

Storm Water Management Plan

Permittee: Clinton City MS4

Permit Number: UTR-090054

Location of MS4: Clinton City, (Davis County)

Submitted with this permit is the following:

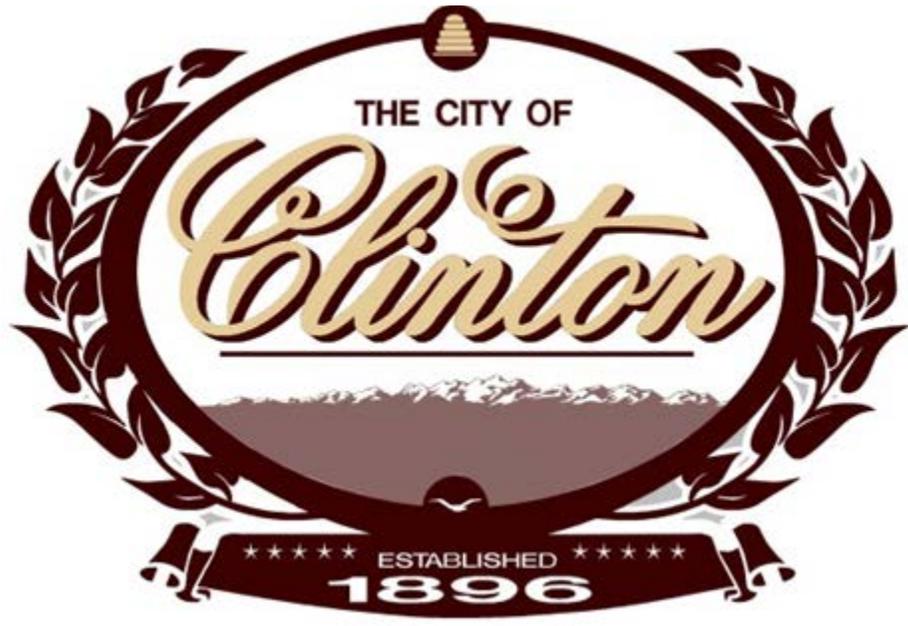
- A map of the MS4 location
- Information Regarding the overall quality concerns, priorities, and measureable goals specific to the Permittee that were considered in the development and/or revisions to the SWMP document
- A description of the program elements that will be implemented in each of the six minimum control measures
- 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
- A description of how the Permittee intends to meet the requirements 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.
- If applicable indication of joint submittal of Co-Permittees and the associated responsibility in meeting requirements of the SWMP
- Associated SOPs implemented by the Permittee

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"

Authorized Signature

Date



CLINTON CITY
STORM WATER
MANAGEMENT PROGRAM

Drafted: November 1, 2010
Revised June 2, 2016
By: Clinton City

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
MSGP	Multi Sector General Permit
NPDES	National Pollutant 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
UPDES	Utah Pollutant Discharge Elimination System

KEY PERSONS

Clinton City Public Works Department
1740 N 1750 W Clinton Utah 84015
(801)614-0870

Dave Williams, Assistant PW Director
dwilliams@clintoncity.com

Kasey Jensen, Storm Water Inspector
kjensen@clintoncity.com

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INTRODUCTION

Polluted storm water runoff is often transported to municipal separate storm sewer systems (MS4s) and ultimately discharged into local rivers and streams without treatment. EPA's Storm Water Phase II Rule establishes an MS4 storm water management program that is intended to improve the Nation's waterways by reducing the quantity of pollutants that are introduced into storm sewer systems during storm events. Common pollutants include oil and grease from roadways, pesticides and fertilizers from lawns, sediment from construction sites, and carelessly discarded trash, such as cigarette butts, paper wrappers, and plastic bottles. When deposited into nearby waterways through MS4 discharges, these pollutants can impair the waterways, thereby discouraging use of the resource, contaminating drinking water supplies, and interfering with the habitat for fish, other aquatic organisms, and wildlife.

In 1990, EPA promulgated rules establishing Phase I of the National Pollutant Discharge Elimination System (NPDES) storm water program. The Phase I program for MS4s requires operators of "medium" and "large" MS4s, that is, those that generally serve populations of 100,000 or greater, to implement a storm water management program as a means to control polluted discharges from these MS4s. The Storm Water Phase II Rule extends coverage of the NPDES storm water program to certain "small" MS4s but takes a slightly different approach to how the storm water management program is developed and implemented.

Coverage Under This Permit

Authority to Discharge

Storm Water Management Program (SWMP)

A Storm Water Management Program should:

- Reduce the discharge of pollutants to the “maximum extent practicable” (MEP);
- Protect water quality;
- Satisfy the appropriate water quality requirements of the Clean Water Act and the State of Utah General Permit for Discharges from Small Municipal Separate Storm Sewer Systems.

Storm water management programs must include:

- Best Management Practices (BMPs) for each of the six minimum control measures;
 1. Public Education and Outreach on Storm Water Impacts
 2. Public Involvement /Participation
 3. Illicit Discharge Detection and Elimination (IDDE)
 4. Construction Site Storm Water Runoff Control
 5. Long-Term Storm Water Management in New Development and Redevelopment (Post-Construction Storm Water Management)
 6. Pollution Prevention and Good Housekeeping for Municipal Operations
- Measurable goals for each minimum control measure (i.e., narrative or numeric standards used to gauge program effectiveness);
- Estimated months and years in which actions to implement each measure will be undertaken, including interim milestones and frequency; and
- The method for determining the success or effectiveness of each goal.
- The person or persons responsible for implementing or coordinating the storm water program.

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 March 1, 2016 in accordance with Section 1.1 authority to discharge in the UTR090000.

This document has been organized to follow the permit organization of UTR090000. The effective MS4, best management practices (BMPs), and standard operating procedures (SOPs) that Clinton City has adopted, or will be adopting, to comply with the permit requirements are listed in the following sections.

2.0 Notice of Intent and Storm Water Management Program Description

2.3.2.1

Permit Number

Clinton City MS4 SWMP Permit Number (UTR090054)

Permit Application and Notice of Intent

Phase II Rule encourages the development of a storm water management program by requiring a Notice of Intent (NOI) describing the storm water management program to be submitted to the NPDES permitting authority. The Notice of Intent becomes the permit application.

The Notice of Intent has been prepared in conjunction with this document and a copy has been included.

Cities required to permit under Phase II are allowed to cooperate and work together with coalitions of neighboring cities. The individual MS4s may share responsibility for program development with neighboring communities or health department and/or take advantage of existing local or state programs.

See formal Clinton City MS4 SWMP Permit NOI as reference.

STATE OF UTAH, DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF WATER QUALITY
 105 North 150 West, P.O. Box 14870, Salt Lake City, Utah 84114-8700 (801)536-4300

Notice of Intent (NOI) for Coverage Under the UDES General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4's), Permit No. U7R096000



INSTRUCTIONS ON BACK PAGE

DESQ USE ONLY

Coverage No. _____

Submission of this Notice of Intent constitutes notice that the party identified in Section I of this form intends to be authorized by a DESQ General Permit to discharge from Small Municipal Separate Storm Sewers in the State of Utah. Acceptance of permit obligations such as discharges is directly with the issuance conditions of the permit. ALL NECESSARY INFORMATION MUST BE PROVIDED ON THIS FORM.

Part I: General Information

Governmental Entity Name: Clinton City Corporation

Mailing Address: Street: 2267 North 1500 West

City: Clinton State: UT Zip Code: 84015

Operator Type: City

Operator Status: Local

Operator Contact Person: David Williams

Title: Assistant Public Works Director/ Storm Water Supervisor Telephone Number: 801-614-0870

Latitude/Longitude at Center of land for which you are requesting authorization to discharge:

Latitude: N 48° 8' Longitude: W 112° 3'

Population served by your MS4: 24,000 People

Storm Water Management Program Responsible Person:

Name: David Williams Title: Assistant Public Works Director/ Storm Water Supervisor

Telephone Number: 801-614-0870

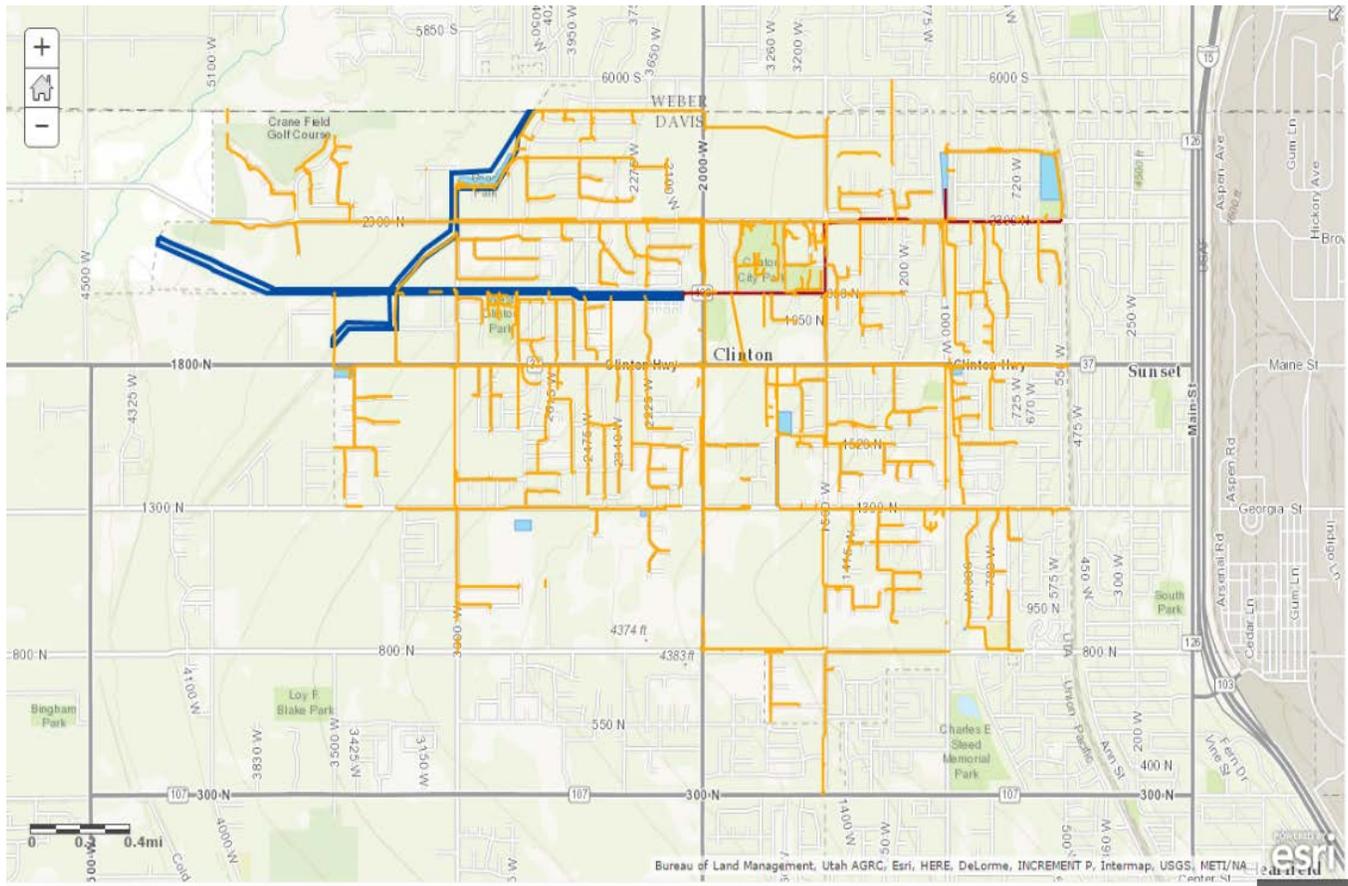
Part II: Outfalls and Receiving Waters

Receiving Waters: List all separate storm water outfall receiving waters (all discharges to waters under the definition of waters of the State). If all receiving waters are not known at the time of the NOI submittal, list known outfalls and update the list on annual reports. (ATTACH ADDITIONAL SHEETS AS NEEDED)

	Outfall	Receiving Water
1.	Clinton Cree.	Howard Slough
2.	Howard Slough	Through wetlands to the Great Salt Lake
3.		
4.		
5.		
6.		

3.2.2 MS4 Location Description and Map (Reference)

General storm drain system map as reference



CLINTON CITY CHARACTERISTICS

General Information

The Clinton City Storm Drain System falls under the Public Works Department for the City. The Collections System Supervisor can be contacted at the following address and phone number:

Mr. Dave Williams
2267 North 1500 West Clinton, Utah 84015
(801) 614-0870 dwilliams@clintoncity.com

Some general information for Clinton City follows:

Population: 21,000

Size:

5.6 square miles

Geographic Description: Located in the I-15 corridor, south of the Davis/Weber County line in Davis County. About 9 miles southwest of Ogden, UT, and about 32 miles northwest of Salt Lake City, UT. Approximate elevation is 4,375 ft.

Receiving Waters: Howard Slough

Annual Precipitation: 19.33 Inches (Ogden Airport Data)

Type of Community: Suburban, mostly residential with some commercial business

Latitude: N 41° 8'

Longitude: W 112° 3'

The Clinton storm water system consists of curb and gutters, a few open ditches, ponds, culverts, piped sections, wet ponds, swales and canals. Most storm water facilities drain into the piped storm water system and eventually empty into the Clinton Creek and Howard Slough. The storm water all eventually ends up in the Great Salt Lake. There are several regional detention ponds built into the system. New commercial sites are required to detain storm water before releasing it. Most of the streets use curb and gutter to collect storm water runoff with the remaining using swales and ditches.

2.3.2.3

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

Local Water Quality Concerns

The water quality within the City of Clinton is relatively good. None of the streams or waterways has been identified as protected or impaired under Section 303(d) of the Clean Water Act. The hope and intent of this Storm Water Management program (SWMP) is to maintain that status and possibly even improve the current water quality.

The storm water in Clinton City drains to a piped collection system where it is transported to Clinton Creek, passing through settling ponds and into Howard Slough and eventually the Great Salt Lake. The existing system works well. Continued growth is expected but the system has been designed and planned for this growth.

Like most communities along the Wasatch Front, the biggest concerns involve trash, fertilizers and pesticides coming from lawns and farmlands, oils and grease coming from the roadways, and sediment loads (coming primarily from disturbed sites). Clinton's SWMP has been geared toward targeting the pollutants mentioned. The focus of this plan is to do what we can within the community, trying to stay in harmony with the rural nature of the community and within the existing budget structure.

Stormwater Committee

A stormwater committee is used for the purpose of addressing the above mentioned water quality items and consider options to develop a storm water management program. The steering committee includes:

Name	Representing
Will Wright	Clinton Community Development Director
Mike Child	Clinton Public Works Director
Dave Williams	Clinton City Collection System Supervisor
Kasey Jensen	Clinton City Storm Water Inspector
Bryce Wilcox	JUB Engineers
Public Input	Public
Lee Ware	accenaGroup

Input and recommendations from this committee were used to develop this Storm Water Management Program (SWMP). Their countless hours devoted to this task are greatly appreciated and are reflected in this program.

Mission Statement

The Stormwater Committee reaffirmed the mission statement that can be utilized in directing and shaping the Storm Water Management Program:

“Our mission is to improve the quality of water in the Great Salt Lake and enhance wildlife habitat downstream of Clinton city by improving the quality of storm water discharge.”

As discussion was held trying to understand the nature of the problems and how to accomplish the mission statement, several potential pollutants were identified and discussed.

We reviewed information and studies preformed in the Salt Lake Area which identified the biggest pollutants as:

- Total Suspended Solids
- Total Phosphorus
- BOD5
- Metals

Information reviewed from the Logan area identified the biggest pollutants as:

- Copper
- Phosphorus
- E. coli
- TDS

As discussion continued and with no sampling on our own system we determined these to be target pollutants, pollutants that the community could and should try to actively reduce. These pollutants include:

- Chemicals and other toxins (chlorides)
- Oil and grease (hydrocarbons)
- BOD5
- TSS (sediment)
- Phosphorus (nutrients)
- Pathogens (bacteria)
- Trash (debris, litter)
- Heavy metals

<u>Pollutant</u>	<u>Source</u>	<u>Impacts</u>
<u>Sediment</u>	<u>Construction sites, vehicle/boat washing, agricultural sites , erosion</u>	<u>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.</u>
<u>Nutrients (Phosphorus, Nitrogen Potassium, Ammonia)</u>	<u>Fertilizers from agricultural operations, lawns and gardens; livestock and pet waste, decaying vegetation, sewer overflows and leaks.</u>	<u>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.</u>
<u>Hydrocarbons (Petroleum Products, Benzene, Toluene, Ethyl benzene, Xylene)</u>	<u>Vehicle and equipment fluid leaks, engine emissions, pesticides, equipment cleaning, leaking fuel storage containers, fuel spills, parking lot runoff</u>	<u>These pollutants are toxic to humans and wildlife at very low levels. Carcinogenic. Teratogenic.</u>
<u>Heavy Metals</u>	<u>Vehicle brake and equipment wear, engine emissions, parking lot runoff, batteries, paint and wood preservatives, fuels and fuel additives, pesticides, cleaning agents</u>	<u>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</u>
<u>Toxic Chemicals (Chlorides)</u>	<u>Pesticides, herbicides, dioxins, PCBs, industrial chemical spills and leaks, deicers, solvents</u>	<u>Chemicals are of concern because they are toxic to all life at very low levels. Carcinogenic. Teratogenic.</u>
<u>Debris/Litter/Trash</u>	<u>Improper solid waste storage and disposal, abandoned equipment, litter</u>	<u>Aesthetically unpleasant. Risk of decay product toxicity. Risk of aquatic animal entrapment or ingestion and death.</u>
<u>Pathogens (Bacteria)</u>	<u>Livestock, human, and pet waste, sewer overflows and leaks, septic systems</u>	<u>Human health risks due to disease and toxic contamination of aquatic life.</u>

A major portion of these identified pollutants stem from the people in the community. It was determined that the first and most important thing that needs to be done is educate the people. Being primarily residential community with a little commercial and industrial development, the majority of the water quality problems lie with the individual residents and from construction sites. This program has been developed with a heavy emphasis on education and public involvement. It is anticipated that the effectiveness and participation levels in various programs will be greatly enhanced if the public is first made aware of the problems being faced.

The emphasis should be on the positive aspects of our community. Programs and education materials should give ideas of what people can do, not give long lists of things they can't do

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);

Permit Requirements

The chosen measurable goals, submitted in the Notice of Intent as a permit application, become the required storm water management program; however, the NPDES permitting authority can require changes in the mix of chosen BMPs and measurable goals if all or some of them are found to be inconsistent with the provisions of the Phase II Final Rule. Likewise, the permittee can change its mix of BMPs if it determines that the program is not effective as it could be.

Reports

Reports must be submitted annually. The reports must include:

- The status of compliance with permit conditions, including an assessment of the appropriateness of the selected BMPs and progress toward achieving the selected measurable goals for each minimum measure;
- Results of any information collected and analyzed, including monitoring data if any;
- A summary of the storm water activities planned for the next reporting cycle;
- A change in any identified BMP or measurable goals for any minimum measure; and
- Notice of relying on another governmental entity to satisfy some of the permit obligations (if applicable).

Record Keeping

Records required by the NPDES permitting authority must be kept for at least 5 years and made accessible to the public at reasonable times during regular business hours. Records need not be submitted to the NPDES permitting authority unless the permittee is requested to do so.

Deadlines

The current UPDES permit became effective on March 1, 2016. This permit requires that all MS4s have an updated SWMP submitted to the State of Utah by July 1, 2016. The permit further requires that each MS4 conduct an annual review of the SWMP and to reevaluate its effectiveness at least annually.

Penalties

The UPDES permit that the operator of a regulated small MS4 is required to obtain is enforceable at both the State level and at the federal level thus subjecting the permittee to potential enforcement actions and penalties by both the UPDES and NPDES permitting authorities if the permittee does not fully comply with application or permit requirements.

2.3.2.5 Modifications to City Ordinances

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.

This SWMP introduces several plans for the modification of City ordinances specifically, Title 21 Storm Drain Utility, and will be revised to fulfill permit requirements set forth by this SWMP.

Ordinances to address required items, including enforcement, Post Construction BMPs, New BMPs, IDDE, etc., are currently in process of development and some revision. In addition, proposals are being sent to city council and city management for approval. All new and or revised ordinances will be updated and documented within the Clinton City SWMP in the designated section. Older records will be kept in the designated appendix. (See Goals section as reference for continual development of needed city ordinances.)

Modified, updated, and new City ordinances are to be placed here , along with explanation, rationale, and supporting documentation upon completion and approval.

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.

The description of how the Clinton City MS4 intends to meet these requirements are outlined and described with specific detail in section 4. See Section 4 (MCMs) as reference

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.

N/A

3.1 Discharges to Water Quality Impaired Waters

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.waterquality.utah.gov/TMDL/index.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 most recent 303 (d) lists, Clinton City does not specifically discharge into any impaired waters.

See 2016 Current Water Quality Report as sited Reference

<http://www.deq.utah.gov/ProgramsServices/programs/water/wqmanagement/assessment/currentIR2016.htm>

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.

Clinton City MS4 is currently working directly with the Davis County Storm Water Coalition as part of an inter local agreement aimed at collecting data and sampling analysis from the county to attribute information to a comprehensive plan. This plan is intended to enhance the efforts of the Clinton City MS4, as well as all other Davis County MS4s.

A subcommittee has been developed to begin addressing all related issues and bring before the main body, so as to approve needed implementation stages and help approval of Coalition funds that may be used.

The Clinton City MS4 has specifically collected samples from wet ponds from previous years to be added to address section 3.2.1 and to share with the County Coalition in a multi-faceted effort to reduce nitrogen (nutrients). See section 4 MCMs as reference to future goals on nitrogen and phosphorus reduction.

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.

Clinton City MS4 participates and works directly with the Davis County Storm Water Coalition as a regional collaborative program.

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.

Clinton City MS4 is currently working directly with the Davis County Storm Water Coalition as part of an inter local agreement aimed at collecting data and sampling analysis from the county to attribute information to a comprehensive plan. This plan is intended to enhance the efforts of the Clinton City MS4, as well as all other Davis County MS4s.

A subcommittee has been developed to begin addressing all related issues and bring before the main body, so as to approve needed implementation stages and help approval of Coalition funds that may be used.

The Clinton City MS4 has specifically collected samples from wet ponds from previous years to be added to address section 3.2.1 and to share with the County Coalition in a multi-faceted effort to reduce nitrogen (nutrients). See section 4 MCMs as reference to future goals on nitrogen and phosphorus reduction, in addition to how Clinton City MS4 will proceed forward on targeting sources that are, or have, a high potential to contribute nitrogen and phosphorus to the waters receiving the discharge authorized under this Permit.

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

Targeted sources for the reduction in nitrogen and phosphorus discharges are being evaluated and determined through the actions and participation of the Davis County Storm Water Coalition and designated subcommittee, of which the Clinton City MS4 is an active participant. The educational materials described in section 3.2.1.3, many of which have already been developed, will be distributed to the appropriate group and or target sources as available. Equivalent educational sources that are specific for Clinton City MS4 include active participation and educational booth display at the Clinton City Heritage Days Celebration, ongoing monthly / bi-weekly / quarterly utility billing mailers, and the City's Primary website. In addition, specific information and face-to-face advisory is provided during all new business license application processes and all new construction permit application processes.

3.3 Co-Permittees

The Clinton City MS4 has no Co-Permittees.

