

# STORMWATER MANAGEMENT PLAN Project Name

Date (Month Day, Year)

Westminster Permit Number: (ENG##-####)
CDPS Number: (COR######)

Property Owner:
Name and Contact Information

Property Operator:
Contact Information

SWMP Preparer:
Company Name
Contact Information

#### STORMWATER MANAGEMENT PLAN

#### **Table of Contents**

	ruble of contents	
10 INTE	OCCULCTION	Page No
	RODUCTION	
	JECT SITE LOCATION AND DESCRIPTION	
3.0 SITE	CONTACT INFORMATION	I
	POSED SEQUENCE FOR MAJOR CONSTRUCTION ACTIVITIES	
	TING SOIL DATA	
	TING VEGETATION	······ —
	EIVING WATERS	
7.1	Immediate and Ultimate Receiving Waters	
7.2	Stream Crossings	
7.3	Impaired Waters	
	ENTIAL POLLUTANT SOURCES	
	I-STORMWATER DISCHARGES	
10.0EFFI	UENT LIMITATIONS	
10.1		
	Other Effluent Limitations	
	ERIALS HANDLING	
	ITROL MEASURE MAINTENANCE	
13.0 SPIL	L PREVENTION AND RESPONSE PLAN	
13.1	Spill Prevention	14
13.2	Spill Prevention and Response Training	
13.3	Environmental Sensitive Areas	
13.4	Spill Reporting and Cleanup Contacts	15
13.5	Location of Spill Kits	
13.6	Quantities of Chemical and Locations Stored On-Site	16
13.7	Chemical Container Labeling	16
13.8	Minor Spills (less than 5 gallons)	
13.9	Major Spills (greater than 5 gallons)	
13.10	Notification of Regulatory Agencies	17
14.0 FINA	AL STABILIZATION	
14.1	Establishing Final Stabilization	18
14.2	Final Stabilization Measures	
14.3	Long-Term/Permanent Stormwater Control Measures	18
15.0 INSF	PECTIONS	18
16.0 REC	ORDKEEPING	18
<u>APPEND</u>	<u>PICES</u>	
Anno	adiy A CDDS Construction Dermit (One page decument)	

- Appendix A CDPS Construction Permit (One page document)
- Appendix B Completed SWMP Checklist
- Appendix C Erosion and Sediment Control Plans, BMP Details, Landscape Plan, and Chapter 2 of COW Standards and Specifications
- Appendix D Soils Report and Geotechnical Report
- Appendix E National Flood Hazard Layer FIRMette
- Appendix F Inspection Forms

#### 1.0 INTRODUCTION

This SWMP identifies possible pollutant sources at this construction site that may contribute pollutants to stormwater, and identifies control measures that, when implemented in accordance with good engineering, hydrologic, and pollution control practices, will reduce or eliminate any possible water quality impacts. A copy of this SWMP will be available onsite or will be easily accessible via an electronic format. This SWMP will be revised, as necessary, when site conditions change.

This SWMP was prepared in accordance with the Colorado Discharge Permit System (CDPS) general permit COR400000 and the City of Westminster's Standards and Specifications. A copy of the CDPS Construction Permit for this project is included in Appendix A. A completed SWMP checklist is included in Appendix B.

#### PROJECT SITE LOCATION AND DESCRIPTION

[Include the location and description of project site, limits of construction, limits off disturbance (if different) and adjacent areas]

- Total Area of Construction Limits: [XXX acres]
- Total Area of Disturbance Limits: [XXX acres]

(May be the same. Need to state if so)

Include description and purpose of construction activities at site, and summary of grading activities: excavating, paving, landscape, etc.].

Erosion and Sediment Control Plans are included in Appendix C.

#### SITE CONTACT INFORMATION 3.0

#### **Owner:** Name: Title: Address: Phone: Email:

#### Operator

Name: Title: Address: Phone: Email:

#### **Project Manager/Site Supervisor:**

Name: Title: Address: Phone:

#### Email:

#### **Qualified Stormwater Manager:**

Name: Title: Address: Phone: Email:

#### **Control Measure Contractor:**

Name: Title: Address: Phone: Email:

Other: Name: Title: Address: Phone: Email:

#### 4.0 PROPOSED SEQUENCE FOR MAJOR CONSTRUCTION ACTIVITIES

[Describe general sequence for major construction activities and the planned implementation of control measures for each phase.]

