



WEST VALLEY CITY
Unity Pride Progress



Storm Water Management Plan

2013-2018

(November 2015 Modification)

West Valley City

Public Works Department

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Abbreviations

APWA	American Public Works Association
BMP	Best Management Practices
DEQ	Department of Environmental Quality
EPA	U.S. Environmental Protection Agency
IDDE	Illicit Discharge and Detection Elimination
GIS	Geographic Information System
MCM	Minimum Control Measure
MPM	Minimum Performance Measure
MS4	Municipal Separate Storm Sewer System
NOV	Notice of Violation
O&M	Operations & Maintenance
SLV	Salt Lake Valley
SOP	Standard Operating Procedure
SSO	Sanitary Sewer Overflow
SWMP	Storm Water Management Program
SWPPP	Storm Water Pollution Prevention Plan
UPDES	Utah Pollutant Discharge Elimination System
WVCFD	West Valley City Fire Department
WVCPD	West Valley City Police Department

Executive Summary

West Valley City is a Phase II Co-Permittee of the Jordan Valley Municipalities. As part of the permit renewal for the term ending in 2018, West Valley City has re-written and updated the Storm Water Management Plan (SWMP). This version of the plan includes modifications made in October 2015.

The overall storm water program is overseen and administered by the West Valley City Public Works Department with contributions from Public Works and Parks and Recreation. Combined efforts of all staff members involved in the program comprehensively address permit requirements. Funding is provided through the Storm Water Utility established by West Valley City.

Good faith efforts have been made by all parties involved to establish appropriate procedures and BMP's to protect water quality and fulfill all requirements set forth by the permit. As a living document, regular evaluation and updates will be completed as necessary to ensure compliance.

2.3 Storm Water Management Program Plan Description

2.3.2 Revised SWMP Document

The updated SWMP will be submitted to the Division within 120 days of the effective date of the permit.

2.3.2.1 Permit Number

UTS000001

2.3.2.2 MS4 Location

West Valley City is located in Salt Lake County, southwest of Salt Lake City. Its general location is west of the Jordan River, south of SR-201, east of 7200 West and north of Kearns and Taylorsville. Please refer to Appendix A for a map of West Valley City.

2.3.2.3 Overall Water Quality Concerns

Water quality concerns include organic matter which may contribute to the impaired Jordan River and targeted pollutants listed in Section 4.2.1.1 of the SWMP. To address these concerns, West Valley City has selected the measurable goals outlined in each minimum control measure's section of this SWMP. Additionally, potential high-risk pollutant sources have been targeted with our dry screening program. Existing storm water controls which may impair water quality have also been prioritized for potential retrofits.

2.3.3 Program Elements

The following document, including the appendices, describes the elements of the minimum control measures that are or will be implemented to protect water quality.

2.3.3.1 Existing Measures and On-Going Processes

This SWMP has been rewritten to include existing ongoing processes already implemented as well as new implementations.

2.3.3.2 Measurable Goals

For each minimum control measure, a list of measurable goals can be found in sections 4.2.1-4.2.6 of the SWMP. It includes a description of existing on-going elements as well as new elements that will be implemented to achieve required actions.

3.1 Impaired Waters

3.1.1.1 Discharges into 303(d) Water Bodies

A portion of the storm water from the West Valley City storm water system discharges into the Jordan River which is considered an impaired water body.

3.1.1.2 TMDL Requirements

Phase I of the TMDL study on the Jordan River was approved by the EPA on June 5, 2013. In the study, dissolved oxygen was identified as the greatest impairment for the Jordan River. Organic matter contributes to the dissolved oxygen levels, and will continue to be the focal point of future phases of the TMDL strategy. As specific requirements are established to improve the dissolved oxygen levels, appropriate BMPs and capital improvements will be installed to meet those requirements and update the West Valley City SWMP accordingly.

3.1.2 Pollutant Control

When new requirements are imposed from the TMDL to improve dissolved oxygen levels, a description of how West Valley City will control discharges will be prioritized and implemented.

3.2 Threatened or Endangered Species and Historic Properties

West Valley City complies with Federal and State laws relating to threatened and endangered species and historic properties.

4.1 Storm Water Management Program

4.1.1 Storm Water Management Program

West Valley City developed, implements and enforces this SWMP to reduce the discharge of pollutants from the MS4 through the six minimum control measures.

4.1.1.1 Implementation Schedule

As detailed in the permit and this SWMP, the required schedules will be met to implement the SWMP.

4.1.2 Process to Evaluate Implementation

West Valley City personnel meet on the 2nd Wednesday each month to discuss and evaluate portions of the SWMP and assess any needs for improvements. Assignments are then made and followed up the following month to implement improvements into our program. This monthly meeting allows West Valley City to plan, set priorities, evaluate the effectiveness of the SWMP implementation and make any updates and improvements as necessary.

4.1.2.1 Implementation Tracking

The number of inspections performed, enforcement actions and types of public education activities implemented are being tracked.

4.1.2.2 Resources for SWMP Implementation

The resources necessary to meet all requirements of this permit are provided through the West Valley City Storm Water Utility. A summary of the Storm Water Utility resources will be included in the annual report.

4.1.3 BMP's Implemented

BMP's implemented for each minimum control measure are described in this SWMP.

4.1.3.1 Measurable Goals

Measurable goals for each of the BMPs, including timeframes for implementation and frequency of actions are included in Sections 4.2.1-4.2.6.

4.1.3.2 Responsible Party for Implementation

The specific person or position responsible for implementation of the BMP will be documented in the SWMP or the SOP.

4.1.3.3 Good Faith Effort

A good faith effort is being made to comply with the terms of the MS4 permit.

4.2 Minimum Control Measures

West Valley City has updated our SWMP to meet the requirements of the six minimum control measures of the renewal permit. These measures are:

- Public Education and Outreach on Storm Water Impacts
- Public Involvement/Participation
- Illicit Discharge Detection and Elimination (IDDE)
- Construction Site Storm Water Runoff Control
- Long-Term Storm Water Management in New Development and Redevelopment
- Pollution Prevention and Good Housekeeping for Municipal Operations

This updated SWMP will continue programs that have already been in place in West Valley City which have been successful. New programs or updates to existing programs are also being incorporated in this SWMP.

As part of the renewal permit, new requirements for Long-Term Storm Water Management will be fully developed and implemented within 18 months of coverage under this Permit. A good faith effort has been made to meet all requirements with this updated SWMP.

4.2.1 Public Education and Outreach on Storm Water Impacts

West Valley City implements a public education program designed to improve the public’s awareness about how routine things they do can affect storm water quality. This includes educational materials distributed to various audiences, support of media ads produced by the Salt Lake County Stormwater Coalition, employee training for select employees and presentations given to businesses and the construction industry.

4.2.1.1 Target Specific Pollutants and Sources

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

Table 1 Targeted Pollutants for Audience Groups

Audience Group (source)	Sediments	Nutrients	Heavy Metals	Trash & Debris	Oil & Grease	Bacteria & Viruses	Herbicides & Pesticides
General Public	X	X		X	X	X	X
Commercial Facilities	X	X	X	X	X	X	X
Construction/Development	X	X		X	X		
MS4 Facilities	X	X	X	X	X		X

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.

4.2.1.2 General Public Education and Outreach Program

West Valley City is a member of the Salt Lake County Stormwater Coalition. The Coalition produces media ads on radio, television and online which promote good behaviors to protect storm water quality. Summaries of media ads are included in Appendix B. The Coalition also sponsors an annual Water Quality Fair where 4th graders and chaperones attend and learn about storm water quality through the various displays at the event.

Storm water educational literature is distributed regularly through the West Valley City Public Relations Department at City-sponsored events, through Neighborhood Watch programs and is available to the general public at the Public Relations Department offices.

The West Valley Journal was a printed journal delivered to all postal addresses in West Valley City every other month where ads regarding storm water protection were included. The Journal has since been discontinued. The City will start including in the West Valley City Update Newsletter the same ads which promote good behavior to prevent storm water pollution. These ads address one of the targeted pollutants and their proper handling, including pet waste, fertilizer use, household hazardous waste disposal and car washing. Copies of these ads are

found in Appendix B. These campaigns are part of the West Valley City IDDE education program required in Part 4.2.3.7 of the permit.

4.2.1.3 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 West Valley City implements for this measure address these more prevalent pollutants and also provide opportunities to educate businesses about IDDE hazards as required in Part 4.2.3.7.

Annual storm water inspections for all businesses with a West Valley City Storm Water Management Permit provide an opportunity for institutional education. Inspectors discuss with the business any observed pollutants or hazards and deficiencies affecting storm water quality that were encountered during the inspection.

West Valley City has hired a consultant to help the city understand how to best outreach to businesses. Recommendations included adding a requirement for business license applicants to view a video prior to issuance of the license. This recommendation is in the implementation process.

4.2.1.4 Construction Industry Education Program

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. A video presentation may be given addressing construction storm water runoff concerns and how to prevent runoff into storm drains. A copy of the pre-construction meeting agenda is included in Appendix D.

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.