Storm Water Management Program

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.

The Clinton City MS4 has held and maintained 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, since its inception in 2002. Clinton City also participated in the MS4 SWMP revamp of 2010. This

document is available both in hard copy print and electronically through the City's primary website (www.clintoncity.com).

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.

Clinton City has implemented 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.

The documentation program will consist of: Inspection forms complying with the requirements of this permit (Section 6.8) will be completed in the field with electronic devices; all documentation will be submitted to the storm water data base. When paper forms are used in the field; the forms will then be digitized and placed into the storm water database. 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 forms. The sewer and storm water crew will report applicable O&M activities and their location, date, etc. also street sweeping activities while water crews note flushing, repair and construction activities which could affect storm water quality. The storm water inspector will utilize the same system to complete facility inspections, dry weather screening, Illicit Discharge Detection and Elimination (IDDE) tracking the progress of post construction BMPs as well as construction inspections using the state form.

This database will serve as the digital archive for all inspections that will be frequently backed up and stored at a secondary offsite location. 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.

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) Newsletters
- 8) Storm water education materials
- 9) Dry weather screening
- 10) Training
- 11) IDDE inspections
- 12) Enforcement actions
- 13) Construction site inspections
- 14) Post Construction inspections

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 Section 4.1.2, these activities will be reported electronically to a database. Some public education and public involvement activities are currently conducted by, and tracked within the Davis County Storm Water Coalition system.

All inspections can be accessed via the Clinton City Public database upon request.

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 Clinton City and the Davis 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 Public Works Division. The City entered into an Interlocal Agreement which delegates Davis County Storm Water Coalition and the Cities' responsibility for administration

within the City, the majority of work needed to comply with this permit will be completed by personnel in the Public Works Department. Management and oversight of the City's responsibilities under the storm water management program is funded through the City's storm water utility.

As the program is implemented, 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 Davis County Storm Water Coalition is an assessment to the participating municipalities.

The vast majority of costs associated with the program are man hours by City Staff. Reporting of financial analysis is reported annually through the Annual MS4 report that is Due October 1st of each year.

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 implements and uses a number of structural and operational BMPs and SOP's to limit storm water discharge of pollutants. As part of the SWMP, the City will document the use of BMPs and SOP's.

- 1) Street sweeping and disposal of materials
- 2) Storm drain catch basin and 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

See Section 4 (MCMs) as reference of all BMPs, there specific use and pairing with MCM Goals, along with BMP fact sheet and reference codes.

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.

The following list identifies all of the selected BMPs that are either implemented or in the process of being implemented within Clinton City MS4. In addition, this list is supported by the indicated reference codes that also match the BMP Fact Sheet to provide specific details on each BMP. NOTE: This list does not specify other information (i.e., months and years in which the Permittee will undertake required actions, including interim milestones and the frequency of the actions).

Clinton City BMP Master List

BMP's	Abbreviation
<i>1- Public Education and Outreach</i>	
Building and Grounds Maintenance	BGM
Classroom Education on Storm Water	CESW
Educational Materials	EM
Housekeeping Practice	HP
Materials Use	MU
Public Education / Participation	PEP
Storm Drain System Signs	SDSS
Used Oil Recycling	UOR
Using Media	UM
Watershed Organization	WO
<i>2- Public Participation/Involvement</i>	
Community Cleanup	CC
Community Hotline	CH
Watershed Organization	WO
Service Group Participation	SGM
Storm Channel / Creek Maintenance	SCCM
Stream Cleanup and Monitoring	SCM
<i>3- Illicit Discharge Detection and Elimination</i>	
Identify Illicit Connections	IIC
Aboveground Tank Leak & Spill Control	ATL
Illegal Dumping Controls	IDC
Illegal Solid Dumping Control	ISDC
Leaking Sanitary Sewer Control	LSSC
Map Storm Water Drains	MSWD
Non-Storm Water Discharge to Drains	NSWD
Ordinance Development	OD
Used Oil Recycling	UOR

Clinton City BMP Master List

BMP's	Abbreviation
1- Public Education and Outreach	
Building and Grounds Maintenance	BGM
Classroom Education on Storm Water	CESW
Educational Materials	EM
Housekeeping Practice	HP
Materials Use	MU
Public Education / Participation	PEP
Storm Drain System Signs	SDSS
Used Oil Recycling	UOR
Using Media	UM
Watershed Organization	WO
2- Public Participation/Involvement	
Community Cleanup	CC
Community Hotline	CH
Watershed Organization	WO
Service Group Participation	SGM
Storm Channel / Creek Maintenance	SCCM
Stream Cleanup and Monitoring	SCM
3- Illicit Discharge Detection and Elimination	
Identify Illicit Connections	IIC
Aboveground Tank Leak & Spill Control	ATL
Illegal Dumping Controls	IDC
Illegal Solid Dumping Control	ISDC
Leaking Sanitary Sewer Control	LSSC
Map Storm Water Drains	MSWD
Non-Storm Water Discharge to Drains	NSWD
Ordinance Development	OD
Used Oil Recycling	UOR
4- Construction Site Runoff Control	
Benching	BE
Brush or Rock Filter	BRF
Building, Repair, Remodeling, & Construction	BRRC
Chemical Mulching	CM
Compaction	CP
Concrete Waste Management	CWM
Construction Road Stabilization	CR
Construction Sequencing	CS
Contaminated or Erodible Surface Areas	CESA
Contractor Certification and Inspector Training	CCIT
Diversion Dike	DD
Dust Controls	DC
Earth Berm Barrier	EB
Equipment & Vehicle Wash Down Area	EVWA
Erosion Control Blankets	ECB
Erosion Control Plan	ECP
Establish/Compile Design Standards	ECDS
Extended Detention Basins	EDB
Filter Strips	FS
Flotation Silt Curtain	FSC
Geotextiles and Mats	GM
Grassed Swales	GS
Infrastructure Planning	IPL
Inlet Protection	IP
Landscape & Irrigation Plan	LI
Materials Storage	MS
Mulching	ML
Ordinance Development	OD
Outlet Protection	OP
Portable Toilets	PT
Preservation of Existing Vegetation	PEV
Riprap	RR
Rock Check Dams	CD
Sand Bag Barrier	SB
Sediment Basin	SB
Sediment Trap	ST
Silt Fence	SF
Slope Drain	SD
Spill Clean-Up	SCU
Stabilized Construction Entrance	SCE
Straw Bale Barrier	STB
Surface Roughening	SR
Temporary and Permanent Seeding	TPS
Temporary Drains and Swales	TDS
Temporary Stream Crossing	TSC
Vehicle and Equipment Cleaning	VEC
Vehicle and Equipment Fueling	VEF
Waste Disposal	WD
5- Post-Construction Runoff Control	
Alternative Turnarounds	AT
Bioengineering	BIO
Biofilters	BF
Conservation Easements	CE
Constructed Wetlands	CW
Double Trench Sand Filter	DTSF
Extended Detention Basins	EDB
Filter Strips	FS
Floatable Skimmers	FS
Grassed Swales	GS
Hydromulching	HIM
Infiltration	IN
Infrastructure Planning	IPL
In-line Storage	ILS
Land Use Planning / Management	LIP
Level Spreaders	LS
Map Storm Water Drains	MSWD
Media Filtration	MF
Minimizing DCIAs	DCIA
Oil/Water Separators & Water Q Inlets	OWS
Open Space Design	OSD
Ordinance Development	OD
Outlet Protection	OP
Peat-Sand Filter System	PSFS
Riprap	RR
Rock Check Dams	CD
Seeding and Planting	SP
Surface Sand Filter System	SSFS
Trench Sand Filter System	TSFS
Urban Forestry	UF
Wet Ponds	WP
Zoning	ZO
6- Pollution Prevention/Good Housekeeping	
Above Tank Leak & Spill Control	ATL
Alternative Discharge of Chlorinated Water	ADCW
Alternative Products	AP
Animal Carcass Removal	ACR
Area Control Procedures	ACP
BMP Inspection and Maintenance	BMPIM
Building and Grounds Maintenance	BGM
Catch Basin Cleaning	CBC
Concrete Waste Management	CWM
Containment Dikes	CD
Covering	CO
Curbing	CU
De-Icing Chemical Use Storage	DCUS
Detention/Infiltration Device Maintenance	DIDM
Drip Plans	DP
Employee Training	ET
Establish/Compile Design Standards	ECDS
Gelling Agents	GA
Hazardous Waste Management	HWWM
Housekeeping Practices	HP
Illegal Dumping Control	IDC
Infrastructure Planning	IPL
Long Term Operation and Maintenance	LTOM
Map Storm Water Drains	MSWD
Manure Composting Program	MCP
Outdoor Container Storage of Liquids	OCSL
Outdoor Loading/Unloading of Materials	OLUM
Outdoor Process Equipment Operations	OPE
Outdoor Storage of Raw Materials	OSRM
Pest Control	PC
Portable Toilets	PT
Roadway/Bridge Maintenance	RBM
Sediment Basin	SB
Septic System Controls	SSC
Signs & Labels	SL
Sorbents	SO
Spill Clean-Up	SCU
Storm Drain Flushing	SDF
Street Cleaning	SC
Sumps	S
Used Oil Recycling	UOR
Vehicle and Equipment Cleaning	VEC
Vehicle and Equipment Maintenance & Repair	VEMR

A table summarizing the dates to complete each activity and track the completion and performance of each BMP along with tentative task summary is in the SWMP. It will be evaluated at least annually and updated, replaced, and revised as needed. See section 4 MCM (Goals) as a reference to implementation and use information.

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.

KEY PERSONS

Clinton City Public Works Department
1740 N 1750 W Clinton Utah 84015
(801)614-0870

Dave Williams, Assistant PW Director
dwilliams@clintoncity.com

Kasey Jensen, Storm Water Inspector
kjensen@clintoncity.com

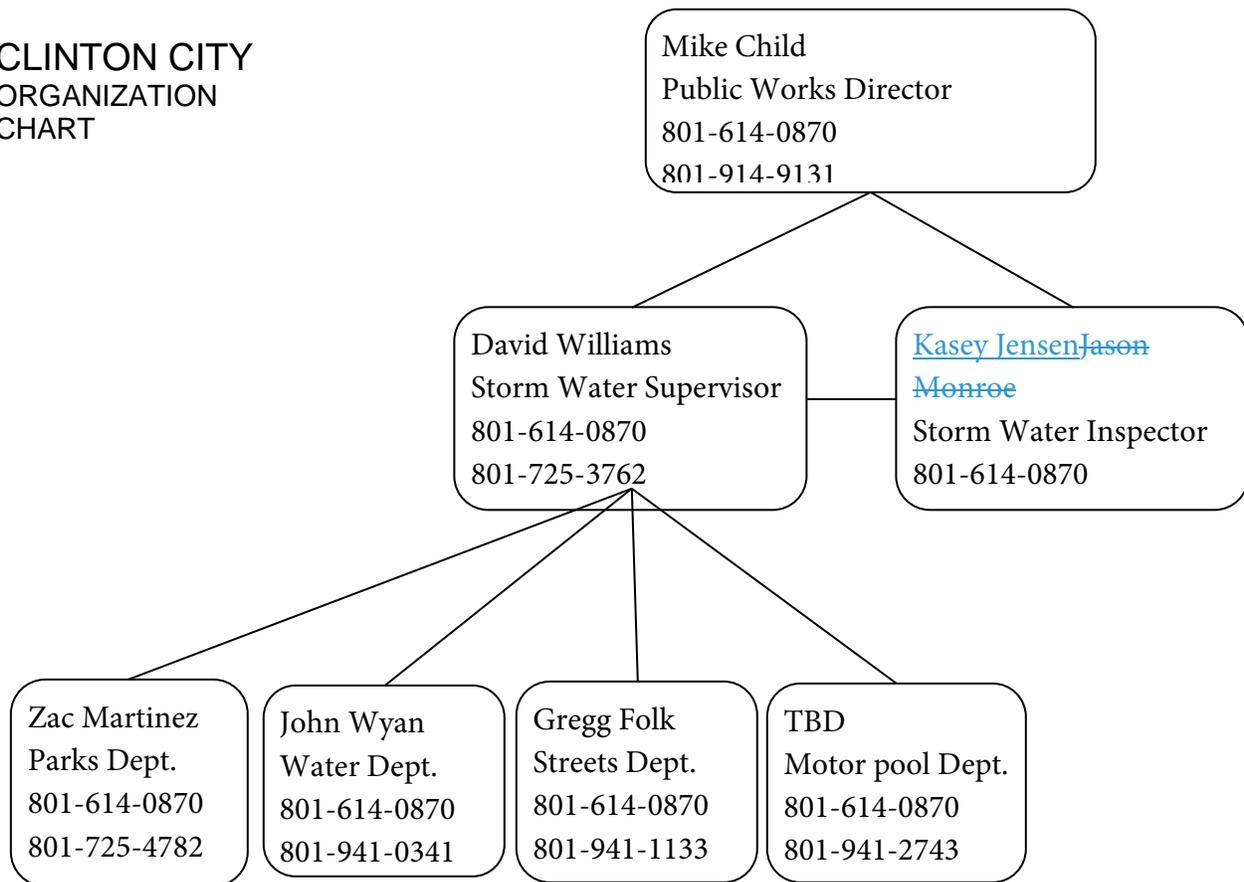
4.1.3.3

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.

Responsible Parties

City staff needs to lead and teach by example. The following organizational chart shows how the plan will bring together individuals from many different areas within the city together – each doing his/her own part to implement a city-wide plan. Following the organizational chart are a few sections outlined specific delegated responsibilities for each department listed.

CLINTON CITY ORGANIZATION CHART



Organization Chart Department Responsibilities

Public Works Director

- General coordination of the Storm Water Pollution Prevention program.
- Liaison with administration and city council

Storm Water Supervisor

- Oversee SWMP program specifics and work with department Supervisors
- General coordination of the Storm Water Pollution Prevention Program.

- **Responsible for shared facilities and general work areas including:**

- o Large equipment wash area
- o Fueling station
- o Salt and materials storage stockpile areas
- o Storm drain system maintenance
- o General BMP maintenance
- o Small vehicle wash area

Storm Water Inspector

- Construction site Inspections
- Annual report
- Updating SWMP, SWPPP
- Tracking and documentation of activities and actions
- Storm drain mapping
- Regulate city, developers, and contractors to be in compliance with federal, state and local storm water regulations.

Parks Department Supervisor

- Parks department maintenance work area
- Pesticide, Herbicide, and Fertilizer (PHF) program
- Training parks personnel
- Chemical and fertilizer storage in work area
- Parks department equipment operation
- Equipment maintenance for parks dept. equipment
- Mowing program

Water Department Supervisor

- Water department maintenance work area
- Training water dept. personnel
- Chemical storage in work area
- Water dept. equipment operation
- Equipment maintenance for water dept. equipment

Streets Department Supervisor

- Streets department work area
- Streets dept. equipment operation
- Equipment maintenance for streets dept.
- Training streets dept. personnel
- Chemicals storage in work area
- Snow plowing program
- Salt and materials storage stockpile areas

Motor Pool Department Supervisor

- Motor pool department maintenance work area

- Training fleet dept. personnel
- Chemicals, fluids, and oils in work area, waste oils/fluids
- Metal fabrication area

Davis County Health Department

- Investigate incidents involving spills, releases or discharge of pollutants, contaminants, or wastes into waterways and drainage systems.
- Initiate appropriate enforcement actions to compel compliance with the regulations or pursue sanctions for violations as required by the UPDES discharge permit.
- Collect local penalties as part of the enforcement action at the request of the MS4
- Maintain a 24 hour incident hot line to provide an opportunity for the public to report spills and violations of the UPDES permit
- Coordinate responses to reported spills and violations of the UPDES permit with the MS4
- Provide annual summaries of reports, investigations and actions taken for spills and violations of the UPDES permit to the MS4

Davis County Public Works Department

- Responsible for flood control and maintenance of designated creeks and channels that traverse from the Wasatch mountains to the Great Salt Lake within the County limits. One of these channels flows through Clinton City.
- Davis County Ordinance 01-87 and 02-98 set forth the policy and procedures used by the County to provide this service.
- Permit coverage under UPDES program authorizes Clinton City to discharge storm water into this channel.

Davis County Storm Water Coalition.

- Consists of representatives from 15 cities and Davis County that jointly perform the following responsibilities.
 - Jointly purchase educational and training materials, as determined by the Coalition, for distribution to:
 - o residents
 - o businesses
 - o developers/contractors
 - o MS4's
 - o Industrial facilities
 - Use the coalition as a county wide committee to:
 - o Train personnel

- o Create partnerships
- o Obtain input and feedback from special interest groups
- Annually contribute updated storm drain system information for county wide mapping purposes.
- Jointly prepare and promote a model ordinance that addresses:
 - o Illicit discharges
 - o Construction site storm water runoff
 - o Long term storm water management
- Jointly arrange for and provide education about hydraulic methods and criteria for sizing post construction BMP's
- Jointly participate to develop Standard Operating Procedures

Minimum Control Measures

PUBLIC EDUCATION AND OUTREACH ON STORM WATER IMPACTS

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) businesses, institutions, and commercial facilities, (3) developers and contractors (construction), and (4) MS4 industrial facilities. The minimum performance measures which should be based on the land uses and target audiences found within the community include:

Public Education and Outreach

The Public Education and Outreach measure is intended to increase public and professional awareness of storm water quality concerns and Best Management Practices (BMPs) that may be implemented to prevent storm water pollution. Clinton City will work on its own and will participate with The Davis County Storm Water Coalition (in cooperation with other entities in the County) to coordinate the Public Education and Outreach efforts County-wide to target the 4 groups identified.

Priorities

Priorities for this control measure were established in cooperation with the other entities participating with the Davis County Storm Water Coalition. Target pollutants with accompanying audiences have been identified by Coalition representatives. Activities (BMPs) were selected to reach out to these audiences, educating them about the pollutants and encouraging behavior that prevents pollution to receiving waters. Measurable goals were

established. A summary of this information (including target pollutants, target audiences, activities, and measurable goals) is included

Priorities for this control measure were established in cooperation with the other entities participating with the Davis County Storm Water Coalition. Target pollutants with accompanying audiences have been identified by Coalition representatives. Activities (BMPs) were selected to reach out to these audiences, educating them about the pollutants and encouraging behavior that prevents pollution to receiving waters. Measurable goals were established. A summary of this information (including target pollutants, target audiences, activities, and measurable goals) is included

4.2.1.1

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;

Target Specific Pollutants and Sources

Clinton City has determined that the targeted pollutants for each of the four audience groups described in the permit requirements are as follows:

Targeted Pollutants for Audience Groups

<u>Audience Group (source)</u>	<u>Sediments</u>	<u>Nutrients</u>	<u>Heavy Metals</u>	<u>Trash & Debris</u>	<u>Oil & Grease</u>	<u>Bacteria & Viruses</u>	<u>Herbicides & Pesticides</u>
<u>General Public</u>	X	X		X			X
<u>Commercial Facilities</u>	X	X		X			X
<u>Construction / Development</u>	X			X			
<u>MS4 Facilities Operations</u>	X	X	X	X			X
<u>X = Targeted potential pollutant may be expected from the audience group</u>							

Audience Group (source)	Hazardous Waste
General Public	X
Commercial Facilities	
Construction / Development	X
MS4 Facilities / Operations	
X = Targeted potential pollutant may be expected from the audience group	

Education efforts for each audience group focus on that group's targeted pollutants. Messages promote good behavior and educate individuals how to avoid, minimize, reduce and/or eliminate the adverse impacts of storm water discharges.

The Clinton City Storm Water Steering Committee identified the following pollutants, associated with the depicted audiences, based on visual identification from the Public Works Department. During routine and ongoing inspections and monitoring, City personnel both identified and based priority toward the mentioned pollutants.

4.2.1.2

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.

General Public Education and Outreach Program

Participate In Davis County Storm Water Coalition

The following list briefly describes the activities that the Coalition has decided to implement to fulfill the responsibilities listed above in Section 1.5.1:

TV Advertising: Educate the general public and businesses about ways (and reasons) to prevent storm water pollution through means that may be easily implemented. Monthly Coalition Meetings: Provide inter-local and interest-holder communication about storm water management programs

4th Grade Lessons: Teach 4th graders the fundamentals of storm water, receiving waters, and ways to prevent pollution to stormwater from households

Educational Materials: Work together to develop and purchase educational materials, pamphlets, and promotional give-away items to aid in the educational program

Water Fair: Help organize and sponsor the transportation for school children and their adult chaperones to a fun event that educates them about storm water pollution prevention and other environmentally friendly topics

Trainings: Host training events related to storm water permit requirements for contractors, MS4 employees, industrial facility operators, or other groups

Training of Coalition members: Provide training opportunities for coalition members to gain insight and information about storm water programs and challenges County Drainage Map: Help facilitate the assembly of a county-wide map for the purpose of protecting receiving waters in responding to spills and illegal dumping

Spill Response Hotline: Advertise and support the use of a common number for spill reporting and response

Standard Operating Procedures: Work together to develop model operating procedures that the member entities may use to implement in their jurisdictions

SWAC Meeting Attendance: Represent the DCSWC at Utah Storm Water Advisory Committee Meetings

Interlocal Agreements: Allow the coalition to function legally, in explicit agreement with each other

Model Ordinance: Work together to create model ordinances and encourage the adoption of similar ordinances by Coalition members

Effects of outdoor activities such as lawn care (use of pesticides, herbicides, and fertilizers)

The Davis County Storm Coalition has developed a pamphlet for residents on this subject. TV ads have addressed this and information can be found on the website.

Benefits of on-site infiltration of storm water

Weber Basin Water Conservancy in Layton and the Utah Botanical Center in Kaysville educates people regarding water conservative landscapes, wetland ecosystems, storm water management and other topics.

Effects of automotive work and car washing on water quality

The Davis County Storm Coalition has developed a pamphlet for residents on this subject. TV ads have addressed this and information can be found on the website.

Proper disposal of swimming pool water

The Davis County Storm Coalition has developed a pamphlet for residents on this subject. Pamphlets are distributed to pool owners.;

Proper management of pet waste

Doggie bags are provided on all walking trails for pet waste.

Newsletter Articles

At least once per year, an article will be prepared for publication in the City newsletter. Articles will focus on reducing the pollution entering our streams. Focus will be placed on recommended topics.

4.2.1.3.

Provide and document information given to businesses and institutions 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.

Businesses and Commercial Institutions Education and Outreach Program

Commercial and industrial institutions throughout the City have very diverse operations. The higher risk pollutants include food grease, petroleum products, lawn pollutants, heavy metals and general waste from dumpsters and/or parking lots. The educational efforts Clinton City implements for this measure address these more prevalent pollutants and also provide opportunities to educate businesses about IDDE hazards as required in Part 4.2.3

Annual storm water inspections for all businesses will be performed. this will provide an opportunity for education. Inspectors will discuss with the business any observed pollutants or hazards and deficiencies affecting storm water quality that were encountered during the inspection.

Every year existing businesses and new entities applying for a license or a building permit will receive storm water quality impact and illicit discharge information as part of their business license renewal process.

The main topics of education may 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, waste materials and dumpsters. (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.

- 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.
- Building, equipment and post construction BMP maintenance.
- Benefits of appropriate on-site infiltration of storm water.

The distribution of information will be tracked on all business licensing applications & processes.

Storm water credits can be applied for good housekeeping, and structural improvements that promote good water quality and decrease runoff.

Reference: See Section 4 MCM Goals for further description and implementation of control.