Project Phase	Estimate Date	Controls to be implemented during each phase*
Pre-Disturbance/Site Preparation		•
Construction (Add specific construction activities such as clearing and grubbing, grading, excavating, utilities, street work, vertical construction etc.)		
Final Stabilization		•

#### 5.0 EXISTING SOIL DATA

[Include any existing data describing the soil and any potential for soil erosion]

A copy of the soils report is included in Appendix D.

#### **6.0 EXISTING VEGETATION**

[Include description of any existing vegetation at the site, an estimate for percent vegetative cover, and methods used to determine percent vegetative cover - methods may include visual, transects, hula hoop, etc.]

#### 7.0 RECEIVING WATERS

#### 7.1 Immediate and Ultimate Receiving Waters

[Name and description of all waterways or conveyance systems the project discharge immediately enters i.e. rivers, lakes, ditches, storm sewer system (e.g. MS4 storm system), roadside swales, etc. This can include more than one waterway or conveyance system.]

[Name and description of water ways the project ultimately discharges to i.e. rivers, lakes, ditches, MS4 storm sewer system, etc. The ultimate and immediate receiving waters may be the same. For example, if the South Platte River runs through the project, the immediate and ultimate receiving waters would be the same]

[If there are receiving waters within the project area, will it be feasible for the project to maintain 50 feet of existing vegetation between construction activities and the receiving water? If not, describe why and if so, make sure to include the 50 feet protection of existing vegetation on the SWMP Site Maps.]

[Discuss if site is in the floodplain]

A copy of the flood insurance rate map (FIRM) for this site (FIRMette) is included in Appendix E.

#### **7.2 Stream Crossings**

[Name and description of any stream crossing and any disturbed upgrade areas that may contribute]

#### 7.3 Impaired Waters

[Are the receiving waters listed as being impaired (on 303(d) list)? If so, describe what the waterway is listed for and how the construction activity is minimizing the potential for activities to impact those parameters.]

#### 8.0 POTENTIAL POLLUTANT SOURCES

[Indicate if the potential pollutant exists on the project by selecting yes or no. Provide any description of activity involving pollutant, location of the activity, and any control measures that will be utilized. Additional rows have been added for any potential pollutants not listed. Example responses provided below. Please review and edit as necessary.]

Potential Source of Pollution	Potential Exists for this Project?	Description of Activities & Control Measures Used
Disturbed and stored soils  • Stockpiled soils (e.g. topsoil, embankments, wetland, spoils, etc.)  • Disturbed soils (exposed areas, staging areas,		Potential during all phases of construction activities, including but not limited to excavating, grading, cutting, filling, landscaping, etc. Potential pollutants include disturbed eroded sediment entering state waterways, inlets and sewers, and off right of way.
parking, etc.)v	[y/n?]	<u>BMPs</u> - Sediment control and stockpile containment may include usage of silt fence, rock socks, sediment control logs, and inlet protection as outlined in the SWMP narratives.
		Erosion control may include mulch/mulch tackifier application, seeding/ mulching, and vegetative protection.
		Administrative BMPs include site management and limiting number and location of stockpiles. Phased construction to reduce the amount of open area at any given time.
Vehicle tracking of sediments		Potential during all construction activities.
		<u>BMPs</u> - Sediment control including vehicle tracking pads, street sweeping, and inlet protection.
	[y/n?]	Minimize the number of entry and exit points, add orange perimeter fence to define construction entries/exits and establish perimeter control, and require equipment to be cleaned prior to arrival on site.
Management of contaminated soils	[y/n?]	No known contaminated soils are expected to be encountered during this project. If contaminated soils/water are encountered, all activity shall be stopped until the situation can be assessed. The owner will be contacted.
Loading and unloading operations	[y/n?]	Potential during delivery and staging of materials, equipment, soil, debris, etc.