4.2.1.5 Employee Training

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. Staff members are initially trained on expected job responsibilities during orientation including protection of storm water quality. As changes are made to responsibilities affecting storm water quality, additional training will be provided.
- Parks and Recreation 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 West Valley City which impact storm water quality, SWPPP and BMP requirements. LID training is provided to the appropriate planning staff members.
- Facilities Staff (annually) – Custodial or other staff members responsible for the maintenance at each City-owned property are trained on expected job responsibilities during orientation. Additional training is provided as needed to ensure expectations are

met. As changes are made in their responsibilities affecting storm water quality, training will be provided.

Targeted training will be selected based on job responsibilities which cover a wide array of topics. As the Long-Term Management program is developed, planners and Registered Stormwater Reviewer's will receive training on LID opportunities and methods.

Staff member training topics may include:

- IDDE hazards & prevention
- IDDE recognition, response & cleanup
- Proper dumpster & waste management
- Various inspection procedures
- Storage of industrial materials
- Street & parking lot maintenance
- Plan review & permitting procedures
- 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 LID and Green Infrastructure Education

Various staff members from the Public Works Department annually attend the APWA Storm Water Conference. LID presentations are given which help educate about LID methods. In the past, StormCon LID trainings have been attended by staff members to gain additional insight to LID methods and opportunities.

West Valley City will also look for training opportunities for plan review staff to expand their education about LID measures as the Long-Term Storm Water Management program continues to be implemented.

4.2.1.7 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. A copy of the most recent survey question results is included in Appendix B.

As part of the public outreach efforts to businesses, business owners were sampled and surveyed to determine a baseline of understanding about proper storm water management

practices. As the business outreach program continues to evolve based on results from surveys, additional education opportunities will be implemented at local businesses.

As discussed in Part 4.1.2 of this SWMP, key personnel meet monthly to discuss the SWMP. Evaluations of employee training (for those whose regular job duties affect storm water quality) are discussed at these meetings to determine if employee training is adequate, if the education provided is being implemented and what changes, if any, can be made to improve MS4 employee training for those involved with storm water quality.

4.2.1.8 BMP Selection Rationale

General Public

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

- Buses for 4th Graders to Water Quality 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.
- Media Ads – Newspaper, online or 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.

Commercial Facilities

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

- Storm Water Quality Protection Presentations – Doing presentations for businesses has a better effect than sending letters or reminders about storm water quality. We felt that mailers or fliers wouldn't get to the right people at the business that will help promote a behavior change.
- Annual Storm Water Inspections – For those businesses with a West Valley City Storm Water Management Permit, annual inspections of structural controls 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.

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.
- 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.

Public Education and Outreach Program Measurable Goals

Measurable goals and BMPs to fulfill this minimum control measure are listed below.

Public Education and Outreach Program Measurable Goals					
-	<u>Activity/BMP</u>	<u>Measurable Goal</u>	<u>Description</u>	<u>Permit Section</u>	<u>Execution Date</u>
PEO-1	Buses to Elementary Presentation	Have at least 6 schools attend the fair	Credits available to 22 elementary schools applied towards bus transportation for 4th graders to attend an Annual Water Quality Fair presented by Salt Lake County.	4.2.1.2	Ongoing
PEO-2	Update Newsletter		Update Newsletter ads placed at least 6 times per year.	4.2.1.2	Ongoing
PEO-3	Hotline Number Listed	Respond to 100% of the discharges reported within 24 hours	Display hotline number on the backs of public works vehicles, on WVC website, ads in newspapers, brochures for Eagle Scout Projects and will be added to brochures.	4.2.1.2	Ongoing
PEO-4	Storm Water Education on Website	Upload all 5 education ads distributed in the Valley Journal to the West Valley City Website	Add storm water educational material to the West Valley City website.	4.2.1.2	12/31/2014
PEO-5	Encourage Proper Hazardous Waste Disposal		Publish online, in ads bi-annually and with educational literature information about proper hazardous waste disposal locations for residents.	4.2.1.2	Ongoing
PEO-6	Support the Salt Lake County Storm Water Coalition and their media ad campaigns	Attend 75% of monthly meetings and continue financial support of the Coalition	Continue support and participation of the SLCSA through financial support and involvement in monthly SLCSA meetings. Continue use of the public education program provided by the SLCSA.	4.2.1.2	Ongoing
PEO-7	Implement Business Education through Business Licensing	100% business licenses issued after businesses complete training	Require all new and renewal business license applicants to complete storm water pollution prevention education.	4.2.1.3	Ongoing

PEO-8	SWPPP Educational Materials	Provide materials for 100% of development and redevelopment applications	All new development/redevelopment applicants will be provided educational material discussing minimum storm water quality protection standards.	4.2.1.4	Ongoing
PEO-9	SWPP Video	Show the video to each contractor working on a project in West Valley City at least once per year	As part of the pre-construction meeting for new developments, redevelopments and City projects, contractors are given a presentation discussing storm water pollution prevention measures.	4.2.1.4	Ongoing
PEO-10	Employee Training - Public Works Staff	Maintain RSI and RSR Certification for Storm Water Enforcement Personnel	Complete annual training opportunities for staff discussing most pertinent water quality prevention measures.	4.2.1.5	Annually
PEO-11	Employee Training - Planning Staff		Complete initial training of new staff about SWPPP and BMP practices and requirements for new developments and redevelopments.	4.2.1.5	Annually
PEO-12	Employee Training - Parks and Recreation Staff		Complete annual training about BMPs related to job responsibilities that protect storm water quality.	4.2.1.5	Annually
PEO-13	Employee Training - Facilities Staff		Train staff members about storm water quality impacts in their job responsibilities.	4.2.1.5	Annually
PEO-14	Distribute LID information to development staff	Train 100% of our planners on LID techniques and BMPs	After establishing LID requirements and BMPs related to LID as part of our Long-Term Storm Water Management program (18 months after permit coverage), appropriate documentation will be distributed to staff involved in development review regarding requirements and BMPs.	4.2.1.6	3/3/2015

PEO-15	Phone Survey Results	Have a 10% increase in respondents who have seen our educational ads	Have a telephone survey completed during this permit term and compare results to previous survey results to determine effectiveness of the program.	4.2.1.7	9/4/2018
PEO-16	Violations	Decrease in number of violations.	Have a decrease in the number of violations issued.	4.2.1.7	Ongoing
PEO-17	Violations	Increase in citizens reporting spills	Have an increase in the number of phone calls we receive from the public reporting spills and discharges.	4.2.1.7	Ongoing

4.2.2 Public Involvement/Participation

West Valley 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
- Boy Scout Eagle service projects
- Community group service projects
- Participation in the Salt Lake County Stormwater Coalition which generally has representation at local watershed councils and water fairs.

Various Boy Scout Eagle Projects which stencil storm drains and distribute educational literature are completed annually in West Valley City. The stencil includes the published hotline for community members to report illicit discharges. Community group service projects are organized on a regular basis to clean detention basins and other areas within West Valley City to prevent non-storm water discharges.

West Valley City disbanded the West Valley City Storm Water Advisory Board due to its ineffectiveness and lack of public participation. West Valley City has established a process to host open houses for City-funded projects that impact storm water quality and will host an open house as needed through the SWMP re-write process to address public comments and concerns.

4.2.2.1 Public Input during SWMP Writing Process

Public comments are solicited on our website where the general public may view the SWMP documents and provide feedback.

4.2.2.2 SWMP Availability to the General Public

The SWMP is available online and at the West Valley City Public Works Engineering office.

4.2.2.3 Adopted SWMP Accessibility for the Life of the Permit

A current version of the SWMP is available for the general public online and at the West Valley City Public Works Engineering office for the life of the permit.

4.2.2.4 Public Notice Requirements

We will comply with all State and Local public notice requirements.

Public Involvement/Participation Program Measurable Goals

Measurable goals and BMPs to fulfill this minimum control measure are listed below.

Public Involvement/Participation Program Measurable Goals					
	<u>Activity/BMP</u>	<u>Measurable Goal</u>	<u>Description</u>	<u>Permit Section</u>	<u>Execution Date</u>
PIP-1	Open Houses for Storm Water Quality Projects	Host at least 2 Open Houses annually	West Valley City hosts open houses for City-funded projects that affect storm water quality and allows for public input on these projects.	4.2.2	Annually
PIP-2	Eagle Scout Stenciling Projects	Encourage 2 eagle scout projects annually	Provide stenciling materials for storm drains and distribute educational literature to nearby residences and businesses for Eagle Scout Projects.	4.2.2	Ongoing
PIP-3	Community Group Service Projects	Encourage 2 community service projects annually	Provide service opportunities for community groups to clean debris and trash in detention basin areas or other water bodies.	4.2.2	Ongoing
PIP-4	Public Notice for Comment on Updated SWMP	Post updates to our SWMP online and open it to public comment	Provide copies of the SWMP to the general public for review and comment online and at the West Valley City Public Works Engineering Office.	4.2.2.2	1/3/2014
PIP-5	Current SWMP Publicly Available	Maintain updated SWMP online	Provide access to a current copy of the SWMP online for public comment and at the West Valley City Public Works Engineering office.	4.2.2.3	Ongoing

4.2.3 Illicit Discharge Detection and Elimination (IDDE)

West Valley City continues to enforce its IDDE program. A hotline has been established for the public to report spills and illegal discharges. Storm water inspectors respond to these calls, follow appropriate SOPs to trace, identify, cease and cleanup spills or illegal discharges. Training is provided to employees who may come into contact with an illicit discharge as part of their job responsibilities. This includes maintenance personnel, street sweepers, storm water inspectors and storm drain operations staff.

