Narrative Report Information Worksheet City and County of Denver, Demolition and Construction Activities Stormwater Management Plan (SWMP) Revised 2/12/2013 as entry form

A. PROJECT LOCATION

Name of Project or Development:
CCD Master No. (if known): CCD EC No. (If known): Street Address:
Township: Range: Section: Quarter Section: Latitude (+/- 15"):, Longitude (+/- 15"): Metropolitan District:
<u>B. PERMITTEE</u> (Responsible party for day to day supervision and control of the MANAGMENT PLAN) Company Name:
Mailing Address:
City, State, Zip Code:
Phone Number: () FAX Number () Name of Contact:
Email:
<u>C. OWNER (same as Permittee □ YES □ NO)</u> Name:
Mailing Address:
City, State, Zip Code:
Phone Number: () FAX Number ()

Name of Contact:

Email:

D. PLAN ENGINEER (prepared MANAGMENT PLAN)

Company Name:

Mailing Address:
City, State, Zip Code:
Phone Number: () FAX Number () Name of Engineer:
Email:
E. SITE SUPERVISOR required prior to commencement of activities at site
Company Name:
Mailing Address:
City, State, Zip Code:
Phone Number: () FAX Number () Name of Site Supervisor:
Email:

F. TYPE OF CONSTRUCTION

Check the appropriate description(s) or provide a brief description that indicates the general nature of the proposed construction. A full description of activities must be included in the Stormwater Management Plan. (see Section G below)

- __ Single Family Residential Development
- ____ Multi-Family Residential Development
- __ Commercial Development
- ____ Oil and Gas Production and/or Exploration (including pad sites and associated infrastructure)
- _____ Highway/Road Development (not including roadways associated with commercial or residential Development)
- ___Other, Describe:

G. SITE DESCRIPTION

1. Acreage

a. Total Site Acreage:

- b. Acreage Subject to Disturbance:
- c. Acreage Determination (Public Utility Projects): _____

Area bounded by predefined construction limits:

Calculations shall include all areas proposed for contractor laydown, materials storage, equipment storage, areas where equipment repair and fueling will occur, ingress, and egress (include haul roads and borrow pits.)

2. Site Conditions:

a. Historical Land Use: (may be for partial site)		
Known Landfill site:	YES	NO
Has any of the following activities occurred on-site:		
Metal Refining	YES	NO
Petroleum Refining	YES	NO
Petroleum Storage	YES	NO
Chemical Manufacturing	YES	NO
Pesticide/Fertilizer Manufacture/Storage	YES	NO
Rail Yard	YES	NO
If the response to any of the above is YES, Please de	scribe:	

b. <u>Potential Pollutants at site</u>: Include in the text box below a discussion addressing all potential pollutants; at a minimum, each of the following sources and activities shall be evaluated for the potential to contribute pollutants to stormwater discharges:

- 1. all disturbed and stored soils
- 2. vehicle tracking of sediments;
- 3. management of contaminated soils;
- 4. loading and unloading operations;
- 5. outdoor storage activities (building materials, fertilizers, chemicals etc.);
- 6. vehicle and equipment maintenance and fueling;
- 7. significant dust or particulate generating processes;
- 8. routine maintenance activities involiving fertilizers, pesticideds, detergents, fuels, solvents, etc.;
- 9. on-site waste management practices (waste piles, liquid wastes, dumpsters, etc.);
- 10. concrete truck/equipment washing;
- 11. dedicated asphalt and concrete batch plants;
- 12. non-industrial waste sources such as worker trash and portable toilets; and
- 13. other areas or procedures where potential spills can occur.

Possible Site Contamination: Is the site part of any of the following:

Known Denver Radium Site	YES NO	
Known Denver LUST Site	YES NO	
Known Superfund Site	YES NO	
Known CERCLA Site	YES NO	
Known RCRA Site	YES NO	
If the response to any of the preceding is YES, Please describe:		

Describe any other known site contamination:

c. Current Land Use:

Describe existing use: ____

Are there any building/structures on-site? YES _____ NO _____

d. Existing and Proposed Topography (minimum 2 foot contours)

Description:______Lowest Elevation: ______

Steepest Slope: _____ Average Slope: _____

Direction_____

e. Vegetation

Identify the types of vegetation found on-site:

Estimate the existing density of vegetation:

Submittal of Photographs is not required but highly recommended

f. Drainage:

Identify all adjacent surface water flows (run-on) that may impact and/or runoff from the subject site:

Identify the State Receiving Waters:

Describe the flow routing from the site to the Receiving Waters:

Are there any springs or seeps located on-site?	YES N	0
Are there any defined drainage channels on-site?	YES N	0

 Does the site fall within a Regulatory Floodplain?
 YES _____ NO ____

 Have you obtained a floodplain permit
 YES _____ NO _____

 If Yes SUDP # _____

Dewatering:

h.