Potential Source of Pollution	Potential Exists for this Project?	Description of Activities & Control Measures Used
		<u>BMPs</u> - Loading and unloading operations shall occur within the disturbance limits of the project using designated vehicle tracking pads.
		Administrative controls include site management to minimize the number of areas at which loading/unloading occurs. Education as to where access points are on the project to prevent vehicle tracking.
Outdoor storage activities (erodible building materials, fertilizers, chemicals, etc.)		Potential during all phases of construction activities including delivery, staging/storage and use of various materials.
	[y/n?]	BMPs - Containment of the storage or staging areas using temporary berms or plastic/metal containment structures. Use of secondary containment device for storage of chemicals and petroleum products. Chemicals shall not be used, stored or stockpiled within 50 feet of state waters.
		Administrative controls including site management to ensure limited amount of materials are stored on site and are placed in proper designated areas.
Vehicle and equipment maintenance and fueling		Fueling of equipment or vehicles and equipment or vehicle repair activities may occur during all phases of construction activity.
	[y/n?]	BMPs - Limit areas where fueling occurs (no less than 50 feet from any state water, inlet, flow line). Ensure spill response kit is accessible where fueling is taking place. Use of plastic sheeting, drip pans, dirt berms and other measures to contain fluids. Immediate clean-up and disposal of spoils as detailed in the Spill Prevention, Control and Countermeasure Plan (Section 13). Secondary containment will be

Potential Source of Pollution	Potential Exists for this Project?	Description of Activities & Control Measures Used
		provided for containers 55 gallons or greater.
		Administrative controls include site management to limit equipment and vehicle maintenance that occurs on site.
Significant dust or particulate generating processes (e.g., saw cutting material,		Potential during clearing and grubbing, cut/fill activities, saw cutting/sanding work and final stabilization.
including dust)	[y/n?]	BMPs - Water truck on site for use as needed to minimize dust production. Use of pickup broom or vacuum during or immediately following saw cutting projects.
Routine maintenance activities including fertilizers, pesticides, herbicides, detergents, fuels, solvents, oils, etc.	[y/n?]	Very few routine maintenance activities will occur on site. See Vehicle and Equipment maintenance for activities associated with those items.  BMPs - See Vehicle and Equipment
On-site waste		Maintenance All activities including clear and
management practices (waste piles, liquid	[y/n?]	grubbing, demolition activities, et.
wastes, dumpsters)		BMPs - Trash receptacles will be placed on site and garbage disposed of when full. Public trash will be routinely picked up around the site (daily) and disposed of in proper containers. Waste piles shall be placed a minimum of 50 feet from state waters, contained by earthen berms, silt fence, erosion logs, and landforms. Waste piles shall be placed in areas where stormwater runoff would not result in contamination of state waters.
		Liquid wastes will be contained and removed from site and properly disposed of by the subcontractors/contractor generating wastes in accordance with the Spill Prevention, Control and Countermeasure Plan (Section 13).

Potential Source of Pollution	Potential Exists for this Project?	Description of Activities & Control Measures Used
Concrete truck/equipment washing, including washing of the concrete truck chute and associated fixtures and equipment	[y/n?]	Activities associated with this pollution source are concrete pours.  BMPs - Dedicated concrete washout areas that are clearly marked and maintained.
Dedicated asphalt, concrete batch plants and masonry mixing stations	[y/n?]	Not applicable for this site. If these activities are added, then the SWMP will be amended.
Non-industrial waste sources such as worker trash and portable toilets	[y/n?]	Potential throughout construction.  BMPs - See onsite waste management.  Cleanup of trash will occur daily. A dumpster will be placed on site, at our office trailer. This will be emptied on a weekly basis, and more often, if waste amounts warrant extra pick-ups. Portable toilets will be located a minimum of 50 feet from state waters. They shall be adequately staked and cleaned on a weekly basis. They will be inspected daily for spills. Administrative controls will include site management practices to ensure workers are placing trash in the appropriate dumpsters. Monitoring to ensure trash dumpsters are removed from the site when full. Monitoring to ensure portable toilets are cleaned as needed, and repaired or removed if found to be leaking.
Other areas or procedures where spills can occur	[y/n?]	Not applicable for this site. If these activities are added, then the SWMP will be amended.

#### 9.0 NON-STORMWATER DISCHARGES

[Indicate if there is potential for non-stormwater discharges exists on the project by selecting yes or no. Provide any description of activity involving non-stormwater discharge, location of the activity, and any control measures that will be utilized. Additional rows have been added for any non-stormwater discharge not listed. Example responses provided below. Please review and edit as necessary.]