4.2.3.1 Storm Water System Map

West Valley 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. A map showing the inventory is included in Appendix A.

4.2.3.2 Storm Water Management Ordinance

Non-storm water discharges are prohibited through West Valley City Code, Section 18-9-103. When such discharges occur, West Valley City Storm Water Enforcement Personnel have available to them 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 West Valley City Storm Water Enforcement Personnel include:

- Verbal Warning – Applicable where violator had no knowledge that their action was a violation of West Valley City Code.
- Administrative Citation – Enforcement of a minor violation as described in West Valley City Code Section 10-2-400P. 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.
- 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 to remedy the violation per West Valley City Code Section 10-2-102. A Notice of Violation is considered a Class “C” Misdemeanor per West Valley City Code Section 18-9-114.
- Stop Work Order – For severely egregious violations, the City may issue a stop work order which would require all working operations to cease immediately at the site of the violation until the violation is brought into compliance through corrective actions.
- 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 West Valley City for each and every subsequent day of violation. Failure to comply with a Notice of Violation is considered a Class “B” Misdemeanor per West Valley City Code Section 10-2-103.
- If non-compliance persists, West Valley City may schedule and Administrative Code Enforcement Hearing pursuant to West Valley City Code Section 10-2-500. Written notice shall be provided to the violator and the Administrative Law Judge will listen to the arguments in the hearing and issue an Administrative Code Enforcement Order.
- As part of the Order, fees may be modified, requirements may be updated and the judge may issue as part of the order authority for West Valley City to bring into compliance the violation and recuperate all costs incurred from the violator.
- Failure to comply with an issued Order may result in West Valley City seeking all legal methods to recover civil penalties and costs and to obtain compliance.

- If civil remedies are insufficient to ensure compliance or if a violation is sufficiently serious, the City may file criminal charges pursuant to West Valley City Municipal Code, Section 10-1-105. Any violations of the City’s storm water ordinances may be prosecuted criminally in lieu of or in addition to civil actions, administrative enforcement proceedings, or abatement proceedings.

A copy of the Enforcement Procedures SOP is included in Appendix G.

West Valley City does not operate a sanitary sewer system. There are four improvement districts which operate the sanitary sewer systems within our jurisdiction:

- Granger-Hunter Improvement District
- Kearns Improvement District
- Magna Water District
- Taylorsville-Bennion Improvement District

If a SSO occurs, it is reported to the district listed above which has jurisdiction at the location of the overflow and to the Division.

4.2.3.2.1 Legal Authority to Enforce Non-Storm Water Discharges

Enforcement against non-storm water discharges is authorized through West Valley City Code, Section 10-2-102. Personnel authorized to enforce ordinances from the Public Works Engineering Division are listed in a memo found in Appendix C and approved by the West Valley City Attorney’s Office.

4.2.3.3 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 152 outfalls in the City during the permit term may also detect these spills and discharges. This includes 14 “high priority” outfalls and areas, of which twenty percent (20%) are screened and assessed annually.

Another part of the IDDE program includes using our video camera to record conditions inside storm 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.

4.2.3.3.1 “High Priority” Area List

During the update process for the SWMP, members from various divisions of West Valley City with specific duties that affect storm water quality met in 2011 and 2012 to determine the locations of “high priority” areas and outfalls within the West Valley City storm water system.

Our procedures went as follows:

1. Collectively, identify on the map in the GIS software 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, areas with a history of illicit discharges)
2. Mark on a printout map these areas
3. Establish our “High Priority” area map (see Appendix A for a copy of this map). The map includes 9 outfalls and 7 geographic areas.

These areas were selected based on industrial and commercial uses, history of past illicit discharges and areas with older infrastructure. The “high priority” area map will be evaluated annually and updated as needed.

4.2.3.3.2 Field Assessment Activities

There are 152 outfalls located within West Valley City, including 14 “high priority” outfalls and areas. Annually, twenty percent (20%) of “high priority” outfalls or areas are screened and assessed. Routine dry weather screening of every outfall is completed at least once during the permit term. A copy of the dry weather screening form is included in Appendix C. When the City is notified about illicit discharges, inspections are completed and documented utilizing the Storm Drain Incident Response Report, a copy of which is included in Appendix C.

4.2.3.4 Tracing Illicit Discharge Source Procedures

Written procedures for detecting and eliminating illicit discharges have been developed and are found in Appendix G. When an illicit discharge is reported, one of our stormwater inspectors 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 (i.e. someone dumping pollutants into the storm drain) or by following the storm drain system upstream to locate the source of the pollutant.

4.2.3.5 Characterize the Nature and/or Threat of the Illicit Discharge

Written procedures for characterizing the nature and/or threat of the illicit discharge are found in Appendix G. A majority of the discharges are known substances (i.e. someone is reported to be dumping oil down the storm drain). Where the substance is unknown, our storm water inspectors perform a limited analysis to identify the pollutant (i.e. pH level tests, visual identification of the substance). If our stormwater inspectors still cannot identify the substance, HAZMAT or the Salt Lake County Health Department is called to help identify the substance and perform further analysis.

4.2.3.5.1 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

If necessary, analytical monitoring may be completed to identify the potential source(s) and characterize the nature of the illicit discharge by a 3rd party. The decision process for utilizing analytical monitoring will be fully documented in the inspection report.

4.2.3.6 Ceasing Illicit Discharges

West Valley City is proactive in its efforts to cease illicit discharges. When responding to an illicit discharge or spill, Storm Water Enforcement Personnel respondents identify the source and require the violator to stop the discharge following the Cease Illicit Discharges SOP found in Appendix G. 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 cleanup activities.

4.2.3.6.1 IDDE Investigation Reports

All IDDE investigations are thoroughly documented and retained in our files at the Public Works Engineering Division offices. The report will describe what actions were taken to comply with the permit requirements and the reason if any requirements were not met. A copy of the Storm Drain Incident Response Report is included in Appendix C.

4.2.3.7 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

4.2.3.8 Household Hazardous Waste

Proper household hazardous waste is encouraged through newspaper ads and refers the reader to locate disposal locations through the Salt Lake County Health Department website which can be accessed through www.wvc-ut.gov/hhw. A copy of the ad is located in Appendix B with the West Valley Journal Ads.

4.2.3.9 Public Hotline

A hotline is available which connects directly to West Valley City Public Works on-call personnel to respond to any spill 24/7. The number, (801) 509-2005, is displayed on West Valley City Public Works vehicles, in educational literature and other multimedia material to the public. When a discharge is reported, the investigation and findings are recorded in the Incident Report. A copy of the Storm Drain Incident Response Report is included in Appendix C. The respondent answering the hot line number is our on-call inspector and varies according to their work shifts. The responding Storm Water Enforcement Officer documents basic information about the discharge in the IDDE log sheet. A copy of the log sheet is included in Appendix C.

4.2.3.9.1 Spill/Dumping Response Procedure

Once the Public Works Department has received notification of a spill, storm water inspectors respond to assess the situation. For minor spills of a known substance (i.e. oil, paint, and household chemicals) the responding personnel and/or the Public Works Operations Division have spill kits and absorbents to clean up the spill. If the discharge is large in nature or of an unknown substance or highly hazardous, West Valley City HAZMAT professionals and/or the Salt Lake County Health Department will be called in to help with the response and contain the situation. Appendix C contains the spill response flow chart with contact information of appropriate personnel to respond to a spill or illicit discharge. The Spill Response Procedure is found in Appendix G. These documents will be updated as necessary.

4.2.3.10 Program Evaluation and Assessment

The IDDE Program is evaluated and assessed semi-annually in the West Valley City Public Works Storm Water coordination meetings described in Part 4.5.1 of this SWMP. Tracking is maintained in our log sheet described in Part 4.2.3.9 of this SWMP.

4.2.3.11 Annual Training of Employees

All West Valley 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.

4.2.3.12 IDDE Documentation

All documentation will be maintained with the SWMP or separate appendices for review and available at the West Valley City Public Works Engineering Division offices.

Illicit Discharge Detection and Elimination (IDDE) Program Measurable Goals

Measurable goals and BMPs to fulfill this minimum control measure are listed below.

