

1.0 Purpose and Scope

The purpose of this procedure is to protect the Nation's waterways and wetland areas, into which storm sewers ultimately drain. This is achieved by requiring the use of protective measures, to prevent the entrance of contaminated storm water or other types of water, which may contain chemicals, silts or soils generated during projects on the Denver Federal Center (DFC).

The GSA DFC Campus has a small Municipal Separate Storm Sewer System (MS4) Permit, issued by the U.S. Environmental Protection Agency (EPA) under the National Pollution Discharge Elimination System (NPDES), as a requirement of the Clean Water Act, Section 402(p)(2). This requires that no liquid, other than stormwater, may be discharged directly to a storm sewer. Therefore, any activity which may impact water quality entering the storm sewer system or where other types of water must be diverted from the storm sewer system is addressed in this procedure.

2.0 Activities and Departments

2.1 Every person entering the DFC Campus has the potential to impact the Storm Sewer System.

2.2 This procedure is to be followed by all personnel conducting landscaping, site demolition, building construction, maintenance, remediation, underground line repair/replacement and/or intrusive subsurface activities at the DFC.

3.0 Exclusions

Magnesium chloride used in snow removal activities.

4.0 Acronyms, Abbreviations and Definitions

Acronym	Definition
BMP	Best Management Practice
CDPHE	Colorado Department of Public Health and Environment
COR	Contracting Officer Representative
DFC	Denver Federal Center
EPA	U.S. Environmental Protection Agency
EPG	GSA, PBS, Region 8, Environmental Programs Group
GSA	U.S. General Services Administration
MS4	Municipal Separate Storm Sewer System
NPDES	National Pollution Discharge Elimination System
NOI	Notice of Intent
Outfall	The place where a sewer, drain, or stream discharges into receiving waters.
RCRA	Resource Conservation & Recovery Act

Acronym	Definition
RFI	RCRA Facility Investigation
SEMS	Sustainability & Environmental Management System
SPCC	Spill Prevention Control & Countermeasures

5.0 Forms Used

- DFC Excavation Permit Request Form (Appendix C)
- Environmental Programs Group (EPG) Storm Water Inspection form (Appendix D)

6.0 Procedure

Language requiring adherence to all DFC SEMS Stormwater environmental requirements including our MS4 permit, is incorporated into all GSA contracts with the potential to impact the DFC Storm Sewer System. GSA Project Managers and Contracting Officer Representatives (CORs) are responsible for overseeing contractors' performance and compliance. The signature of the COR or Project Manager on the Receiving Report contained in the contract file, implies that all contract requirements relating to this Stormwater Environmental Procedure have been met.

The DFC, EPG, Stormwater Program Manager will ensure that the DFC Storm Sewer System Map is current, showing the location of all stormwater drains and outfalls.

6.1 Construction Site Stormwater Runoff Control and Post Construction Stormwater Management (Appendix A):

- a. Project Managers will assess proposed new projects for their potential to impact stormwater, whether by soil disturbance or discharge. If this potential exists, the appropriate contracting documents need to address this concern:
 - The Scope of Work, for construction projects
 - The Performance Work Statement, for service contracts, such as the Grounds Maintenance and Snow Removal contract.

If needed, this information will be placed into any Change Request for Modification, if a contract needs modified.

- b. Project Managers, with the aid of EPG Personnel, shall determine if a DFC, EPG Excavation Permit commonly called the Dig Permit, is required: See DFC Excavation Permit Procedures and Forms document, Appendix C:

“All excavations and associated dirt handling activities, internal or external to a building, shall require a permit from the EPG prior to the commencement of excavation activities”.

The DFC Dig Permit documents the project title, purpose, date, contractor and GSA Project Manager, number and extent of excavations, material handling methods, erosion control plan and DFC map location.