Potential Non- Stormwater Discharges	Potential Exists for this Project?	Description of Activities & Control Measures Used
Discharges from uncontaminated springs that do not originate from an area of land disturbance	[y/n?]	Not applicable for this site. If these activities are added, then the SWMP will be amended.
Discharges to the ground of concrete washout water associated with the washing of concrete tools and concrete mixer chutes. Discharges of concrete washout water must not leave the site as surface runoff or reach receiving waters	[y/n?]	A concrete wash-out area will be utilized to capture wastewater and waste products resulting from the cleaning of concrete and masonry equipment.
Discharges of landscape irrigation return flow	[y/n?]	Not applicable for this site. If these activities are added, then the SWMP will be amended.
Discharges from emergency fire-fighting activities	[y/n?]	To the extent allowed by the circumstances at the scene and without compromising the health and safety of personnel or the public, emergency firefighting activities should be performed in a manner that avoids or minimizes discharges to the MS4.  BMPs - If possible, avoid directing firefighting flows directly on erodible surfaces if runoff will enter Receiving Waters or MS4 facilities. If possible, apply fire-fighting flows so that runoff will flow over vegetated areas.
Dewatering activities meeting a low-risk discharge guidance	[y/n?]	Groundwater is not anticipated to be

Potential Non- Stormwater Discharges	Potential Exists for this Project?	Description of Activities & Control Measures Used
		encountered based on the Geotechnical Investigation.
		If dewatering is needed, and not able to be discharged per the CDPS low risk guidelines, a supplemental dewatering permit for dewatering through CDPS will be obtained.
		Any surface water dewatering covered under the CDPS guidelines needed for the project will be clearly identified on the site maps after installation.
Discharges covered under other CDPS discharge permits?	[y/n?]	N/A

#### **10.0 EFFLUENT LIMITATIONS**

#### **10.1 Control Measure Details**

This section includes the narrative description of appropriate control measures that will be implemented before, during, and after construction activities. Both structural and non-structural control measures will be described.

[Complete the follow tables using one table per control measure that is anticipated for the project. The first table is filled in as an example. Be sure to update this section if additional control measures are used during construction.] Example responses provided below. Please review and edit as necessary.]

Control Measure Name	Description	Phase
Concrete	Designating and properly managing a specific area	Play area
Washout	of the construction site as a concrete washout area.	construction
Area	Designed to receive wash water from washing of	
	tools and concrete mixer chutes, liquid concrete	
	waste from dump trucks, mobile batch mixers, or	
	pump trucks. Surface discharges of concrete	

Control Measure Name	Description	Phase
	washout water from construction sites are prohibited.	
Construction Fencing	Restricts site access to designated entrances and exits, delineates construction site boundaries, and keeps construction out of sensitive areas such as natural areas to be preserved as open space, wetlands and riparian areas.	All phases
Construction Phasing	Attention to construction phasing, scheduling, and sequencing of land disturbing activities. Erosion and sediment controls needs adjustment as the project progresses and should be documented in the SWMP.	All phases
Erosion Control Blanket	Temporary or permanently installed manufactured products designed to control erosion and enhance vegetation establishment and survivability, particularly on slopes and in channels.	Final stabilization
Good House- keeping	Prevents pollution associated with solid, liquid and hazardous construction-related materials and wastes.	Clearing, grubbing and play area construction
Inlet Protection	Permeable barriers installed around an inlet to filter runoff and remove sediment prior to entering a storm drain inlet. Inlet protection can be constructed from rock socks, sediment control logs, silt fence, block and rock socks, or other materials.	Clearing and grubbing and play area construction
Outlet Protection	Helps reduce erosion immediately downstream of a pipe, culvert, slope drain, rundown or other conveyance with concentrated, high-velocity flows. Typical outlet protection consists of riprap or rock aprons at the conveyance outlet.	Clearing and grubbing and play area construction
Rock Socks	Used either as a perimeter control or as part of inlet protection. Traps sediment from stormwater runoff that flows onto roadways as a result of construction activities. Constructed of gravel that has been wrapped by wire mesh or a geotextile to form an elongated cylindrical filter.	Clearing and grubbing and play area construction
Sediment Control Log	A linear roll made of natural materials such as straw, coconut fiber, or other fibrous material trenched into the ground and held with a wooden stake. They are used as a sediment barrier to intercept sheet flow runoff from disturbed areas.	Clearing, grubbing and play area construction
Seeding and Mulching	Seeding is used to stabilize disturbed areas that will be inactive for an extended period or at final grade that will not be otherwise stabilized. Effective seeding includes preparation of a seedbed,	Final stabilization

