CHAPTER FOUR

CONSTRUCTION SITE STORM WATER RUNOFF CONTROL PROGRAM

Permit Requirement 4.2.4. Program description

The City has developed and implemented a Construction Site Storm Water Runoff Control Program since 2007 to reduce pollutants in any storm water runoff to the MS4 from sites with a land disturbance greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale. Public and private projects, including projects proposed by the City's own departments and agencies will comply with these requirements.

Permit Requirement 4.2.4.1 Ordinance

The City has developed and adopted an ordinance that requires the use of erosion and sediment control practices on any site that conducts land disturbance activities, and are proposing changes to better address the new MS4 permit. The ordinance requires compliance will all the terms of the UPDES Storm Water General Permits for Construction Activities. The current and proposed ordinances include sanctions to ensure compliance. The ordinance applies to any kind of land disturbance activities that disturb an area greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale. The ordinance also requires storm water pollution prevention controls on sites that do not meet the description mentioned above.

Permit Requirement 4.2.4.1.1 SWPPP requirements

The City Ordinance Title 10 Chapter 9 Land Disturbance Permit requires the construction operators to prepare a Storm Water Pollution Prevention Plan (SWPPP) and apply sediment and erosion control BMPs to protect water quality, reduce the discharge of pollutants, and control waste such as, but not limited to, discarded building materials, concrete truck washout, chemicals, litter and sanitary waste at the construction site that may cause adverse impacts to water quality. The proposed ordinance "10-9-204 Plans and Specifications (1)(b)(i)" Requires that the SWPPP documents must be submitted using the latest version of the SWPPP template posted on the Utah Department of Environmental Quality Division of Water Quality web site.

Permit Requirement 4.2.4.1.2 Maintaining permit coverage for duration of project

The City Ordinance Title 10 Chapter 9 Land Disturbance Permit requires the construction operators to obtain and maintain coverage under the applicable UPDES Storm Water Permits for Construction Activities for the duration of the project.

Permit Requirement 4.2.4.1.3 Inspection access to private properties

The proposed City Ordinance "10-9-210 Right of Entry" includes provisions for City personnel to access permitted sites for the purpose to ensure compliance with the City Ordinance 10-9.

Ordinance Enforcement

Permit Requirement 4.2.4.2 Enforcement mechanism

The proposed City Ordinance "10-9-4 Enforcement, Violations and Penalties" provides the mechanism for the <u>Engineering Division SWPPP Inspector and/or Code Enforcement Agent</u> to get compliance from operators of land disturbance activity sites.

Permit Requirement 4.2.4.2.1 Enforcement procedures plan

An enforcement procedures plan will be developed to include specific processes and sanctions to minimize the occurrence of violations, and obtain compliance from violators. The proposed City Ordinance "10-9-403 Remedies and Enforcement Actions" include the available sanctions for the enforcement. The plan will include appropriate, escalating enforcement procedures and actions.

The Engineering Division standard operating procedures to get compliance from operators of land disturbance activity sites plan is described as follows:

- After a site inspection or upon a violation to the LDP requirements is found:
 - A verbal warning with specific amount of time is given to the operator to correct deficiency, if not corrected;
 - An NOV is issued describing the violation to be corrected and additional time is given to correct the deficiency with the threat to stop work, issue a citation or both, if not corrected with in time frame given;
 - A stop work order is issued, this can be verbal or in writing, all work must be stopped except for the activity needed to repair deficiency, at this point, a citation could be issued depending on the severity or recurrence of the problem;
 - A citation is issued to appear in court to face possible fines even after the deficiency is corrected, if problem persists;
 - o LDP permit revocation; and
 - Call of bond to repair deficiency.

Permit Requirement 4.2.4.2.2 Tracking enforcement actions

The <u>Engineering Division SWPPP Inspector</u> has been documenting and tracking all of the enforcement actions, the tracking system mechanism include the use of an electronic spread sheets and GIS mapping.

