the discharge.

(3) **Conflicting standards.** Whenever there is a conflict between any standard contained in this ordinance and in the BMP manual adopted by the City under this Chapter, the strictest standard shall prevail.

11-8-100. Civil Fine Pass Through Recovery

In the event that a non-domestic user discharges water into the Salem Separate Storm Sewer System which causes City to violate any conditions of its state or federal storm water discharge obligations and City is fined by the State of Utah or EPA for such violations, then such non-domestic user shall be fully liable for the total amount of the fines and civil penalties assessed against City, together with all administrative costs incurred, including attorneys fees.

11-8-110. Violations and Penalties.

(1) **Violations**. Any person who shall commit any act declared unlawful under this Chapter, who violates any provision of this Chapter, who violates the provisions of any permit issued pursuant to this Chapter, or who fails or refuses to comply with any lawful communication or notice to abate or take corrective action by the City Engineer or designee, shall be guilty of a Class C Misdemeanor. Each day of violation shall constitute a separate violation.

(2) **Penalties.** In addition to any criminal penalties, each violation may also subject the violator to civil penalties of not less than fifty dollars ($50.00) and not more than one thousand dollars ($1,000.00) per day for each day of violation.

(3) **Measuring civil penalties.** In assessing a civil penalty, the City Engineer or designee may consider:
   a. The harm done to the public health or the environment;
   b. Whether the civil penalty imposed will be a substantial economic deterrent to the illegal activity;
   c. The economic benefit gained by the violator;
   d. The amount of effort put forth by the violator to remedy the violation;
   e. Any unusual or extraordinary enforcement costs incurred by the City;
   f. The amount of penalty established by ordinance or resolution for specific categories of violations; and
   g. Any equities of the situation which outweigh the benefit of imposing any penalty or damage assessment.

(4) **Recovery of damages and costs.** In addition to the civil penalty in subsection (3) above, City may recover;

a. All damages proximately caused by the violator to City, which may include any reasonable expenses incurred in investigating violations of and enforcing compliance with this Chapter, or any other actual damages caused by the violation.

b. The costs of City's maintenance of storm water facilities when the user of such facilities fails to maintain them as required by this Chapter.

(5) **Other remedies.** The City may bring legal action to enjoin the continuing violation of this Chapter, and the existence of any other remedy, at law or equity, shall be no defense to any such actions.

(6) **Remedies cumulative.** The remedies set forth in this section shall be cumulative, not exclusive, and it shall not be a defense to any action, civil or criminal, that one or more of the remedies set forth herein has been sought or granted.

11-8-120. Appeals.

(1) **Appeals to municipal governing body.** Any person aggrieved by the imposition of a civil penalty or damage assessment as provided by this Chapter may appeal said penalty or damage assessment to the City Council. Notice of appeal must be filed with the City Recorder within 10 days of the civil penalty or damage assessment. A hearing with the City Council will be scheduled within 30 days of the receipt of the notice of appeal by the City Recorder. The decision of the City Council shall be final and non-appealable.

11-8-130. SEVERABILITY

(2) If any provision or clause of this chapter or its application thereof to any person or circumstances is held to be unconstitutional or otherwise invalid by any court of competent jurisdiction, such invalidity shall not affect other sections, provisions, clauses, or applications which can be implemented without the invalid provision, clause, or application. To this end, the provisions of this Chapter are declared to be severable.

II.

This ordinance shall become effective twenty days after passage and posting.

DATED this 18th day of November, 2020

KURT L CHRISTENSEN , Mayor

Attest:

Jeffrey D. Nielson, City Recorder

AFFIDAVIT OF POSTING

JEFFREY D. NIELSON, being first duly sworn, deposes and says that he is the duly appointed and qualified recorder of the City of Salem, a Municipal Corporation of the State of Utah, and that on the 23 day of November , 2020 he posted a true and correct copy of Ordinance No. 11182023 as enacted by Salem City Council on the 18th day of November, 2020 said posting being made at the City Offices, at the United States Post Office, and at the Salem City Library, all being public places and located within the City Limits of Salem, Utah County, Utah.

DATED this 23 day of November, 2020

JEFFREY D. NIELSON, City Recorder

STATE OF UTAH)
: ss
COUNTY OF UTAH)

The foregoing instrument was acknowledged before me this 23rd day of November, 2020, by Jeffrey D. Nielson.

TAMMY M BECK
NOTARY PUBLIC • STATE of UTAH
COMMISSION NO. 703741
COMM. EXP. 12/19/2022

Tammy M. Beck
NOTARY PUBLIC