Control Measure Name	Description	Phase
	selection of an appropriate seed mixture, proper planting techniques, and protection of the seeded area with mulch, geotextiles, or other appropriate measures.	
	Mulching consists of evenly applying straw, hay, shredded wood mulch, rock, bark or compost to disturbed soils and securing the mulch by crimping, tackifiers, netting or other measures. Reduces erosion by protecting bare soil from	
	rainfall impact, increasing infiltration, and reducing runoff.	
Silt Fencing	Geotextile fabric installed using stakes on down- gradient side and trenched into soil. Provides sediment control by reducing runoff velocity. Used as perimeter control and back of curb control	Clearing and grubbing and play area construction
Stabilized Staging Area	A clearly designated area where construction equipment and vehicles, stockpiles, waste bins, and other construction-related materials are stored. The contractor office trailer may also be located in this area.	Clearing, grubbing and play area construction
Stockpile Management	Minimizes erosion and sediment transport from soil stockpiles. Should be used when soils or other erodible materials are stored at the construction site. Special attention should be given to stockpiles in close proximity to natural or manmade storm systems.	Clearing and grubbing and play area construction
Street Sweeping	Uses mechanical pavement cleaning practices to reduce sediment, litter and other debris washed into storm sewers by runoff. Reduces pollutant loading to receiving waters and in some cases reduces clogging of storm sewers and prolong the life of infiltration oriented BMPs and reduce clogging of outlet structures in detention BMPs.	All phases; as needed
Tree Protection	Used to maintain a stable surface cover as part of construction phasing, or provide protection in areas designated to remain in natural conditions under post-development conditions. Includes installation of a construction fence around the area requiring protection. Where upgradient areas are disturbed, it may also be necessary to install perimeter controls to minimize sediment loading to sensitive areas.	All phases
Vehicle Tracking Control	Provides stabilized construction site access where vehicles exit the site onto paved public roads. Helps remove sediment (mud or dirt) from vehicles, reducing tracking onto the paved surface.	Clearing, grubbing and play area construction

Control Measure Name	Description	Phase
	Constructed from angular rock or other proprietary materials.	

[Repeat as needed to cover every control measure on site. In addition, include control measure details/specifications that outline installation and maintenance for each specific control measure in accordance with good engineering, hydrologic, and pollution control practices. The City of Westminster recommends using the Mile High Flood District's Urban Drainage Criteria Manual, Volume 3, Chapter 7 Fact sheets (MHFD details, www.mhfd.org)

#### 10.2 Other Effluent Limitations

Additional controls measures:

- <u>Soil Compaction</u> Soil compaction must be minimized for areas where infiltration control measures will occur or where final stabilization will be achieved through vegetative cover.
- <u>Topsoil Preservation</u> Unless infeasible, topsoil will be preserved for those areas
  of a site that will utilize vegetative final stabilization. [If infeasible, provide
  information on why it is infeasible). Consider adding the following with any
  bullets that apply. If this does not apply to the project, do not include. None of
  these are requirements and once added to the SWMP they should be followed
  in the field. Topsoil preservation may include the following measures:
  - Limit construction disturbance area including those used for access by installing construction fence or other means to limit impacts to existing topsoil.
  - In areas of grading or excavation, strip and segregate topsoil separately from other excavated materials.
  - In areas with construction traffic where topsoil is likely to mix with subsoil, strip and stockpile topsoil.
- <u>Minimize Disturbances</u> Disturbances will be minimized to the extent feasible especially on steep slopes.
- Temporary Stabilization Temporary stabilization must be implemented for earth disturbing activities on any portion of the site where ground disturbing construction activity has permanently ceased, or temporarily ceased for more than 14 calendar days. Temporary stabilization methods may include, but are not limited to, tarps, soil tackifier, and hydroseed and although not specifically outlined in the permit may also include temporary hard surfaces. The permittee may exceed the 14-day schedule when either the function of the specific area of the site requires it to remain disturbed, or, physical characteristics of the terrain and climate prevent stabilization. The SWMP must document the constraints necessitating the alternative schedule, provide the alternate stabilization schedule, and identify all locations where the alternative schedule is applicable on the site map.