Lead Entity: Engineering Division

Year	Measurable goal action summary:	Document Number of enforcement actions
7/1/2016 -		
6/30/2017		
7/1/2017 -		
6/30/2018		
7/1/2018 -		
6/30/2019		
7/1/2019 -		
6/30/2020		
7/1/2020 -		
6/30/2021		

SWPPP Pre-construction review

Permit Requirement 4.2.4.3. SWPPP review procedures

The <u>Engineering Division</u> will develop and implement procedures for pre-construction Storm Water Pollution Prevention Plan (SWPPP) review and keep records for all sites that obtain a land disturbance permit to ensure plans are complete and in compliance with State and Local regulations. Records of these projects will be kept on file for five years or until construction is completed, whichever is longer.

SWPPP review procedures:

- After the Land Disturbance Permit pre-application meeting, the Engineering Division, requests that the SWPPP template be submitted electronically on "Word" format;
- The Engineering Division creates an electronic file for the project being reviewed;
- The Engineering Division creates an entry on the spread sheet used to track land disturbance sites;
- The Engineering Division enters the site location on a GIS map;
- The Engineering Division uses a SWPPP check list to check the SWPPP template and chosen BMPs for completeness;
 - Correct information on the SWPPP is marked on the check list as "Yes" and information is copied on to the check list as written on the "Description" column;
 - Missing information on the SWPPP is marked on the check list as "No" and a request is made to address the missing information, an explanation of what is missing is written on the "Description" column of the check list;
 - o Incomplete information on the SWPPP is marked on the check list as "Revise" and an explanation of what is missing is written on the "Description" column of the check list"
- Red line comments are also written on the SWPPP template;
- SWPPP drawings are reviewed and comments are also made on them; and
- The revised SWPPP template and check list are sent back to the applicant for corrections to be made and then re-submit SWPPP.

The Land Disturbance Permit will not be issued until every item on the SWPPP check list is correct.

Permit Requirement 4.2.4.3.1 SWPPP Pre-construction review

The <u>Engineering Division</u> will conduct a SWPPP pre-construction review meeting that will include a review of the site design, the planned operations at the construction site, planned BMPs during

the construction phase, and the planned post-construction BMPs to manage runoff created after development.

The SWPPP pre-construction meeting between the Engineering Division SWPPP Inspector and site operator will review the following items:

- Critical parts of the SWPPP including:
 - Sensitive areas to be protected;
 - Receiving waters;
 - o Potential sources of pollution;
 - o Erosion and sediment controls BMPs;
 - Good housekeeping BMPs;
 - o Post-construction BMPs;
 - o Inspection schedule;
 - SWPPP amendment log;
 - o Inspection reports.
- City enforcement procedures; and
- NOT procedures.

Permit Requirement 4.2.4.3.2 SWPPP review check list

The <u>Engineering Division</u> reviews each SWPPP considering the potential water quality impacts; the procedures for the SWPPP review include a check list to ensure that all the proper SWPPP BMPs and documentation is included on this document before the land disturbance permit is issued.

