Storm Water Pollution Prevention Plan

for:

Pineview Boat and RV Storage
600 South HWY 39
Huntsville City, Utah, 84317

Operator(s):

Menlove Construction
Ken Menlove
4243 West Nike Drive #C
West Jordan, Utah, 84088
(801) 671-4697
menlovec@gmail.com

SWPPP Contact(s):

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SWPPP Preparation Date:

02 / 27 / 2018

Estimated Project Dates:

Project Start Date: **02 / 27 / 2018**
Project Completion Date: **02 / 27 / 2019**

Contents

CGP means “Construction General Permit” (for storm water)

SECTION 1: CONTACT INFORMATION/ RESPONSIBLE PARTIES

1.1 Owner(s) & Contractors

Owner(s):

Pineview Investment, LLC
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Centerville, Utah, 84014
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Project Manager(s):

Menlove Construction
Ken Menlove
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Site Supervisor(s):

Menlove Construction
Camron Rydman
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This SWPPP was Prepared by:

Hill & Argyle/Entellus
Scott Argyle
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Subcontractor(s):

PL Henderson & Sons
Jeff Henderson
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Salt Lake City, Utah, 84124
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Emergency 24-Hour Contact:

Menlove Construction
Ken Menlove
(801) 671-4697

1.2 Storm Water Team

Project Manager / SWPPP Prep / RSI / PE / Oversee Superintendent
Project Manager
Ken Menlove
(801) 671-4697
Menlovec@gmail.com

Superintendent / Site SWPPP Inspector
Camron Rydman
(801) 809-5826
Menlovec@gmail.com

SECTION 2: SITE EVALUATION, ASSESSMENT, & PLANNING

2.1 Project/Site Information

Project/Site Name: Pineview Boat and RV Storage

Project Street/Location: 600 South HWY 39

City: Huntsville City State: UT ZIP Code: 84317

County or Similar Subdivision: Weber County

Latitude/Longitude (Use **one** of three possible formats, and specify method)

Latitude:	Longitude:
1. N (degrees, minutes, seconds)	1. W (degrees, minutes, seconds)
2. _ _ º _ _ . _ _' N (degrees, minutes, decimal)	2. _ _ º _ _ . _ _' W (degrees, minutes, decimal)
3. 41.2534389	3. -111.760363

Method for determining latitude/longitude:

☐ USGS topographic map (specify scale: _____) ☐ EPA Web site ☐ GPS

☒ Other (please specify): Google Earth

Is the project located in Indian country? ☐ Yes ☒ No

If yes, name of Reservation, or if not part of a Reservation, indicate "not applicable."_____

Is this project considered a federal facility? ☐ Yes ☒ No

UPDES project or permit tracking number*: UTR384889_____

**(This is the unique identifying number assigned to your project by your permitting authority after you have applied for coverage under the appropriate National Pollutant Discharge Elimination System (UPDES) construction general permit.)*

2.2 Nature of Construction Activity

Describe the general scope of the work for the project, major phases of construction, etc:

- Phase 1: Excavate / backfill footings / foundation walls
- Phase 2: Pour concrete floors / site utilities / masonry walls / Steel buildings
- Phase 3: Final grade / gravel parking / fencing / landscaping

What is the function of the construction activity?

☐ Residential ☒ Commercial ☐ Industrial ☐ Road Construction ☐ Linear Utility
☐ Other (please specify):
Estimated Project Start Date: 02 / 27 / 2018
Estimated Project Completion Date: 02 / 27 / 2019

2.3 Construction Site Estimates

The following are estimates of the construction site.

Total project area:	1.59 acres
Construction site area to be disturbed:	1.59 acres
Percentage impervious area before construction:	100 %
Runoff coefficient before construction:	0.15
Percentage impervious area after construction:	84%
Runoff coefficient after construction	0.54

2.4 Soils, Slopes, Vegetation, and Current Drainage Patterns

Soil type(s): The site is comprised of two soil types the first is a Silt Loam, and the second is a Silty Clay Loam

Slopes (describe current slopes and note any changes due to grading or fill activities): The natural slope of the project area is from East to West at 1% to 3%.