4.2.1.4.

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.

Construction Industry Education Program

Pre Construction Meeting

As part of the requirements for all new development or redevelopment projects, a pre- construction meeting is held wherein contractors and construction workers attend. Utility coordination, submittal requirements, SWPPP elements and other topics are discussed which have an effect on the proposed construction.

This educational measure is part of the IDDE education program as required in Part 4.2.3.7 and

4.2.3.11. Additional requirements are set forth in Part 4.2.4.5 to educate the construction industry.

Construction Packet

Compile a “packet” of information to give to engineers, contractors, developers, planners, and staff for:

- Developing a SWPPP and construction site BMPs
- SWPPP review checklist
- LID opportunities review and encouragement
- Post-Construction preferred design standards
- Criteria for “Priority” construction sites
- List of inspections required and inspection form
- Project completion/close-out procedures
- Pre Construction outline

Reference: See Section 4 of MCM Goals to see further details on goal to include a “How to Build in Clinton City” section to the City’s primary online website. This section is proposed to include the complete “Construction Packet”, including Storm Water considerations and needs on this site. It will also include needed compliance forms and resources.

4.2.1.5

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).

Employee Training

The training program is intended to include aspects of training that are required by this and the other control measures.

Employees will be trained on prohibitions against illicit discharges and water quality impacts. Generally, the training will be done separately by departments (some will be lumped together), so that the training can be customized to the job duties of those in each department. MS4 employees whose job duties may impact storm water will be trained in pollution prevention (especially as related to performing job duties/procedures), permit requirements, water quality concerns.

Specific staff members have been targeted for storm water training. Their responsibilities require specific involvement in storm water quality. These positions include:

- Public Works Department (annually) – Entire staff are trained annually. All staff members are initially trained on expected job responsibilities during orientation including protection of storm water quality and identifying and reporting illicit discharges.
- Parks Department (annually) – Specific staff members with responsibility for park lawn maintenance and associated equipment maintenance
- Community and Economic Development Department (as needed) – Planners and reviewers involved with any development projects constructed in Clinton City which impact storm water quality, LID, SWPPP and BMP requirements.

Targeted training will be selected based on job responsibilities which cover a wide array of topics. Staff member training topics may include:

- IDDE hazards & prevention
- IDDE recognition, response & cleanup
- Proper dumpster & waste management
- Equipment inspection
- Various inspection procedures
- Storage of industrial materials
- Street & parking lot maintenance
- Plan review & permitting procedures
- Minimization of use of salt and other de-icing materials
- Violation enforcement measures
- Public outreach programs
- LID opportunities & infiltration methods
- Operation & maintenance requirements
- Long-term storm water management
- Job duties related to storm water
- SOP's and their implementation
- General SWMP education
- Proper SWPPP controls
- General storm water quality protection

This educational measure is in conjunction with the training requirements set forth in other minimum control measures including:

- Hazards associated with illicit discharges (Permit Section 4.2.3.7).
- IDDE recognition, procedures to stop and cleanup the discharge and prevention methods in their regular job duties (Permit Section 4.2.3.11).
- Protection of existing storm water systems from construction site runoff during construction (Permit Section 4.2.4.5).
- Long-term construction measures, including LID, that can be implemented to preserve storm water quality after construction projects are completed (Permit Part 4.2.5.6)

- Proper methods to complete job responsibilities without impairing the storm water quality (Permit Section 4.2.6.9).

Follow-up training will be completed to address changes in procedures, methods or staffing or when non-compliance issues are discovered.

4.2.1.6

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.

LID Green Infrastructure and Post Construction Control Education

Staff members from the Public Works Department annually attend the APWA Storm Water Conference. Various LID presentations are given which help educate about LID methods. Davis County Coalition provides training for engineers, development and plan review staff, Other LID trainings have been attended by staff members to gain additional insight to LID methods and opportunities. We will also look for training opportunities for plan review staff to expand their education about LID measures.

4.2.1.7

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. One method of evaluation of the program may be an evaluation of audience knowledge prior to commencement of the educational message followed by an evaluation after delivery of the message, such as a survey.

Education Program Evaluation

Public opinion surveys are performed to evaluate the effectiveness of the public education program and evaluate BMPs selected. This occurs at least once per permit term.

4.2.1.8

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

BMP Selection Rationale

General Public

The following BMPs have been implemented to educate the general public:

- 4th Grade Lessons – This BMP was selected because it helps teach children at an age they can understand the importance of water quality and how they can affect water quality.
- Water Fair – This BMP was selected because it helps teach children at an age they can understand the importance of water quality and how they can affect water quality.
- Educational Materials-This BMP was selected to focus and aid in focused message about water quality topics.
- Media Ads – Television ads reach the largest populations and provides good educational messages to encourage behavior changes. Highest frequency of pollutants can easily be targeted with campaign ads.
- Spill response hotline- advertise and support the use of a common number for spill reporting and response.

Commercial Facilities

The following BMPs have been implemented to educate the businesses and institutions:

- Storm Water Credits - businesses may be eligible for a credit on their storm water utility fee for good housekeeping and system designs that promote water quality.
- Annual Storm Water Inspections –All businesses receive an annual inspection of structural controls. This provides an opportunity for our inspectors to educate the business about better storm water protection practices and ensure proper maintenance is being completed to minimize quality impacts in the storm water system.
- Education - Information delivered with business license renewal should target all businesses.

Construction Industry

The following BMPs have been implemented to educate the construction industry:

- Pre-Construction Meeting – This BMP was selected because we can make a presentation directly with the on-site contractor and its employees about the importance of protecting storm water quality and how each worker can protect water quality and meet the requirements of the Permit.
- Construction Packet- Supplies information for designing, permitting and terminating permits and storm water controls.
- Contractor Training- Invite contractors working in our city to storm water specific training.

- Storm Water Construction Permit Application Process – Through this process, the SWPPP is reviewed to ensure proper protection will be in place during construction activities of storm water controls and educate them about the importance of on-site BMPs during construction activities.

MS4 Employees

The following BMPs have been implemented to educate select MS4 employees:

- Annual Training – This BMP allows an informal process to educate employees about IDDE, job duties relating to storm water quality and how they can prevent polluting the storm drains while completing their duties.
- New Hire Training- BMP chosen to target new employees to train about storm water and illicit discharges.
- SOP's- BMP for tasks associated with employees jobs to instruct the proper way of protecting the storm water.
- County Drainage map- Help facilitate the assembly of a county wide map of the purpose of protecting receiving waters in responding to spills and illegal dumping.

PUBLIC PARTICIPATION / INVOLVEMENT

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:

Public Participation/ Involvement

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.

Clinton City promotes public involvement and participation through community service projects, open houses about targeted projects affecting storm water quality and participation in local watershed councils.

Opportunities for public involvement include:

- Public notices and comment period about updates to the SWMP
- Open houses for city funded projects that impact storm water quality.
- Storm water committee consisting of contractors, developers, city members and engineers was used in selecting the BMP's and developing the original SWMP for the city
- Boy Scout service projects
- Installing storm drain markers on catch basins
- delivering storm water information to residents in the same area that markers are installed
- Information includes the published hotline for community members to report illicit discharges.
- Community group service projects
- Projects are organized on a regular basis to clean detention basins and trails, creeks, ponds other areas within Clinton City to prevent non-storm water discharges.
- Projects to mulch areas to prevent erosion.
- Encouraged to keep gutters clean.
- Adopt a park program.
- Participation in the Davis County Storm water Coalition which generally has representation at local trainings and water fairs.
- The DCSWC will be utilized to give and receive input, feedback and recommendations for the storm water management programs in Davis County. We will participate with the DCSWC to facilitate communication with the public, contractors, developers, consultants, industrial representatives, and others affected by or interested in NPDES storm water issues

4.2.2.1

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.

Opportunities for Public Input

Public Works 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.

Reference: See Section 4 of MCM Goals to see further details on goal to include a “Opportunities for Public Input” section to the City’s primary online website. This section is proposed to include the an online forum for the citizenry of Clinton City to comment on Storm Water issues. It is proposed that this method would allow for the tracking and documentation of all incoming comments, in addition to measure it’s effectiveness and level of participation.

4.2.2.2

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.

SWMP Document for Public Review

Public Works 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.

Reference: See Section 4 of MCM Goals to see further details on goal to include a “SWMP Document for Public Review” section to the City’s primary online website. This section is proposed to include an online forum for the citizenry of Clinton City to comment on and review the SWMP. It is proposed that this method would allow for the tracking and documentation of all incoming comments, in addition to measure it’s effectiveness and level of participation.

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.

SWMP Document for Public Review and Input

A current version of the SWMP is available for the general public online and at the Clinton City Public Works office this will allow the public to review and provide input. Any modifications to the SWMP will be made available.

Reference: See Section 4 of MCM Goals to see further details on goal to include a “SWMP Document for Public Review” section to the City’s primary online website. This section is proposed to include an online forum for the citizenry of Clinton City to comment on and review the SWMP. It is proposed that this method would allow for the tracking and documentation of all incoming comments, in addition to measure it’s effectiveness and level of participation.

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.

Public Notice

We will comply with all State and Local public notice requirements. Public notices shall be published online. Public comments will be received and appropriate responses will be given and documented.

Ordinances will be modified in accordance with Utah law, providing the public numerous opportunities to contribute and voice concerns.

ILLICIT DISCHARGE DETECTION AND ELIMINATION

Phase II Requirements

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:

Illicit Discharge Detection and Elimination

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 (IDDE) 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 SOPs 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

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.

Storm Water System Map

Clinton City maintains a GIS inventory which includes outfalls, pipes, structures or other storm water system inventories located within its jurisdiction. Updates to the system are completed as the system is modified.

4.2.3.2

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.

Storm Water Management Ordinance

Non-storm water discharges are prohibited through Clinton City Code, Title 23. When such discharges occur, Clinton City Storm Water Inspector, and Davis County Health Department, have the authority to impose escalating enforcement options to stop a non-storm water discharge and impose appropriate measures to ensure compliance.

Escalating enforcement options by The City Storm Water Inspector include:

- Verbal Warning – Applicable where violator had no knowledge that their action was a violation of Clinton City Code.
- Citation – Enforcement of a minor violation as described in Clinton City Code Section. Assesses a penalty fee and requires corrective action. Citations may be on top of any criminal, civil or other legal remedy established by law to ensure the violation is remedied. Citations are issued directly from the Clinton City Police Department.
- Notice of Violation – Enforcement of a major violation or if corrective action from an Administrative Citation is not completed. Additional fees may be assessed and additional requirements may be ordered

If impact includes any illicit discharge, The Davis County Health Department will issue the Notice of Violation.

- Failure to comply with a notice of violation within Ten days of service of the violation will be incurred and civil penalties shall be owed to Clinton City for each and every subsequent day of violation.
- The City may bring into compliance the violation and recuperate all costs incurred from the violator.

Clinton City operates a sanitary sewer system. If a SSO occurs, the plan outlined in the SSMP is followed

City ordinance prohibits illegal dumping into any sump, detention basin, storm drain, curb and gutter, drain inlet, storm drain ditch or other storm drainage structure that conveys storm water and/or non-storm water, any type of debris, petroleum product, chemical, paint, pesticide, herbicide, heavy metal, acid or base product, solid or liquid waste product, hazardous waste product, and/or human or animal waste.

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.

Legal Authority to Enforce Non-Storm Water Discharges

Authority to detect, eliminate and enforce against non-storm water discharges is authorized through City Code title 23. City has a Resolution with Davis County Health Department to investigate and enforce non storm water discharges.

Should any discharge be considered an illicit discharge, the Davis County health Department will handle enforcement, along with the issuing of any Notice of Violations and associated fines. It should be noted that the Davis county health Department regulates a scale factor fine system with a penalty scale chart and a severity assessment flow chart, which addresses the nature of each discharge / impact on a case-by-case basis, in addition to addressing repeat offenders.

Clinton City participates on all illicit discharge cases, including all settlement meetings. Clinton City has the ability to levy additional fines on top of those issued by the County. This information and description of the relationship that exists between the Davis County health Department and Clinton City can be found in Appendix C of the SWMP within the Adjudicative Hearing Procedures Policy manual.

4.2.3.3

Implement a written 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:

IDDE Detection and Mitigation Plan

The detection and mitigation plan for spills, illicit connections, SSO's and illegal dumping are described herein. We rely on our trained employees who are out in the public regularly (i.e. street sweepers, storm drain maintenance operators, storm water inspectors) and public reported discharges to detect spills and illegal discharges. Our regular dry weather screening of all outfalls in the City may also detect these spills and discharges.

Another part of the IDDE program includes smoke testing lines and using our crawler camera to record conditions inside storm drain and land drain pipes. This method allows us to locate any illicit connections and require proper mitigation in order to prevent illegal discharges from entering into the storm drain system.

The specific procedures that are implemented by Clinton City MS4 are located within the SOP section of the SWMP. In addition, a procedural flow chart for Incident and Response is located in Appendix C of the SWMP.

4.2.3.3.1

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 waterbodies; 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.

“High Priority” Area List

Storm Water personnel reviewed a map of the city to determine areas that might effect storm water quality or potential for illicit discharges. Special attention is given to:

- 1- Areas where businesses with higher pollutant risks are located (i.e. salvage yards, trucking facilities, businesses with high use of chemicals or other pollutants which may get into the storm water system,
- 2- Areas with a history of illicit discharges,
- 3- Areas near water bodies,
- 4- Older infrastructure areas
- 5- Areas with history of past illicit discharges

The following form list is implemented to help evaluate and provide key considerations regarding potential high priority areas within Clinton City.

High-Priority-Lists—Things-to-consider¶

This list is implemented to help evaluate and provide key considerations regarding potential high-priority areas within Clinton City.¶

City-owned-Facilities¶

- Quantity-of-urban-pollutants-stored¶
- Improperly-stored-materials¶
- Outside-activities¶
- Proximity-to-waterbodies¶
- Poor-housekeeping¶
- History-of-illicit-discharges¶

¶

Storm-Sewer-System-Maintenance-Priorities¶

- Water-quality-concerns¶
- Receiving-waters-condition¶
- Amount-and-type-of-materials-accumulated¶
- Other-location-specific-factors¶

¶

IDDE-Priorities¶

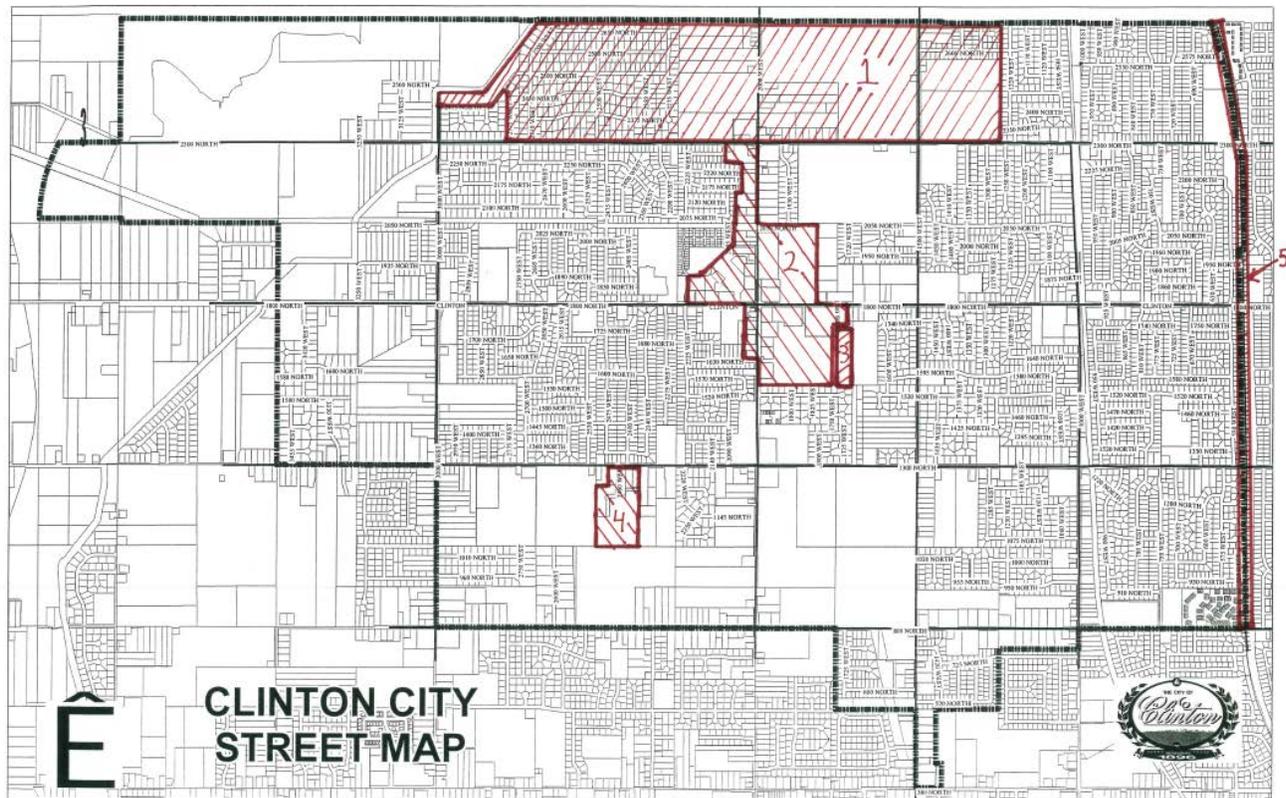
- Old-infrastructure¶
- Industrial,-commercial-and-mixed-use¶
- History-of-illicit-discharges¶
- History-of-illegal-dumping¶
- On-site-sewage-disposal¶
- History-of-sewer-overflows-or-cross-connections¶
- Upstream-of-sensitive-waterbodies¶
- Other-areas-likely-to-have-illicit-discharges¶

¶

Construction-Site-Priorities¶

- Soil-erosion-potential¶
- Site-slope¶
- Project-size-and-type¶
- Sensitive-receiving-waterbodies¶
- Proximity-to-waterbodies¶
- History-of-non-compliance-by-an-operator¶

The following map of the Clinton City MS4 outlines and identifies the High Priorities within the MS4 boundaries and jurisdiction. These areas were selected based on the considerations and factors that have previously been presented.



NOTE: Numbers 1 – 5 represent the following areas.

1. Primary residential area that all drains to the Clinton City Wet Pond or Fish Pond
2. Clinton City Business Commercial District
3. Clinton City Public Works Facility
4. Clinton City Industrial District
5. Clinton City Rail Road Tracks and access.

4.2.3.3.2

Field inspections 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.

Field Assessment Activities

Clinton City MS4 conducts an annual inspection at all identified high priority areas. All outfalls located within the City, including “high priority” outfalls are inspected annually and recorded on a dry weather screening form.

Clinton City field inspections and assessments of high priority areas will consist of an annual field assessment at each high priority area. Each area will be evaluated to identify if the area is still a high priority area and to see if compliance and needed attention is being addressed. It is a goal to enhance the high priority list to include better questions and notes to document these findings.

All outfalls located within the City, including “high priority” outfalls are inspected annually and recorded on a dry weather screening form.

4.2.3.3.3

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.

Dry Weather Screening

The Storm Water Inspector 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 all known outfalls will be inspected annually. Field assessment activities will be documented on an inspection form. All inspections will be recorded at the City’s storm water data base.

Dry Weather Screening procedures for Clinton City are outlined in detail within the SOP section of the SWMP (Appendix I). Although the requirement for Dry weather screening allows for the assessment of 20% of out fall locations, Clinton City performs monitoring on all 72 locations annually and provides documentation for each. Documentation has been made electronic and is housed on the Clinton City Public database.

The following image depicts the form that is used to perform the dry weather screening. This form is also housed in Appendix C in the SWMP.

DRY WEATHER SCREENING AND VISUAL STORM WATER DISCHARGE EXAMINATION REPORT

Date of Examination: _____ Permit No. UTR: 090003
Outfall location or ID number: _____ Lat: _____ Long: _____
Nature of Discharge (i.e., runoff, land drain, irrigation or snowmelt): _____
Type of Monitoring: _____

<input checked="" type="checkbox"/> Dry Weather Screening Date of last Rainfall Event: _____	Wet Weather Screening (Quarterly Min.) <input type="checkbox"/> Rainfall Event Date of Rainfall Event: _____ Time of Event: _____ Precipitation: _____ <input type="checkbox"/> Unable to collect sample due to adverse conditions or inadequate runoff.
---	---

Visual Quality of Storm Water Discharge: (circle response)

At Time of Sampling:

Color: clear brown green rust other: _____

Odor: Yes / No

Clarity:

Floating Solids: Yes / No

Foam: Yes / No

Other obvious indicators of storm water pollution:

OBSERVED:

Probable sources of any observed storm water contamination:

Name of Examiner: Kasey Jensen Title: SWPPP INSPECTOR

Signature

Date

4.2.3.3.4

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.

Separate UPDES Permit Notification

If a discharger is found to need a separate permit, both the discharger and the division will be notified. Based on assessment and need during a field inspection, commercial business application / license review, construction preview application process, or other, entities that are in need of an Industrial Storm Water permit Dewatering permit, or an individual UPDES permit will be made aware and expected to comply.

4.2.3.4

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.

Tracing Illicit Discharge Source Procedures

SOPs are developed and followed for detecting and eliminating illicit discharges. When an illicit discharge is reported, the storm water inspector investigates on-site and locates the source of the discharge. The source is identified either by visual observation at the reported location of the incident or by following the storm drain system upstream to locate the source of the pollutant. The Davis County Health department is contacted to help in the investigation

Reference: SOP Specifics on tracing illicit discharge sources and procedures can be found in Appendix I

4.2.3.5

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.

Characterize the Nature and/or Threat of the Illicit Discharge

SOPs are developed and followed for characterizing the nature and/or threat of the illicit discharge. When an illicit discharge is reported, the storm water inspector investigates on-site and locates the source and type of discharge and attempts to mitigate the damage as much as possible until it can be cleaned up. The Davis County Health department is contacted to help in the investigation. Priorities of initial assessment include Safety first, environment second, and property / equipment, etc. third. Clinton city implements spill containment and cleanup kits in all vehicles and accessible to all staff and operations. Annual ongoing training is also implemented on spill containment and cleanup to pertinent city employees and staff.

Reference: SOP Specifics on Characterize the Nature and/or Threat of the Illicit Discharge can be found in Appendix I

4.2.3.5.1

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.

Inspection Documentation

When the source of a non-storm water discharge is identified and confirmed, the following information is recorded in an inspection report:

- Date of initial report of discharge
- Date investigation was initiated
- Date discharge was observed
- Location of discharge
- Description of discharge
- Method of discovery
- Date of removal, repair or enforcement action
- Date and method of removal verification

The Davis County Health department is contacted to help in the investigation. They have the means and expertise if analytical monitoring is necessary to identify the potential source(s) and characterize the nature of the illicit discharge. The decision process for utilizing analytical monitoring will be fully documented in the

inspection report. NOTE: It is a goal of the Clinton City MS4 to enhance the inspection form to include more detail on remediation and analytical monitoring procedures and guidelines.

Reference: SOP Specifics on spill response documentation can be found in Appendix C

4.2.3.6.

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.

Ceasing Illicit Discharges

When responding to an illicit discharge or spill, a Storm Water inspector will respond and identify the source and require the violator to stop the discharge following the SOPs. In instances where the violator is not present, respondents take appropriate measures to cease the discharge at the source. Once the discharge has ceased, SOPs are followed to begin containment and cleanup activities

- 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

Reference: SOP Specifics on ceasing illicit discharges can be found in both Appendix C and Appendix I

4.2.3.6.1

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.