SWPPP Checklist Subdivision and operator name Date					
		SWPPP Information			
Location	Correct	Description			
	Y=Yes N=No				
	R=Revise				
1.1 Owner(s), Operator, Contractors					
Owner	Y				
Operator (GC, Project Manager)	Y				
Site Supervisonr	Y				
SWPPP Contact SWPPP Prepared by:	Y Y				
Emergency 24 hr. contact	Y				
1.2 Storm Water Team	-				
Oversite	Y				
Modifications	Y				
Compliance	Y				
Installations Maintenance	Y Y				
Inspections	Y				
Corrective Actions	Y				
1 Project Site Information					
Site Name	Y				
Adress	Y				
UPDES Tracking Number	Y				
2.2 Nature of Construction Activities 2.3 Construction Site Estimates	Y				
Total project area	Y				
Area to Be Disturbed	Y				
Runoff coefficients before and after construction	Y				
.4 Soils, Slopes, Vegetation, and Current Drainage Paterns					
Soil Type	Y				
Slopes	Y				
Drainage Patterns	Y				
Vegetation 2.5 Emergency Related Project ?	Y				
2.6 Phase/Sequence of Construction Activity	Y				
2.7 Site Features and Sensitive Areas to be Protected	Y				
.8 Maps	Y				
Section 3 Pollution Prevention Standards					
.1 Potential Sources of Pollution	Y				
.2 Non-Storm Water Discharges	Y				
3 Natural Buffers of Equivalent Sediment Controls	Y				
ection 4 Erosion and Sediment Controls .1 Minimize Disturbed Area Protect Natural Features and	Y				
.2 Establish Perimeter Controls and Sediment Barriers	Y				
.3 Retain Sediment On-Site	Y				
.4 Establish Stabilized Construction Exits	Y				
.5 Protect Slopes	Y				
1.6 Stockpiled Sediment or Soil	Y				
1.7 Minimize Dust	Y				
.8 Topsoil	Y				
.9 Soil Compaction .10 High Alititude/Heavy Snows	Y Y				
I.11 Linear Activities	Y				
.12 Chemical Treatment	Y				
.13 Stablize Soils	Y				
.14 Final Stabilization	Y				
Section 5: Pollution Prevention					
.1 Spill Prevention and Response	Y				
.2 Construction and Domestic Waste	Y				
.3 Washing of Applicators and Containers Used for .4 Establish Proper Building Material Staging Areas	Y Y				
.5 Establish Proper Equipment/Vehicle Fueling and	Y				
.6 Control Equipment/Vehicle Washing	Y				
7.7 Pesticides, Herbicides, Insecticides, Fertilizers, and	Y				
.8 Other Pollution Prevention Practices (Street	Y				
Section 6: Inspections and Corrective Actions					
.1 Inspections					
6.1.1 Personnel 6.1.2 Inspection Schedule	Y Y				
6.1.2 Inspection Schedule .2 Corrective Actions	Y				
.3 Delegation of Authority	Y				
Section 7: Training and Recordkeeping					
.1 Training	Y				
.2 Recordkeeping	Y				
Section 8: Water Quality					
3.1 UIC Class 5 Injection Wells 3.2 Discharge Information	Y Y				
3.2 Discharge Information 3.3 Receiving Waters	Y				
.4 Impaired Waters	Y				
.5 High Water Quality	Y				
.6 Dewatering Practices	Y				
.7 Control Storm Water Flowing Onto and Trhough the	Y				
.8 Protect Storm Drain Inlets	Y				
ection 9: Post-Construction BMPs	Y				
ection 10: Certification	Y				
ppendix A General Location Map ppendix B Site Maps	Y Y				
ppendix B Site Maps ppendix C BMP Specifications	Y				
appendix C BMP Specifications	Y				
appendix E NOI	Y				
appendix E Additional Information (i.e. Documentation;	Y				
ther permits such as dewatering, stream alteration, wetland;					
nd ouf the date SWPPP documents, local permit)	.,				
appendix G Delegation of authority	Y				
nnondiv U Subcontract	Y				
	v				
Appendix I Training log	Y Y				
Appendix I Training log Appendix J Grading and stabilization activities log					
Appendix H Sabcontractor certifications/agreements Appendix I Training log Appendix J Grading and stabilization activities log Appendix K SWPPP Amendment log Appendix L Corrective action log Appendix U L Corrective action log Appendix M inspection reports	Y				

Permit Requirement 4.2.4.3.3 Priority construction sites

The <u>Engineering Division</u> will identify and document priority construction sites. Sites will be evaluated and identified as priority construction sites based on the following factors as a minimum:

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

Construction Site Inspections

Permit Requirement 4.2.4.4 SOPs for site inspections and enforcement

The <u>Engineering Division</u> SWPPP Inspector is the person responsible for site inspections that disturb an area greater than one acre, he may assign common plan of development inspections to the building department inspectors as needed. Enforcement procedures will be initiated by the SWPPP Inspector and may require assistance from the Code Enforcement Officer when all efforts to gain voluntary compliance have been exhausted, the Code Enforcement Officer will then issue a citation based on the proposed City Ordinance 10-9-4.