Exclusions to the Dig Permit:

- Landscaping work associated with removal of old landscapes, constructing new landscapes, planting flowers and bushes, repairing and installing new sprinkler heads, lines and other activities that do not exceed 18 inches in depth.
 - Paving and the 8 to 10-inch road base under the pavement.
 - Drilling - EPG, RCRA Facility Investigation projects do not require a dig permit, as they are already under the purview of the Colorado Department of Public Health & Environment (CDPHE).
- c. The GSA Project Manager is responsible for the following tasks, associated with the DFC Dig Permit:
- Submitting a completed Excavation Permit Request Form (Appendix C) to the EPG Dig Permit coordinator, prior to the disturbance of any earth.
 - Conveying the information in the Dig Permit to the contractor performing the excavation work and all other parties who may be involved with the excavation.
 - Delivering a copy of the Dig Permit to the Contracting Officer, for the Contracting Project files.
- d. The EPG Dig Permit coordinator will research and assess the potential for soil and groundwater contamination and then prepare the permit, detailing the depth to water and any necessary precautions. The permit is assigned a number, logged in the database, filed and a copy is provided to the GSA Project Manager.
- e. Once it is determined that a project will disturb soils of any amount on the DFC, the Contractor is required to initiate precautionary measures, as detailed in the Erosion Control Plan within the Dig Permit, to prevent discharge of potentially contaminated storm water or other non-storm related waters directly into a storm drain. Precautionary measures include, but are not limited to, the installation of silt fencing, absorbent material such as fiber rolls, straw bales, gravel bags (see examples in Appendix B).

Projects involving soil disturbance of one acre or more require that the Contractor prepare a stormwater management plan and submit the Notice of Intent (NOI) form to the EPA. The Contractor must comply with the NOI requirements, including the Stormwater Prevention Plan, for the duration of the project. The contractor is required to submit the NOI number to the SEMS Project Team for recording. EPG will conduct and record inspections of these projects on a regular basis.

- f. Discharged water shall be directed away from all curbs and other areas where storm drains may exist.
- g. Discharging non-storm water to lawn areas, open areas, or into a Baker tank truck, is considered acceptable practice. However, the contractor must install protection around all of the storm drains which could be impacted.
- h. GSA Project Managers will maintain oversight and conduct weekly inspections on any project requiring storm drain protection measures, to check the integrity of the protective measures and to ensure at the completion of the project that any observable material is removed from the storm drain area. Inspections are documented on the EPG, DFC Excavation Permit: Excavation Inspection Report form (Appendix C).
- i. Upon completion of the project requiring the discharge of water, storm drain protection should be removed and it should be noted in the project file.
- j. Contractors are required to adhere to the project design criteria for the control, retention and detention of post construction runoff during storms and the removal of suspended solids from runoff..

6.2 Accidental and Deliberate Discharge Detection and Elimination:

- a. Contract language dictates the preventive measures required to be implemented by Contractors working at the DFC, in order to avoid non-storm water discharges entering the storm sewer system.
- b. The Contractor is responsible for ensuring that their personnel are appropriately trained and compliant with these requirements. GSA Project Managers and CORs are responsible for monitoring contractors' performance and compliance.
- c. In the event of a spill of non storm water, (solvents, fuels, lubricants etc.), occurring indoors or outdoors, this liquid will not be permitted to enter a storm drain.
- d. Prevention of discharges:
 - The potential for accidental or deliberate spills is reduced by the security measures utilized at the DFC.
 - Deliberate dumping into the stormwater system is illegal under the Federal Clean Water Act and is punishable by law.
 - The DFC Quality Assurance Inspector checks every mechanical room during the quarterly circuit of all buildings, notifying the EPG of any problems or potential problems relating to spills or discharges.
- e. Contractors are governed by the Green Buildings and Grounds Maintenance elements of the SEMS, thereby reducing the use of hazardous chemicals which can impact the DFC Storm Sewers.

- f. Stormwater Hotline: 303 236-2911. The existing DFC Emergency Response Hotline as well as Tenant Notification is also used for reporting situations of concern with respect to Stormwater runoff from the DFC.
- g. Detection measures for non-stormwater discharges are performed:
- During the quarterly surface water sampling aspect of the DFC Long Term Monitoring Program, under the Consent Order required by the CDPHE.
 - Upon receipt of information from anyone on the DFC Campus reporting an observation or suspicion.
 - As a result of a reported spill.
 - Stormwater outfalls are inspected annually, during dry weather, for the presence of non stormwater discharge.
- h. Response to Accidental / Illicit Release:
- In the event of a non-stormwater release into the DFC Storm Sewer system, the Environmental Procedure for Spill Response is followed. The level of response varies according to toxicity. GSA CORs, Project Managers, Building and Property Managers all carry the Emergency Spill Cards, with contact details. The Spill Prevention Control and Countermeasure (SPCC) Plan is followed.