IDDE Investigation Reports

All IDDE investigations are documented by both the city and Davis County Health Department. All of the investigation documentation and procedures will be kept in the electronic files accessible through the Clinton City Public Drive and are available upon request.

4.2.3.7

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

Illicit Discharge Education and Training

The following sections of this SWMP describe IDDE related education and training programs implemented by the City:

- 4.2.1.1 Target Specific Pollutants and Sources
- 4.2.1.2 General Public Education and Outreach Program
- 4.2.1.3 Businesses and Commercial Institutions Education and Outreach Program
- 4.2.1.4 Construction Industry Education Program
- 4.2.1.5 Employee Training

Commercial and or industrial type businesses are also notified during the construction review and inspection process and also during the business license application process.

4.2.3.8

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

Household Hazardous Waste

Proper household hazardous waste disposal site is located at Wasatch Integrated Waste facility in Layton Utah. The city encourages the use of this facility through newsletter articles its website and other public outreach programs.

4.2.3.9

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.

Public Hotline

A hotline is available which connects directly to Clinton City Public Works office. Clinton City has on-call personnel to respond to any spill 24/7. Davis County also has a 24/7 number for reporting. . The public may also call the Police or Fire Departments to report any activities.

When a discharge is reported, the investigation and findings are recorded in the Incident Report.

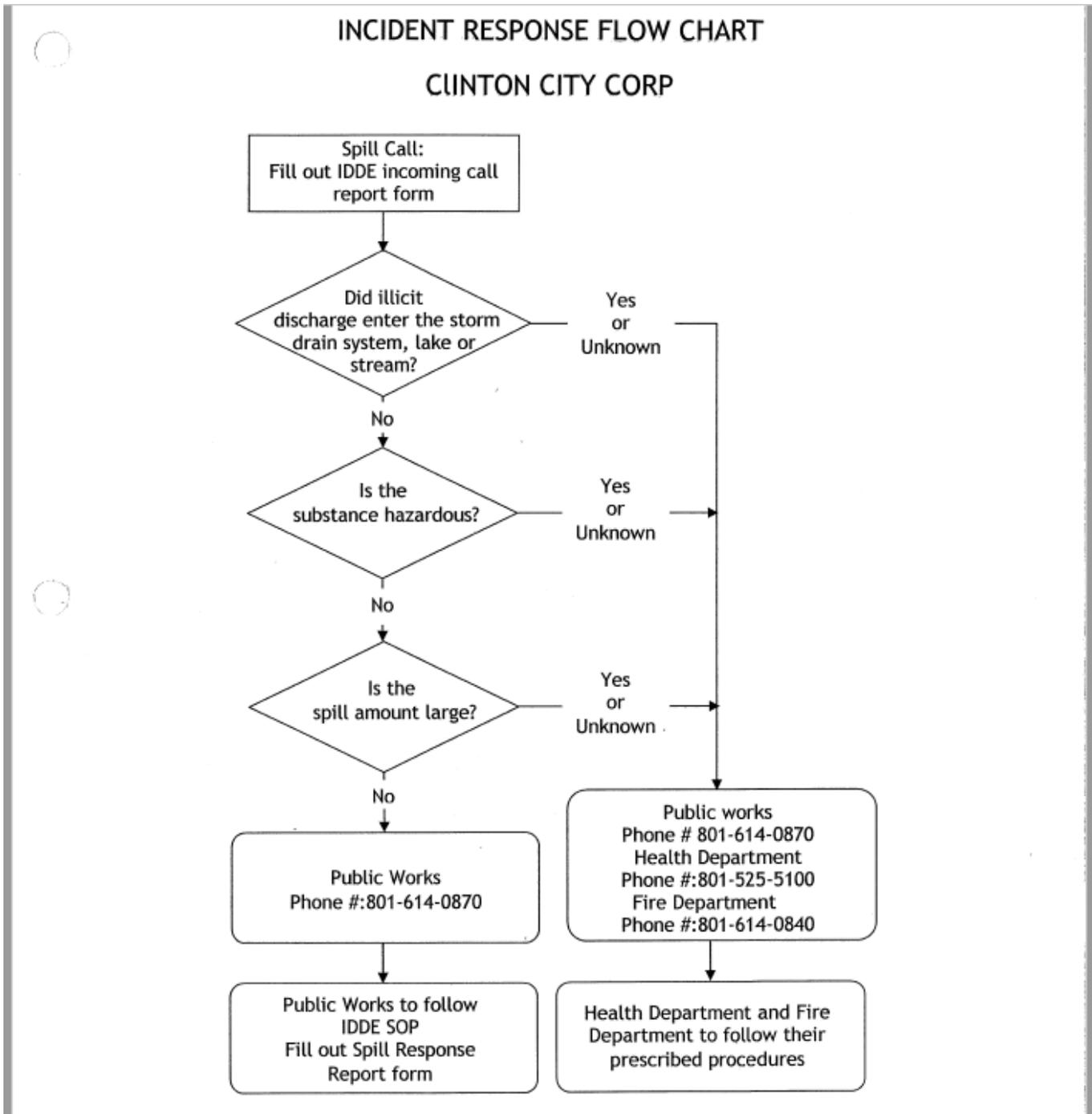
4.2.3.9.1

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.

Spill/Dumping Response Procedure

SOPs are developed including a flow chart for spills. Davis County Health Department will assist with all spills. When the Public Works Department receives notification of a spill, the storm water inspector responds to assess the situation. For minor spills of known substances, the responding personnel will have a spill kit and absorbents to clean up the spill. If the discharge is large in nature or of an unknown substance or highly hazardous, professional clean-up company will be called

The following document outlines a procedural flow chart of responding to a spill dumping incident.



Reference: SOP Specifics on spill / dumping response procedures can be found in Appendix I of the SWMP.

4.2.3.10

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.

Program Evaluation and Assessment

The IDDE Program is evaluated and assessed with the review of the SWMP document. Currently all response forms and other associated incident reports are housed on the Clinton City Public database. It is a goal for the new permit cycle to enhance tracking by developing a GIS mapping system to identify incidents and spills. This can be referenced in the goals section of the MCMs.

4.2.3.11

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 Permittee 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.

Annual Training of Employees

All City staff that may come into contact with illicit discharges as part of their regular job duties or who may receive illicit discharge reports are trained about the IDDE program and their responsibilities within the IDDE program. Training is documented. All records of this training are held on the Clinton City Public database.

4.2.3.12

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.

IDDE Documentation

All documentation will be maintained in the storm water data base and available for review upon request.

Summary of Existing BMPs and Efforts

Ordinances

Clinton City currently has an ordinance designed to specifically prohibit illicit discharges and illegal dumping. This ordinance was last updated in October 2010. A copy of the updated ordinance can be found in Appendix E.

Community Clean-up

Clinton City provides a clean up day in which residents can bring their waste to the public works facility for free disposal. This clean up day usually occurs in both the spring and the fall time.

Community Clean-up Dumpsters

The city provides 4 mobile dump trailers which are parked at resident's homes for a couple of days. Residents can use the dumpster for cleaning up their homes and yards. These dumpsters are provided free of charge twice a week between March and November.

NOTE: Add to Public Education and involvement.

Illicit Discharge Reporting

Reports of all spills are currently handled by Public Works, the Fire Department and the Davis County Health Department.

Mapping

The City has a storm drain map that locates all existing storm drain structures including locations of pipes, outfalls and detention basins.

Promote Disposal site

Clinton City promotes Wasatch Integrated Waste Facility which accepts household hazardous waste by publishing the phone number on the city website.

Dry Weather Screening

The City has implemented a dry weather screening program. Each outfall is inspected at least once a year. A dry weather screening report form is filled out for each inspection.

Plan and Implementation Measures

In order to help meet the goals and objectives of this SWMP Clinton City has chosen to adopt the following BMPs for use within our city as applicable. Each BMP is cross referenced alphabetically by code to a fact sheet and specifications that describes the BMP, its applicability, its limitations, and its effectiveness in Appendix H.

BMP	Code
Illegal Dumping Controls	IDC
Identify Illicit Connection	IIC
Non-Storm Water Discharge to Drains	NSWD
Map Storm Water Drains	MSWD
Leaking Sanitary Sewer Control	LSSC
Dry Weather Screening	DWS
Illegal Solid Waste Dumping Control	ISDC
Ordinance Development	OD
Used Oil Recycling	UOR
Employee Training	ET
Public Education / Participation	PEP
Community Hotline	CH
Hazardous Waste Management	HWM
Above Ground Tank Leak & Spill Control	ATL

CONSTRUCTION SITE RUNOFF CONTROL

Phase II Requirements

4.2.4. Construction Site Storm Water Runoff Control

All Permittees shall revise 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 has developed and implemented 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 city also requires storm water pollution prevention controls on sites that do not meet the description mentioned above.

4.2.4.1

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 Permits 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.

Erosion and Sediment Control Practices

All projects are required by ordinance to obtain a UPDES storm water general permit, as per the minimum requirement for associated projects. In addition, the use of erosion and sediment control practices is required.

4.2.4.1.1

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 most current UPDES Storm Water General Permits for Construction Activities, which can be found at: <http://www.deq.utah.gov/Permits/water/updes/stormwatercon.htm>.

Require a SWPPP for Construction Projects

All projects greater than or equal to one acre or are part of a larger common plan of development are required to prepare a SWPPP, the developers are referred to the State SWPPP template to assist in preparing the SWPPP.

4.2.4.1.2

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

UPDES Storm Water Permit Requirements

Before construction can begin proof of a Notice of Intent issued from the State is required before a permit will be issued. It is also required to keep the permit active until it is terminated.

4.2.4.1.3

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.

Private Property Access for Inspections

All projects on private property which have a Storm Water Construction Permit must provide right-of-way access to City personnel for inspections of storm water facilities.

4.2.4.2

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

Enforcement Strategy

In order to ensure compliance of construction BMPs, an enforcement strategy has been developed.

- 1- Site plan review process to ensure that the approved set of plans contains the required BMPs, UPDES Permit, SWPPP, and all other required and necessary items.
- 2- Pre- construction meeting with the contractor to discuss the SWPPP to ensure that appropriate plans are in place to install appropriate BMPs, set expectations of standards and compliance.
- 3- Site inspections can verify that approved BMPs are in place and properly functioning.
- 4- When deficiencies exist, enforcement SOPs can be followed to bring a deficiency into compliance.

Reference: SOP specifics for enforcement strategy on construction site runoff is located in Appendix I of the SWMP.

General construction enforcement includes:

- i. Warning: give the contractor a warning to correct problems with a reasonable deadline to complete corrections. Skip this step if the problems pose a serious threat to human safety or the environment. Inspect condition of BMPs, general site cleanliness, and compliance.
- ii. Issue a NOV
- iii. Stop-Work Order: if problems are not corrected by the deadline, or if the problem is re-occurring, issue a stop-work order (with supervisor's approval). Also provide another deadline before pursuing additional enforcement action.
- iv. Correct Problem and Bill Contractor*: city crews can be utilized at \$500/hr (one hour minimum)
- v. Criminal Charges: coordinate with City Prosecutor for criminal charges

4.2.4.2.1

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.

Construction BMP Enforcement

On-site inspections by the storm water inspector are performed to ensure BMPs are properly installed, maintained and functioning. If a violation of the SWPPP occurs, or any other storm water issue is apparent on-site during site visits and inspections, these steps will be followed to obtain compliance:

- 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, issuance 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
- City to have deficiency repaired and billed to permit holder

4.2.4.2.2

Documentation and tracking of all enforcement actions.

Documentation of all Enforcement Actions

The storm water inspector will document and track all of the enforcement actions includes site inspection reports, warnings, notes from site visits and any type of citation or orders issued to bring a site into compliance of requirements. Records will be stored in the data base (Public Drive) and on GIS.

4.2.4.3

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:

Clinton City requires that a SWPPP will be prepared and submitted to the City to review for compliance with State and Local regulations before the contractor can obtain approval. The plan must include possible sources of storm water pollutants and Selection of Best Management Practices (BMPs) to reduce or eliminate pollutant impacts.

Reference: SOP specifics for enforcement strategy on construction site runoff is located in Appendix I of the SWMP.

The following form is used by Clinton City to evaluate construction SWPPP plans. This is a sample of a seven page assessment form. Documentation is kept on the Clinton City Public drive.

SWPPP Preconstruction Submittal and Review Checklist

Name of Development: _____ Submittal Date: _____
 Developer: _____ Phone: _____
 Responsible Contact: _____ Phone: _____
 Reviewed by Clinton City (date): _____ (name): _____

The following items shall be included on the SWPPP. Check the spaces below indicating that each item is included or is not applicable, and then submit this form to Clinton City with the SWPPP. Heading numbers correspond to sections in the Utah SWPPP Template. References are given from the Construction General Permit (primarily sections 2 and 7).

Included N/A SWPPP Requirement

1.1 – Storm Water Team

- Storm Water Team by name or position – 7.2.1
 Role or responsibilities of each team member – 7.2.1

2.2 - Nature of Construction Activity

- Nature of activity or project – 7.2.2

2.3 - Construction Site Estimates

- Total area of site, area to be disturbed during course of the project – 7.2.2
 Maximum area to be disturbed at one time – 7.2.2

2.4 – Soils, Slopes, Vegetation, and Current Drainage Patterns

- Provide the range of soil particle sizes expected on the site – 2.1.1.b.ii.3
 Slopes and Drainage Patterns – 7.2.5.d

2.5 – Emergency Related Projects – If Applicable

- State the cause of the public emergency – 7.2.3
 Provide a description of the construction necessary to reestablish public services – 7.2.3

2.6 – Phase/Sequence of Construction Activity

- Intended sequence of activities – 7.2.4
 Start date and duration of storm water control measure installation – 7.2.4.a
 Commencement and duration of earth-disturbing activities – 7.2.4.b
 Cessation, temporarily or permanently, of construction activities – 7.2.4.c
 Final or temporary stabilization of exposed soils – 7.2.4.d
 Removal of temporary storm water control measures – 7.2.4.e

2.7 – Site Features and Sensitive Areas to be Protected

APPENDIX A, STORM WATER MANAGEMENT PROGRAM
 Updated November 2014

4.2.4.3.1

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.

Pre-Construction SWPPP Review

Pre-construction SWPPP reviews are conducted for all projects as per the SWPPP Review Procedure SOPs. This includes a review of design, operations and construction BMPs for the project. Records of these projects are kept for five years or until construction is completed, whichever is longer

The following form contains the Pre-con review that is implemented by Clinton City. This form outlines the procedure and agenda that is used during this review meeting. In sufficient or non-compliance is expected to be corrected and brought to compliance prior to starting project.

Preconstruction Meeting Storm Water Agenda

- **Clinton City Storm Water Contact:**
 - Kasey Jensen 801-941-1903 kjensen@clintoncity.com
 - Emergency Contact
- **Contractor Storm Water Contact:**
 - Who? (Who is going to Jail)
 - Number?
 - Email?
- **SWPPP:**
 - Location of document
 - Needs to be kept up to date, records of modifications
 - Training of staff and contractors
 - NOI
 - NOT
- **Site Plan Review**
 - BMP discussion
 - Stockpiles
 - Weather Conditions (storm control during construction)
 - Dust control
 - Trash and Concrete washout (brick, stucco)
 - Removal of Controls
- **Contractor Inspections:**
 - Certification
 - Frequency
 - Sample needed if raining during inspection
 - Where to send to
 - Enforcement
- **MS4 Inspections**
 - Last week of Month
 - Follow up
- **Dewatering Permit**
http://www.deq.utah.gov/Permits/water/updes/updes_f.htm
- **Maintenance Agreements**
- **Common Problems or Points to Discuss**
 - Not updating SWPPP
 - BMP maintenance
 - Email your inspections
 - Filing a NOT at end of project

4.2.4.3.2

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.

Potential Water Quality Impacts Consideration

Each SWPPP is reviewed with the use of a checklist to consider the potential of water quality impacts. Procedures for the SWPPP review include ensuring that all the proper SWPPP BMPs and documentation is included on this document before any permit is issued. Potential to incorporate LID into the design is also considered. Consideration regarding construction location near sensitive and or high priority areas are also provided. The SWPPP review checklist is referenced in section 4.2.4.3 of this document.

Reference: SOP specifics for SWPPP review process is located in Appendix I of the SWMP.

4.2.4.3.3

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.***

Identify Priority Construction Sites

City will identify priority construction sites based on potential pollutants, erosion potential, slope, project size and type, sensitive receiving water bodies, proximity to water bodies and history of non-compliance by an operator. The SWPPP review check list will contain a box denoting if the project is classified as “high priority.”

The following form provides key considerations when determining if a construction project and site should be viewed as a High Priority site.

High-Priority Lists—Things to Consider¶

This list is implemented to help evaluate and provide key considerations regarding potential high-priority areas within Clinton City.¶

City-owned Facilities¶

- Quantity of urban pollutants stored¶
- Improperly stored materials¶
- Outside activities¶
- Proximity to waterbodies¶
- Poor housekeeping¶
- History of illicit discharges¶

¶

Storm Sewer System Maintenance Priorities¶

- Water quality concerns¶
- Receiving waters condition¶
- Amount and type of materials accumulated¶
- Other location-specific factors¶

¶

IDDE Priorities¶

- Old infrastructure¶
- Industrial, commercial and mixed use¶
- History of illicit discharges¶
- History of illegal dumping¶
- On-site sewage disposal¶
- History of sewer overflows or cross-connections¶
- Upstream of sensitive waterbodies¶
- Other areas likely to have illicit discharges¶

¶

Construction Site Priorities¶

- Soil erosion potential¶
- Site slope¶
- Project size and type¶
- Sensitive receiving waterbodies¶
- Proximity to waterbodies¶
- History of non-compliance by an operator¶

4.2.4.4

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:

Construction Site Inspection and Enforcement

The storm water inspector will be the person responsible for site inspections and enforcement of construction storm water pollution control measures. Inspection and enforcement SOP's will be followed. Construction projects that require SWPPP's will be determined in the project review phase and approved by the inspector.

The Clinton City MS4 inspector shall be state RSI Certified, or equivalently trained and certified by an accepted and recognized organization.

4.2.4.4.1

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>.

New Construction Site Inspections

All sites greater than or equal to one acre or part of a larger common plan of development will be inspected by a Registered Stormwater Inspector at least monthly using the Department of Environmental Quality's Construction Storm Water Inspection Form.

4.2.4.4.2

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.

Inspections Before, During and After Construction

City personnel will inspect all projects, private or public, prior to land disturbance, during construction and following active construction. The State SWPPP Compliance Inspection Form is used for SWPPP inspections.

After the City receives notification from the State that a notice of termination has been filed or from the Building Department that a certificate of occupancy has been applied for, the site is inspected by the Storm Water inspector to verify the final stabilization and removal of all temporary control measures before the bond is released.

Upon termination or when a NOT is filed for the permitted project, a final inspection is performed. If found in compliance, the inspector will make the necessary changes to the State's website & online permitting system to release the NOT. All post construction BMPs will be monitored and addressed according to the SOP for post construction BMPs, as identified in the SOP section found in Appendix I.

Reference: SOP specifics for Post Construction BMPs is located in Appendix I of the SWMP.

4.2.4.4.3

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>.

Priority Construction Site Inspections

Priority construction sites will be inspected every other week utilizing the Department of Environmental Quality's Construction Storm Water Inspection Form.

4.2.4.4.4

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.

Site Inspection Follow Up

The storm water 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 in the Clinton City Public data base.

Reference: SOP specifics for Construction Site Inspections is located in Appendix I of the SWMP.

4.2.4.4.5

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.

Hotline

A local phone number to the city public works department will be posted at each site for the purpose of providing a means for the public to report 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.

4.2.4.5

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.

Staff Training

All staff members with responsibilities related to construction activities and plan review will receive regular training to implement the construction storm water program. Inspectors with RSI certification will meet the requirements to maintain Registered Storm water Inspector certification. Plan reviewers will complete Registered SWPPP Reviewer certification. Third party training events for inspectors and plan reviewer will be conducted through the Davis County Storm Water Coalition. Training records will include dates, course description and names and positions of staff in attendance and recorded Training records will be maintained in the data base Additional training details are included in Part 4.2.1.5.

4.2.4.6.

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.

Maintain Records

All project records, including SWPPP's, site plan reviews, inspections and enforcement actions, shall be maintained for 5 years or until construction is completed, whichever is greater. All records, monitoring reports, and documentation is kept on the Clinton City Public drive.

POST CONSTRUCTION STORM WATER MANAGEMENT

Phase II Requirements

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.

Long Term Storm Water Management in New Development and Redevelopment

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 City currently has many BMPs in place to ensure runoff control. The minimum performance measures established will promote the pre-development hydrology for new developments or improve the hydrology of a redeveloped site and reduce storm water discharge. Prior to issuance of a permit, a site plan review process evaluates storm water controls proposed for the site.

The minimum performance measures are:

NOTE: An extension has been granted continue the development of this specific section of the SWMP. Clinton City MS4 is working both independently and as a collaborative effort with the Davis county Storm Water coalition to best address this need. Amendments will be made by the required due date of this section.

4.2.5.1

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.

Long Term Storm Water Control Requirements

City ordinance requires long-term post-construction storm water controls at new development and redevelopment sites. All sites are required to treat storm water before it leaves the site. And all storm facilities for both minor and major systems must be designed to account for the conveyance, detention and retention of water during a storm event. Credits to the storm water bill can be applied for.

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. The city will continuously update post- construction BMPs that will minimize impacts from development runoff to the MS4.

4.2.5.2

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

Long Term Enforcement Strategy

Long-term storm water protection measures will be installed prior to issuance of necessary permits. Site inspections are completed during construction which ensure that proposed long-term storm water protection measures are installed and perform their function properly. Enforcement procedures will be followed to ensure compliance. These procedures may include permit denial, citations, fees and/or requirements to correct deficiencies.

4.2.5.2.1

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.

Sanctions for Violations

The procedures and actions to gain compliance from violators are:

- 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 the Storm Water Division 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
- Storm water credits can be revoked.
- Other actions include: notice of violation, stop work orders, cease and desist orders, and citations

By ordinance, Clinton City has the authority to exercise enforcement, as outlined in previous sections. If the violation is illicit in nature, The Davis County Storm Water Coalition will be involved to provide investigation and enforcement as needed.

4.2.5.2.2

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:

BMP Selection

- ***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.***

BMP Selection

The Long-Term Storm Water Management Program will require BMPs to be installed in new developments which will help protect water quality by installing BMPs which reduce targeted pollutants for the proposed use and operation of new developments. Proposed redevelopment projects will be required to install BMPs which will reduce the amount of pollutants which the site may be contributing to the storm water system without redeveloping the site.

The selection process of these BMPs will include the feasibility of construction for the proposed use, effectiveness of the BMP in reducing targeted pollutants for the proposed use and how well the BMP functions in local geographic conditions.

The City GIS databases will be used to keep an inventory of all Post-Construction BMPs. 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.

4.2.5.3

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.

New Development and Redevelopment Standards

Prior to developing or redeveloping a site, the City Planning Department provides a packet to the developer and/or the owner containing standards and requirements which must be met prior to construction.

The storm water inspector and engineer review submitted site plans and applications prior to issuance of a permit to ensure that development standards are met, including required storm water controls or management practices.

NOTE: Upon completion of new standards and long term post construction BMPs, this section will be updated / amended to define what is expected and needed.