Drainage Patterns (describe current drainage patterns and note any changes dues to grading or fill activities): Current drainage pattern- water flows from west to east across the lot and into the existing U-DOT ROW, which percolates into the ground. This pattern will only be modified in that storm water from the site will be retained on the site and prevented from exiting the property.

Vegetation: The site is currently covered with grasses and weeds.

Other:

2.5 Emergency Related Projects

Emergency-Related Project? ☐ Yes ☒ No

2.6 Phase/Sequence of Construction Activity

Phase I

- Excavate and Backfill Footings
- Duration of phase (start date, end date)
- BMP's:
  - Minimize disturbed area and protect natural features and soil
  - Retain sediment on-site
  - Stockpile sediment or soil
  - Minimize dust
  - Silt Fence
  - Berms
  - Concrete Washout
  - Use inlet protection for all surrounding storm drains
- Stabilization Methods
  - Protect slopes
  - Establish stabilized construction exits

Phase II

- Pour Concrete Walls / Site Utilities / Masonry Walls / Steel Building Erection
- Duration of phase (start date, end date)
- BMP's
  - Retain sediment on-site
  - Protect slopes
  - Silt fence
  - Berms
  - Concrete Washout
  - Waste Container
  - Inlet Protection
  - Minimize dust
- Stabilization Methods
  - Protect slopes
  - Establish stabilized construction exits
  - Backfill foundations

Phase III

- Final Grading / gravel parking / Final Stabilization / Fencing
- Duration of phase (start date, end date)
- BMP's
  - Retain sediment on-site
  - Protect slopes
  - Silt Fence
  - Berms

- Concrete Washout
- Stabilization Methods
  - Final Grading
  - Landscaping

2.7 Site Features and Sensitive Areas to be Protected

None

2.8 Maps

See Appendix

SECTION 3: WATER QUALITY

3.1 UIC Class 5 Injection Wells

- ☐ French Drain
- ☐ Commercially Manufactured pre-cast or pre-built subsurface infiltration system
- ☐ Drywell(s), seepage pit(s), improved sinkhole(s)

Description of your Class V Injection Well:
Not Applicable

DWQ contact information:
Name:
Date:
Additional information:

Local Requirements:

3.2 Discharge Information

Does your project/site discharge storm water into a Municipal Separate Storm Sewer System (MS4)? ☐ Yes ☒ No
List the MS4 that receives the discharge from the construction project: INSERT TEXT HERE

Are there any surface waters that are located within 50 feet of your construction disturbances?
☐ Yes ☒ No
List the water body: INSERT TEXT HERE

3.3 Receiving Waters

Table 1 – Names of Receiving Waters (see http://wq.deq.utah.gov)

Name(s) of the first surface water that receives storm water directly from your site and/or from the MS4. (note: multiple rows provided where your site has more than one point of discharge that flows to different surface waters)
1.none
2.
3.
4.
5.

6.

3.4 Impaired Waters

Table 2. - Impaired Waters (Answer the following for each surface water listed in Table 1 above) (see http://wq.deq.utah.gov look in the bottom half of the left hand column)

	Is this surface water listed as "impaired"?	If you answered yes, then answer the following:		
		What pollutant(s) are causing the impairment?	Has a TMDL been completed?	Pollutant(s) for which there is a TMDL
1.	☐ Yes ☒ No		☐ Yes ☐ No	
2.	☐ Yes ☐ No		☐ Yes ☐ No	
3.	☐ Yes ☐ No		☐ Yes ☐ No	
4.	☐ Yes ☐ No		☐ Yes ☐ No	
5.	☐ Yes ☐ No		☐ Yes ☐ No	
6.	☐ Yes ☐ No		☐ Yes ☐ No	

3.5 High Water Quality

Table 3 – High Water Quality (Answer the following for each surface water listed in Table 1 above) (see http://wq.deq.utah.gov look in the bottom half of the left hand column)

	Is this surface water designated as High Water Quality? (see Appendix C)	If you answered yes, specify which category the surface water is designated as?
1.	☐ Yes ☒ No	☐ Category 1 ☐ Category 2
2.	☐ Yes ☐ No	☐ Category 1 ☐ Category 2
3.	☐ Yes ☐ No	☐ Category 1 ☐ Category 2
4.	☐ Yes ☐ No	☐ Category 1 ☐ Category 2
5.	☐ Yes ☐ No	☐ Category 1 ☐ Category 2
6.	☐ Yes ☐ No	☐ Category 1 ☐ Category 2