Illicit Discharge Detection and Elimination (IDDE) Measurable Goals					
	<u>Activity/BMP</u>	<u>Measurable Goal</u>	<u>Description</u>	<u>Permit Section</u>	<u>Execution Date</u>
IDDE-1	Storm Water System Map	Update the system map to reflect 100% of the updates or changes	Regularly update the GIS map as changes occur to storm drain systems in order to ensure that the map is complete and accurate at any given time.	4.2.3.1	Ongoing
IDDE-2	IDDE Enforcement Strategy	Follow up on 100% of the enforcement actions issued to illegal discharge violators	Follow up on 100% of the illicit and/or illegal discharges reported to us, through the public hotline or by staff members, and ensure that compliance has been achieved.	4.2.3.2	Ongoing
IDDE-3	Screen and Assess "High Priority" IDDE Areas	Screen and assess at least 20% of "High Priority" IDDE areas annually	Based on the IDDE "High Priority" Area map, screen and assess at least 20% of the outfalls and other areas shown on the map. Where feasible, assess 100% of "High Priority" areas. Report findings and impose sanctions as necessary for any compliance measures.	4.2.3.3	Annually Beginning 2013
IDDE-4	Dry Weather Screening	Screen all Outfalls at least once during the permit term	Dry weather screen all outfalls at least once during the term of this permit	4.2.3.3	9/4/2018
IDDE-5	IDDE Hotline	Within 24 hours respond to and log 100% of calls received on the IDDE Hotline	All calls received through the public hotline for spills and dumping will be logged in our IDDE log and responded to within 24 hours of receiving notification.	4.2.3.9	Ongoing

IDDE-6	IDDE Training	Train 100% of employees described in this BMP on an annual basis about the IDDE program.	For those employees described in this minimum control measure that should receive training about the IDDE program, its functions and available BMPs, ensure that 100% receive annual training as provide by West Valley City.	4.2.3.11	Annually
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4.2.4 Construction Site Storm Water Runoff Control

This minimum control measure reduces pollutants from all new construction project sites (“projects”) 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 applies to public and private projects.

4.2.4.1 Erosion and Sediment Control Practices

All projects are required to use erosion and sediment control practices per West Valley City Code, Section 18-7-102. Compliance enforcement measures are stated in West Valley City Code, Section 18-7-107 and West Valley City Code, Title 10.

4.2.4.1.1 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, per West Valley City Code, Section 18-5-403. The developers are referred to the State SWPPP template to prepare the SWPPP.

4.2.4.1.2 Private Property Access for Inspections

All projects on private property which have a West Valley City Storm Water Construction Permit provide right-of-way access to West Valley City personnel for inspections of storm water facilities per West Valley City Code, Sections 18-5-405 and 18-5-406.

4.2.4.1.3 UPDES Storm Water Permit Requirements

As per West Valley City Code, Section 18-7-106, a Storm Water Management Permit and a Storm Water Construction Permit are required for any areas disturbing greater than or equal to one acre or are part of a larger common plan of development. As part of the application process, proof of a Notice of Intent issued from the State is required before a permit will be issued.

4.2.4.2 Enforcement Strategy

In order to ensure compliance of construction BMPs, an enforcement strategy has been developed. The first opportunity of enforcement is through the site plan review process. At this stage, it can be ensured that the approved set of plans contains the required BMPs. At the pre-construction meeting with the contractor, the SWPPP is discussed to ensure that appropriate plans are in place to install appropriate BMPs. Proper storm water protection practices may be presented in a storm water presentation during the pre-construction meeting. West Valley City also has several Excal Visual videos which provide training to contractors and employees about storm water quality practices. These videos, or segments from these videos, may also be presented during the pre-construction meeting. A list of the topics discussed in these videos is found in Appendix D. Lastly, through our site inspections it can be verified that approved BMPs are in place and properly functioning. Where deficiencies exist, enforcement SOPs can be followed to bring a deficiency into compliance.

4.2.4.2.1 Construction BMP Enforcement

During the pre-construction meeting, SWPPP requirements and construction BMPs are discussed to ensure compliance with requirements. On-site inspections by authorized West Valley City Storm Water Enforcement Personnel are completed to ensure BMPs are properly installed, maintained and functioning. If a violation of the SWPPP occurs, or any other storm water quality protection issue is apparent on-site during site visits and inspections, West Valley City Storm Water Enforcement Personnel have the authority to issue a warning, administrative citation, notice of violation and/or stop work order, depending on severity of the violation, to

bring the construction site into compliance with appropriate BMPs. The Escalating Enforcement SOP found in Appendix G is followed.

4.2.4.2 Documentation of all Enforcement Actions

Copies of all enforcement documents issued by Public Works personnel are maintained in the West Valley City Public Works Engineering Division offices. This 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.

4.2.4.3 SWPPP Requirements

SWPPP review SOPs have been developed and are located in Appendix G. Projects disturbing greater than or equal to one acre or that are part of a larger common plan of development are required to submit a SWPPP. The Community Development Department notifies the Engineering Division when building permits are applied for. The Engineering Division verifies whether or not the building lot is part of a common plan of development and requires a SWPPP for those lots. Records of these projects are kept for five years or until construction is completed, whichever is longer. Developers are directed to look online at <http://www.wvc-ut.gov/index.aspx?NID=791> for SWPPP information and requirements.

4.2.4.3.1 Pre-Construction SWPPP Review

Pre-construction SWPPP reviews are conducted for all projects as per the SWPPP Review Procedures SOP located in Appendix G. This includes a review of design, operations and construction BMP's for the project.

4.2.4.3.2 Potential Water Quality Impacts Consideration

Review procedures consider potential water quality impacts as per our SWPPP Review Procedures SOP located in Appendix G. Checklists are utilized for all development types during the review. Copies of the current checklists are found in Appendix E.

4.2.4.3.3 Evaluate LID and Green Infrastructure Opportunities

LID requirements are outlined in the West Valley City Engineering Standards which have been developed over the last couple of years and will be presented before the City Council for formal adoption. These standards require developers to consider LID and green infrastructure implementation opportunities for their projects where practical and feasible. A copy of a draft checklist is located in Appendix E. Use of this new checklist will commence when the West Valley City Engineering Standards are fully adopted and implemented

4.2.4.3.4 Identify Priority Construction Sites

West Valley City will identify priority construction sites based on potential pollutants and proximity to the Jordan River, which is considered an impaired water body. High priority sites may be located within the Jordan, Decker and Redwood drainage districts as shown on the Storm Water Districts Map located in Appendix A or other areas that the City feels there is a need to be considered a high priority site.

4.2.4.4 Construction Site Inspection Program

During the construction phase, site inspections are completed to ensure approved BMPs are installed, maintained and functioning properly on-site to prevent construction storm water runoff from entering into the storm drain system. The Storm Water Inspection Procedures located in Appendix G are followed for these inspections. Where violations occur, the Escalating

Enforcement Procedures SOP located in Appendix G is followed to impose sanctions against the violation and bring the site into compliance.

4.2.4.4.1 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 West Valley City Registered Stormwater Inspector at least monthly using the Department of Environmental Quality's *Construction Storm Water Inspection Form*.

4.2.4.4.2 Inspections Before, During and After Construction

West Valley City personnel will inspect all projects, private or public, prior to land disturbance, during construction (as required in Part 4.2.4.4.1) and following active construction. The State SWPPP Compliance Inspection Form is used for SWPPP inspections. A copy of this form is located in Appendix D.

After the City receives notification from the State that a notice of termination has been filed or from the West Valley City Building Department that a certificate of occupancy has been applied for, the site is inspected by Storm Water Enforcement Personnel as part of the bond release to ensure that final stabilization has been achieved.

4.2.4.4.3 Priority Construction Site Inspections

Priority construction sites described in Part 4.2.4.3.4 will be inspected every other week utilizing the DEQ's Construction Storm Water Inspection Form.

4.2.4.4.4 Site Inspection Follow Up

Site inspectors will follow up on issues discovered during the inspection. During the follow up inspection, pictures are taken and completed corrective actions are documented. Where corrective actions were not completed, inspectors will continue to use the Enforcement Procedures as necessary until compliance is achieved. All enforcement actions will be documented.

4.2.4.5 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 Stormwater Inspector certification. Plan reviewers will complete Registered SWPPP Reviewer certification. Training records will be maintained per Part 4.2.5.6. Additional training details are included in Part 4.2.1.5.

4.2.4.6 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.

Construction Site Storm Water Runoff Control Program Measurable Goals

Measurable goals and BMPs to fulfill this minimum control measure are listed below.