Reference state permit page 9, item C.8 groundwater/stormwater dewatering

g. <u>Wetlands</u>: Define the dimensions/surface areas for each identified wetland and its location relative to the site. Identify all on-site wetlands/wetlands channels:

1	
2	
3	
Tributary or adjacent Wetlands Areas Upstream of the site? YES NO Downstream of the site? YES NO Will the proposed construction work impact any of the on-site wetland areas? YES	NO
If the answer is <u>YES</u> , attach copies of correspondence with the State of Colorado and U. Engineers concerning permits and approvals for the work.	.S. Army Corps of
Soils: Identify the predominant Hydrologic Soil Group found on-site. A B C What is the runoff coefficient for the undeveloped site?	D
Provide brief description of soils on site (e.g. Sandy, clayey etc)	
Is there any outcropping of bedrock on-site? YESNO Will grading or excavation on-site reach bedrock? YESNO If YES, what is the depth of the bedrock? Will grading or excavation penetrate the Water Table? YES Will grading or excavation penetrate the Water Table? YES NO If YES, what is the depth of the Water Table?	

i. Erosion Potential:

1.

Provide estimates of the potential annual soil loss from the site for the following conditions: Erosion by water from an unprotected site_____ tons per acre per year.

Erosion by water from a protected site _____ tons per acre per year

Identify the procedures/formulas used to produce these estimates. If the Universal Soil Loss Equation (USLÉ) has been used, provide the values used for the following:

R (Annual Erosion Index) ______ K (Soil Erodibility Factor) _____ LS (Length/percent Slope Factor) _____

C (Soil Cover Factor)

Provide estimates of the potential annual soil loss from the site for the following conditions:

Erosion by wind from an unprotected site ______ tons per acre per year. Erosion by wind from a protected* site ______ tons per acre per year

Identify the procedures/formulas used to produce these estimates.

Protected site: calculations shall be based on the BMPs proposed for use on the site

H. PROJECT DESCRIPTION – CONSTRUCTION ACTIVITIES

1. Proposed Construction Activities		
Identify which of the following activities will occur d	uring developme	ent of the site:
a. Clearing and Grubbing	YES	NO
b. Mass Overlot Grading	YES	NO
c. Cut Operations	YES	NO
If YES, estimate volume of cut (cubic yards)		
d. Fill Operations	YES	N0
If YES, estimate volume of fill (cubic yards) _		

*If a offsite borrow or stockpile area is used it must be included in this SWMP or have separate permit coverage

e. Building Demolition	YESNO
f. Foundation Excavation	YESNO
g. Utility Construction	YES NO
h. Street Construction and Paving	YES NO
i. Building Construction	YES NO
j. Parking Lot Construction/Paving	YES NO
k. Landscaping	YESNO
Will Private Storm and Sanitary Sewer systems	be constructed? YES NO
Will Private Storm and Sanitary Sewer systems	be constructed? YESNO

If YES, identify the SP or PR Project Numbers assigned* by WMD for each project

If sewers are private or being constructed by a governmental agency other than Public Works, list the agency and associated Project number(s)______

*if Public Works Project Numbers have not been assigned but will be in the future, please indicate as "Not Assigned."

2. Construction Scheduling (Corresponds with Construction Phasing below)

a. Site Preparation / Grading Operations
Proposed Start Date:
Proposed Completion Date:
b. Utility / Infrastructure / Building Construction
i. Utilities:
Proposed Start Date:
Proposed Completion Date:
ii. Infrastructure Construction:
Proposed Start Date:
Proposed Completion Date:
iii. Building Construction:
Proposed Start Date:
Proposed Completion Date:
c. Landscaping/Site Stabilization
Proposed Start Date:
Proposed Completion Date:

3. <u>Construction Phasing</u> - Denver recognizes 3 basic phases for all construction sites as outline below.

(Note: A map or drawing for each phase is required, showing required BMPs for that phase Address the installation and maintenance of all proposed erosion control measures, sediment/pollutant control measures, and site stabilization measures for each phase. Add additional

sheets to the worksheet if needed.)

a. Site Preparation/Grading

i. Describe the types and placements of proposed BMPs for use during clearing, grubbing, demolition, and grading operations.

ii. Describe all measures proposed for interim site stabilization.

iii. Describe the inspection and maintenance schedule proposed for BMPs on-site.

b. Utility/Infrastructure/Building Construction

i. Describe the types and placements of proposed BMPs for use during utility construction, roadway construction, building construction and paving operations.

ii. Describe all measures proposed for interim site stabilization.

iii. Describe the inspection and maintenance schedule proposed for BMPs on-site

c. Permanent Site Stabilization/Landscaping

i. Describe the types and placements of BMPs proposed for use during site stabilization and landscaping, as well as describing all permanent water quality enhancement facilities.

ii. Describe all measures proposed for final site stabilization.

iii. Describe the inspection and maintenance schedule proposed for BMPs on-site.

iv. Identify any annual grasses proposed for use in stabilizing the site.