3.6 Dewatering Practices

Not Applicable

3.7 Control Storm Water Flowing onto and through the Project

BMP Description*: *SF Silt Fence (see detail at end of SWPPP	
Installation Schedule:	Before any earth work begins
Maintenance and Inspection:	At least every 7 days or within 24 hours after a storm of 0.5 inches or greater, repair as needed
Responsible Staff:	Ken Menlove

3.8 Protect Storm Drain Inlets

BMP Description: IP-GB Inlet Protection – Gravel Bags (see detail at end of SWPPP)	
Installation Schedule:	Before any construction work begins
Maintenance and Inspection:	At least every 7 days or within 24 hours after a storm of 0.5 inches or greater, repair as needed
Responsible Staff:	Ken Menlove

SECTION 4: POLLUTION PREVENTION STANDARDS

4.1 Potential Sources of Pollution

Potential sources of sediment to storm water runoff:
Site excavation will produce sediment over entire project

Potential pollutants and sources, other than sediment, to storm water runoff:

Pollutant-Generating Activity	**Pollutants or Pollutant Constituents** (that could be discharged if exposed to storm water)	**Location on Site** (or reference SWPPP site map where this is shown)
Site Excavation (Contracter)	Fuels, Oils, Concrete, Human Waste, Landscape, and Building Materials.	On Site

4.2 Non-Storm Water Discharges

Authorized Non-Storm Water Discharges	**Comments**
Water used to control dust	
Routine external building wash down	
Pavement wash waters	
Landscape irrigation	

BMP Description: SF Silt Fence (see detail at end of SWPPP)	
Installation Schedule:	Before any earthwork begins
Maintenance and Inspection:	Inspect at least every seven days, or within 24 hours after a storm of 0.5 inches or greater. Repair as needed.
Responsible Staff:	Ken Menlove

BMP Description: IP-GB Inlet Protection – Gravel Bags (see detail at end of SWPPP)	
Installation Schedule:	Before any earthwork begins
Maintenance and Inspection:	Inspect at least every seven days, or within 24 hours after a storm of 0.5 inches or greater. Repair as needed.
Responsible Staff:	Ken Menlove

BMP Description: DC Dust Control (see detail at end of SWPPP	
Installation Schedule:	As necessary if erosion becomes an issue
Maintenance and Inspection:	Inspect at least every seven days, or within 24 hours after a storm of 0.5 inches or greater. Repair as needed.
Responsible Staff:	Ken Menlove

BMP Description: DC Dust Control	
Installation Schedule:	Daily as needed
Maintenance and Inspection:	Daily or more frequently as needed
Responsible Staff:	Ken Menlove

4.3 Natural Buffers or Equivalent Sediment Controls

Buffer Compliance Alternatives

Are there any surface waters within 50 feet of your project's earth disturbances? ☐ YES ☒ NO

(Note: If no, no further documentation is required for the SWPPP Template.)

Check the compliance alternative that you have chosen:

☐ I will provide and maintain a 50-foot undisturbed natural buffer.

(Note (1): You must show the 50-foot boundary line of the natural buffer on your site map.)

(Note (2): You must show on your site map how all discharges from your construction disturbances through the natural buffer area will first be treated by the site's erosion and sediment controls. Also, show on the site map any velocity dissipation devices used to prevent erosion within the natural buffer area.)

☐ I will provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by additional erosion and sediment controls, which in combination achieves the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.

(Note (1): You must show the boundary line of the natural buffer on your site map.)

(Note (2): You must show on your site map how all discharges from your construction disturbances through the natural buffer area will first be treated by the site's erosion and sediment controls. Also, show on the site map any velocity dissipation devices used to prevent erosion within the natural buffer area.)