Construction Site Storm Water Runoff Program Measurable Goals					
	<u>Activity/BMP</u>	<u>Measurable Goal</u>	<u>Description</u>	<u>Permit Section</u>	<u>Execution Date</u>
CON-1	SWPPP Review	Review 100% of SWPPP submittals for all development types	Review 100% of SWPPP submittals for all projects greater than or equal to one acre or part of a larger common plan of development.	4.2.4.1	Ongoing
CON-2	City Issued Permits	Issues required permits for 100% of development projects submitted	Issue a Storm Water Management Permit and a Storm Water Construction Permit for 100% of all development projects greater than or equal to one acre.	4.2.4.1	Ongoing
CON-3	Pre-Construction Meetings	Hold pre-construction meetings for 100% of projects	All private projects greater than or equal to one acre or part of a common plan of development, and all public projects have a pre-construction meeting to discuss the project, including storm water quality.	4.2.4.2	Ongoing
CON-4	SWPPP Presentation	Give a SWPPP presentation on 100% of projects constructed in West Valley City	Give the SWPPP presentation to all contractors who have not seen the presentation within the last 12-18 months or who have not previously done any construction work within West Valley City.	4.2.4.2	Ongoing
CON-5	LID Opportunities Considered	Require 100% of new projects to consider LID opportunities	Require all new projects, public or private, to utilize a checklist for their project which requires consideration of LID opportunities that can be implemented in their project.	4.2.4.3	Being Implemented

CON-6	Construction Site Inspections	Complete construction site inspections monthly for 100% of projects	All construction projects greater than or equal to one acre or part of a larger common plan of development are inspected at least monthly to ensure compliance of requirements and proper storm water quality protection.	4.2.4.4	Monthly
CON-7	"Priority" Construction Site Inspections	Inspect 100% of "Priority" construction site inspections bi-monthly	All "Priority" construction projects, as identified to meet requirements of the Permit, are inspected twice a month, to ensure compliance of requirements and proper storm water quality protection.	4.2.4.4	Bi-monthly
CON-8	Staff Training	Train one additional RSR	Provide training and certification for one more staff member to become RSR certified	4.2.4.5	2014
CON-9	Staff Training	Train all plan review staff	Train all Public Works plan review staff and provide opportunities for all West Valley City staff members who are RSI and RSR certificate holders to renew their certificates before they expire.	4.2.4.5	Annually

4.2.5 Long-Term Storm Water Management in New Development and Redevelopment

West Valley City is continuing to develop a long-term storm water management program. West Valley City requires new developments and redeveloped sites greater than or equal to one acre to apply for a Storm Water Construction Permit and a Long Term Storm Water Management Permit per City Code Section 18-2-101. Prior to issuance of these permits, a site plan review process evaluates storm water controls proposed for the site.

As part of the update to the long term storm water management program, the West Valley City Engineering Standards have been developed and will be adopted by City Council in November 2015. Included in these standards are requirements to promote the pre-development hydrology for new developments or improve the hydrology of a redeveloped site and reduce storm water discharge.

Engineering Standards have been provided to the Division of Water Quality.

4.2.5.1 Long-Term Storm Water Control Requirements

Prior to the issuance of the Storm Water Construction Permit and the Long Term Storm Water Management Permit, commercial projects must include in their design an oil/water separator for all parking areas. Commercial developments are also required to include BMPs as described in the Outline for Storm Water Management Plan. This outline is provided to all developers applying for these permits and is included in Appendix E.

Modifications and updates to the West Valley City Code are being made concurrent to the adoption of the Engineering Standards. Part of the updates include using Engineering Standards established by the West Valley City Engineering Division with more specific BMP selection, design, installation, operation and maintenance requirements to meet the requirements of this minimum control measure.

4.2.5.2 Long-Term Enforcement Strategy

A site plan review is required as part of the process to receive storm water permits from the City. During the site plan review, it can be verified that the development includes long-term storm water protection measures as required. Site inspections are completed during construction which ensure that proposed long-term storm water protection measures are installed and perform their function properly. Where violations exist, the Escalating Enforcement procedures found in Appendix G will be followed to ensure compliance. These procedures may include citations, fees and/or requirements to correct deficiencies.

West Valley City Code, Sections 18-9-113 through 18-9-116 and Sections 10-2 through 10-4 authorizes the use of these enforcement strategies.

4.2.5.2.1 Sanctions for Violations

Steps to impose sanctions against violations of the West Valley City Code are found in the Escalating Enforcement Procedures located in Appendix G. These steps range from verbal warnings to civil, criminal and/or other legal remedies to bring a violation into compliance. Recalcitrant violators who continue to refuse compliance will be imposed higher escalating sanctions, fees and/or other legal remedies until compliance is achieved and any additional judgments levied upon the violator by the Administrative Judge are fulfilled. The same process

may be followed for chronic violators who continue to commit the same violation in order to ensure future compliance.

4.2.5.2.2 BMP Selection

The Long-Term Storm Water Management Program will require BMPs to be installed in new developments. These requirements are intended to protect water quality by installing BMPs which reduce targeted pollutants for the proposed use. Redevelopment projects will be required to install BMPs which will reduce the amount of pollutants the site currently contributes to the storm water system.

Developers and owners will be required to submit documentation about their proposed BMPs, which include how the BMP was selected; the pollutant removal expected from the proposed BMP; and the technical basis which supports performance claims.

4.2.5.3 New Development and Re-Development Standards

Prior to developing or redeveloping a site, the West Valley City Planning Department provides a packet to the developer and/or the owner containing standards and requirements which must be met prior to construction. Included in this packet is an application for a Storm Water Construction Permit and a Storm Water Management Permit. These applications, along with their related checklists, must be submitted to West Valley City with a set of proposed plans.

The Development Section Manager and/or the Development Review Engineer review submitted site plans and applications prior to issuance of a permit. This review includes verifying that required storm water controls or management practices are included in the design. Copies of these applications and permit requirements are included in Appendix E.

4.2.5.3.1 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.

4.2.5.3.2 LID Implementation

The Engineering Standards require all new developments to prepare a Low Impact Development Analysis. This analysis will include the volume based evaluation of pre-development hydrology and post-development hydrology, evaluation of LID BMPs, and discussion of implementation of BMPs.

The Storm Water Utility Billing system also encourages LID implementation through rate discounts for businesses per West Valley City Code, Section 20-7-107 and the Consolidated Fee Schedule found in West Valley City Code, Section 1-2-110. All sites, residential or business, are charged a storm water fee, based upon an Equivalent Resident Unit (ERU). Rate A is the standard rate charged at \$4.00 per month per ERU. Each business is charged one ERU per 2830 square feet of impervious area on their site. .

Rate B requires certain additional BMPs be installed onsite through a Storm Water Management Permit which reduce or remove pollutants from storm runoff. These BMPs must be approved by the Engineering Division. Rate B is a reduced rate of \$2.80 per month per ERU. The city's storm water ordinance is being modified concurrent to the adoption of the Engineering Standards to allow Rate B to be given for the voluntary implementation of a Low Impact Development design.

Rate C can be granted, if approved by the Engineering Division, by retaining or infiltrating all storm water runoff from the site. Rate C is a reduced rate of \$1.80 per month per ERU.

4.2.5.3.3 Retrofit Existing Developed Sites

Existing developed sites which apply for a West Valley City Storm Water Management Permit and are adversely impacting water quality will be assessed and evaluated for retrofit opportunities to reduce the water quality impact. A ranking of control measures will be used to determine which sites are best suited for retrofits as well as those that could be considered later for retrofitting.

4.2.5.3.4 Hydrologic Analysis

Design specifications require storm water facilities (i.e. pipe sizes and detention basin sizes) be designed for a 10 year event. Storm data tables are provided to developers and included on our website at <http://wvc-ut.gov/index.aspx?NID=785>. When the Engineering Standards are fully adopted, part of the plan review process will require submittals of the technical specifications of the proposed BMPs. Reviewers will ensure adequate sizing and performance meet requirements in the standards..

The City has required that the Coon Creek, Copper City and Hercules storm water districts (see map in Appendix A) must retain their water on-site and implement infiltration measures. The soils in these areas are favorable for such requirements, and will encourage BMPs installed which will filter water on these sites.

4.2.5.4 Procedures for Site Plan Review (Pre-Construction)

West Valley City encourages a pre-development meeting with the owner/developer to discuss new development and redevelopment projects. During this pre-development meeting, long-term storm water management requirements are provided to the developer. Although a pre-development meeting is not required, it is encouraged and the majority of applicants take advantage of this opportunity to discuss the project prior to design completion. Long-term management practices required on the checklist provided during the pre-development meeting are discussed in the early stages of the design process, requiring long-term management BMPs to be considered and incorporated into the design.

Once plans are finalized and submitted to West Valley City Engineering Division offices, the development staff reviews the plans. Part of the review process includes a consideration of water quality impacts that the proposed project may have on storm water quality. If proposed BMPs adequately address those impacts, the plan is approved.

4.2.5.4.1 SWPPP Requirements

Projects disturbing greater than one acre or that are part of a larger common plan of development are required to submit a SWPPP. Plan review SOPs have been developed and are located in Appendix G and include ensuring that long-term management measures are included in the plans.

4.2.5.4.2 Preferred Design Specifications

Preferred design criteria is provided to developers and contractors as found in the new Engineering Standards. As described in part 4.2.5.3.4 of this SWMP, pipe sizing standards and specifications are provided to developers for design purposes. This design criterion is updated in the Engineering Standards and will be applied once fully adopted by the City Council, a copy of which will be provided to the Division.

Part of the new Engineering Standards will encourage restaurants to locate their oil/water separator in a contained, landscaped area in case an SSO occurs. This will prevent the SSO from entering into the storm drain system.

4.2.5.4.3 Maintain Design Specification Documentation

A copy of the general information provided to the owner/developer as part of the permit application process is maintained by the West Valley City Engineering Division office. Copies of comments made during the site plan review process requiring additional storm water quality evaluation or BMPs are also maintained by the West Valley City Engineering Division office. Copies of the applications and permits are found in Appendix E.