4.2.5.3.1

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.

Non Structural BMPs

Proposed new development and redevelopment projects will be required to consider and submit proposed non-structural BMPs for their development as part of their Storm Water Management Plan before receiving a permit to construct their development. Additional requirements will be investigated as part of the review and will include consideration of:

- Minimize development in areas susceptible to erosion and sediment loss
- Minimize disturbance of native soils and vegetation
- Preserve areas that provide important water quality benefits
- Implement measures for flood control
- Protect the integrity of natural resources and sensitive areas

4.2.5.3.2

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, evapotranspire 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 an LID approach cannot be utilized, the Permittee must document an explanation of the reasons preventing this approach and the rationale for the chosen alternative 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>

LID Implementation

The City is developing a Low Impact Development (LID) manual and developing a process to evaluate and encourage a LID approach which encourages the implementation of structural BMPs, where practicable, that infiltrate, evapotranspire, 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. The selection design of post-construction controls will take into consideration clogging or obstruction issues, freeze-thaw problems, effect on slope stability and groundwater, and the ability to effectively maintain the control.

If LID practices are proposed to be used on a site, the storm water inspector and engineer 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.

4.2.5.3.3

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, evapotranspire 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***

Retrofit Existing Developed Sites

Existing developed sites which are adversely impacting water quality will be assessed and evaluated for retrofit opportunities to reduce the water quality impact. Sites will be ranked to help determine which sites are best suited for retrofits as well as those that could be considered later for retrofitting.

4.2.5.3.4

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 rationale 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 extent technically feasible and that full employment of these control are infeasible due to site constraints.

Hydrologic Analysis

Clinton City is developing new storm drainage criteria and design guidelines to apply to all storm drainage plans. The storm water inspector and engineer reviews the plans and has the authority to modify the criteria and guidelines as needed to meet changing or unusual needs or conditions.

4.2.5.4

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:

Procedures for Site Plan Review (Pre Construction)

Owner/developers are invited to a pre-development meeting to discuss new development and redevelopment projects. long-term storm water management requirements are provided to the developer. Long-term management practices are discussed in the early stages of the design process, requiring long-term management BMPs to be considered and incorporated into the design. When plans are finalized and submitted staff reviews the plans considering water quality impacts that the proposed project may have on storm water quality. Plans are approved if proposed BMPs adequately address those impacts.

4.2.5.4.1

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.

Review Post-Construction Plans

Clinton City MS4 performs a plan review meeting, where all participants, representing development, utilities, and other key management positions, evaluate post construction plans to ensure that they are adequate for the project and will meet compliance standards, as well as meeting long term storm water management measures

4.2.5.4.2

Permittees shall provide developers and contractors with preferred design specifications to more effectively treat storm water for different development types 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.

Preferred Design Specifications

NOTE: An extension has been granted to continue the development of this specific section of the SWMP. Clinton City MS4 is working both independently and as a collaborative effort with the Davis county Storm Water coalition to best address this need. Amendments will be made by the required due date of this section.

4.2.5.4.3

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.

Maintain Design Specification Documentation

The city will keep a representative copy of information that is provided to design professionals. Design professionals will be directed to the City website where they can download pertinent information. Training

seminars may be offered by Davis County Storm Water Coalition; attendance and material presented will be documented.

4.2.5.5

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.

City Post Construction BMP (SOPs)

The city has SOPs for site inspection 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.

- Post construction BMPs owner information, location, maintenance schedule and other pertinent information are entered on the post-construction facilities data base (4.2.5.2.3)
- Inspections are conducted by City Personnel using the Post-Construction Facility Inspection Report (4.2.5.2)
- After a site inspection or upon a violation to the post-construction BMP maintenance requirements is found:
 - o A specific amount of time is given to the operator to correct the deficiency
 - o A Notice of Violation (NOV) is issued describing the violation to be corrected and time given to correct the deficiency with the threat to issue a citation if not corrected
 - o If problem persists, a citation is issued to appear in court to face possible fines even after the deficiency is corrected
 - o The City will repair the deficiency and will back charge the operator or place a lean on the property for the cost of the repairs made.

4.2.5.5

The ordinance or other regulatory mechanism shall include provisions for 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.

Private Property Access for Inspections

Clinton City ordinance provides authority to the storm water inspector to access private property for inspection purposes during construction and post-construction and allows us to impose enforcement measures as necessary to ensure compliance of storm water facility maintenance.

4.2.5.5.2

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.

Permanent Structural BMP Inspections during Construction

Permanent structural BMPs will be inspected at least once during installation by the storm water inspector to ensure proper installation.

4.2.5.5.3

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; and,***
- ***Specific maintenance issues or violations found that need to be corrected by the property owner or operator along with deadlines and re-inspection dates.***

Permanent Structural BMP Annual Inspections

The storm water inspector will inspect and maintain structural BMPs owned or operated by the City annually. Facilities that are owned/operated by a private entity will also be inspected by the city and maintained by the owner/operator as specified in the maintenance agreement with the City. The storm water inspector will inspect and document storm water controls at least once every year or as specified in the maintenance agreement.

4.2.5.6

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.

Staff Training

Training will be provided for all staff involved in post-construction storm water management, planning, review, inspections and enforcement. Training will include LID BMPs and the new requirements for long-term management practices, reviewing City Ordinances, Storm Water Drainage Plans, the fundamentals of long-term storm water management through the use of structural and non-structural control methods long-term practices. Storm water inspectors will maintain their RSR certification. 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 Section 4.2.1.5, of this document.

NOTE: Going forward all new training records will be kept on City public Drive. This is for a reference of training.

4.2.5.7

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.

Post Construction Structural Controls Inventory

Clinton City maintains a spreadsheet which lists all sites public and private, which have post construction structural storm water controls.

NOTE: Going forward all new spreadsheet will be kept on City public Drive. This is for a reference of training. GIS will also keep an inventory or past history of documentation.

4.2.5.7.1

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).***

Inventory Data Collection

The Post Construction Storm Water Inventory entry includes basic information such as: Project Name and Location, Owner's name and contact information, BMP description, Storm water control measure, Maintenance requirements, Installation date and inspection history.

NOTE: Going forward all new spreadsheets will be kept on Clinton City public Drive. This is for a reference of training. GIS also has inventory, but is visual with context of area and location.

4.2.5.7.2

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.

Inventory Updates

After annual inspections are completed for post-construction storm water control measures, updated information is recorded on the inspection form.

Amendments and changes will be made as needed, but at least on an annual basis and after SWMP and Inventory reviews.

POLLUTION PREVENTION / GOOD HOUSEKEEPING

Phase II Requirements

4.2.6. Pollution Prevention and Good Housekeeping for Municipal Operations

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 the 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.

City owned facilities and City activities have standard operating procedures (SOPs) for the maintenance and proper operation of structural storm water controls along with training, 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

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***

City Owned or Operated Facilities and Storm Water Controls

The city has a list of all City-owned or operated facilities, parks and storm water controls. This list will be reviewed annually and updated as necessary. The list includes:

- **Parks and open space**
 - Meadows Park
 - Power Line Park
 - Kestrel Park
 - Veterans Park
 - Trailside Park

- Pioneer Park
- Pond Park
- West Clinton
- Clinton Nature Trail
- Civic Center Park
- Heritage Park
- **Material storage yards**
 - o Public Works Shops
- **Pesticide storage facilities**
 - o Public Works Shops
- **Public buildings, including police stations, fire stations, municipal**
 - o City Hall
 - o Police Department
 - o Fire Station
 - o Recreation Building
- **Buildings, etc.**
 - o Civic Center Scorekeeper Building
 - o West Clinton Scorekeeper Building
 - o Recreation Storage #1, #2, Baseball Shed Civic Center
 - o West Clinton Shed
 - o Restrooms, Meadows, Veterans, Civic Center (2)
 - o Pump House
 - o Cranefield Lift Station
- **Parking lots**
 - o Meadows Park
 - o Cemetery
 - o Civic Center
 - o Power Line Park
 - o Public Works Shop
 - o West Clinton Park
 - o Pond Park
 - o Kestrel Park
- **Public works yard**
- **Salt storage facility**
- **Street repair and maintenance sites**
- **Vehicle maintenance and storage yards**
- **Structural storm water controls**
 - o Meadows
 - o Shoestring
 - o Cemetery
 - o Trailside
 - o Power Line

- o Pond
- o Kestrel
- o Clinton Fields
- o 1300 N

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

4.2.6.2

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.

Inventory Assessment

City-owned facilities were assessed as to their risk for discharge potential. The majority of potential pollutants include sediments, nutrients, and hydrocarbons from petroleum products. These are a result from park maintenance activities, roadway maintenance activities, exterior building maintenance activities (lawn maintenance or other activities involving chemicals and nutrients), sediment and trash collected from our storm drains, and trash and hydrocarbons found in our parking lots. All these pollutants pose the highest risks of entering into our storm drain system from city-owned facilities.

The assessment form and process, with all accompanying specifics, can be referenced in Appendix B and Appendix G of the SWMP.

4.2.6.3

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).

“High Priority” Facilities

The only “High priority” facility was determined to be the Public Works shops This was determined because of the nature of operations and the activities that may impact storm water quality The factors that considered in giving a facility a high priority ranking was 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.

The assessment form and process, with all accompanying specifics, and determinations for the consideration or being a “High Priority Area”, can be referenced in Appendix B and Appendix G of the SWMP.

4.2.6.4

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 practices (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);***
- ***Locations 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;***
- ***Locations where the following activities are exposed to storm water:***
 - 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.***

Identified “High Priority” Facility (SWPPP)

The only “high priority” facility identified is the Public Works Shops, has established a facility-specific SWPPP and SOPs.

Buildings and Facilities O&M

The City Hall, Police, and Fire Station have similar operations and maintenance activities.

Chemicals are used for cleaning the interior of the building and are stored inside the building away from any storm drain facilities. Exterior activities include landscape maintenance, sidewalk and parking lot maintenance.

The Public Works Shops building and maintenance yard activities include maintenance and regular trash cleanup, the yard for this building is deep cleaned in the spring and fall. The parking lot is swept every time the street sweeper is out sweeping. Storm Drain Boxes all have protection inside and are checked and cleaned regularly. Materials with a potential to spill are kept indoors.

Parking lot sweeping occurs for all City-owned facilities approximately 5 times per year. Tracking of when sweeping activities occur is maintained by the Storm Water Crew. Storm drain boxes found in the parking lots are also cleaned annually. For parking lot and exterior maintenance, the Pothole Patching, Remove & Replace Asphalt, Street Sweeping, Vac Operations and Storm Drain Cleaning and Lawn Mowing SOPs are followed. Trash and debris collection occurs by appropriate staff members around each of the facilities weekly and trash collected is deposited into appropriate containers to prevent storm water pollution runoff.

Material Storage, Heavy Equipment Storage Areas and Maintenance Areas:

Chemicals are stored indoors or within containment areas with BMPs installed to prevent storm water pollution, unless otherwise addressed. Deicing materials are stored in a covered area which prevents salts from entering the storm water system. When deicing materials are loaded into trucks, sweeping activities are completed around the loading area to prevent any spilled material from entering the storm drain system.

When leaking vehicles are encountered in the fleet yard, absorbents and drip pans are placed immediately to prevent storm water contamination. Leaking vehicles are then brought into the shop for repairs as soon as possible to correct leaks. Maintenance at the fleet yard is completed indoors within a contained area, which is connected to the sanitary sewer.

Parks and Open Space O&M

The Parks Department maintains all City Parks Public Works maintains trails. All of the chemicals are stored indoors, at the maintenance buildings or at the Public Works Shops building. Maintenance activities include fertilizers, mowing, herbicides, pesticides and regular landscape maintenance. Each of these activities follows proper SOPs. Proper disposal of lawn clippings, trash, debris, used chemical containers and other vegetation is followed by discarding these items into garbage containers that are collected and taken to the local landfill. The Parks Department follows the public works SWPPP.

All storm drains located in parks or open space facilities are inventoried. Appropriate sediment and erosion control measures are in place (e.g. Curb & gutter, runoff into established areas for infiltration) to ensure stability and water quality protection. Pet waste stations are located along the trails and checked regularly.

Vehicle and Equipment O&M

All City-owned vehicles are maintained by Public Works. They are located inside the Public Works Shop. All maintenance activities are housed inside of the building. The maintenance area has drains located at the perimeter of the work area so that any spills or leaks which may occur during maintenance activities will be contained within the work area and cleaned up, or will enter into these drains which are connected to the sanitary sewer system.

Chemicals and pollutants are stored properly indoors and do not pose a threat to the storm drain system. If there are any vehicles which leaks, they are either parked inside the maintenance building, or outside in the parking lot with containment measures in place to collect and/or absorb the leaking material until the vehicle is fixed and no longer leaks. The Public Works building #2 houses an indoor and outdoor car wash. All drains are connected to the sanitary sewer system SOPs are followed to reduce pollutants from entering the storm drain system.

The only fueling area is located at the Public Works Shops yard. Spill kits and signs are posted in the area.

Roads, Highways and Parking Lots O&M

City-owned roads and parking lots are maintained by the Public Works Crew. Maintenance activities include pothole repairs, sidewalk repairs, curb and gutter repairs, snow removal, street sweeping, roadway striping and mowing within the right-of- way along some major arterials. SOPs for each of these activities are available.

Street sweeping occurs approximately 5 times per year throughout the entire City. When City sweepers are sweeping streets in the vicinity of City-Owned parking lots, lots are also swept. Public Works facility is swept each day the sweeper is sweeping.

Snow hauling does not occur.

Storm Water Collection/Conveyance System O&M

All of the public storm water system owned by the City is maintained by Public Works personnel. Maintenance activities completed annually include cleaning out storm drain boxes with vac trucks, jet washing pipe lines, maintaining storm water collection basins, and ditch cleaning. Priority areas where more silt and debris accumulates into the pipe system and areas where flooding may occur without proper cleaning are cleaned more frequent.

All catch basins are inspected annually Vac trucks clean out each storm drain catch basin as needed. The maintenance calendar has a list of higher priority storm drain structures which receive cleaning on a more frequent basis. These structures are higher priorities because there is a larger volume of pollutants which may enter the system at these locations and/or because the functionality of the structures has limitations (i.e. siphons) in their effectiveness and need to be cleaned more regularly to maintain the efficiency of the system.

City-owned structural BMPs such as swales, retention and detention basins and regional storm water control facilities are inspected frequently by Storm Water personnel.

When deficiencies exist, cleaning, dredging and other maintenance activities are performed by storm water personnel. Groups from the general public which want to perform service activities for their community also sponsor service projects which remove trash and debris from storm water basins and allow for public involvement from these groups.

Pollutants collected from street sweeping, City-owned parking lot sweeping and storm drain cleaning activities are deposited in the containment area in the Public Works Shops yard, where the waste is deposited into a settling basin. Water collected from the waste evaporates or is vacuumed out and drained into the sanitary sewer system. Remaining solid waste is then transported to the local landfill. Records of landfill loads are maintained in the data base. If waste materials to be disposed of require special handling other than dropping it off at the landfill, the city will contact an appropriate 3rd party specialized in handling and disposing such waste.

4.2.6.5

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

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.

Weekly Visual Inspections

Weekly visual inspections are performed for all “high priority” facilities. This facility is identified as the Public Work Shops facility. Weekly inspections are completed by the Storm Water inspector utilizing the Weekly Inspection Checklist to minimize the potential for pollutant discharge. Any spill discovered will be documented and cleaned up immediately to prevent contact with precipitation or runoff.

Deficiencies and corrective actions are documented and a log kept showing when weekly visual inspections were completed will be maintained in the data base

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.

Quarterly Comprehensive Inspections

The Storm water inspector will perform, at least once per quarter, a comprehensive inspection of the “high priority” facility which is identified as the public works facility. During the “high priority” facility inspection, 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 in the data base. Inspections will follow the SOP guidelines and recorded on an inspection form. The report will include identified deficiencies and the corrective actions taken to remedy the deficiencies.

4.2.6.5.3

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 the SWMP document. This inspection must be done in accordance with the developed SOPs. The inspection report must also include any identified deficiencies and the corrective actions taken to remedy the deficiencies.

Quarterly Visual Observations of Storm Water Discharges

The storm water inspector will visually observe the quality of storm water discharges from “high priority” facilities which is identified as the public works facility. 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. Visual observations will be documented and records kept in the data base.

SOPs for the inspection are as follows:

- Locate monitoring discharge point catch basin just outside the gate
- Collect sample in a glass container
- Document with pictures: water sample, runoff flow patterns, observed sheen flows, etc.
- Identify deficiencies and report to the parties responsible for the deficiencies
- Responsible party will then report back to the SWPPP Inspector the corrective actions taken
- SWPPP Inspector conducts a follow up inspection to verify correction and finish report

Where weather conditions preclude the City from completing these operations during winter weather, attempts to complete at least 4 observations annually during the wet season will be completed.

4.2.6.6

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 maintain 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.

Building and Facilities SOPs

City facility SOPs include: City owned or operated offices, police and fire stations, parking lots, etc. SWPPP and SOP's will be reviewed annually and updated, if necessary, to describe in writing standard operating procedures for:

- 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 has developed an inventory and map of all storm drains located on the property of all the City owned or operated buildings and facilities. To 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

All floor drains inside City facilities are identified and checked to ensure proper discharge of floor drains to sanitary sewer facilities. As changes occur, updates to the inventory and map will be made.

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.

SOPs are in place and will be reviewed and updated annually, if necessary, to describe in writing standard operating procedures for:

- Material storage areas
- Heavy equipment storage areas
- Maintenance areas

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.

SOPs are in place and will be reviewed and updated annually, if necessary, to describe in writing standard operating procedures for:

- Proper application, storage, and disposal of fertilizers, pesticides, and herbicides 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

4.2.6.6.4

Vehicle and Equipment. SOPs shall address, but are not limited to: 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 and equipment 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.

SOPs are in place and will be reviewed and updated annually, if necessary, to describe in writing standard operating procedures for:

- Vehicle maintenance and repair activities
- Leaking vehicles and equipment
- Equipment storage
- Fueling areas
- Vehicle wash processes

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.

SOPs are in place and will be reviewed and updated annually, 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)
- Snow removal and application of deicing compounds

4.2.6.6.6

Storm water collection and conveyance system. SOPs shall address, but are not limited to: SOPs and schedules 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 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 shall 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 shall 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 City has a maintenance calendar and SOPs are in place and will be reviewed and updated annually, if necessary, to describe in writing 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 maintenance calendar data will be used to designate priority areas that will be maintained more frequently. it is also used to document procedures and disposal methods of all waste and waste water removed from the storm water conveyance system.

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.

City has identified any facility or operation that could reasonably be expected to discharge to the municipal separate storm sewer system (MS4) and updated the SOPs to include facilities and operations not listed above that would reasonably be expected to discharge contaminated runoff.

4.2.6.7

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 City will allow private contractors and developments to be able to conduct 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 City Ordinance to insure through contractually required documentation or periodic site visits, that the owner of such storm water BMPs is following SOP to maintain such controls. This permit requirement is also covered in Section 4.2.5 of this plan.

4.2.6.8

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

Water Quality Impacts of New Structural Controls

During the construction plan review process, assessment is made regarding the water quality impacts in the design of all new flood management structural controls that are associated with Clinton City MS4 or that discharge to the MS4. Consideration is given to controls that can be used to minimize the impacts to site water quality and hydrology while still meeting project objectives. These assessments and considerations are agreed upon by the review committee.

NOTE: This section will be further amended upon the completion and outcome of the City's new Master Storm Water Plan and newly developed and implemented LID standards. All Amendments will be made to the SWMP as needed and timely.

4.2.6.8.1

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.

Assessment of Existing Structural Controls

Existing storm water facilities will be reviewed annually as part of the SWMP review. Retrofit opportunities may present themselves after each review.

NOTE: This section will be further amended upon the completion and outcome of the City's new Master Storm Water Plan and newly developed and implemented LID standards. All Amendments will be made to the SWMP as needed and timely. Additional assessment and amendments could be expected due to future improvements based on outcomes decided from the Capital Improvement Plan.

4.2.6.9

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 Permits for Storm Water Discharges Associated with Construction Activities.

Compliance of Public Construction Projects

All capital improvement projects which are greater than or equal to one acre will comply with the same water discharge requirements of private projects, including construction and post-construction controls. All City-funded projects disturbing greater than or equal to one acre or that are part of a larger common plan of development will apply for a General UPDES Permit for Storm Water Discharges Associated with Construction Activities.

When designing projects consideration of LID techniques, any impacts to storm water quality, detention, retention, improvements to existing sites which are redeveloped to improve storm water quality and additional criteria to ensure we are complying with the requirements of this permit.

All public construction projects have a pre-construction meeting with the contractor, invited utility providers who choose to attend and Public Works staff. Part of the discussion during the pre-construction meeting includes SWPPP measures to be included on the project to ensure storm water systems are protected and construction storm water runoff is minimized.

Post-construction BMPs are incorporated into the design where they will prove to be beneficial and economical for the project. These BMPs may include, but is not limited to, oil/water separators, hydro-dynamic separators, water quality control devices or improvements to storm drain systems that will reduce the number of pollutants which enter the storm drain system including organic materials and nutrients.

4.2.6.10

The Permittee 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 individuals 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.

Employee Training

Public Works Department personnel are trained annually regarding storm water quality as it relates to their job responsibilities. More specific information pertaining to employee training can be found in Section 4.2.1.5 of this document.

NOTE: Training records and all associated and supporting documentation is housed on the Clinton City Public drive and can be viewed upon request.

Standard Operating Procedures

For

Clinton City Utah

Developed in conjunction with
Davis County Storm Water Coalition

Created: February 2010

Last Revision: June 2016



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GENERAL – Chemical Application Pesticides, Herbicides, Fertilizers

1. Preparation
 - a. Make sure your state Chemical Handling Certification is complete and up-to-date before handling any restricted chemicals.
 - b. Wear proper PPE
 - c. Calibrate fertilizer and pesticide application equipment to avoid excessive application.
 - d. Use pesticides only if there is an actual pest problem and periodically test soils for determining proper fertilizer use
 - e. Time and apply the application of fertilizers, herbicides or pesticides to coincide with the manufacturer's recommendation for best results ("Read the Label").
 - f. Know the weather conditions. Do not use pesticides if rain is expected. Apply pesticides only when wind speeds are low(less than 5 mph).
2. Process
 - a. Always follow the manufacturer's recommendations for mixing, application and disposal. ("Read the Label").
 - b. Do not mix or prepare pesticides for application near storm drains, preferably mix inside a protected area with impervious secondary containment (preferably indoors) so that spills or leaks will not contact soils.
 - c. Employ techniques to minimize off-target application (e.g. spray drift, over broadcasting.) of pesticides and fertilizers.
3. Clean-up
 - a. Sweep or blow off pavements or sidewalks where fertilizers or other solid chemicals have fallen, back onto grassy areas before applying irrigation water.
 - b. Triple rinse containers, and use rinse water as product. Dispose of unused pesticide as hazardous waste.
 - c. Always follow all federal and state regulations governing use, storage and disposal of fertilizers, herbicides or pesticides and their containers. ("Read the Label")
4. Documentation
 - a. Keep copies of MSD sheets for all pesticides, fertilizers and other hazardous products used.
 - b. Record pesticide application activities: including date individual who did the application, amount of product used and approximate area covered.