Procedures for an inspections and enforcement are as follows: Inspection procedures:

- 1. The SWPPP inspector will open an electronic file for each SWPPP inspection that will eventually contain a copy of the SWPPP Compliance Inspection Form, pictures, maps, and any other information gathered.
- 2. The SWPPP inspector will pre-fill the known fields of the SWPPP compliance inspection form using the latest version of the State approved inspection form.
- 3. The SWPPP inspector shall familiarize himself/herself with the SWPPP and identify all BMPs prior to inspecting the site.
- 4. At the time of inspection, the SWPPP inspector shall introduce himself/herself to the site operator representative and review the SWPPP template and fill the fields of the SWPPP compliance inspection form that have to do with record keeping (questions 1, 3-5);
- 5. Proceed to do a field inspection and fill the fields of the SWPPP compliance inspection form that have to do with erosion, sediment and good house keeping controls (questions 2, 6-14) document site conditions with photos and narrative descriptions of deficiencies;
 - Collects information by observing and asking questions to obtain new information about: management practices, construction techniques or a piece of equipment;
 - The inspector should evaluate actual implementation and maintenance of BMPs practices on-site compared to how implementation and maintenance is detailed in the SWPPP. At a minimum, the inspector should observe all areas of active construction. Observing equipment and materials storage areas, recently stabilized areas, and evaluate the effectiveness of BMPs.
 - Evidence of poor BMP maintenance, installation or practices should be documented with digital photographs. Those photographs should be logged date stamped and stored on media that cannot be edited. Photos should also

- be appended to the site inspector's report. It is also beneficial to take photographs of good practices for educational reasons.
- Do not recommend solutions or endorse products. The solution to a compliance problem may appear obvious based on the inspector's experience. However, the responsibility should be placed on the site owner/responsible person to implement a workable solution to a compliance problem that meets UPDES standards. Key advice must be offered carefully. The way inspectors present themselves is important to the effectiveness of the inspection. An inspector cannot be overly familiar, but will be more effective if able to establish a minimum level of communication.
- 6. If possible, have the SWPPP project manager go along for the entire inspection;
- 7. Review data gathered and finish the written comments and corrective actions part of the inspection form;
- 8. Meet with the site operator representative to review SWPPP compliance inspection form and time frame to have deficiencies repaired;
 - Clearly communicate expectations and consequences;
 - Give a reasonable time frame (e.g. 24 hours, 48 hours, one week, two weeks, etc.) to correct the deficiencies identified depending on the level of risk to water quality.
 - The inspector should make clear that Springville City reserves rights to future enforcement actions. If the inspector's supervisor or enforcement coordinator determines additional enforcement actions are necessary.
- 9. Have the site operator representative sign the SWPPP compliance inspection form; and
- 10. Print inspection form, pictures, maps, etc. and give it to the site operator representative.
- 11. Upon returning to the office, the SWPPP compliance inspection report and photographs shall be recorded in the appropriate computer database.

Enforcement Procedures:

After a deficiency is observed and noted during a SWPPP compliance inspection or during any other site visit, and a request for repair or maintenance of a BMP is made either through the SWPPP compliance report or verbally is not taken care off within the time frame allowed, the SWPPP inspector will initiate enforcement procedures that include the following actions (City Ordinance 10-9-4):

- 1. Verbal Warning- additional 24 hours are given before a Notice of Violation (NOV) is issued:
- 2. NOV- additional time is given before a stop work order, citation or both are issued;
- 3. Stop Work Order- all work will be stopped except the work necessary to repair SWPPP deficiencies;
- 4. Citations- The SWPPP inspector will solicit the help of the Code Enforcement Agent to give out the citation.
- 5. Suspension or Revocation of Land Disturbance Permit- the City Engineer will contact the holder of the LDP to inform him of his decision.
- 6. Other remedies:
 - Withholding of permits, certificates, etc.;
 - The City makes the necessary corrections and bills the responsible party;
 - Call on bond.

Documentation is critical to effective enforcement. It is the responsibility of the SWPPP inspector to maintain time limits, timely follow-up inspection is critical.