- INSERT WIDTH OF NATURAL BUFFER TO BE RETAINED
- INSERT EITHER ONE OF THE FOLLOWING:

  (1) THE ESTIMATED SEDIMENT REMOVAL FROM A 50-FOOT BUFFER USING APPLICABLE INFORMATION IN APP. D, 2.2.2. INCLUDE INFORMATION ABOUT THE BUFFER VEGETATION AND SOIL TYPE THAT PREDOMINATE AT YOUR SITE

  OR

  (2) IF YOU CONDUCTED A SITE-SPECIFIC CALCULATION FOR THE ESTIMATED SEDIMENT REMOVAL OF A 50-FOOT BUFFER, PROVIDE THE SPECIFIC REMOVAL EFFICIENCY, AND INFORMATION YOU RELIED UPON TO MAKE YOUR SITE-SPECIFIC CALCULATION.
- INSERT DESCRIPTION OF ADDITIONAL EROSION AND SEDIMENT CONTROLS TO BE USED IN COMBINATION WITH NATURAL BUFFER AREA
- INSERT THE FOLLOWING INFORMATION:
  - (1) SPECIFY THE MODEL OR OTHER TOOL USED TO ESTIMATE SEDIMENT LOAD REDUCTIONS FROM THE COMBINATION OF THE BUFFER AREA AND ADDITIONAL EROSION AND SEDIMENT CONTROLS INSTALLED AT YOUR SITE, AND
  - (2) INCLUDE THE RESULTS OF CALCULATIONS SHOWING THAT THE COMBINATION OF YOUR BUFFER AREA AND THE ADDITIONAL EROSION AND SEDIMENT CONTROLS INSTALLED AT YOUR SITE WILL MEET OR EXCEED THE SEDIMENT REMOVAL EFFICIENCY OF A 50-FOOT BUFFER

☐ It is infeasible to provide and maintain an undisturbed natural buffer of any size, therefore I will implement erosion and sediment controls that achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.

- INSERT RATIONALE FOR CONCLUDING THAT IT IS INFEASIBLE TO PROVIDE AND MAINTAIN A NATURAL BUFFER OF ANY SIZE
- INSERT EITHER ONE OF THE FOLLOWING:

  OR

  (2) IF YOU CONDUCTED A SITE-SPECIFIC CALCULATION FOR THE ESTIMATED SEDIMENT REMOVAL OF A 50-FOOT BUFFER, PROVIDE THE SPECIFIC REMOVAL EFFICIENCY, AND INFORMATION YOU RELIED UPON TO MAKE YOUR SITE-SPECIFIC CALCULATION.
- INSERT DESCRIPTION OF ADDITIONAL EROSION AND SEDIMENT CONTROLS TO BE USED IN COMBINATION WITH NATURAL BUFFER AREA

- INSERT THE FOLLOWING INFORMATION:
  - (1) SPECIFY THE MODEL OR OTHER TOOL USED TO ESTIMATE SEDIMENT LOAD REDUCTIONS FROM THE EROSION AND SEDIMENT CONTROLS INSTALLED AT YOUR SITE, AND
  - (2) INCLUDE THE RESULTS OF CALCULATIONS SHOWING THAT THE ADDITIONAL EROSION AND SEDIMENT CONTROLS INSTALLED AT YOUR SITE WILL MEET OR EXCEED THE SEDIMENT REMOVAL EFFICIENCY OF A 50-FOOT BUFFER

☐ I qualify for one of the exceptions in Part 2.1.2.a.v. (If you have checked this box, provide information on the applicable buffer exception that applies, below.)

Buffer Exceptions

Which of the following exceptions to the buffer requirements applies to your site?

☐ There is no discharge of storm water to the surface water that is located 50 feet from my construction disturbances.

(Note: If this exception applies, no further documentation is required for Section 4.1 of the Template.)

☐ No natural buffer exists due to preexisting development disturbances that occurred prior to the initiation of planning for this project.

(Note (1): If this exception applies, no further documentation is required for Section 2.2 of the Template.)

(Note (2): Where some natural buffer exists but portions of the area within 50 feet of the surface water are occupied by preexisting development disturbances, you must still comply with the one of the CGP Part 2.1.2.a compliance alternatives.)