GENERAL- Concrete Work

1. Preparation
 - a. Train employees and contractors in proper concrete waste management.
 - b. Store dry materials under cover, away from drainage areas
 - c. Remove any damaged concrete that may need to be replaced.
 - d. Prepare and compact sub-base.
 - e. Set forms and place any reinforcing steel that may be required.
 - f. Determine how much new concrete will be needed.
 - g. Locate or construct approved concrete washout facility (usually shop yard)
2. Process
 - a. Install inlet protection as needed.
 - b. Moisten sub base just prior to placing new concrete. This helps keep the soil from wicking moisture out of the concrete into the ground.
 - c. Place new concrete in forms.
 - d. Consolidate new concrete
 - e. Screed off surface
 - f. Let concrete obtain its initial set
 - g. Apply appropriate surface finish
 - h. Remove forms when concrete will not slump.
3. Clean-up
 - a. Perform washout of concrete trucks and equipment in designated areas only
 - b. Do not washout concrete trucks or equipment into storm drains, open ditches, streets or streams
 - c. Concrete trailers: dump excess in concrete bin fill trailer with water and dump into evaporation pit.
 - d. Cement and concrete dust from grinding activities is swept up and removed from the site.
 - e. Remove dirt or debris from street and gutter.



GENERAL—Concrete U-Cart Concrete Wash Out

1. Preparation
 - a. After concrete poured from the U-Cart, raise the hopper.
 - b. Drive to shop yard for debris dumping.

2. Process
 - a. Dump any extra concrete into bin marked “concrete”
 - b. Go to wash out pad behind building #2 and fill hopper with rinse water
 - c. Drive trailer to wash out bin and dump water cement mix
 - d. Go back to washout pad behind building #2 and spray, scrub, washout excess concrete and rocks from inside and outside of hopper and entire unit, drains are plumbed to sand traps and sewer.

3. Clean-up
 - a. Do a walk around inspection of U-Cart.
 - b. Take U-Cart back



GENERAL – Dumpsters and Garbage Storage

1. Preparation
 - a. Small dumpster located by shop #1 with lid and serviced weekly by Robinson Waste.
 - b. Large dumpster provided in shop yard next to garbage bin serviced as needed by Robinson Waste.
 - c. Bins provided in yard for different types of debris: concrete, asphalt, green waste, metals, sweepings, wash out, garbage, mixed soil waste.
 - d. Training is provided to employees to dispose of materials in proper place.
2. Process
 - a. Inspect garbage bins for leaks regularly, and have repairs made immediately by responsible party.
 - b. Locate dumpsters on a flat surface that does not slope or drain directly into the storm drain system.
 - c. Keep lids (if equipped) closed when not actively filling dumpster.
 - d. Keep bins pushed up or empty and in good shape.
 - e. Install berms, curbing, vegetation strips or adequate grading around storage areas to control water entering/leaving storage areas.
3. Clean-up
 - a. Keep areas around dumpsters and bins clean of all garbage.
 - b. Have dumpsters and garbage bins emptied as often as needed to keep from overflowing.
 - c. Have bins or dumpsters replaced as needed to keep odors from becoming a problem.
 - d. If cans or bins need to be washed, wash out behind or inside building #2



GENERAL – Fueling

1. Preparation
 - a. Train employees on proper fueling methods and spill cleanup techniques.
 - b. Maintain canopy or roof over aboveground storage tanks and fuel transfer areas.
 - c. Absorbent spill clean-up materials and spill kits shall be available in fueling areas (located in fuel shed) and on mobile fueling vehicles and shall be disposed of properly after use.
2. Process
 - a. Shut off the engine.
 - b. Ensure that the fuel is the proper type of fuel for the vehicle. North tank is diesel south is regular gas.
 - c. Nozzles used in vehicle and equipment fueling shall be equipped with an automatic shut off to prevent overfill.
 - d. Fuel vehicle carefully to minimize drips to the ground.
 - e. Fuel tanks shall not be 'topped off'.
 - f. Mobile fueling shall be minimized. Whenever practical, vehicles and equipment shall be transported to the designated fueling area in the facilities area.
 - g. When fueling small equipment from portable containers, fuel in an area away from storm drains and water bodies.
 - h. Make sure fueling equipment is in good order, notify shop foreman if attention is needed to equipment.
3. Clean-up
 - a. Immediately clean up spills using dry absorbent located in gas shed or shop, sweep up absorbent material and properly dispose of contaminated clean up materials.
 - b. Large spills shall be contained as best as possible and follow guidelines set forth in shop SWPPP and or SPCC plan.
4. Records
 - a. Comply with above ground storage tank records and monitoring requirements.
 - b. Document training of employees.



GENERAL – Parking Lot Maintenance

1. Preparation.
 - a. Conduct regular employee training to reinforce proper housekeeping.
 - b. Restrict parking in areas to be swept prior to and during sweeping using regulations as necessary.
 - c. Perform regular maintenance and services in accordance with the recommended vehicle maintenance schedule on sweepers to increase and maintain efficiency.
2. Process.
 - a. Sweep parking areas, as needed, or as directed by the city's responsible official. Shop yard is to be swept every time the sweeper is out.
 - b. Hand sweep sections of gutter if soil and debris accumulate.
 - c. Pick-up litter as required to keep parking areas clean and orderly.
3. Clean-up.
 - a. Dispose of sweepings into the bin at city shop labeled "sweeper"
 - b. Street sweeper to be cleaned out in a manner as instructed by the manufacturer behind shop #2 and in a manner that swept materials cannot be introduced into a storm drain.
4. Documentation.
 - a. Keep accurate logs to track swept parking areas and approximate quantities.
 - b. Document training of employees.



GENERAL – Pet Waste

1. Preparation
 - a. Adopt and enforce ordinances that require pet owners to clean up pet wastes.
 - b. Dispensers for pet waste bags and disposal containers along with signs with instructions for proper cleanup and disposal are provided at locations such as trail heads or parks where pets are allowed. (power line park/trail, rail trail, Clinton trail).
2. Process
 - a. Check parks and trails for pet waste problems as needed.
 - b. Check public open space for pet waste prior to mowing and watering.
 - c. Provide ordinance enforcement as needed.
 - d. Maintain dispensers and keep stocked with waste bags.
3. Clean up
 - a. Remove all pet waste, provide temporary storage in a covered waste container, and dispose of properly. Preferred method of disposal is at a solid waste disposal facility.
4. Documentation
 - a. Document problem areas for possible increased enforcement and/or public education signs.



GENERAL – Storm Drain Inlet Protection

1. Preparation:
 - a. Identify all inlets that are within the construction area and a minimum of one up and two storm drain inlets downstream from the work location.
 - b. Do visual inspection on outside of grate.
 - c. Make sure nothing needs to be cleaned before installing the inlet protection.
 - d. Identify what type of inlet protection will be necessary. (Filter fabric, gravel bags, or drop in sediment trap bags.)

2. Process
 - a. Clean the top of the inlet if necessary.
 - b. Use the type of inlet protection that has been determined to be appropriate, and protect all sediment from entering the storm drain system.
 - c. Inspect the inlet protection periodically to assure that it is working properly.
 - d. Clean any sediment that may build up as needed.

3. Clean-up
 - a. When all construction is complete and stabilized remove the inlet protection and clean all sediment that has been trapped.
 - b. If needed have the vacuum truck clean the storm drain inlet box.
 - c. All sediment that has been removed will be taken to the local landfill for disposal.

4. Documentation
 - e. Keep logs of number of catch basins protected and cleaned.
 - f. Record the amount of waste collected.
 - g. Keep any notes or comments of any problems.



GENERAL – Transporting Dry Excavated Materials & Spoils

1. Preparation
 - a. Utilize truck with proper containment of materials
 - b. Determine disposal site of excavated materials
 - c. Perform pre-trip inspection of vehicle

2. Process
 - a. Load
 - b. Check truck after loading for possible spillage
 - c. Cover load if possible
 - d. Transport in manner to eliminate spillage & tracking
 - e. Utilize one route for transporting

3. Clean-up
 - a. Clean loading area
 - b. Clean transporting route
 - c. Wash off truck and other equipment behind building #2 if needed



GENERAL – Transporting Equipment

1. Preparation
 - a. Determine equipment needed for transport and method (trailer, truck bed) needed to transport equipment.
 - b. Conduct pre- trip inspection of equipment and vehicles
2. Process
 - a. Load and secure equipment on trailer or truck
3. Clean-up
 - a. Off load equipment
 - b. Store equipment and trailer in proper location
 - c. Conduct post-trip inspection of equipment
 - d. Wash equipment, if needed, according to the SOP for Cleaning Equipment SOP
 - e. Clean off trailer
4. Documentation
 - a. Trip inspection report if attention needed to equipment



GENERAL – Transporting Soil and Gravel

1. Preparation
 - a. Dry out wet materials before transporting if possible.
 - b. Make sure you know and understand the SWPPP requirements for the site you will be working at.
 - c. Truck and other equipment will be cleaned afterwards behind building #2.
 - d. Perform pre –trip inspection on truck before use.

2. Process
 - a. Use a stabilized construction entrance to access or leave the site where materials are being transported to/from.
 - b. Cover truck bed with a secured tarp before transporting if possible.
 - c. Follow the SWPPP requirements for the specific site to/from which the materials are being hauled.
 - d. Make sure not to overfill materials when loading trucks.
 - e. Drivers responsibility to clean spilled material on truck before trip.

3. Clean up
 - a. Use sweeper to clean up any materials tracked out on the roads from site.
 - b. Wash out truck and other equipment when needed behind building #2.

4. Documentation
 - a. Keep records of any material that is tracked out of site and what was done to clean it up and how long it took and what the weather conditions were at the time.



GENERAL – Transporting Wet Excavated Materials & Spoils

1. Preparation
 - a. Utilize truck with containment for material
 - b. Determine disposal site of excavated material
 - c. Perform pre-trip inspection on vehicle

2. Process
 - a. Load and Transport in manner to minimize spillage & tracking of material
 - b. Check truck for spillage
 - c. Utilize one route of transport

3. Clean-up
 - a. Clean route of transport to provide cleaning of any spilled material
 - b. Wash out truck and other equipment behind building #2 if needed



GENERAL – Vehicle and Equipment Storage

1. Preparation
 - a. Inspect parking areas for stains/leaks on a regular basis.
 - b. Drip pans or adsorbents for leaking vehicles are provided in building #1 & #2
2. Process
 - a. Whenever possible, store vehicles inside where floor drains have been connected to sanitary sewer system.
 - b. When inside storage is not available, Vehicles and equipment will be parked in the approved designated areas.
 - c. Maintain vehicles to prevent leaks as much as possible.
 - d. Address any known leaks or drips as soon as possible. When a leak is detected a drip pan will be placed under the leaking vehicle to collect the drip. And vehicle will be scheduled for repairs.
 - e. The location to empty and store drip pans is in shop #1.
 - f. Never store leaking vehicles over a storm drain.
 - g. Clean up all spills using dry methods.
3. Clean Up
 - a. Any leaks that are spilled on the asphalt will be cleaned up with dry absorbent; The dry absorbent will be swept up and disposed of in the garbage.
 - b. The paved surfaces around the building will be swept every time the sweeper is out, weather permitting.



GENERAL – Washing

1. Preparation
 - a. The wash area for vehicles and equipment is inside maintenance building #2 that has a drain system which is attached to the sanitary sewer system or on the outside wash pad back side of building #2 that has a drain system which is attached to the sanitary sewer system.
 - b. No vehicle washing will be done where the drain system is connected to the storm sewer system.
2. Process
 - a. Minimize water and soap use when washing vehicles.
 - c. Use hoses with automatic shut off nozzles to minimize water usage if possible.
 - d. When washing outside the building, it is the operators' responsibility to make sure all wash water is contained on the wash pad and does not have access to the storm drain.
 - e. Never wash vehicles over a storm drain.
3. Clean Up
 - a. Sweep wash areas after every washing to collect what solids can be collected to prevent them from washing down the drain system, dispose of solids in garbage.
 - b. Clean solids from the settling pits on an as needed basis.
 - c. Street sweeper will sweep wash pad every day it's sweeping the streets.



IDDE - Call-in Inspections

1. Preparation
 - a. Have a system in place to receive phone calls and collect information regarding suspected illicit discharges.
 - b. Davis county spill # 801-525-5100 or 24hour on call # 801-807-8872
 - c. Clinton City public works office 801-614-0870 Davis county dispatch 801-451-4151
2. Process
 - a. Use the Incident Tracking Sheet to collect the appropriate information from the caller. Then, transfer the Incident Tracking Sheet to storm water specialist.
 - 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 basins 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.



IDDE - Opportunistic Illicit Discharge Observation

1. Preparation
 - a. Be alert for potential illicit discharges to the municipal storm water system while going about normal work activities and inspections.
2. Process
 - a. Call the storm water specialist if you see evidence of an illicit discharge.
 - b. Notify Davis County Health Department 801-8078872
 - c. Assess the general area of the illicit discharge to see if you can identify its source.
 - d. Whenever possible, take photographs of the suspected illicit discharge.
 - e. Responding stormwater department personnel will complete the following:
 1. Use the IDDE Incident Tracking Sheet to document observations.
 2. Obtain sample for visual observation and complete an Outfall Inspection Form, if applicable.
 3. Follow the 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 SOPs.
4. Documentation
 - a. File all completed forms (ie. Incident Tracking Form, Outfall Inspection Form, Catch Basin Cleaning Form, and Storm Drain Cleaning Log).
 - b. Document any further action taken.



IDDE - Outfall Inspections

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, tablet with necessary forms, flashlight, and camera (optional).
 - 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 number. 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.



IDDE – Outfall/Discharge Inspection and Characterization

1. Preparation
 - a. Make sure you have the following supplies for the field work:
 - i. Camera, flashlight, nitrile gloves, waterproof boots or waders, tape measure, phone, watch (with stopwatch), GPS, and map(s) showing drainage system and outfalls in the area you plan to screen
 - ii. pH and ammonia testers, thermometer, clear sample bottle(s), ziplock bags, and caulk or plumbers' putty
 - b. Notify private property owners whose property you'll need to be crossing
2. Process
 - a. Upon arrival at each outfall/discharge, take photo(s), and gather information
 - b. Use the data observed, collected and recorded on *Field Sheet* and guidelines on *Field Sheet* to characterize the outfall/discharge as an "unlikely," "potential," "suspect," or "obvious" point of illicit discharge
 - i. if outfall is non-flowing and characterized as "obvious," "suspect," or "potential," place a caulk dam and schedule a return visit to attempt to collect a sample
 - ii. if characterized as "obvious," follow *spill incident response and reporting procedures* and assist responders in containing the discharge. Then initiate *SOP – IDDE Tracing Source of Discharges*
 - iii. if outfall is flowing and characterized as suspect, initiate *SOP – IDDE Tracing Source of Discharges* within two working days.
3. Clean-up
 - a. Place used gloves and other waste in bag and carry-out for disposal into waste bin.
 - b. If any hazardous waste is produced (eg. used detergent/surfactant reagent), carry out and arrange for delivery to a hazardous waste facility
 - i. Contact: Veolia Environmental Services
709 N. Taylor Way Suite 1
North Salt Lake, UT 84054, US (801) 232-0976
4. Documentation
 - a. Record any further actions taken for potential, suspect, and obvious illicit discharges
 - b. Note any discrepancies in the storm drain system maps from what is found in the field. Make sure that the maps get updated to correctly reflect actual conditions



IDDE - Removing Illicit Discharges

1. Preparation

- a. Notify Davis County Health Department 801-807-8872
- b. Obtain available property ownership information for the source of the illicit discharge.

2. Process

- a. Assist Davis County Health Department to 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 supervisor.
- e. Seek technical assistance from the Davis County Health Department

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.



IDDE – Removing Illicit Discharges (not associated with construction activity)

1. Preparation
 - a. Make sure reporting has been done according to SOP *spill incident response and reporting procedures*
 - b. Begin completing a SOP *Discharge/Spill Inspection Report*
2. Process
 - a. If the discharge is due to a sewer cross connection:
 - i. Determine the responsible party for the discharge
 - ii. Issue a Notice of Violation to the violator requiring the problem to be corrected within three days to avoid further enforcement action
 - b. For other discharges contact the Davis County Health Department - Environmental Division for removing the discharge and bringing enforcement action to violator
 - a. Assist county personnel as needed in determining the responsible party, providing utility information and providing other screening or investigation information gathered regarding the discharge
 - c. Offer technical assistance to the violator; help them understand how to go about correcting the problem
 - d. Follow-up as needed to ensure that the discharge has been removed. If violator fails to remove the discharge bring criminal enforcement action.
 - e. If unable to immediately contain and/or cease the discharge, record the circumstances and submit a written rationale to the Division of Water Quality (see 2010 MS4 permit 4.2.3.6)
3. Documentation
 - a. Complete *Discharge/Spill Inspection Report* and/or obtain a copy of the discharge report from the Davis County Health Department - Environmental Division
 - b. If unable to immediately contain and cease the discharge, write a rationale describing the circumstances and submit it to the Utah Division of Water Quality (e.g. for failing septic system).



IDDE - Tracing Illicit Discharges

1. Preparation
 - a. Review / consider information collected when illicit discharge was initially identified and document 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, tablet 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. Follow relevant SOPs.
4. Documentation
 - a. Document tracing results for future reference.



IDDE – Tracing Source of Discharges

1. Preparation
 - a. Review map(s) showing drainage system and area contributing to location of the discharge
 - b. Bring water-quality screening equipment and sample containers
 - c. Bring traffic control devices and safety equipment for entering manholes and inlet boxes
2. Process
 - a. Drive around the streets of the area contributing to the discharge point and look for anything that may help reveal the source of the discharge (if the source is found, skip to step c.)
 - b. From the point of discharge, check the nearest up-stream manhole or inlet box for a similar discharge.
 - i. Put on safety equipment and set up traffic controls according to MUTCD, part 6
 - ii. Remove manhole or box cover (if necessary). Make an observation of any flow present. Use water-quality screening equipment and sample containers, if needed, to determine whether the discharge is similar in nature to the discharge present below.
 - iii. Progress up the system, repeating the previous step until the source of the discharge is found or the segment of the drainage system where the discharge enters the system is isolated
 - iv. If the source is not found, yet the segment of the drainage system where the discharge enters is isolated, make arrangements to get a video with distance measurements of that segment of the drainage system to trace the source.
 1. If further investigation is needed, consider using smoke tests, dye testing, sampling for additional water quality parameters, and requesting assistance from the Davis County Health Department
 - c. Determine whether the source is an illicit discharge and if so, report according to *Spill Incident Response and Reporting Procedures* and implement *SOP – IDDE Removing Illicit Discharges*
3. Documentation
 - a. Add relevant information to *Discharge/Spill Inspection Report*
 - d. Note any discrepancies in the storm drain system maps from what is found in the field. Make sure that the maps get updated to correctly reflect actual conditions



INSPECTION/ENFORCEMENT – Enforcing Construction Site Requirements

1. Preparation
 - a. Make sure that any problems needing corrective action have been documented
 - b. Review previous inspections, warnings given, and other enforcement actions taken

2. Process
 - a. Use these escalating enforcement actions:
 - i. Warning: give the contractor a warning to correct problems with a reasonable deadline to complete corrections. Skip this step if the problems pose a serious threat to human safety or the environment. Inspect condition of BMPs, general site cleanliness, and compliance.
 - ii. Issue a NOV
 - iii. Stop-Work Order: if problems are not corrected by the deadline, or if the problem is re-occurring, issue a stop-work order (with supervisor's approval). Also provide another deadline before pursuing additional enforcement action.
 - iv. Correct Problem and Bill Contractor*: city crews can be utilized at \$500/hr (one hour minimum)
 - v. Criminal Charges: coordinate with City Prosecutor for criminal charges

3. Follow-Up
 - a. Return to check corrective action items after the deadline given to the contractor.
 - b. Take photos
 - c. Implement further escalating enforcement action as needed to ensure compliance

4. Documentation
 - a. File photos and inspection reports
 - b. Document enforcement actions taken

** Normally this action is to be used for projects where the city has leverage to collect the expenses, such projects needing final approval from the city and projects for which a storm water bond has been posted*



INSPECTION/ENFORCEMENT – Enforcing Long-Term Control Requirements

1. Preparation

- a. Make sure that any problems needing corrective action have been documented
- b. Review maintenance agreement, previous inspections, warnings given, and other enforcement actions taken

2. Process

- a. Use these escalating enforcement actions:
 - i. Warning: give the owner a warning to correct problems with a reasonable deadline to complete corrections. Skip this step if the problems pose a serious threat to human safety or the environment.
 - ii. Notice of Deficiency: if problems are not corrected by the deadline, or if the problem is re-occurring, issue a Notice of Deficiency by certified mail or hand delivery (with supervisor's approval). Also provide another reasonable deadline before pursuing additional enforcement action.
 - iii. Correct Problem and Bill Owner: city crews can be utilized at \$500/hr (one hour minimum)
 - iv. Collection of Charges: coordinate with City Prosecutor for collection of charges

5. Follow-Up

- a. Return to check corrective action items shortly after any deadline given to the owner.
- b. Take photos
- c. Implement further escalating enforcement action as needed to ensure compliance

6. Documentation

- a. File photos and inspection reports
- b. Document enforcement actions taken



INSPECTION/ENFORCEMENT – Inspecting Construction Sites

1. Preparation
 - a. Plan to inspect sites once per month (bi-weekly for hi-priority sites)
 - b. Normal Inspection time is the last week of the month.
 - c. Review information about SWPPP and previous inspections that are on-file

2. Process
 - a. Use the State Inspection Form to conduct the inspection
 - b. Upon arrival at site, locate the SWPPP and review it to determine site requirements
 - c. Inspect condition of BMPs, general site cleanliness, and compliance
 - d. Take photos
 - e. Complete and certify the report; note any corrective actions needed for compliance and give the contractor a deadline for the corrective action items.
 - f. Email a copy of the completed inspection report to the contractor

3. Follow-Up
 - a. Return to check that corrective action items have been completed the following work day after the deadline given to the contractor
 - b. Implement *SOP: INSPECTION/ENFORCEMENT – Enforcing Construction Site Requirements* as needed to ensure compliance

4. Documentation
 - a. File photos and inspection reports
 - b. Document enforcement actions taken



INSPECTION/ENFORCEMENT – Inspecting Long-Term Controls (public)

1. Preparation
 - a. Check Records; review information about the design and function of the control, and previous inspections that are on-file
 - b. Schedule the inspection; plan to inspect each city-owned long-term structural control, as part of our weekly checklist

2. Process
 - a. Use the weekly checklist to insure all structures are inspected.
 - c. Complete the report; note any corrective actions needed and schedule these to be completed within a reasonable time.
 - d. Additional complete inspection to be preformed with yearly post construction inspection.

