Stormwater Management Plan (SWMP) Review

Introduction

The City of Thornton Stormwater Ordinance requires a Stormwater Management Plan (SWMP) to meet the requirements of the CDPS General Permit for Stormwater Discharges Associated with Construction Activity (Stormwater Construction Permit) and the requirements of the City's MS4 Permit.

A SWMP must be submitted to the City of Thornton for review before construction begins. The SWMP shall be prepared in accordance with good engineering, hydrologic and pollution control principles and identifying all potential pollutant sources. All Control Measures in the SWMP shall meet the requirements of the most recent version of Volume 3 of the Urban Storm Drainage Criteria Manual published by the Urban Drainage and Flood Control District (UDFCD) or CDOT M-Standards and City of Thornton Standard and Specifications. This checklist is a guide to meet the minimum requirements for a SWMP as identified in the CDPHE "Stormwater Management Plan Preparation Guidance".

Purpose of Document

The purpose of this document is to assist project managers, developers and consultants with the minimum requirements for developing a SWMP for projects with land disturbance of one or more acres. City staff shall provide this guidance to assist developers and consultants in preparing their SWMP to meet the minimum requirements. This checklist provides the documentation necessary for the City to meet its MS4 Permit requirements. The developer and/or consultant shall provide the final checklist and SWMP to the city for final approval. The final completed and approved checklist shall become part of the project file for future reference.

Storm Water Management Plan

The stormwater management plan identifies possible pollutant sources that may contribute pollutants to stormwater, and identifies control measure that, when implemented, will reduce or eliminate potential water quality impacts. The SWMP must be completed and implemented prior to the time the project breaks ground, and revised by the contractor's Qualified Stormwater Manager as construction proceeds, to accurately reflect the conditions and practices at the site.

The SWMP must include a description of all control measures used to control pollutants in stormwater discharges. At a minimum, the following checklist describes sources and activities that must be evaluated to meet the minimum requirements for the City of Thornton and the CDPS General Permit for Stormwater Discharges Associated with Construction Activity.

SWMP Review Checklist

Project name _____

CDPS permit number _____ Project number_____

Developer/Consultant _____

SWMP prepared by _____ Date prepared _____

SWMP reviewed by _____ Date of review _____

1. Site Evaluation, Assessment, and Planning

Does the SWMP clearly describe the construction activity to include:

	Yes	No	COT Review
A. **Qualified Stormwater Manager(s)**: Does the SWMP identify a specific individual(s), position or title who is responsible for developing/implementing/maintaining/revising the SWMP? (I.C.2.a.i)	◯	◯	
B. **Site Description**:			
i. The nature of the **construction activity** at the site (**COR40000** Permit Section I.C.2.a.vi.(a))	◯	◯	
ii. The proposed **sequence (phasing) for major activities** and the planned implementation of control measures for each phase. (e.g.: clearing, grading, utilities, vertical, etc.) (I.C.2.a.vi.(b))	◯	◯	
iii. The **estimates of total acreage of the site**, and the **acreage expected to be disturbed** by clearing, excavation, grading, or other activities (I.C.2.a.vi.(c))	◯	◯	
iv. A summary of any **existing data used in the development** of the site construction plans or SWMP describing **soil or existing potential for soil erosion** (I.C.2.a.vi.(d))	◯	◯	
v. A **description of the percent(%) of existing vegetation** ground cover relative to the entire site and the method for determining the percentage(%) (I.C.2.a.vi.(e))	◯	◯	
vi. A **description of any allowable non-stormwater discharges** at the site, including those being discharge under a division low risk discharge guidance policy (I.C.2.a.vi.(f))	◯	◯	
vii. **A description of areas receiving discharge from the site**. Including general flow direction, and a description of the immediate source receiving the discharge. If the stormwater discharge is to the COTs municipal separate storm sewer system COT MS4 should be listed as well as the location of the storm sewer discharge and the ultimate receiving water(s) should be included. (I.C.2a.vi.(g))	◯	◯	