v. List the perennial grasses seed mix proposed for site stabilization

vi. Identify the estimated date for seeding

I. Required Best Management Practices (BMP)

As listed, under Section 4 of Information Guide document

- 1. Vehicle Tracking Control (See Erosion Control Detail)
- 2. Inlet Protection (See Erosion Control Detail)
- 3. Site Stabilization (Sediment Control Narrative)
- 4. Spill Prevention/Containment (Sediment Control Narrative) (See Attached Narrative)
- 5. Chute Washout Containment (See Erosion Control Detail)
- 6. Street Sweeping (See Standard Note #10)
- 7. Perimeter Control (See Erosion Control Details)
- 8. Portable Toilets

J. Maintenance, Inspections & Record Keeping (See Standard Note #7)

Additional Maintenance, Inspection & Record Keeping Instructions: (If needed, See attached Narrative)

K. Post Construction Permanent Water Quality

Identify permanent water quality BMPs proposed for site sediment control:

- 1. Grass Buffer 2. Grass Swale 3. Modular Block Porous Pavement 4. Porous Pavement Detention
- 5. Porous Landscape Detention
- 6. Extended Detention Basin
- 7. Sand Filter Extended Detention Basin
- 8. Constructed Wetlands Basin
- 9. Retention Pond
- 10. Constructed Wetlands Channel

YES		NO
YES		NO
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YES NO

NO

NO

YES

YES

11. Innovative/Proprietary Technology *

*Use of Innovative/Proprietary Technology will require the submission of the technology developer's technical data, specifications, design criteria and installation requirements for review.

M. Required Drawing Plans for each phase - at a minimum these drawings shall include:

- Cover Page 0
 - o Project Title
 - Erosion Control Number (EC-20XX-XXX)
 - o Vicinity Map
 - Standard Notes
- Initial Phase 0
 - Existing Topography extended 100' beyond the property boundary
 - Location of Existing Structures on-site
 - Locations of nearby floodplains
 - Limits of construction site boundaries
 - o Limits of grading and clearing
 - Locations of storage areas
 - Locations of contaminated areas
 - Locations of construction entrances
 - Locations for all storm runoff discharge points at site boundaries or onsite drainageways
 - o Locations for all proposed initial BMPs
- Infrastructure Phase (as applicable) 0
 - Existing & Proposed Topography extended 100' beyond the property boundary
 - Location of Existing Structures on-site
 - Limits of construction site boundaries
 - o Locations of storage areas
 - o Locations of contaminated areas
 - Locations of construction entrances
 - o Locations for all storm runoff discharge points at site boundaries or onsite drainageways
 - Locations for all proposed initial & infrastructure BMPs
- Vertical Phase (as applicable) 0
 - Existing & Proposed Topography extended 100' beyond the property boundary
 - Location of Existing & Proposed Structures on-site
 - Limits of construction site boundaries
 - o Locations of storage areas
 - Locations of contaminated areas
 - Locations of construction entrances

- o Locations for all storm runoff discharge points at site boundaries or onsite drainageways
- o Locations for all proposed initial, infrastructure & vertical BMPs
- o Final Grading Phase (as applicable)
 - o Existing & Proposed Topography extended 100' beyond the property boundary
 - o Location of Existing & Proposed Structures on-site
 - o Limits of construction site boundaries
 - o Locations of storage areas
 - o Locations of contaminated areas
 - o Locations of construction entrances
 - o Locations for all storm runoff discharge points at site boundaries or onsite drainageways
 - o Locations for all proposed initial, infrastructure, vertical & final grading BMPs
- o Final Stabilization Phase
 - o Existing & Proposed Topography extended 100' beyond the property boundary
 - o Location of Existing & Proposed Structures on-site
 - o Limits of construction site boundaries
 - o Locations of contaminated areas
 - o Locations for all proposed Final Stabilization Phase BMPs
 - o Locations of all permanent water quality BMPs

L. Certifications

1. Engineer's Certification - Plans submitted for review need to bear a P.E. Stamp, signature, and a P.E.'s Certification Note

Engineer's Certification:

"I hereby certify that this Construction Activities Stormwater Management Plan for

_____, Project # EC-_____ was prepared by me (or under my direct supervision) in accordance with the provisions of the Construction Activities Stormwater Discharge Permit for the City and County of Denver. I understand that the City and County of Denver does not and will not assume liability for drainage facilities design."

_____ Colorado Registered PE# _____

Date____

Project Design Engineer

2. Owner's Certification Note using the following language and signed by owner or authorized agent.

Owner's Certification:

"This Construction Activities Stormwater Management Plan has been submitted as the application for a Construction Activities Stormwater Discharge Permit filed with the Wastewater Management Division of the City and County of Denver. I understand that additional erosion control, sediment control and water quality enhancing measures may be required of the owner and his or her agents due to unforeseen pollutant discharges or if the submitted plan does not function as intended. The requirements of this plan shall be the obligation of the land owner and/or his successors or heirs; until such time as the plan is properly completed, modified, or voided."

Date___

Owner or Authorized Agent Representing Owner