4.2.5.5 Site Inspection and Enforcement of Long-Term Measures

West Valley City has an active program to perform post-construction inspections for any site which has an active Storm Water Management Permit. The SOP for inspecting and enforcing maintenance of required storm water control measures is included in Appendix G.

4.2.5.5.1 Private Property Access for Inspections

West Valley City Code, Sections 18-5-404 through 18-5-406 and the Storm Water Management Permit provide authority to West Valley City to access private property for inspection purposes during construction and post-construction. This applies only to sites with an active Storm Water Management Permit. West Valley City Storm Water Inspectors will perform all inspections. West Valley City Code Section 18-5-405 allows us to impose enforcement measures as necessary to ensure compliance of storm water facility maintenance.

4.2.5.5.2 Permanent Structural BMP Inspections during Construction

Permanent structural BMPs will be inspected at least once during installation by West Valley City Storm Water Enforcement Personnel to ensure proper installation.

4.2.5.5.3 Annual Inspection Reports

Annual inspections will be completed by West Valley City Public Works Department on all post-construction controls. A copy of the inspection form is included in Appendix E.

4.2.5.6 Staff Training

Training has been and will continue to be provided to the planners involved in the plan review process regarding LID BMPs and the standard requirements for long-term management practices. Engineering Division review staff receives training and education about long-term practices and implements improvements in the program. Development Section staff from the Engineering Division will maintain RSR certifications as long as it is provided as a certification by the USWAC. Additional training is discussed in Part 4.2.1.5 of this SWMP. Training records are kept and stored in their respective Departments.

4.2.5.7 Post-Construction Structural Controls Inventory

West Valley City maintains a spreadsheet which lists all sites that have been issued a Storm Water Management Permit. Individual structural controls for these sites are not inventoried but are shown on development and redevelopment plans which are stored in the SIRE database. A Cityworks database has been developed and is being implemented to manage post-construction permits and BMPs, and will serve as the post-construction structural controls inventory.

4.2.5.7.1 Inventory Data Collection

As West Valley City implements the inventory tracking database, each inventory entry will include the information required in the permit.

4.2.5.7.2 Inventory Updates

After annual inspections are completed for post-construction storm water control measures, updated information is recorded on the inspection form. Updates will also be recorded electronically when West Valley City develops an inventory tracking database.

Long-Term Storm Water Management Program Measurable Goals

Measurable goals and BMPs to fulfill this minimum control measure are listed below.

Long-term Storm Water Management Program Measurable Goals					
	<u>Activity/BMP</u>	<u>Measurable Goal</u>	<u>Description</u>	<u>Permit Section</u>	<u>Execution Date</u>
LTM-1	Parking Lot Devices	100% of projects have oil/water separator installed in parking lots	New developments, and parking lot expansions or redevelopments are required to install an oil/water separator type device in all parking lot areas.	4.2.5.1	Ongoing
LTM-2	Long-Term Program	Develop and Implement new Long-Term Program	As part of the new permit requirements, West Valley City will develop and implement a new Long-Term Storm Water Management Program to meet the requirements of this minimum control measure. Part of the new program will include necessary ordinance modifications to the West Valley City Code.	4.2.5.1	Ongoing
LTM-3	LID Options	100% of Storm Water Permit applicants will consider LID options for their development	Develop appropriate BMP recommendations based on land use types and include them in our Engineering Standards made available to all developments. Include requirements in our standards for all developments to consider LID options for their site.	4.2.5.3	Ongoing
LTM-4	Develop Ranking Measures for Retrofits	Establish ranking measures for potential retrofit projects	Create a ranking criteria to measure existing developed sites that adversely impact storm water quality and identify which sites are the best candidates for a retrofit project to improve water quality.	4.2.5.3	Ongoing

LTM-5	Retrofit Existing Sites	Retrofit 2 sites with adverse water quality impacts	Based on the ranking criteria established as part of goal LTM-5, identify at least 2 sites that can be retrofitted to improve water quality impacts and complete the retrofit projects during this permit term.	4.2.5.3	9/4/2018
LTM-6	Design Storm	Establish a Design Storm for Treatment Requirements	Adopt a specific design storm as part of the Engineering Standards and require all new developments to treat the design storm established.	4.2.5.3	Ongoing
LTM-7	Publish Engineering Standards	Publish Engineering Standards	Publish the adopted Engineering Standards with recommended BMPs for development types as well as other minimum control standards required of all developments and redevelopments.	4.2.5.4	Beginning 2016
LTM-8	SWPPP Review	Review 100% of SWPPP submittals for all development types	Review 100% of SWPPP submittals for all projects greater than or equal to one acre or part of a larger common plan of development.	4.2.5.4	Ongoing
LTM-9	BMP Inspection during Construction	Inspect 100% of long-term structural control BMPs	During installation, complete an inspection of all permanent structural control BMPs to ensure they are installed properly.	4.2.5.5	Ongoing
LTM-10	RSR Certification	Provide RSR certification training for Development Section Manager	Have the Development Section Manager attend the RSR class and receive RSR certification	4.2.5.6	Will be completed when USWAC provides updated training
LTM-11	RSI/RSR Certification	Maintain RSI/RSR Certification for West Valley City Storm Water Enforcement Personnel	Provide the training to maintain RSI certification for all West Valley City Storm Water Enforcement Personnel. Provide the training to maintain RSR certification for all West Valley City Development Review Staff.	4.2.5.6	Ongoing

LTM-12	Structural Controls Inventory	Develop a post-construction Inventory Database	Create and develop a database to track all post-construction structural controls.	4.2.5.7	Ongoing with full implementation in 2016
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4.2.6 Pollution Prevention and Good Housekeeping for Municipal Operations

The following section describes various components of the O&M program for all City-owned or operated facilities.

4.2.6.1 City Owned or Operated Facilities and Storm Water Controls

In Appendix F is a list of all City-owned or operated facilities, parks and storm water controls.

4.2.6.2 Inventory Assessment

A group of key personnel met in 2012 to make an initial assessment of city-owned facilities listed in Appendix F. The Public Works Director, Parks and Recreation Director, City Engineer, Public Works Operations Manager, Storm Water Engineer, Storm Water Permits Officer and Storm Water Operations Foreman were in attendance. City-owned facilities and operations and their risk for discharge potential were discussed. It was found during this discussion that the majority of potential pollutants with the highest risks of entering into our storm drain systems include sediments, nutrients, and hydrocarbons from petroleum products. Below is a list of identified pollutants based on facility type:

- Parking Lot Maintenance (All City-owned parking lots) – Petroleum products, pavement marking paint, general trash, hydrocarbons.
- Storm Drain Systems – General trash and debris, sediments and nutrients.
- Golf Course Maintenance Shops – Lawn clippings, herbicides, fertilizers, hydrocarbons and petroleum products from equipment maintenance.
- Open Space Areas (parks, trails, buildings, golf courses) – Lawn clippings, herbicides, fertilizers and general trash.
- Exterior Building Maintenance (All City-owned facilities) – Herbicides, fertilizers, pesticides, general trash and hydrocarbons from parking lots.
- Public Works Shop/Fleet Building – Sediment, general trash, hydrocarbons, petroleum products, vehicle fluids and salt.

4.2.6.3 “High Priority” Facilities

“High priority” facilities were determined to include the Public Works shops building (fleet, maintenance and operations) and both City-owned and operated golf course maintenance buildings and maintenance areas. These were determined because of the nature of operations and their activities that may impact storm water quality.

4.2.6.4 Facility-Specific SOP’s

West Valley City owns and maintains the City Hall offices, Public Safety offices, five (5) fire stations, two (2) golf courses, a fleet building, the Public Works Shops and seven additional buildings. There are 27 City Parks and additional trails or other open spaces which are owned and maintained by West Valley City. Those buildings and facilities which have a potentially substantial impact on storm water quality follow operations and SOPs which prevent negative impacts to the storm water system.

Each of the three (3) “high priority” facilities identified in part 4.2.6.3 of this SWMP has established facility-specific SOPs, as found in Appendix G. New and redeveloped facilities will consider LID techniques to improve storm water quality for these projects.

4.2.6.4.1 Buildings and Facilities O&M

The City Hall, Public Safety Building, Fire Stations, Harman Home, Utah Cultural Celebration Center and USANA Amphitheatre 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 the Public Works Fleet Maintenance building are located adjacent to each other. In addition to operations and maintenance activities listed in the first paragraph of this section and regular trash cleanup, the yard for these two buildings is deep cleaned in the spring and fall.

The West Valley City Fire Department performs training exercises at station #73, located at 2834 South 2700 West. Most exercise activities utilize fire hydrants or culinary water. On occasion, foam is used. In these instances, the foam is a protein based product which encourages plant growth, but does not pose a major risk to storm water quality. Runoff is generally not experienced, and discharges are contained on-site.

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 Maintenance Foreman. Storm drain boxes found in the parking lot are also cleaned about five times annually when sweeping occurs. For parking lot and exterior maintenance, the Pothole Patching, Remove & Replace Asphalt, Street Sweeping, Vactor Operations and Storm Drain Cleaning and Lawn Mowing SOPs are followed and found in Appendix G. 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.