Other controls related to final stabilization, bulk storage, spill prevention, and protection of vegetation within 50 feet of receiving waters are covered in other sections of this SWMP.

#### 11.0 MATERIALS HANDLING

This section includes the narrative description of all potential pollutants other than sediment that will be handled and disposed of in an appropriate manner that does not contaminate stormwater.

[Provide a table for each type of material or waste material is anticipated for the project. The first table is filled in as an example. Be sure to update this section if additional control measures are used during construction. Example responses provided below. Please review and edit as necessary.]

Material/Waste Product Name	Description and Intended Use and Associated Control Measure	Phase
Concrete Curing	Used for concrete work.	During concrete pouring
Compounds	Containers will be kept	activities
	intact with no leakage and	
	in an area with good	
	housekeeping practices to	
<u> </u>	avoid spills	A.II.
Diesel	Used to fuel equipment.	All phases when heavy
	Containers will be kept	equipment tis in use
	intact with no leakage and in an area with good	
	housekeeping practices to	
	avoid spills	
Diesel Engine Antifreeze	Used in equipment.	All phases when heavy
Coolant	Containers will be kept	equipment tis in use
	intact with no leakage and	
	in an area with good	
	housekeeping practices to	
	avoid spills	
Hydraulic Oil	Used in equipment.	All phases when heavy
	Containers will be kept	equipment tis in use
	intact with no leakage and	
	in an area with good	
	housekeeping practices to	
	avoid spills	
Motor Oil	Used in equipment.	All phases when heavy
	Containers will be kept	equipment tis in use
	intact with no leakage and	
	in an area with good	
	housekeeping practices to	
	avoid spills	

Material/Waste Product Name	Description and Intended Use and Associated Control Measure	Phase
Unleaded Gasoline	Used to fuel equipment. Containers will be kept intact with no leakage and in an area with good housekeeping practices to avoid spills	All phases when heavy equipment tis in use

[Repeat as needed to cover all material handling on site.]

#### 12.0 CONTROL MEASURE MAINTENANCE

All erosion and sediment control practices and other protective measures identified in the SWMP will be maintained in effective operating condition. Control measures that are not adequately maintained in accordance with good engineering, hydrologic and pollution control practices, including removal of collected sediment outside the acceptable tolerances of the control measures are considered to be no longer operating effectively and must be addressed.

Assessment of control measures will be performed as part of the comprehensive inspection. Where site assessment results in the determination that new or replacement control measures are necessary, the control measures must be installed to ensure ongoing compliance with this SWMP. Where control measures have failed or otherwise non-compliant, they must be addressed immediately or an alternative schedule with rationale will be supplied in the inspection corrective action log. See control measures details and specification for specific maintenance information

#### 13.0 SPILL PREVENTION AND RESPONSE PLAN

#### 13.1 Spill Prevention

All parties on site will take all measures necessary to prevent spills that could negatively impact stormwater quality. The following general spill prevention methods should be used on site:

- Ensuring personal safety for all personnel effected by the spill;
- Proper storage of all materials;
- Proper maintenance of all containers;
- Bulk storage, 55 gallons or greater, for petroleum products and other liquid chemicals must have secondary containment or equivalent;

- Train employees in spill prevention and cleanup;
- Designate responsible individuals to oversee and enforce control measures;
- Spills should be covered and protected from stormwater run-on during rainfall to the extent that it doesn't compromise cleanup activities;
- Do not bury or clean/wash spills with water without using a wet vacuum;
- Store and dispose of used clean up materials, contaminated materials, and recovered spill material properly;
- Do not allow water used for cleaning and decontamination to enter storm drains or waterways;
- Contain water overflow or minor water spillage and do not allow it to discharge into storm drains or waterways;
- Loading and unloading of chemicals should be observed by on site personnel at all times:
- Do not store chemicals within 50 feet of a storm drain or waterway; and
- All spills must be documented and properly cleaned up immediately.

#### 13.2 Spill Prevention and Response Training

Prior to project startup, personnel and contractors will be trained in the following spill control procedures by the Erosion Control Specialist/Qualified Stormwater Manager.

- Chemicals planned to be used on site;
- Spill control;
- Containment, vessel, tank, and piping inspection and maintenance;
- Spill response, containment, and clean-up; and
- Company policies on reporting and responding to spills.