3. Follow-Up
 - a. Return to complete any action items on check list if not able to fix at time of inspection
 - b. Note any corrective actions performed

4. Documentation
 - a. File inspection reports and notes on corrective actions performed



INSPECTION/ENFORCEMENT – Inspecting Long-Term Controls (private)

1. Preparation
 - a. The City will inspect annually, however it is the responsibility of the owner to inspect and maintain their BMP's. Check Records; review terms of maintenance agreement (if any), information about the design and function of the control, and previous inspections that are on-file
 - b. Schedule the inspection; plan to inspect each control annually
 - c. Notify the owner of the inspection and schedule a time when owner (or owner's representative) will be there if feasible

2. Process
 - a. Use the Long-Term Control Inspection Form as appropriate for the type of control to be inspected
 - b. Inspect condition of control according to the inspection form (whether adequately maintained, operating as designed, etc.)
 - c. Take photos
 - d. Complete the inspection report; note any corrective actions needed for compliance and give the owner a deadline for the corrective action items. If owner (or owner's representative) is available, request that they sign the report.
 - e. Email a copy of the completed inspection report to owner

3. Follow-Up
 - a. Return to check corrective action items shortly after any deadline given to the owner
 - b. Implement *SOP: INSPECTION/ENFORCEMENT – Enforcing Long-Term Control Requirements* as needed to ensure compliance

4. Documentation
 - a. File inspection reports, photos, and notes on corrective actions performed
 - b. Document enforcement actions taken



INSPECTION/ENFORCEMENT – Project Termination

1. Preparation
 - a. Notify owner/operator of items required for project termination including as-built drawings, certification and/or maintenance agreement for long-term structural storm water controls and filing of Notice of Termination with Utah DWQ. Make sure that all of these documents have been submitted and are acceptable.
 - b. Keep an incentive in place (such as a bond or hold on occupancy) to motivate the owner or contractor to complete requirements for project termination and schedule the inspection
 - c. Review information about SWPPP, outstanding violations, fees, and plans for permanent structural storm water controls
 - d. If termination is for a transfer of responsibility:
 - i. Review documents to check that responsibility has been transferred and accepted by another party, a SWPPP is complete, and a NOI has been filed. Skip to item 3.b. below.
2. Process
 - a. Use the State Inspection Form to conduct the site inspection
 - b. Determine whether all requirements have been met
 - c. Take Photos
 - d. Complete and certify the report; note any corrective actions needed. Request that owner/contractor sign the report.
 - e. Email a copy of the completed inspection report to the owner/contractor
3. Follow-up
 - a. When requirements have not been meet:
 - ii. Return to check corrective action items
 - iii. Implement *SOP: INSPECTION/ENFORCEMENT – Enforcing Construction Site Requirements* as needed to ensure compliance
 - b. When requirements have been met
 - i. Log on to the State of Utah Online Storm Water Permit System using an municipal administrative login and change the permit status to “Confirmed Termination”
4. Documentation
 - a. File photos, inspection report, and other records
 - b. Document enforcement actions taken



INSPECTION/ENFORCEMENT -SWPPP - Preconstruction Review

1. Preparation
 - a. Assemble submitted documents from applicant
 1. Permit Application
 2. SWPPP Documents
 3. Other site specific documents
2. Process
 - a. Use SWPPP Review Checklist
 - b. Review submitted information
 - c. Confirm information is understandable and specific for site being reviewed
 - d. Highlight – mark – note missing or non submitted information
 - e. Determine site priority for inspections
3. Documentation
 - a. If submittal is incomplete
 1. Note missing information
 2. Prepare memo to request any missing information as needed
 3. Notify applicant requesting needed additional information
 4. Review re-submittals for compliance
 - b. If submittal is complete
 1. Notify Community Development that SWPPP is complete.



MS4—Discharge/Spill Inspection Report

REPORTED INFORMATION

Reported by _____ Date _____

Location of Discharge _____

Description of Discharge _____

Amount of Discharge (estimated) _____

Report Taken by _____

INVESTIGATION INFORMATION

*Complete and attach **Field Sheet***

Date Investigation Began _____ Was Source of Discharge Found? Yes No

Any Discharge to Storm Drain? Yes No

Method(s) Used to Discover Source of Discharge _____

Agencies Discharge was Reported To: _____ Date: _____

_____ Date: _____

_____ Date: _____

ILLICIT DISCHARGE REMOVAL INFORMATION

Description of Actions Taken to Remove the Discharge _____

Has Illicit Discharge Been Eliminated? Yes Date _____

No

ENFORCEMENT INFORMATION

List Enforcement Action(s) Taken

Date: _____ Enforcement Action _____

Date: _____ Enforcement Action



MS4 —Using the State Storm Water Permits Website

1. Preparation
 - a. Create an online account at: <https://secure.utah.gov/stormwater-admin>
 - b. Log-in to the online account at: <https://secure.utah.gov/stormwater-admin>
 - iv. The First time you log in here a screen will come up to Request Access. Select the Municipality option then the Request Access button.
 - v. You will need to wait for approval from the Division of Water Quality before gaining access to the Municipal-Administrative functionality which gives you the right to edit some of the information for the permits
2. Process
 - a. Log-in to your online account at: <https://secure.utah.gov/stormwater-admin>
 - b. For listing and/or finding information about permits that meet certain criteria, click the “Permits Lookup” link and then search by Permit Type, and other search options if desired.
 - i. The table with search results may be sorted by any field by clicking on the field name at the top of the column; clicking twice will sort the results in reverse order
 - ii. Using this feature along with sorting by the date can give useful information for managing and reporting on storm water projects in your jurisdiction
 - c. Clicking on the permit number for any listed permit will bring up a Permit Details with more information about that permit
 - iii. Permit Status (and some other information about the permit) may be edited by clicking the edit button at the bottom of the screen. Here, the status of a permit may be changed from Unconfirmed Termination to Confirmed Termination.
 - d. For running a report of permits that have Unconfirmed Termination status, click the “Reports” link. Each resulting permit listed will have a corresponding “Confirmed Termination” button for which you may change the status of the permit from Unconfirmed Termination to Confirmed Termination.
3. Follow-up
 - e. Guidance Documents for using the database and for municipal-administrative use of the database area available at <http://www.waterquality.utah.gov/UPDES/stormwater.htm>

For help with gaining municipal-administrative access and/or changing inaccurate information regarding permits, contact the Utah Division of Water Quality at 801-536-4300



PARKS – Athletic Field Painting

1. Preparation
 - a. Calculate the amount of paint required for the job and use water based paints.
 - b. Store painting material under a covered storage area.
 - c. Determine whether the wastes will be hazardous or not and the required proper disposal of said wastes
 - d. Calibrate painters to minimize amount of material used and still be effective
 - e. Train employees in spill cleanup procedures and proper handling and storage of painting materials

2. Process
 - a. Mix paints in a controlled area away from storm drains.
 - b. Keep lids tight on containers until used.
 - c. Secure containers when transporting.
 - d. Have available absorbent material and other BMP's ready for an accidental paint spill.
 - e. Load material into equipment on the turf or a drop cloth carefully to minimize spillage.

3. Clean-up
 - a. Put excess paint back into the containers prior to cleaning equipment. Left-over paint should be stored for later use or dried out.
 - b. Rinse water-based paint equipment in approved area. Never pour excess paint or wastewater from cleanup of paint in the storm drain.
 - c. Store paint and equipment indoors.

4. Documentation
 - a. Write-up/report of any discharges into storm drain system



PARKS – Chemical Application Pesticides, Herbicides, Fertilizers

5. Preparation
 - a. Make sure your state Chemical Handling Certification is complete and up-to-date before handling any restricted chemicals.
 - b. Calibrate fertilizer and pesticide application equipment to avoid excessive application.
 - c. Use pesticides only if there is an actual pest problem and periodically test soils for determining proper fertilizer use
 - d. Time and apply the application of fertilizers, herbicides or pesticides to coincide with the manufacturer's recommendation for best results ("Read the Label").
 - e. Know the weather conditions. Do not use pesticides if rain is expected. Apply pesticides only when wind speeds are low(less than 5 mph).
6. Process
 - a. Always follow the manufacturer's recommendations for mixing, application and disposal. ("Read the Label").
 - b. Do not mix or prepare pesticides for application near storm drains, preferably mix inside a protected area with impervious secondary containment (preferably indoors) so that spills or leaks will not contact soils.
 - c. Employ techniques to minimize off-target application (e.g. spray drift, over broadcasting.) of pesticides and fertilizers.
7. Clean-up
 - a. Sweep or blow off pavements or sidewalks where fertilizers or other solid chemicals have fallen, back onto grassy areas before applying irrigation water.
 - b. Triple rinse containers, and use rinse water as product. Dispose of unused pesticide as hazardous waste.
 - c. Always follow all federal and state regulations governing use, storage and disposal of fertilizers, herbicides or pesticides and their containers. ("Read the Label")
8. Documentation
 - a. Keep copies of MSD sheets for all pesticides, fertilizers and other hazardous products used.
 - b. Record fertilizing and pesticide application activities, including date, individual who did the application, amount of product used and approximate area covered.



PARKS – Mowing and Trimming

1. Preparation
 - a. Process overview with all employees
 - b. Check the oil and fuel levels of the mowers and other equipment; fill if needed in an approved area.

2. Process
 - a. Put on eye and hearing protection as recommended by the manufacture.
 - b. Mow and trim the lawn
 - c. Sweep or blow clippings to grass areas

3. Clean-up
 - a. Mowers are to be scraped and brushed at shop in garbage bin area – dry spoils are disposed of.
 - b. Wash equipment behind building #2
 - c. Clean up wash station after use



PARKS – Open Space Management

1. Preparation
 - a. Provide a regular observation and maintenance of parks, and other public open spaces.
 - b. Identify public open spaces that are used for stormwater detention and verify that detention areas are included on the storm drain system mapping, inspection schedules, and maintenance schedules.
2. Process
 - a. Ensure that any storm drain or drainage system components on the property are properly maintained.
 - b. Avoid placing bark mulch (or other floatable landscaping materials) in stormwater detention areas or other areas where stormwater runoff can carry the mulch into the storm drainage system.
 - c. Follow all SOPs related to irrigation, mowing, landscaping, and pet waste management.
3. Clean Up
 - a. Keep all outdoor work areas neat and tidy. Clean by sweeping instead of washing whenever possible. If areas must be washed, ensure that wash water will enter a landscaped area rather than the storm drain. Do not use soap for outdoor washing.
 - b. Pick up trash on a regular basis.
4. Documentation
 - a. Document any observed deficiencies for correction or repair.



PARKS – Planting Vegetation (Starters)

1. Preparation
 - a. Call the Blue Stakes Center of Utah at least 2 working days before any digging will be done, to reveal the location of any underground utilities.
 - b. Dial 811 or 1-800-662-4111
 - c. Decide where any spoils will be taken.

2. Process
 - a. Dig holes; place spoils near the hole where they may easily be placed back around roots. Avoid placing spoils in the gutter.
 - b. Bring each plant near the edge of the hole dug for it.
 - c. Check the depth of the hole, and adjust the depth if necessary. The depth of the hole for a tree should be as deep as the root ball, so that the top of the root ball is level with the top of the hole.
 - d. Carefully remove pot or burlap.
 - e. Place the plant in the hole.
 - f. Backfill the hole with existing spoils, compost, and a little fertilizer if desired. Do not use excessive amendments.
 - g. Water the plant.
 - h. Stake the plant, if necessary, to stabilize it.

3. Clean-up
 - a. Move any extra spoils into truck or trailer. Place the spoils on a tarp if there is a likelihood that some of the dirt would be lost through openings in the bed.
 - b. Sweep dirt from surrounding pavement(s) into the planter area
 - c. Transport spoils to their designated fill or disposal area.



PARKS – Planting Vegetation (Seeds)

1. Preparation
 - a. Call the Blue Stakes Center of Utah at least 2 working days before any digging will be done, to reveal the location of any underground utilities.
 - b. Dial 811 or 1-800-662-4111
 - c. Decide on the application rate, method, water source, and ensure adequate materials are on hand.
 - d. Grade and prepare the soil to receive the seed. Place any extra soil in a convenient location to collect.

2. Process
 - a. Place the seed and any cover using the pre-determined application method (and rate).
 - b. Lightly moisten the seed.

3. Clean-up
 - a. Move any extra spoils into truck or trailer. Place the spoils on a tarp if there is a likelihood that some of the dirt would be lost through openings in the bed.
 - b. Sweep dirt, seed, and any cover material from surrounding pavement(s) into the planter area
 - c. Transport spoils to their designated fill or disposal area.



PARKS – Mulch and/or Bark (Installation)

1. Preparation:
 - a. Identify types of products to be applied.
 - b. Locate proper placement of material.
 - c. Pervious surface is preferred, if not available or practical.
 - d. Identify all Storm Drain inlets in area.
 - e. Choose the best BMP to protect inlets.
 - f. Choose protection to be placed around material.
2. Process:
 - a. Protection for all inlets shall be installed. (Gravel Bags)
 - b. Haul in material
 - c. Install containment around material. (Gravel Bags, Straw Waddle etc)
 - d. Protection around material may be moved to gain access to material, and shall be reinstalled after the work day has been completed.
3. Clean-up:
 - a. Sweep the area to clean up material off of surface.
 - b. Remove any leftover material.
 - c. Remove all inlet protection, and pile containment.



PUBLIC WORKS – Weed mowing

1. Preparation
 - a. Set up temporary traffic control devices according to part VI of the MUTCD.

2. Process
 - a. Carefully mow weeds.
 - b. Keep clippings away from storm drain inlets
 - c. Clean off road way by sweeping or blowing off.

3. Clean-up
 - a. Clean any loose material off asphalt or gutter.

4. Documentation
 - a. Document any observed deficiencies for correction or repair.



SEWER – Aquatech Truck Waste Disposal

1. Preparation
 - a. After picking up waste, make sure equipment is put away and properly secured.
 - b. Decant water into SEWER manhole to separate solids from water.
 - c. Go to North Davis Sewer District plant.
 - d. Check in at front office and state purpose.
 - a. Back into assigned area for waste disposal.
 - b. Make sure you have PPE on (i.e., boots, gloves, etc).
 - c. Slowly open debris tank and drain excess water.
 - d. Take a measurement with a tape measure, or weigh-in on a scale. – Jot down measurement or weight.

2. Clean-up
 - a. Raise debris tank and flush.
 - b. Spray tank down (inside and out).
 - c. Wash tires to prevent track out (if necessary, pull forward).
 - d. Lower debris tank.

3. Documentation
 - a. Document weight or measurement and complete proper form(s).
 - b. Drop off form at sewer plant office.



SEWER – Sewer Overflow/ Spill

1. Preparation
 - a. Determine Cause of overflow or spill.
 - b. Take immediate steps to stop overflow.
 - c. Notify Davis County Health Department.

2. Process
 - a. Take immediate steps to contain the overflow to protect storm drain inlets and entrances to waterways from the overflow material, e.g., block or bag storm drains, divert to downstream manhole, use of vacuum truck.
 - b. Protect public from area
 - c. Immediately begin collecting overflow material with vacuum truck

3. Cleanup
 - a. Wash down impacted area, collecting all wash water and disposing into sanitary sewer
 - b. Solids and debris are to be flushed, swept, vacuumed, raked, picked up and transported for proper disposal
 - c. Disinfect the overflow site with a bleach solution.
 - d. Wash equipment with bleach solution.

4. Documentation

a. Document and report spill according to Clinton City Sewer Management Plan.



STORM DRAIN – Aquatec Truck Debris Disposal

1. Preparation
 - a. Prioritize cleaning routes to use at the highest frequency in areas with the highest pollutant loading.
 - b. Perform preventative maintenance and services on Aquatec truck to increase and maintain their efficiency.
 - c. Dump location is in the shop yard labeled wash out.

2. Process
 - a. Operate the Aquatec truck in a manner that meets the manufacturer specifications.
 - b. Measures should be taken at the downstream manhole to prevent debris from continuing further down the storm drain system.

3. Clean-up
 - a. Aquatec truck is to be cleaned out in an approved area that will not allow liquids or debris to enter the storm drain system which is identified as the wash out bin.
 - b. Aquatec truck cleaning area shall separate the liquids from the solids.
 - c. Once solids have dried out they shall be taken to the local land fill for disposal.
 - d. Decant water is to be collected and let it evaporate or is vacuumed up and discharged into the drain behind building #2 which is connected to the sewer.

4. Documentation
 - a. Keep accurate logs to track storm drain lines that have been cleaned and those still require cleaning.
 - b. Keep notes or comments.



STORM DRAIN – Catch Basin Cleaning

1. Preparation:
 - a. Clean sediment and trash off grate.
 - b. Do visual inspection on outside of grate.
 - c. Make sure nothing needs to be replaced.
 - d. Do inside visual inspection to see what needs to be cleaned.
2. Process
 - a. Clean out box using hand tools and load into truck if possible.
 - b. Clean using a high powered vacuum truck to start sucking out standing water and sediment if needed.
 - c. Use a high pressure washer to clean any remaining material out of catch basin, while capturing the slurry with the vacuum if needed.
 - d. After catch basin is clean, send the flusher hose of the vacuum truck downstream to clean pipe and pull back sediment that might have gotten down stream of pipe.
 - e. Move truck downstream of pipe to next catch basin.
3. Clean-up
 - a. Unload truck in garbage bin for landfill.
 - b. When vacuum truck is full of sediment take it to the wash out pit in the shop yard to dump all the sediment out of truck.
 - c. When it evaporates, clean it up with a backhoe, and take it to the landfill.
4. Documentation
 - a. Keep logs of number of catch basins cleaned.
 - b. Record the amount of waste collected.
 - c. Keep any notes or comments of any problems.



STORM DRAIN – Creek Management

1. Preparation
 - a. Monitor streams on a regular monthly basis.
 - b. Check culverts and crossings after every storm.
 - c. Remove immediate threats immediately.
 - d. Maintain access to stream channels wherever possible.
 - e. Identify areas requiring maintenance and notify Davis County if needed.
 - f. Determine what manpower or equipment will be required.
 - g. Identify access and easements to area requiring maintenance.
 - h. Determine method of maintenance that will be least damaging to the channel.

2. Process
 - a. Remove unwanted material (debris, branches, soil) from the creek channel and place it in a truck to be hauled away

3. Clean-up
 - a. Stabilize all disturbed soils.
 - b. Remove all tracking from paved surfaces near maintenance site, if applicable.
 - c. Haul all debris or sediment removed from area to approved dumping site.

4. Documentation
 - a. Keep log of actions performed including date and individuals involved.
 - b. Record the amount of materials removed or imported.
 - c. Keep any notes or comments of any problems.
 - d. Use “before” and “after” photographs to document activities as applicable.



STORM DRAIN – Detention Pond Cleaning

1. Preparation:
 - a. Schedule the Pond cleaning work for a time when dry weather is expected.
 - b. Remove any sediment and trash from grates, placing it in a truck for disposal.
 - c. Do a visual inspection to make sure any grates, structures, manholes, boxes, and pipes are in good working order. Remove manhole covers and grates as necessary for inspecting.
2. Process
 - a. Provide outlet protection where feasible to minimize the amount of debris that might leave basin during cleaning process.
 - b. Start cleaning basin by using backhoe to remove debris and sediment off the bottom.
 - c. Continue cleaning structures and pond bottom as necessary by sweeping and shoveling.
 - d. Put all material removed from the pond into a dump truck.
 - e. Some structures may require use of a vacuum truck. If so use the same procedures described for cleaning catch basins.
 - f. For grassy swells full of sediment remove the sod and sediment and replace with new sod.
3. Clean-up
 - a. After cleaning basins, clean off the concrete pads using dry methods (sweeping and shoveling).
 - b. Take the material that was removed to the landfill for final disposal.
4. Documentation
 - a. Keep a log of each detention basins/pond cleaned including date, individuals involved in cleaning, and a description of the type of debris removed.
 - b. Record the amount of waste collected.
 - c. Keep any notes or comments of any problems.



STORM DRAIN – Ditch Management

1. Preparation
 - a. Monitor ditches weekly and after storms.
 - b. Maintain access to ditch channels wherever possible.
 - c. Contact affected property owners and utility owners.
2. Process
 - a. Identify areas requiring maintenance
 - b. Determine what manpower or equipment will be required.
 - c. Identify access and easements to area requiring maintenance.
 - d. Determine method of maintenance that will be least damaging to the channel and adjacent properties or utilities and the most effective.
3. Clean-up
 - a. Stabilize all disturbed soils.
 - b. Remove all tracking from paved surfaces near maintenance site, if applicable.
 - c. Haul all debris or sediment removed from area to approved dumping site.
4. Documentation
 - a. Keep log of actions performed including date and individuals involved.
 - b. Record the amount of materials removed or imported.
 - c. Keep any notes or comments of any problems.
 - d. Use “before” and “after” photographs to document activities as applicable.



STORM DRAIN – Street Sweeping

1. Preparation
 - a. Prioritize cleaning routes to use at the highest frequency in areas with the highest pollutant loading.
 - b. Increase sweeping frequency just before the rainy season and in the fall unless sweeping occurs continuously throughout the year.
 - c. Perform preventative maintenance and services on sweepers to increase and maintain their efficiency
 - d. Streets are to be swept as needed or specified by the city. Street maps are used to ensure all streets are swept at a specified interval.

2. Process
 - a. Drive street sweeper safely and pickup debris
 - b. When full, take the sweeper to an approved street sweeper dump site which is at the shop yard in the bin labeled sweeper.

3. Clean-up
 - a. Street sweepers are to be cleaned out on wash pad behind shop 2.
 - b. Street sweeping cleaning stations shall separate the solids from the liquids.
 - c. Once solids have dried out, haul them to the local landfill
 - d. Decant water is to be collected and routed to an approved wastewater collection system area only.
 - e. Haul all dumped material to Wasatch integrated waste landfill.

4. Documentation
 - a. Keep accurate logs to track streets swept and streets still requiring sweeping.
 - b. Log the amount of debris collected and hauled off.



STREETS- Chip Seal

1. Preparation
 - a. Clean and dry areas where materials are to be applied.
 - b. Apply temporary covers to manholes and catch basins to prevent oil and materials from getting inside of them.

2. Process
 - a. Apply emulsion at recommended rate.
 - b. Spread chips closely behind emulsion distributor, slowly such that the chips do not roll when they hit the surface.
 - c. Roll chips. Rollers follow closely behind the chip spreader. Roll entire surface twice.
 - d. Maximum speed 5 mph.

3. Clean-up
 - a. All loose aggregate is removed from the roadway by sweeping it up (see SOP for Street Sweeping).
 - b. Excessive asphalt applications and spills are removed with shovels and scraping tools.
 - c. Remove the temporary covers from manholes and catch basins. If it appears that any chip seal materials have gotten into the inlet boxes, remove the material according to the SOP for inlet boxes.
 - d. Dispose of the waste material that has been swept and scraped up by taking it to the landfill.

4. Documentation
 - a. Record location and date on the maintenance database and map



STREETS – Crack Seal

1. Preparation
 - a. Remove weeds from the road
 - b. Air-blast the cracks to remove sediments from the crack to allow for proper adhesion.
 - c. Ensure that surface is clean and dry.
 - d. Wear proper safety equipment.

2. Process
 - a. Proper temperature of material should be maintained.
 - b. Sufficient material is applied to form the specified configuration.

3. Clean-up
 - a. Excessive sealant application or spills are removed.
 - b. Sweep all loose debris from the pavement and dispose of it in the local landfill.

4. Documentation
 - a. Record location and date on the maintenance GIS map



STREETS – Curb Painting

1. Preparation

- a. Calculate the amount of paint required for the job and use water based paints if possible.
- b. Determine whether the wastes will be hazardous or not and the required proper disposal of said wastes
- c. Determine locations of storm drain inlets and sewer inlets that may need to be protected
- d. Prepare surfaces to be painted by sandblasting and/or scraping. Thoroughly sweep up all sand, blastings, and/or paint scrapings
- e. If paint stripping is needed, use a citrus-based paint remover whenever possible.
- f. If wastewater will be generated, use curb, dyke, etc. around the activity to collect the filter and collect the debris.

2. Process

- a. Paint curb. Prevent over-spraying of paints and/or excessive sandblasting
- b. Use drip pans and drop clothes in areas of mixing paints and painting
- c. Have available absorbent material and other BMP's ready for an accidental paint spill.