Within 180 days after coverage by this permit, staff members will identify all floor drains inside West Valley City facilities. As part of the inventory collection process, West Valley City will ensure proper discharge of floor drains to sanitary sewer facilities. Floor drains for several buildings which are operated by the Parks and Recreation Department have already been located and are shown on the maps included in Appendix F. All storm drains on West Valley City owned facilities will be inventoried and mapped. As changes occur, updates to the inventory and map will be made for floor drains and storm drains at West Valley City facilities.

4.2.6.4.2 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. The Salt Storage SOP found in Appendix G describes steps taken to ensure salt does not enter into the storm drain system. During summer months, oils for fleet maintenance are stored in the deicing material storage area towards the back of the covered area.

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.

4.2.6.4.3 Parks and Open Space O&M

The Parks and Recreation Department maintains the two golf courses, the Fitness Center and all City Parks and open trails. All of their chemicals are stored indoors, at the maintenance buildings at the golf courses 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 as found in Appendix G and follows a general frequency schedule found in the Parks and Recreation Storm Water Management Plan located in Appendix F. 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 and Recreation Department has also established a SWPPP which is followed as operations and maintenance activities occur. A copy of their SWPPP, as well as locations of floor drains, is located in Appendix F.

All storm drains located in parks or open space facilities will be inventoried by staff within 180 days of coverage under this permit. 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. A current list of pet waste signs located in City parks is found in Appendix F and updated when additional signs are installed.

4.2.6.4.4 Vehicle and Equipment O&M

All City-owned vehicles are maintained by the Public Works Fleet Division. They are located inside the Fleet Maintenance building. 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 Shops Storage and Cleaning Procedures are followed to reduce pollutants from entering the storm drain system and are found in Appendix G.

The maintenance building also houses an indoor car wash. When the car wash is utilized, floor drains connected to the sanitary sewer system capture any water and cleaning materials. West Valley City car washing policies are found in Appendix F and all employees who use City-owned vehicles are educated about these policies.

The only fueling area (owned by the State of Utah) located on West Valley City property is located at the West Valley City Public Works Shops building. Storm water at the fueling area does not pose a significant pollution risk due to existing topography on-site.

4.2.6.4.5 Roads, Highways and Parking Lots O&M

City-owned roads and parking lots are maintained by the Public Works Operations Division personnel annually. 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. A copy of the SOPs followed for each of these activities is included in Appendix G.

Priorities are established by the Operations Manager and Public Works Director based on needs and time of year. During the summer months, roadway maintenance takes priority, including pavement marking, roadway sealing, asphalt repairs and concrete repairs. During the winter months, snow removal takes priority. As needed during winter months, potholes which may pose a significant threat to the safety of vehicles and their operators are temporarily repaired. When weather permits, a permanent repair is reconstructed.

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. A copy of the Street Sweeping SOP is located in Appendix G.

Snow hauling does not occur. If West Valley City were to encounter a need for snow storage, the Snow Hauling SOP would be followed, as shown in Appendix G.

Graffiti is a problem that can be challenging for any community. West Valley City has a staff member who provides cleanup of graffiti found along City roadways and located within the public right-of-way. For removal purposes, Taginator, Tagaway or latex paint is used to remove the graffiti. A copy of the Taginator technical sheet is found in Appendix F. Procedures for removing the graffiti are found in Appendix G.

4.2.6.4.6 Storm Water Collection/Conveyance System O&M

All of the public storm water system owned by West Valley City is maintained by the Public Works Operations personnel. Maintenance activities completed annually include cleaning out storm drain boxes with vactor trucks, jet washing pipe lines, maintaining storm water collection basins, rodding storm drains and ditch cleaning. Priorities are established annually by the Operations Manager and the Storm Water Operations Foreman to determine which pipes and boxes are cleaned. Priority areas include larger diameter pipes with larger storm water volumes, areas where more silt and debris accumulates into the pipe system and areas where flooding may occur without proper cleaning. A copy of the Storm Drain Maintenance SOPs for these activities are located in Appendix G.

Vactor trucks clean out each storm drain catch basin once annually. Observations for maintenance needs are completed at the same time. Located in Appendix F is 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 will be inspected annually by the Storm Water Operations Foreman. When deficiencies exist, cleaning, dredging and other maintenance activities are performed by Operations 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 West Valley City Public Works Shops yard, where the waste is deposited into a settling basin. Water collected from the waste settles and drains into the sanitary sewer system. Remaining solid waste is then transported to the local landfill. Logs of landfill loads are maintained by and located in the office of the Storm Water Operations Foreman. If waste materials to be disposed of require special handling other

than dropping it off at the landfill, the Operations Manager or the Storm Water Maintenance Supervisor will contact an appropriate 3rd party specialized in handling and disposing such waste.

4.2.6.4.7 Other Facilities and Operations O&M

West Valley City owns three (3) facilities which are operated by 3rd party companies:

The Maverik Center is operated and managed by the Centennial Management Group. Their responsibilities include operations and interior housekeeping. These regular activities do not pose a threat to storm water quality, as any chemicals are stored indoor and floor drains are connected to the sanitary sewer system. The exterior parking lots and drains are maintained by West Valley City.

Hale Centre Theatre is owned by West Valley City but operations are managed by a board of trustees. All interior activities are contained and any accompanying discharges enter the sanitary sewer system. West Valley City sweeps their parking lots as part of our regular street sweeping.

The Acord Ice Center (maintained and operated by Salt Lake County) is housed in the same building as the Family Fitness Center, owned by West Valley City. However, the exterior grounds are maintained by West Valley City. All interior activities of the Acord Ice Center are the responsibility of Salt Lake County.

4.2.6.5 Third Party Expectations

West Valley City performs its own maintenance and does not contract with a 3rd party for these activities.

4.2.6.6 “High Priority” Facility Inspections

The “high priority” facilities defined in Part 4.2.6.3 of this SWMP were identified because of the higher potential risk of pollutants contaminating the storm drain system due to the nature of work performed at these facilities. Weekly visual inspections are completed to verify that no pollutants are visibly entering the storm drain system. Additionally, more thorough quarterly visual and comprehensive inspections are completed to ensure that proper SOPs are followed and that no pollutants are contaminating storm drain water quality. Inspection forms document the condition of these facilities and corrective actions to complete, if necessary.

4.2.6.6.1 Weekly Visual Inspections

Weekly visual inspections are performed for all “high priority” facilities. These facilities include the Ridge Golf Course maintenance building, the Stonebridge Golf Course maintenance building and the Public Work Shops facilities. Weekly inspections are completed at the golf courses by the Senior Golf Course Superintendent using the Golf Course Weekly Inspection Checklist. Weekly inspections are completed at the Shops building by the Storm Water Operations Foreman utilizing the Shops Weekly Inspection Checklist. A copy of the checklists used for weekly visual inspections is included in Appendix F. Deficiencies and corrective actions are documented and a log kept showing when weekly visual inspections were completed will be maintained at the facility where the inspections took place.

4.2.6.6.2 Quarterly Comprehensive Inspections

Quarterly comprehensive inspections will be performed at all “high priority” facilities. The Storm Water Operations Foreman completes the inspections for the Golf Course maintenance

buildings. The Permits Officer from the Public Works Engineering Division completes the quarterly inspections for the Shops building. Procedures include paying attention to pollutant-generating areas and storm water controls found on-site. A copy of the SOP for Quarterly Comprehensive Inspections is included in Appendix G.

Currently the UPDES Inspection Form is utilized as a checklist for these inspections. During the coverage of this permit, a new form will be developed specifically for use at these facilities. Deficiencies and corrective actions are documented on the inspection form. A follow up inspection or confirmation of corrective actions being completed will be confirmed for all corrective actions required. Copies of these reports will be submitted to the Storm Water Engineer and maintained with the SWMP documents.

4.2.6.6.3 Quarterly Visual Observations of Storm Water Discharges

As part of the quarterly inspections by the Storm Water Operations Foreman and the Permits Officer of “high priority” facilities, and where feasible, storm water discharges will be observed. Where weather conditions preclude West Valley City from completing these observations during winter weather, attempts to complete at least 4 observations annually during the wet season will be completed.

Observations of storm water discharges will be noted on the quarterly comprehensive inspection form, including deficiencies and recommended corrective actions. A copy of the SOP for Quarterly Comprehensive Inspections, including visual observations, is included in Appendix G.

4.2.6.7 Water Quality Impacts of New Structural Controls

The Storm Water Operations Supervisor and Storm Water Engineer will assess existing flood management structural controls within 18 months of coverage under this Permit to determine if changes or additions can be made to improve water quality. Findings and recommendations will be reported on the Structural Assessment Form, a copy of which is included in Appendix F.

4.2.6.7.1 Assessment of Existing Structural Controls

The Public Works Department met with several key personnel involved with storm water quality and identified three ponds that will be retrofitted with a water quality improvement feature before discharging the water into the Jordan River. These ponds are located to the West of the Jordan River on the south side of 3300 South, the north side of 3900 South and the Metro Pond on the south side of SR-201. These three retrofits will be completed during the coverage of this permit.