6.3 Stormwater Awareness and Training:

- a. The SEMS Project Team is responsible for disseminating the Stormwater Awareness program throughout the DFC. Methods include and are not limited to: Stormwater documents posted on the public website: www.gsa.gov/sems, distribution of Stormwater brochures DFC wide; posters; curb markers beside each storm drain catch basin; huddle topics, intern presentations. SEMS training modules include stormwater information.
- b. Contractors are responsible for training their staff in the Stormwater compliance measures, required by their contracts and defined by this GSA, SEMS Environmental Procedure. CORs are responsible for overseeing that this has been completed and is effective.

6.4 Regulatory Compliance:

The SEMS Action Team Lead for Stormwater is responsible for reviewing, updating, reporting and implementing, at least annually, all federal, state and local regulatory requirements.

7.0 Records Management

The EPG are responsible for retaining the completed:

- DFC Excavation Permit Documents

- Inspection forms
- Training records
- Copies of completed NOI forms

8.0 References

GSA, DFC, EPG "Protecting Storm Water on the Denver Federal Center".
 GSA, DFC, EPG, Excavation Permit Procedure document: PWT / GSA, Denver, CO
 January 2006
 GSA, DFC, MS4 Stormwater Permit, 2003.
 GSA, DFC, Quality Assurance Surveillance Plan
 GSA, DFC, Spill Prevention Control and Countermeasure Plan

9.0 Appendices

Appendix A: Construction Site Stormwater Runoff Control and Post Construction
 Stormwater Management

Appendix B: Table 1: Examples of Control Measures and Table 2: Maintenance for
 Control Measures

Appendix C: Filling Out an Excavation [Dig] Permit Request Form by the GSA Project
 Manager

- Excavation Permit Request Form
- Erosion Control Plan for DFC Excavation
- Dig Permit Base Map
- Excavation Inspection Report

Appendix D: Construction Site Inspection Form

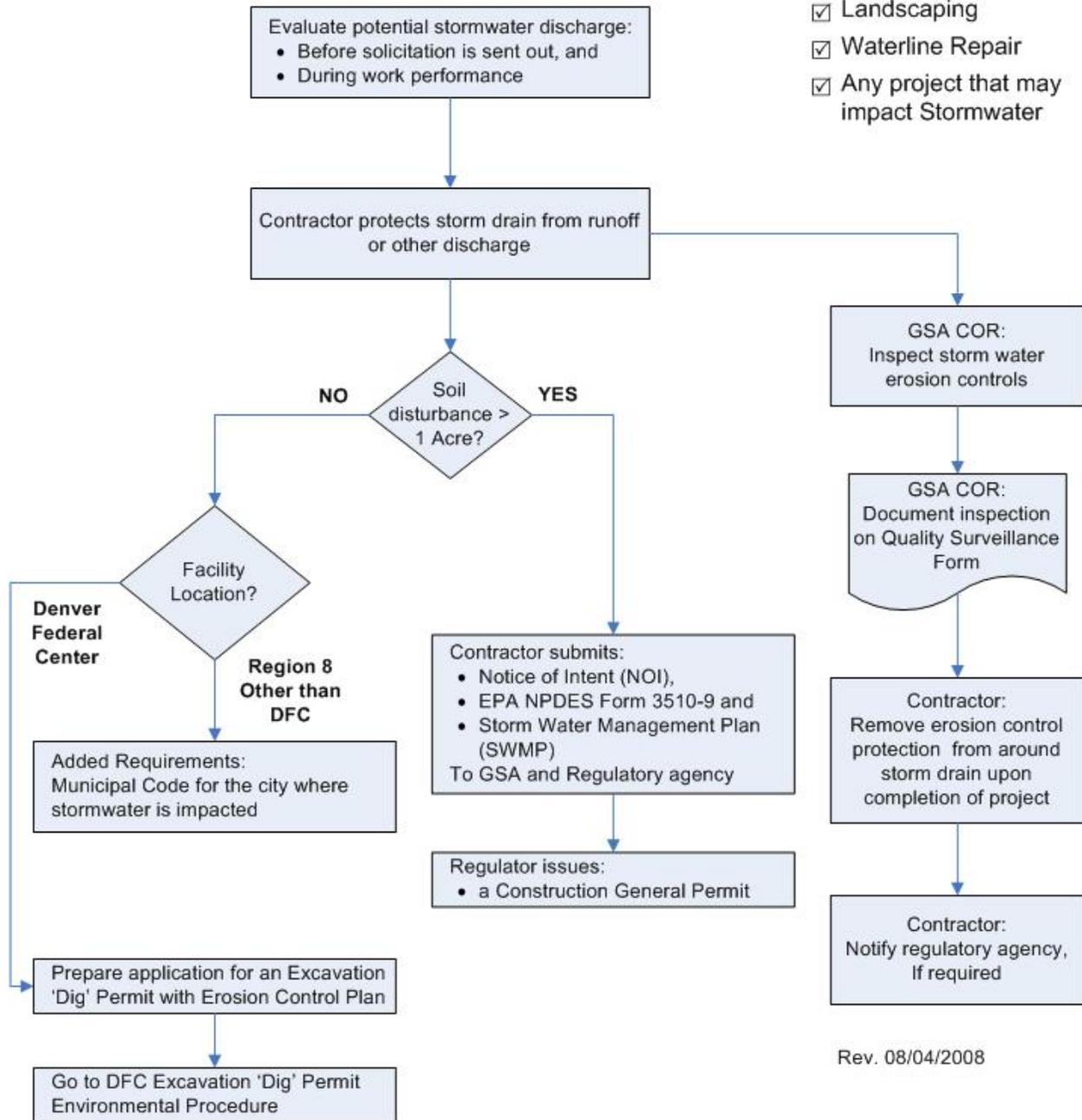
Document Revision and Update:

REVISION DATE	REVISED BY:
03/13/2006 (Original)	Elizabeth B. Roberts
09/14/2007	Sue Grant
08/04/2008	Sue Grant & Robert Melvin

APPENDIX A

Construction Site Stormwater Runoff Control and Post Construction Stormwater Management

STORMWATER MANAGEMENT



Projects:

- Construction
- Landscaping
- Waterline Repair
- Any project that may impact Stormwater

Rev. 08/04/2008

APPENDIX B

Table 1: Examples of Control Measures

Source Area or Activity	Potential Pollutants	Control Measures
Pavement removal activities	Asphalt, concrete, sediment, oil and grease	Storm Drain protection: silt fence, fiber rolls, straw bales
Grading activities including stockpiling and hauling	Asphalt, concrete, sediment, oil and grease	Storm Drain protection: fiber rolls and / or straw bales
Underground utility earthwork activities/ remediation	Sediment	Storm Drain protection: silt fence / fiber rolls / straw bales
Vehicle and equipment use, storage and maintenance	Oil, grease, fuels, coolants, detergents and sediment	Earthen berms, drip pans, absorbent materials, covering, straw bales
Solid Waste	Construction and domestic waste (floatables), and leachate	Water-tight and/or covered dumpsters

Table 2: Maintenance for Control Measures

Control Measure	Maintenance/Repair Measures
Storm Drain Protection	Replace torn/damaged filtering or absorbent materials, remove accumulated sediment, and adjust as necessary.
Fiber rolls / straw bales, silt fences	Replace damaged sections, remove accumulated sediment and debris, re-position as necessary.
Street Sweeping	Perform as needed.

APPENDIX C

FILLING OUT AN EXCAVATION [DIG] PERMIT REQUEST FORM BY THE GSA PROJECT MANAGER

1. Is your new project going to excavate soils? Yes, then continue. No, then no Permit is required.
2. Fill out the Permit Request Form (provided by EPG, Bldg. 41 Room 190 or second floor Bldg. 41 Room 240) and mark on Figure 1 map the location of the excavation.
3. Deliver completed Permit Request Form to EPG.
4. EPG will provide the Permit to the requestor with a determination if the soils are presumed clean, potentially contaminated, or contaminated and any storage, handling, and disposal requirements where applicable. The Permit will be signed by both the EPG Program Manager and the GSA Project/Tenant Manager.
5. The GSA Project Manager shall provide the Program Manager a signed copy of the Permit. It is the Program Manager's responsibility to provide the C O with a copy for inclusion in the contracting project files. An electronic copy of the permit can be requested to facilitate development of the Scope of Work or Performance Work Statement.
6. The EPG will provide contract language to be included in the contracting proposals after they have determined handling requirements.
7. The EPG, upon request, can provide general cost information on soil testing, sampling, and disposal.