	Yes	No	COT Review
viii. A description of all stream crossings located within the construction site boundary. (I.C.2.a.vi.(h))	◯	◯	
C. **Potential Sources of Pollution**: Does the SWMP identify and describe those sources determined to have the potential to contribute pollutants to stormwater discharges? This shall include, but is not limited to the following pollutant sources: (I.C.2.a.iv)	◯	◯	
i. Disturbed and stored soils (if no, make sure this is noted)	◯	◯	
ii. Vehicle tracking of sediments (if no, make sure this is noted)	◯	◯	
iii. Management of contaminated soils	◯	◯	
iv. Loading and unloading operations	◯	◯	
v. Outdoor storage activates (erodible building materials, fertilizers, chemicals, etc.)	◯	◯	
vi. Vehicle and equipment maintenance and fueling	◯	◯	
vii. Significant dust or particulate generating processes (e.g., saw cutting material, including dust)	◯	◯	
viii. Routine maintenance activates involving fertilizers, pesticides, herbicides, detergents, fuels, solvents, oils, etc.;	◯	◯	
ix. On-site waste management practices – i.e. Waste piles, liquid wastes, dumpsters (if no, make sure this is noted)	◯	◯	
x. Concrete truck/equipment washing, including washing of the concrete truck chute and associated fixtures and equipment	◯	◯	
xi. Dedicated asphalt, concrete batch plants and masonry mixing stations	◯	◯	
xii. Non-industrial waste sources such as worker trash and portable toilets	◯	◯	
xiii. Run-on stormwater	◯	◯	
xiv. Effluent limitations infeasible to treat	◯	◯	
D. **Additional Applicable Permits and Low Risk Guidance Documents**: Does the SWMP list and include any applicable Municipal, State or Federal permits as well as any applicable Low Risk Guidance Documents (Documents will appear in Appendix 2	◯	◯	
Notes:			

2. Erosion and Sediment or Stormwater Management Control Measures

	Yes	No	COT Review
Implementation of Control Measures: Does SWMP include design specifications that contain information on the implementation of the control measure in accordance with good engineering hydrologic and pollution control practices (including applicable drawings, dimensions, instillation information, materials, implementation process, control measure-specific inspection expectations, and maintenance requirements) (I.C.2.a.v)	◯	◯	
Notes:			

3. Site Map

Does plan provide a generalized site map or maps which indicate:

	Yes	No	COT Review
A. Construction site boundaries (I.C.2.a.vii.(a))	◯	◯	
B. Flow arrows that depict stormwater flow direction on-site and runoff direction (I.C.2.a.vii.(b))	◯	◯	
C. All areas of ground surface disturbance including areas of borrow and fill (I.C.2.a.vii.(c))	◯	◯	
D. Areas used for storage of soil (I.C.2.a.vii.(d))	◯	◯	
E. Locations of all waste accumulation areas, including area for liquid, concrete, masonry, and asphalt (I.C.2.a.vii.(e))	◯	◯	
F. Location of dedicated asphalt, concrete batch plants, and masonry mixing stations (I.C.2.a.vii.f)	◯	◯	
G. Locations of all structural control measures (I.C.2.a.vii.g)		◯	
H. Locations of non-structural control measures (I.C.2.a.vii.h)	◯	◯	
I. Locations of springs, streams, wetlands and other surface waters, including areas that require pre-existing vegetation to be maintained within 50 feet of a receiving water, where determined feasible in accordance with Part I.B.1.a.i.(d). (I.C.2.a.vii.(i))	◯	◯	
J. Locations of all stream crossings located within the construction site boundary. (I.C.2.a.vii.(j))	◯	◯	
Notes:			

4. Waste Management Plan

	Yes	No	COT Review
A. **Spill Prevention and Response Plan**: Does SWMP have a spill prevention and response plan? (I.C.2.a.ii.)	◯	◯	
B. **Materials Handling**: Does SWMP clearly describe and locate all control measures implemented at the site to minimize impacts from handling significant materials (see definitions at Part I.E.(27)) that could contribute pollutants to runoff? (i.e., exposed storage of building materials; paints and solvents; landscape materials; fertilizers or chemicals; sanitary waste material; trash and equipment maintenance or fueling procedures) (I.C.2.a.iii)	◯	◯	
Notes:			

5. Final Stabilization and Long-Term Stormwater Management

	Yes	No	COT Review
Clearly describe the practices used to achieve final stabilization of all disturbed areas at the site and any planned practices to control pollutants in stormwater discharges that will occur after construction operations have been completed at the site. (i.e., seed mix selection and application methods; soil preparation and amendments; soil stabilization practices; detention/retention ponds; rain gardens; stormwater vaults; etc.) (I.C.2.viii) Note: If permittee relies on landscape plan, then it must be referenced and maintained with the SWMP.	◯	◯	
Notes:			

6. Inspection Reports

	Yes	No	COT Review
The SWMP shall include documented inspection reports in accordance with Part I.D of the Permit. (I.C.2.ix)	◯	◯	
Notes:			

Section completed by Thornton staff

Does the SWMP meet the City of Thornton and CDPHE requirements?

◯ Yes ◯ No

Approved checklist sent to preparer?

◯ Yes ◯ No

Thornton reviewer's name _____

Date of final SWMP approval _____