The construction site storm water runoff control inspection program will provide:

Permit Requirement 4.2.4.4.1 Inspections for all construction sites with a land disturbance of greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale at least <u>monthly</u> by qualified personnel using the Construction Storm Water Inspection Form (Checklist) found on the Division's website at http://www.deq.utah.gov/Permits/water/updes/stormwatermun.htm#forms.

Permit Requirement 4.2.4.4.2 The <u>Engineering Division SWPPP Inspector</u> will inspect all phases of construction until the termination of the project. Procedures for termination notification by operator of a permitted site to verify the final stabilization and removal of all temporary control measures are as follows:

- 1. Construction operators/owners will contact the SWPPP Inspector and request a final inspection of the construction site to terminate their LDP.
- 2. The SWPPP Inspector will conduct a final inspection to confirm that the site is clean, has been stabilized, all temporary BMPs have been removed, and all structural BMPs have been installed according to the approved plans and are functioning properly;
- 3. The SWPPP Inspector will fill out the NOT section of the SWPPP Compliance Inspection Form and give a copy to operator representative;
- 4. The Operator will then submit the Springville City Land Disturbance Permit NOT to the Engineering Division with the following information as requested by the City Engineer:
 - As-built plans and written certification by a registered professional engineer licensed to practice in the State of Utah that the structural post-construction BMPs have been installed in accordance with the approved plan;
 - Terminate the coverage by closing out the permit on the State website; and
 - Operation and maintenance agreement describing the maintenance schedule of the post-construction BMPs as required on the Springville City Code 4-12-302 (3)
 Maintenance

This procedure will be provided to the construction operator/owner at the pre-construction meeting (as detailed in Section 4.2.4.3.1) before active construction begins.

Permit Requirement 4.2.4.4.3 The <u>Engineering Division SWPPP Inspector</u> will inspect sites with the <u>priority designation</u> as identified per the requirements of section 4.2.4.3.3 and listed on the Springville City Land Disturbance Permit at least <u>bi-weekly</u> using the Construction Storm Water Inspection Form (Checklist) found on the Division's website at http://www.deg.utah.gov/Permits/water/updes/stormwatermun.htm#forms.

Permit Requirement 4.2.4.4.4 Based on site inspection findings, The <u>Engineering Division SWPPP Inspector</u> will take all necessary follow-up actions (i.e., re-inspection, enforcement) to ensure compliance in accordance with the proposed City Ordinance 10-9-4. Enforcement actions will be tracked and documented on a spreadsheet and GIS mapping.

Permit Requirement 4.2.4.4.5 A hotline telephone number has been established and listed on the City website (Springville.org) and is required on SWPPP signage at all construction sites that will allow the general public to report storm water related issues on construction sites, such as tracking onto streets, etc. The <u>Engineering Division</u> will track and document records of violations, enforcement actions and corrective actions taken in a spreadsheet and GIS mapping.

City Personnel Training

Permit Requirement 4.2.4.5 The <u>Engineering Division</u> will train staff whose primary job duties are related to implementing the construction storm water program, including permitting, plan review, construction site inspections, and enforcement on an annual basis.

The training will be conducted by the <u>Engineering Division personnel or a third party</u>. Third party training events for inspectors and plan reviewer will be conducted through the Utah County Storm Water Coalition.

Training records will include dates, course description and names and positions of staff in attendance.

Lead Entity: Engineering Division

Year	Measurable goal action summary:	Document annual training dates, attendance and course description
7/1/2016 -		
6/30/2017		
7/1/2017 -		
6/30/2018		
7/1/2018 -		
6/30/2019		
7/1/2019 -		
6/30/2020		
7/1/2020 -		
6/30/2021		

Record Keeping of Permitted Sites

Permit Requirement 4.2.4.6 The Engineering Division SWPPP Inspector is currently using procedures to maintain records of all projects disturbing an area greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale. The records include: site plan reviews, SWPPPs, inspections and enforcement actions including verbal warnings, stop work orders, warning letters, notices of violation, and other enforcement records. Records of these projects will be kept for five years or until construction is completed, whichever is longer.

Lead Entity: Engineering Division