3. Clean-up

- a. Paint out brushes and rollers as much as possible. Squeeze excess paint from brushes and rollers back into the containers prior to cleaning them.
- b. Pour excess paint from trays and buckets back into the paint can containers and wipe with cloth or paper towels. Dispose of the towels according to the recommendations on the paint being used.
- c. Rinse water-based paint brushes in the sink after pre-cleaning. Never pour excess paint or wastewater from cleanup of paint in the storm drain.
- d. Cleanup oil based paints with paint thinner. Never clean oil based brushes in a sink or over a storm drain. Filter solvents for reuse if possible and/or store in approved drum for recycling.
- e. Dispose of waste collected by placing it in a garbage container. Left-over paint and solvents should be stored for later use or dried out (do not place these liquids in the garbage).
- f. Sprayer clean-up: Run xylene through sprayer and spray into container and let dry. Let paint cans dry out before disposal.

4. Documentation

- a. Write-up/report of any discharges into storm drain system



STREETS – Overlays and Patching

1. Preparation

- a. Measure and mark locations of manholes and valves on the curb
- b. Manholes and catch basins are covered as needed to prevent oil and materials from getting inside the structures or system.
- c. Cracks should be properly sealed. Alligator cracks and potholes should be removed and patched. Rutting should be milled.
- d. Surface should be clean and dry.
- e. Uniform tack coat applied and cured prior to placement of overlay.
- f. If milling is required, install inlet protection at all inlets and at least one down stream.

2. Process

- a. Check hot asphalt mix for proper temperature, percentage asphalt, gradation, air voids and any other agency requirements.
- b. Raise manhole lids and valves to elevation of new asphalt surface with riser rings.
- c. Surface texture should be uniform, no tearing or scuffing.
- d. Rolling should be done to achieve proper in-place air void specification.

3. Clean-up

- a. Covering should be removed as soon as the threat of imported materials entering the system is reduced and prior to a storm event.
- b. After pavement has cooled, sweep gutters to remove loose aggregate.

4. Documentation

- a. Record location and date on the maintenance GIS map



STREETS – Secondary Road Maintenance

1. Preparation
 - a. Determine length amount and type of road base or gravel that will be needed.
 - b. Determine proper equipment to be used and or any safety hazards.
 - c. Drainage: slopes, berms etc.

2. Process
 - a. Have truck drivers follow a designated route for hauling in the soil (See SOP for transporting Soil and Gravel).
 - b. If soil is too dry to achieve compaction, loosen surface material and moisture condition.
 - c. Smooth or grade soil with the desired crown or cross-slope.
 - d. Compact soil.

3. Clean-up
 - a. Clean up equipment according to the SOP for Cleaning Equipment.
 - b. Clean up any debris on traveled roads, and dispose of it in the landfill.

4. Documentation
 - a. Turn in load tickets



STREETS – Shouldering

5. Preparation
 - a. Set up temporary traffic control devices according to part VI of the MUTCD.

6. Process
 - a. Place import material as needed and perform grading to achieve proper drainage.
 - b. Mulch clippings.
 - c. Clean off road way by sweeping or blowing off.

7. Clean-up
 - a. Clean any loose material off asphalt or gutter.

8. Documentation
 - a. Record location and date on the maintenance GIS map



STREETS- Slurry Seal

1. Preparation
 - a. Remove weeds from the roads. Sweep areas where materials are to be applied, and allow to dry, if necessary. Verify that existing pavement has been inspected for detrimental effects of poor drainage.
 - b. Cover/protect catch basins and manholes.
 - c. Notify public 48 hours before starting work.

2. Process
 - a. Apply materials in a smooth and uniform manner. Slurry material should not run onto adjacent pavement surface, curb and gutter or waterways.

3. Clean-up
 - a. If loose aggregate is remaining in street or curb, sweep it up and check again within a month.
 - b. Ensure that excess emulsion materials are removed from the site and stored for later use in an area or container that is not exposed to the weather.
 - c. Remove covers/protection from catch basins and manholes, and valves.

4. Documentation
 - a. Record location and date on the maintenance GIS map



STREETS– Snow De-icing material handling

1. Preparation
 - a. Store de-icing material under a covered storage area inside building #3.
 - b. Above ground storage tanks must have secondary containment and is located inside building #2.
 - c. Sweep loading area frequently to keep runoff away from storm drain inlets.
 - d. Wash out vehicles behind building #2 on the washout area before and after snow removal.
 - e. Calibrate sprayers to minimize amount of de-icing material used and still be effective
 - f. Train employees in spill cleanup procedures and proper handling and storage of de-icing materials

2. Process
 - a. Load material into brine maker carefully to minimize spillage. Do not over fill.
 - b. Load Material into trucks carefully to minimize spillage loading is done behind building #2
 - c. Do not leave loading unattended while filling
 - d. Periodically sweep loading area to reduce the amount of de-icing materials exposed to runoff
 - e. Distribute the minimum amount of de-icing material to be effective on roads
 - f. Do not allow sprayers to idle while distributing de-icing materials.
 - g. Park trucks loaded with de-icing material inside when possible

3. Cleanup
 - a. Sweep up all spilled de-icing material around loading area
 - b. Clean out trucks after snow removal duty behind building #2 in the washout area
 - c. Provide maintenance for vehicles in covered area
 - d. Do not dispose of surplus brine in storm drain



STREETS – Snow Equipment Storage

Plows

1. Preparation
 - a. Spray off plow inside or behind building #2.
 - b. Locate an area out of the way equipment can be stored until the next snow season.
 - c. Storage area for plows is on the asphalt next to sanders and concrete pad end of building2
2. Process
 - a. Drop plow blade.
 - b. Safely secure plow with blocks of wood, bricks or use hand crank if provided.
 - c. In order to match the vehicle with the correct plow, place vehicle unit # on back side of plow.
 - d. Inspect or check for any leaks.
 - b. Grease couplers and place hydraulic caps on both the plow and truck.
- c. Tarp plow if it is not powder coated.

Sanders

1. Preparation
 - a. Back into salt shed and remove excess salt from sander.
 - b. Drive the truck and sander to wash pad behind building #2.
 - c. Thoroughly spray off truck and sander while spreader is spinning.
 - d. Storage location is out of the way and on the asphalt.
2. Process
 - a. Back into designated area, between racks so that you're level with sander.
 - b. Chain up both sides on the back end of sander.
 - c. Raise the bed approximately 2', using caution not to hit spreader.
 - d. Chain up front 2 sides.
 - e. Slowly lower the bed.
 - f. Proceed to drive forward.
 - g. As the sander is now hanging; grease zerks, hydraulic couplers and place caps on both the sander and truck.
 - h. Tarp sander if it is not powder coated.



STREETS – Snow Removal and De-icing

1. Preparation
 - a. Store de-icing material under a covered storage area inside building #3.
 - b. Sweep loading area frequently to keep runoff away from storm drain inlets.
 - c. Wash out vehicles behind building #2 on the washout pad before and after snow removal.
 - d. Calibrate spreaders to minimize amount of de-icing material used and still be effective
 - e. Train employees in spill cleanup procedures and proper handling and storage of de-icing materials

2. Process
 - a. Load material into trucks carefully to minimize spillage
 - b. Periodically sweep loading area to reduce the amount of de-icing materials exposed to runoff
 - c. Distribute the minimum amount of de-icing material to be effective on roads
 - d. Do not allow spreaders to idle while distributing de-icing materials.
 - e. Park trucks loaded with de-icing material inside when possible

3. Cleanup
 - a. Sweep up all spilled de-icing material around loading area
 - b. Clean out trucks after snow removal duty in approved washout area behind building #2
 - c. Provide maintenance for vehicles in covered area



WATER – Chemical Handling/Transporting and Spill Response

1. Preparation
 - a. Understand MSDS sheets for handling of product
 - b. Determine proper place of handling
 - c. Have necessary containment and spill kits at handling place

2. Process
 - a. Begin transfer process
 - b. Discontinue operations if spill levels occurs
 - c. Disconnect and store handling equipment

3. Clean-up
 - a. Clean up spills with proper material
 - b. Dispose of contaminated material at appropriate facility

4. Documentation
 - a. Report spills to Davis County
5 gallons of hydro fluoride acid
Work hours 801-870-8872
After hours 801-451-4151 Davis County dispatch



WATER – Planned Waterline Excavation Repair/Replacement

1. Preparation
 - a. Determine where discharge flow will go
 - b. Place inlet protection at nearest downstream storm drain inlet
 - c. Clean Gutters leading to inlet
 - d. Isolate waterline to be worked on

2. Process
 - a. Make efforts to keep water from pipeline from entering the excavation
 - b. Direct any discharge to pre-determined area
 - c. Backfill and compact excavation
 - d. Haul of excavated material or stock pile nearby

3. Clean up
 - a. Clear gutter/waterway where water flowed
 - b. Clean up all areas around excavation
 - c. Clean up travel path of trucked material

4. Documentation
 - a. Complete paperwork



WATER – Unplanned Waterline Excavation Repair/Replacement

1. Preparation
 - a. Have on hand or access to wattles, gravel bags, or other materials for inlet protection.

2. Process
 - a. Slow the discharge.
 - b. Inspect flow path of discharged water
 - c. Protect water inlet areas
 - d. Follow planned repair procedures.(AWWA Standards)
 - e. Haul off spoils of excavation (see appropriate SOP)
 - f. Consider use of silt filter bags on pumps or use vac truck

3. Clean-up
 - a. Repair eroded areas as needed
 - b. Follow planned repair procedures
 - c. Clean up the travel path of trucked excavated material



WATER – Waterline Flushing for Routine Maintenance

1. Preparation
 - a. Determine flow path of discharge to inlet of waterway.

2. Process
 - a. Clean flow path if needed
 - b. Protect inlet structures if needed.
 - c. Use diffuser to dissipate pressure to reduce erosion possibilities if needed.

3. Clean-up
 - a. Clean flow path
 - b. Remove inlet protection.

4. Documentation
 - a. Record



WATER – Waterline Flushing after Construction/System Disinfection with Discharge to Storm Drain

1. Preparation
 - a. Determine chlorine content of discharged water, and select if de-chlorination equipment is to be used.
 - b. Determine flow path of discharge.

2. Process
 - a. Protect inlets in flow path
 - b. Install de-chlorination equipment if needed
 - c. Check flow path.
 - d. Use diffuser to reduce velocities

3. Clean-up
 - a. Pick up inlet protection
 - b. Clean flow paths
 - c. Remove equipment from flush point

4. Documentation
 - a. Residual test of discharged water



WATER – Waterline Flushing after Construction/System Disinfection with Discharge with Haul Off (Used for Dust Control/Compaction)

1. Preparation
 - a. Determine chlorine content of discharged water
 - b. Determine appropriate construction activity for treatment

2. Process
 - a. Flush to tanker for disposal on unpaved construction activity for dust control or compaction
 - b. Conform that application of water is in appropriate location

3. Clean-up
 - a. Remove equipment from flush point

4. Documentation
 - a. Residual test of discharged water
 - b. Location of water discharged



**General Permit for Discharges from Small Municipal
Separate Storm Sewer Systems (MS4s)
Measurable Goals**

MCM	1
Measurable Goal	Support Davis County Storm Water Coalition Efforts (e.g., water fair, T.V. Ads, annual contractor/developer training, purchase supplies for 4th grade teacher curriculum, curb markers, gas stations, other handouts, develop pamphlets for selected pollutants and selected businesses or individuals, etc.), See DCSWC Goal Sheet as reference.
Pollutant(s)	(All pollutants) - pet waste, sediment, fertilizer, hydrocarbons, auto fluids, swimming pool water, wash water, household hazardous waste, landscaping materials, grass clippings, and ecoli
Audience(s)	Residents, Businesses, Developers, Contractors, and MS4's , Engineers, Youth Educational Target (4th Graders)
Desired Result	4.2.1.1 To educate audiences about impacts from storm water discharge and help encourage a change in behavior. To educate audiences on ways to avoid, minimize, and reduce impacts of storm water discharge. To educate audiences on actions individuals can take to improve water quality.
Milestone Date	Ongoing (Some progrms are annual, seasonal, monthly, etc.) Coalition participation is monthly, but program iniatives are by individaul occurance.
Associated BMPs (See Reference Code)	PEP, ET, CESW, EM, and UM
Measure of Success (Effectiveness)	Ads continue to run and survey supports increase in public awareness, water fair participation continues to increase, along with awareness, Youth educational program (4th graders) continues participation growth and awareness. Participation success and awareness contnues to grow for contractor and developer training...supported by survey results.

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**General Permit for Discharges from Small Municipal
Separate Storm Sewer Systems (MS4s)
Measurable Goals**

MCM	1, 2, 3, 4, 5, 6
Measurable Goal	Enhance educational and informative resources for the MCMs 1, 2, 3, 4, and 5.
Pollutant(s)	(All pollutants) - pet waste, sediment, fertilizer, hydrocarbons, auto fluids, swimming pool water, wash water, household hazardous waste, landscaping materials, grass clippings, nutrients and ecoli
Audience(s)	Residents, Businesses, Developers / Contractors, and MS4's (City Personnel, Engineers, Planners, Inspectors, all Key Department Representatives, etc.)
Desired Result	<p>Develop and or enhance needed educational, informative, and participatory resources, including:</p> <ol style="list-style-type: none"> 1) Produce information sign for Clinton City Herriatge Days Celebration 2) Enhance website with new information for: <ol style="list-style-type: none"> a) Add complete building process & order of operations for contractors b) Add electronic version of Coalition pamphlets (eg Handling Hazardous Waste) c) Online public comment forum for SWMP review, comment, participation, etc. d) Add spill response hotline info and comment forum for SWPPP issues e) Update links of newly revised SWMP 3) Enhance printed materials / mailers / news letter information for: <ol style="list-style-type: none"> a) city wide news letters for residents in Utility billing b) Advisory notices for business that are applying or renewing business licenses d) Create Hotline/Response post-its for consturction projects SWPPP Boards
Milestone Date	<ol style="list-style-type: none"> 1) By July 15, 2016 2) By Spring, 2017 - Intrim milestone of October 2016 (Compete initial programing frame work) 3) By Spring, 2017 - Intrim milestone of November 2016 (Completed construction post-its and Business license advisories)
Associated BMPs (See Reference Code)	PEP, ET, SDSS , EM, WO, UM, CH, SCCM, MU, HP
Measure of Success (Effectiveness)	<p>Success is to be measuerd by the completion of the goal, the verification of the level of participation, and the verification of the level of awareness / effectiveness.</p> <ol style="list-style-type: none"> 1) sign is produced, functional, and witness of participation at event, and monitor awareness. 2) Completion of goal / tasks, verify intended participation through comment forums, and by verifying awareness of info by survey and online comment pages

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**General Permit for Discharges from Small Municipal
Separate Storm Sewer Systems (MS4s)
Measurable Goals**

MCM	5
Measurable Goal	Develop and enhance Clity MS4 LID program and standards
Pollutant(s)	(All pollutants) - pet waste, sediment, fertilizer, hydrocarbons, auto fluids, swimming pool water, wash water, household hazardous waste, landscaping materials, grass clippings, nutrients, phosphorus, and ecoli
Audience(s)	Residents, Businesses, Developers / Contractors, and MS4's (City Personnel, Engineers, Planners, Inspectors, all Key Department Representatives, etc.)
Desired Result	Develop and enhance Clity MS4 LID program and standards, including: 1) LID selection process 2) Address retention (90%) BMP application and management 3) Develop LID standard details 4) Review and include structural and non-structural BMP standars (LID) 5) Updating Storm Water Master Plan 6) Updating Capital Facilities Plan - to include water quality projects & Improvements
Milestone Date	To be completed by December 1, 2016 (Intrim milestone dates include: 1,2,3,4) - July 7, 2016 Kick off meeting Consultant Clinton City 5) To be completed by the December 31, 2016 6) To be completed by the December 31, 2016 (Started)
Associated BMPs (See Reference Code)	See all reference codes of Section 5 on BMP Master List Note: it is anticipated to add more BMPs as plans develop further, at which time this section will amended to include those updates.
Measure of Success (Effectiveness)	Success is to be measuerd by the completion of the goal, by the development of the LID program, implementation of new standards, education, and program oversight.

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**General Permit for Discharges from Small Municipal
Separate Storm Sewer Systems (MS4s)
Measurable Goals**

MCM	1, 2, 3, 4, 5, 6
Measurable Goal	Update, enhance, and develop Clinton City MS4 storm water ordinances
Pollutant(s)	(All pollutants) - pet waste, sediment, fertilizer, hydrocarbons, auto fluids, swimming pool water, wash water, household hazardous waste, landscaping materials, grass clippings, nutrients, phosphorus, and ecoli
Audience(s)	Residents, Businesses, Developers / Contractors, and MS4's (City Personnel, Engineers, Planners, Inspectors, all Key Department Representatives, etc.)
Desired Result	<p>1) Develop a spill / incident map through GIS program</p> <p>2) Update the MS4 spill response form</p> <p>3) Develop pamphlet / educational flyer and implement training program for city personnel to make available, along with educational advisory, as needed to City residents conditional upon incident or potential impact (e.g., illegal dumping, emptying pool down storm drain, blowing yard waste into streets, etc.)</p>
Milestone Date	To have development & Implementation completed by Summer 2017
Associated BMPs (See Reference Code)	ET, EM, PEP, UM, IDC,
Measure of Success (Effectiveness)	Success is to be measured by the completion of the goal, by the development of handout materials and training of key city personnel. It is the hope of the Clinton City MS4 that this goal will be a proactive effort to help raise awareness and change behaviors. Effectiveness may be measured through city survey and online city storm water forum comment pages.

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**General Permit for Discharges from Small Municipal
Separate Storm Sewer Systems (MS4s)
Measurable Goals**

MCM	6
Measurable Goal	To observe and verify if the Clinton City MS4 program is making positive difference in water quality
Pollutant(s)	sediment, ecoli, nutrients, phosphorus, TSS, Oil & Grease NOTE: Potential for other pollutants to be added.
Audience(s)	MS4's (City Personnel, Engineers, Planners, Inspectors, all Key Department Representatives, etc.)
Desired Result	To observe and verify if the Clinton City MS4 program is making a positive difference in water quality through sampling designated locations. 1) To test where incoming stormwater enters the city at the city border (Clinton / Sunset Border @ 2300 N 500 W) 2) To test where storm water leaves the city boundary at (250 N 360 W) @ the Clinton / West Point Border 3) To test at the end of the settling ponds, where the conveyance channels meet together, prior to entering the Howard Slough - To establish a baseline to observe and draw conclusions as to the effectiveness of the Clinton City MS4 Storm Water Program
Milestone Date	Ongoing (Bi-Annual for first year - 1x June and 1x November) Annually thereafter in June
Associated BMPs (See Reference Code)	LTOM
Measure of Success (Effectiveness)	It is the hope of the Clinton City MS4 to establish a baseline from which to evaluate future sample results. This goal would be considered a success or effective if future results demonstrated a decrease in identified pollutants. It would also be considered a success if results demonstrated an increase in identified pollutants to better provide direction to the MS4, with regard to enhancing program development.

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**General Permit for Discharges from Small Municipal
Separate Storm Sewer Systems (MS4s)
Measurable Goals**

MCM	1, 2, 3, 4, 5, 6
Measurable Goal	Update, enhance, and develop Clinton City MS4 storm water ordinances
Pollutant(s)	(All pollutants) - pet waste, sediment, fertilizer, hydrocarbons, auto fluids, swimming pool water, wash water, household hazardous waste, landscaping materials, grass clippings, nutrients, phosphorus, and ecoli
Audience(s)	Residents, Businesses, Developers / Contractors, and MS4's (City Personnel, Engineers, Planners, Inspectors, all Key Department Representatives, etc.)
Desired Result	<p>1) Develop a spill / incident map through GIS program</p> <p>2) Update the MS4 spill response form</p> <p>3) Develop pamphlet / educational flyer and implement training program for city personnel to make available, along with educational advisory, as needed to City residents conditional upon incident or potential impact (e.g., illegal dumping, emptying pool down storm drain, blowing yard waste into streets, etc.)</p>
Milestone Date	To have development & Implementation completed by Summer 2017
Associated BMPs (See Reference Code)	ET, EM, PEP, UM, IDC,
Measure of Success (Effectiveness)	Success is to be measured by the completion of the goal, by the development of handout materials and training of key city personnel. It is the hope of the Clinton City MS4 that the this goal will be a proactive effort to help raise awareness and change behaviors. Effectiveness may be measured through city survey and online city storm water forum comment pages.

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**Davis County Storm Water Coalition
Documentation Plan**

Activity	Target Pollutants	Target Audiences	Measurable Goal	Document/Data/Proof of Completion	Document Location	Responsible Person/Party
TV Advertisements	1-17	1-4	Purchase annually	Invoice	Coalition Documentation Binder	Coalition Chairman
Monthly Coalition Meeting	1-17	1-4	Meet 10 times annually	Agenda, Minutes, Attendance List	Binder	Coalition Chairman
4th Grade Lessons	1-7,15	1	Teach all public 4th grade classes annually	Invoice, Teacher's report	Binder	Coalition Chairman
Purchase Education Materials						
Booklets & Balls	1-7,15	1	Purchase enough for all 4th grade classes annually	Invoice	Binder	Coalition Chairman
BMP Manual	3,8	3,4	Review annually	Finished document	Binder	Coalition Chairman
Pamphlets	2,3,6,9-14,16	1-4	Develop 1 pamphlet annually	Invoice, finished document	Binder	Coalition Chairman
Stickers (gas station)	17	1,2	Purchase when supply is depleted	Invoice, finished products	Binder	Coalition Chairman
Pencils & Magnets	1-17	1	Have continually available	Invoice, finished products	Binder	Coalition Chairman
Water Fair	1-7,15	1	Hold one event annually	Invoices	Binder	Coalition Chairman
Trainings	1-17	3,4	Hold one training annually	Invoice, Invitation, Agenda, Attendance List	Binder	Coalition Chairman
County Drainage Map	15	4	Request updates annually	Minutes of Coalition meeting	Binder	Coalition Chairman
Spill Report Hotline	15	1	Get reports semi-annually	Report on calls received	Binder	Coalition Chairman
Standard Operating Procedures	1-17	4	Review & update annually	Finished document	Binder	Coalition Chairman
StormCon Conference	1-17	4	Send 3 coalition members annually	Invoices	Binder	Coalition Chairman
SWAC Meeting Attendance	1-17	4	Have 1 voting member and 1 alternate assigned and present 90%	Attendance sheet, minutes	Binder	Coalition Chairman
Interlocal Agreement	1-17	1-4	Execute once per permit cycle	Executed document	Binder	Coalition Chairman
Model Ordinance	1-17	1-4	Have available by July 2011	Finished document, subcommittee minutes	Binder	Coalition Chairman

Target Pollutant Sources		
	1	e. coli
	2	Pet Waste
	3	Sediment
	4	Grass
	5	Oil
	6	Fertilizer
	7	Trash
	8	Construction site waste
	9	Septic Waste
	10	Hydrocarbons
	11	Automotive Fluids
	12	Swimming Pool Water
	13	Wash Water
	14	Household Hazardous Waste
	15	Illicit Discharges
	16	landscaping materials
	17	Fuels
Target Audiences		
	1	Residents
	2	Businesses, institutions, and commercial facilities
	3	Developers and construction contractors
	4	MS4 industrial facilities