The Permit will be issued within 3 days of submittal. All special handling, storage and /or disposal methods will be documented and explained in the issued Permit.

EXCAVATION PERMIT REQUEST FORM
(To be filled out by GSA Project Manager)

All projects involving any degree of excavation will require an Excavation Permit.

Date _____

Project Title _____

GSA/Tenant Project Manager _____

Contractor Name (if known) _____

Proposed Date of Excavation _____

Excavation Period (days) _____

Reason for Excavation _____

Number of Excavations _____

Approx. depth (ft) _____

Approx. length & width (ft) _____

Proposed method of handling, storage and/or disposal of excavated material:

This section for **EMERGENCY EXCAVATION ONLY**:

Name of EPG representative contacted _____

Date and time of Excavation Authorization _____

LOCATE AND CLEARLY MARK ALL EXCAVATION SITES ON ATTACHED MAP

Excavation Permit Number: _____

Erosion Control Plan for DFC Excavation	
Location:	
Excavation Start Date:	End Date:
Contractor:	Project Manager:
Terrain Slope Direction:	
Type of Slope:	Steep <input type="checkbox"/> Mid <input type="checkbox"/> Mostly Flat <input type="checkbox"/>
Comments:	
Type of Surface:	Concrete or Asphalt <input type="checkbox"/> Lawn <input type="checkbox"/> Field <input type="checkbox"/>
Comments:	
Distance to Storm Water Inlet:	Feet
Type of Inlet:	Storm Drain <input type="checkbox"/> Area Drain <input type="checkbox"/> McIntyre Gulch <input type="checkbox"/> Ag Ditch <input type="checkbox"/>
Comments:	
Best Management Practice(s) To Be Implemented	1.
	2.
	3.
	4.
GSA EPG Approval	
Signed _____ Date _____	

The Contractor shall dispose of all sediment and debris collected due to the use of BMPs

EPG DFC Excavation Permit

Excavation Inspection Report

Permit No.: _____ Date of Visited: _____

GSA Representative inspecting the excavation: _____
(EPG personnel)

Date excavation was started: _____

Circle One

Status of the Excavation at the time of inspection:

Starting Excavation Performing Repair Work Backfill Excavation

NA Yes No Is the contractor following the soil segregation requirements of the permit?

NA Yes No Are the segregated soils placed on plastic sheeting with the edges turned up?

NA YesNo Is the pile being covered at the end of the day?

NA YesNo Is visible contamination or odor observed from the excavation?

NA YesNo Has the contractor put the soils back into the excavation as prescribed by the permit?

NA Yes No Have the waste soil and water containers been properly labeled?

NA Yes No Are the soil and water containers at the excavation?

The soils and water containers are located at: Bld. 47 Bld. 11 At Excavation

Other Comments: _____

APPENDIX D: Construction Site Inspection Form

	OVERALL CONDITION (Good, Fair, Poor)	NEED REPAIR? (Yes, No)	COMMENTS
<i>STRUCTURAL MEASURES</i>			
Sediment Containment Systems			
Hay Bale Barriers			
Silt Fence Barriers			
Rock Barriers			
Inserts			
Vehicle Tracking Pad			
<i>NON-STRUCTURAL MEASURES and/or Swales</i>			
Diversion Dikes and/or Swales			
Slope Drains			
Temporary Vegetation			
Perennial Vegetation			
Mulch and/or BFM Protection			
Soil Binder Protection			
Hillside RECPs			
Drainage Channel TRMs			
Riprap and/or Gabions			

Will existing BMPs need to be modified or removed or additional BMPs installed? Y/N
 If Yes, list the action items to be completed on the following table.

ACTIONS TO BE COMPLETED	DATE COMPLETED

Weather information since the last inspection was held.

EVENT	DATE BEGAN	DURATION (Hours)	AMOUNT (Inches)

Are uncontrolled releases of mud or muddy water from the site and/or deposits of sediment evident? Y/N
If yes, where and what corrective actions are to occur?

Are non compliance incidents evident? Y/N
If yes, describe:

Additional Comments:

Signature: _____