Additional retrofit opportunities may present themselves after the assessment of all structural controls is completed as described in part 4.2.6.7 of this SWMP.

4.2.6.8 Compliance of Public Construction Projects

West Valley City capital improvement projects which are greater than or equal to one acre will comply with the same water discharge requirements as private projects. This includes construction and post-construction storm water quality protection 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.

All public construction projects have a pre-construction meeting with the contractor, invited utility providers who choose to attend and Public Works Engineering 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 are 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.

A checklist will be developed which will be used on all public construction project and will include consideration of LID techniques, any impacts to storm water quality, 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.

4.2.6.9 Employee Training

Public Works Department personnel are trained annually regarding storm water quality as it relates to their job responsibilities. Parks and Recreation personnel who are involved in maintenance activities for city parks, golf course and equipment which may have an impact on storm water quality are trained annually. This training may include storm water quality topics, SOPs, proper policies or any other topics which may relate to their job responsibilities and storm water quality protection. Please refer to Part 4.2.1.5 for additional detailed information about employee training. All training provided is documented and records are stored with the Storm Water Engineer.

Pollution Prevention and Good Housekeeping Program Measurable Goals

Measurable goals and BMPs to fulfill this minimum control measure are listed below.

Pollution Prevention and Good Housekeeping Program Measurable Goals					
	<u>Activity/BMP</u>	<u>Measurable Goal</u>	<u>Description</u>	<u>Permit Section</u>	<u>Execution Date</u>
PPGH-1	Floor Drains	Identify 100% of Floor Drains	Floor drains located in city-owned facilities will be identified, inventoried and will confirm that floor drains connect to the sanitary sewer system within 180 days of coverage under this permit.	4.2.6.4.1	3/4/2014
PPGH-2	Storm Drain Mapping	Map 100% of storm drains on City-owned facilities	All storm drains located on the city-owned facilities will be mapped and included in the GIS system.	4.2.6.4.1	Ongoing
PPGH-3	Street Sweeping	100% of streets swept at least 5 times annually	All City-owned and maintained roadways will be swept at least 5 times annually.	4.2.6.4.5	5 Times Annually
PPGH-4	Catch Basin Cleaning	100% of catch basins cleaned annually	All catch basins will be cleaned at least once per year.	4.2.6.4.6	Annually

PPGH-5	Weekly Visual Inspections	Complete 100% of weekly visual inspections	100% of weekly visual inspections for the three "high priority" facilities to be completed.	4.2.6.6.1	Weekly
PPGH-6	Quarterly Comprehensive Inspections	Complete 100% of Quarterly Comprehensive Inspections	100% of quarterly comprehensive inspections of the three "high priority" facilities to be completed.	4.2.6.6.1	Quarterly
PPGH-7	Quarterly Storm Water Discharge Observations	Document 100% of Quarterly Storm Water Discharge Observations	Quarterly storm water discharges observed at the three "high priority" facilities will be documented and implement any corrective actions recommended.	4.2.6.6.1	Quarterly
PPGH-8	Existing Structural Controls Assessment	Assess 100% of city-owned structural controls	All existing flood management structural controls owned by West Valley City will be assessed. Any recommended changes or additions will be documented and implemented into the Capital Improvement program for renovations.	4.2.6.7.1	3/4/2015
PPGH-9	Project Evaluation Checklist	Develop and implement a project evaluation checklist	Develop and implement a project evaluation checklist that will be used on all public construction projects. The checklist will include consideration of LID techniques and any impacts to storm water quality.	4.2.6.8	3/4/2015
PPGH-10	Employee Training	Train 100% of employees	Provide training opportunities for all employees whose job responsibilities involve storm water quality impacts.	4.2.6.9	Annually

4.4 Sharing Responsibility

4.4.1 Reliance on Other Entities

West Valley City does not rely on any other entity to share its responsibilities for executing the minimum control measures in their entirety discussed in this SWMP. Should there be any form of reliance upon a 3rd party to carry out any portion of the details in this SWMP in the future, the expectations and requirements will be described and enforced through agreements between West Valley City and the 3rd party.

4.5 Reviewing and Updating Storm Water Management Programs

4.5.1 Annual Review

At each internal monthly storm water coordination meeting, one of the six minimum control measures is discussed. Each minimum control measure is rotated every six months into the discussion of the monthly meetings, resulting in each minimum control measure being discussed twice a year. Included in the discussion is an evaluation of existing program measures, proposed improvements to the program and ensuring that all permit requirements are being met. Assignments are given to personnel in attendance for any changes and improvements to the programs. The month following assigned tasks being given, follow up reports are provided on the progress of each assignment.

Any updates that are made to the SWMP will be submitted to the DEQ.

4.5.1.1 Review Schedule of Program Measures

The following schedule is utilized in our monthly coordination meetings to discuss each minimum control measure of the permit and its associated programs.

Storm Water Coordination Meeting Topics		
<u>Month</u>	<u>MCM Topic to Discuss</u>	<u>MCM Topic to Follow Up On Assignments</u>
January	Construction Site Runoff Control	Long-Term Storm Water Management
February	Illicit Discharge Detection & Elimination	Construction Site Runoff Control
March	Public Involvement/ Participation	Illicit Discharge Detection & Elimination
April	Public Education & Outreach	Public Involvement/ Participation
May	Pollution Prevention and Good Housekeeping for Municipal Operations	Public Education & Outreach

June	Long-Term Storm Water Management	Pollution Prevention and Good Housekeeping for Municipal Operations
July	Construction Site Runoff Control	Long-Term Storm Water Management
August	Illicit Discharge Detection & Elimination	Construction Site Runoff Control
September	Public Involvement/ Participation	Illicit Discharge Detection & Elimination
October	Public Education & Outreach	Public Involvement/ Participation
November	Pollution Prevention and Good Housekeeping for Municipal Operations	Public Education & Outreach
December	Long-Term Storm Water Management	Pollution Prevention and Good Housekeeping for Municipal Operations

4.5.1.2 Revisions or Changes to BMPs

Following the same schedule outlined in part 4.5.1.1 of this SWMP, any changes made in BMPs will be discussed and any changes or revisions made to BMPs will be updated in the SWMP and reported to the DEQ.

4.5.1.3 Assessment of SWMP

An overall assessment of the SWMP and its associated BMPs, programs and goals will be discussed in segments in the monthly storm water coordination meetings. Ineffective portions of the program will be replaced and any updates will be submitted to the DEQ on an annual basis.

4.5.2 Program Updates

Storm Water Management Program updates will be made as needed in accordance with update requirements.

4.5.2.1 Additions to Programs

Additions made to the SWMP document will be submitted to the DEQ and documented.

4.5.2.2 Replacing Program Details

When ineffective or unfeasible BMP's are replaced by alternative BMP's, a description of our evaluation will be documented and submitted to the DEQ for approval. The evaluation will include:

- An explanation of why the BMP is ineffective or unfeasible
- Expected effectiveness of replacement BMP
- Why the replacement BMP will achieve the goal of the ineffective BMP

4.5.3 Documentation of Changes

Change requests will be written, signed and submitted to the DEQ per requirements.

5.3 Analytical Monitoring

West Valley City is a Phase II co-Permittee and is not required to perform analytical monitoring.

5.4 Non-analytical Monitoring

Per Part 4.2.3.3.2, visual dry weather screening will be completed.

5.5 Record Keeping

5.5.1 Maintain SWMP

All portions of the SWMP and supplementary documents located in the Appendices will be updated and maintained to stay current with program details.

5.5.2 Supplementary Document Updates

All modifications to supplementary documentation (i.e. appendices, SOPs included in the SWMP) will be submitted to the DEQ.

5.5.3 Division Modifications

If the Division provides written determination that parts or all of the supplementary documents are not in compliance with permit requirements, modifications will be completed within a time frame specified by the DEQ.

5.5.4 Document Retention

All documents related to compliance with the permit and the SWMP will be maintained for at least five years.

5.5.5 Public Availability

All documents will be made available to the public upon request and will be posted on the City website.

5.6 Reporting

5.6.1 Annual Report

Salt Lake County collects and combines all reports provided to them from the other MS4s included in this Permit and submits them together to the Division. West Valley City will continue to submit our annual report to Salt Lake County. If changes are made to this arrangement, we will submit our annual report directly to the Division.

5.6.2 Appendices to the Annual Report

Together with the annual report, West Valley City will submit appendices I, II and III as required by the State.

5.6.3 Report Certification

Each annual report will be signed and certified according to Part 6.8.

5.7 Legal Authority

Through the West Valley City Municipal Code, West Valley City has ensured appropriate legal authority to:

- Control the contribution of pollutants to the MS4
- Prohibit illicit and non-storm water discharges
- Control the discharge of spills, dumping or disposal of non-storm water materials
- Control interagency contributions in West Valley City jurisdiction
- Require compliance to meet measures
- Conduct inspection, surveillance and monitoring activities to ensure compliance

6.0 Standard Permit Conditions

West Valley City will comply with the standard permit conditions outlined in Part 6.0.

6.8 Signatory Requirements

The permit application will be signed by either a principal executive officer or ranking elected official per the requirement in part 6.8.1 of the Permit.