#### 13.3 Environmental Sensitive Areas

[Provide information on environmental sensitive areas in the work area and what procedures are in place to prevent environmental impacts or state "There are no environmentally sensitive areas in the work area."]

#### 13.4 Spill Reporting and Cleanup Contacts

All responsible personnel and their corresponding contact information are presented in the table below.

Responsibility	Name and Title	Phone Number
Emergency Local Fire, Police, &	N/A	911
Ambulance		
EPA National Response Center	N/A	1-800-424-8802
CDPHE Spill Reporting Hotline	N/A	1-877-518-5608
Primary Contact for Spills		
Secondary Contact for Spills		
On-Site Spill Responder		
Westminster Stormwater Hotline	N/A	303-706-3367

#### 13.5 Location of Spill Kits

The kit will contain an absorbent boon, absorbent rags, absorbent litter and an overpack drum to storm the material. Spill kit materials should be replenished after use in the field. Spill kits should be inspected regularly to check if materials need to be replenished.

Type of Spill Kit	Location

#### 13.6 Quantities of Chemical and Locations Stored On-Site

The following is a table of chemical quantities and where they are located on site. (<u>Note</u>: Also refer to the Potential Pollutants list and evaluation in Section 8 of this SWMP.)

Material	Quantity	Staging/Storage Location

#### 13.7 Chemical Container Labeling

Any products/chemicals that are located or stored on site shall be properly labeled as to the contents of the material. The Safety Data Sheet (SDS) for all products/chemicals utilized on site can be found in a notebook at the project trailer.

#### 13.8 Minor Spills (less than 5 gallons)

Notification and cleanup procedures to be implemented in the event of a spill for spills which do not enter state waters or are under reporting limits of the chemical of concern (e.g. diesel fuel, hydraulic fluid, motor oil, used hydraulic fluid and motor oil, tack oil).

- Minor spills typically involve small quantities of oil, gasoline, paint, etc. which can be controlled by the first responder at the discovery of the spill.
- Use absorbent materials on small spills rather than hosing down or burying the spills.
- Absorbent materials should be promptly removed and disposed of properly.
- Follow the practice below for a minor spill:
  - Contain the spread of the spill.
  - Recover spilled materials.
  - Clean the contaminated area and properly dispose of contaminated materials.

- Keep within permitted area.
- It must not threaten any stormwater conveyance.

#### 13.9 Major Spills (greater than 5 gallons)

Significant spill procedures for spills of any size that enter state waters or have the potential to do so and can be controlled by the first responder along with the aid of other trained personnel. Section 13.4 above contains spill notification contacts and phone numbers. This response may require all work to stop. Spills must be clean up immediately

- Contain spread of the spill.
- Notify the project foreman immediately.
- If the spill occurs on paved or impermeable surfaces, clean up using dry methods. Contain the spill by encircling with absorbent materials and do not let the spill spread. Make sure nearby storm drains and waterways are protected.
- If the spill occurs in a dirt area, immediately contain the spill by constructing an earthen berm. Dig up and properly disposed of contaminated soil.
- If the spill occurs during a rain event, cover the spill with tarps, visqueen or similar material to prevent contaminating runoff. Make sure nearby storm drains and waterways are protected.

#### 13.10 Notification of Regulatory Agencies

For non-hazardous materials which may endanger health or the environment; spills or discharge of hazardous substance or oil, which may cause pollution of the waters of the state; the following measures shall be implemented:

- Contact the CDPHE Environmental Emergency Spill Reporting Line (1-877-518-5608) within 24 hours of the spill event. A written notification to the CDPHE-EMP is necessary within 5 days.
- Contact the Colorado State Patrol 24-hour hotline (1-303-239-4501) if the spill is on a state highway.
- Report spill to the Project Engineer.
- Call the Westminster Stormwater Hotline (303-706-3367) if spilled material spreads to a Westminster storm drain or a waterway.

For spills involving hazardous materials, the following measures shall be implemented:

- Contact the local emergency response team by dialing 911.
- Contact the CDPHE Environmental Emergency Spill Reporting Line (1-877-518-5608) within 24 hours of the spill event. A written notification to the CDPHE-EMP is necessary within 5 days.
- Contact the Colorado State Patrol 24-hour hotline (1-303-239-4501) if the spill is on a state highway.
- Call the Westminster Stormwater Hotline (303-706-3367) if spilled material spreads to a Westminster storm drain or a waterway.

#### 14.0 FINAL STABILIZATION

#### 14.1 Establishing Final Stabilization

Final stabilization is reached when all ground surface disturbing activities at the construction site are complete; and, for all areas of ground surface disturbing activities, either a uniform vegetative cover with an individual plant density of at least 70 percent (uniform) of pre-disturbance levels is established, or equivalent permanent alternative stabilization methods are implemented.

#### 14.2 Final Stabilization Measures

[Include a description of final stabilization measures and methods i.e. asphalt, seed application and mix, landscaping sod, etc.]

#### 14.3 Long-Term/Permanent Stormwater Control Measures

[Include description of long-term, permanent stormwater control measures here (e.g. extended detention pond, bioswale, permeable pavement, regional pond, etc.). If the project does not require a permanent stormwater control measure, state that the site will be returned to pre-construction vegetated conditions if that applies]

#### 15.0 INSPECTIONS

During construction the site will be inspected by a Qualified Stormwater Manager at one of the following frequencies approved by the CDPHE:

- At least one inspection every 7 calendar days
- At least one inspection every 14 calendar days including post storm inspections within 24 hours of a storm that causes surface erosion.

The City of Westminster allows a 14-day and post storm inspection frequency.

Inspect the following areas for evidence of, or the potential for, pollutants leaving the construction site boundaries, entering the stormwater drainage system, or discharging to state waters:

- Construction site perimeter:
- All disturbed areas;
- Designated haul routes;
- Material and waste storage areas exposed to precipitation;
- Locations where stormwater has the potential to discharge offsite; and
- Locations where vehicles exit the site.

A reduced frequency inspection schedule may be followed with approval from the City of Westminster for the following site conditions:

- Inspections at completed sites that are awaiting final stabilization
- Winter conditions exclusion

A copy of a blank inspection form is included in Appendix F. Completed inspection forms must be keep on site or be easily accessible via an electronic format.

#### 16.0 RECORDKEEPING

A copy of this SWMP and all inspection records must be retained for three years from the permit termination date.

## APPENDIX A CDPS Construction Permit

(One page document)

### APPENDIX B COMPLETED SWMP CHECKLIST

#### **APPENDIX C**

EROSION AND SEDIMENT CONTROL PLANS, BMP DETAILS, LANDSCAPE PLANS, AND CHAPTER 2 OF COW STANDARDS AND SPECIFICATIONS

#### (\*\*NOTE: Add Plans. Don't need to include this page\*\*)

### The SWMP includes a legible site map(s) showing the following:

- a. Construction site boundaries (limits of construction and limits disturbance; if same, state in notes or legend)
- b. Flow arrows that depict stormwater flow directions on-site and runoff direction
- c. All potential pollutant sources:
  - i. All areas of ground disturbance including areas of borrow and fill
  - ii. Areas used for storage of stockpiles
  - iii. Staging area(s)
  - iv. Locations of all waste accumulation areas, including areas for liquid, concrete, masonry, and asphalt
  - v. Locations of dedicated asphalt, concrete batch plants, and masonry mixing stations
  - vi. Non-stormwater discharges
- d. Locations of all structural control measures. Include BMP detail (e.g. from Mile High Flood District).
- e. Locations of all non-structural control measures. Include BMP detail (e.g. from Mile High Flood District).
- f. Locations of springs, streams, wetlands, and other state waters, including areas that require pre-existing vegetation to be maintained within 50 feet of a receiving water
- g. 100-yr floodplain boundary if within 50 feet of limits of construction
- h. Locations of all stream crossings located within the construction site boundary

<u>Note</u>: Include a separate map for each phase of construction (e.g. initial, interim and final) to avoid clutter and confusion on the map. It may be appropriate for small and linear projects to have only one map and not require phased maps.

The City does not allow the use of straw bales. The use of mud mats for vehicle tracking control must be approved prior to use (usually on short-duration projects only).

### APPENDIX D SOILS REPORT AND GEOTECHNICAL REPORT

### APPENDIX E NATIONAL FLOOD HAZARD LAYER - FIRMette

### APPENDIX F INSPECTION FORMS