☐ For a "linear project" (defined in Appendix A), site constraints (e.g., limited right-of-way) make it infeasible for me to meet any of the CGP Part 2.1.2.a.v.3 compliance alternatives. Include documentation here of the following:

(1) Why it is infeasible for you to meet one of the buffer compliance alternative, and (2) Buffer width retained and/or supplemental erosion and sediment contorls to treat discharges to the surface water.

☐ The project qualifies as "small residential lot" construction (defined in Part 2.1.2.a.v.3 and in Appendix D).

For Alternative 1 (see Appendix D, Part 2.3.a):

- INSERT WIDTH OF NATURAL BUFFER TO BE RETAINED
- INSERT APPLICABLE REQUIREMENTS BASED ON TABLE D-1
- INSERT DESCRIPTION OF HOW YOU WILL COMPLY WITH THESE REQUIREMENTS

For Alternative 2 (see Appendix D, Part 2.3.b):

- INSERT (1) THE ASSIGNED RISK LEVEL BASED ON APPLICABLE TABLE IN APP. D, PART 2.3.2.b, AND (2) THE PREDOMINANT SOIL TYPE AND AVERAGE SLOPE AT YOUR SITE
- INSERT APPLICABLE REQUIREMENTS BASED ON APP. D, TABLE D-2
- INSERT DESCRIPTION OF HOW YOU WILL COMPLY WITH THESE REQUIREMENTS

☐ Buffer disturbances are authorized under a CWA Section 404 permit.
INSERT DESCRIPTION OF ANY EARTH DISTURBANCES THAT WILL OCCUR WITHIN THE BUFFER AREA

(Note (1): If this exception applies, no further documentation is required for Section 2.2 of the Template.)

(Note (2): This exception only applies to the limits of disturbance authorized under the Section 404 permit, and does not apply to any upland portion of the construction project.)

☐ Buffer disturbances will occur for the construction of a water-dependent structure or water access area (e.g., pier, boat ramp, and trail). INSERT DESCRIPTION OF ANY EARTH DISTURBANCES THAT WILL OCCUR WITHIN THE BUFFER AREA

(Note (1): If this exception applies, no further documentation is required for Section 2.2 of the Template.)

SECTION 5: EROSION AND SEDIMENT CONTROLS

5.1 Minimize Disturbed Area and Protect Natural Features and Soil

Not Applicable

5.2 Establish Perimeter Controls and Sediment Barriers

BMP Description: SF Silt Fence (see detail at end of SWPPP)	
Installation Schedule:	Before any construction work begins
Maintenance and Inspection:	At least every 7 days or within 24 hours after a storm of 0.5 inches or greater, repair as needed
Responsible Staff:	Ken Menlove

BMP Description: IP-GB Inlet Protection – Gravel Bags (see detail at end of SWPPP)	
Installation Schedule:	Before any construction work begins
Maintenance and Inspection:	At least every 7 days or within 24 hours after a storm of 0.5 inches or greater, repair as needed
Responsible Staff:	Ken Menlove

5.3 Retain Sediment On-Site

BMP Description: SF Silt Fence (see detail at end of SWPPP)	
Installation Schedule:	Before any construction work begins
Maintenance and Inspection:	At least every 7 days or within 24 hours after a storm of 0.5 inches or greater, repair as needed
Responsible Staff:	Ken Menlove

5.4 Establish Stabilized Construction Exits

BMP Description: SCE Stabilized Construction Entrance (see detail at end of SWPPP)	
Installation Schedule:	Start of project
Maintenance and Inspection:	Daily inspection – repair as frequently as needed Course aggregate, 3-6 inches in size
Responsible Staff:	Ken Menlove

5.5 Protect Slopes

BMP Description: ECB Erosion Control Blankets (see detail at end of SWPPP)	
Installation Schedule:	As necessary if erosion becomes an issue
Maintenance and Inspection:	At least every 7 days or within 24 hours after a storm of 0.5 inches or greater, repair as needed
Responsible Staff:	Ken Menlove

5.6 Stockpiled Soil or Other Erodible Material

BMP Description: STOCKPILE WITHIN SILT FENCE AREA	
Installation Schedule:	As necessary
Maintenance and Inspection:	At least every 7 days or within 24 hours after a storm of 0.5 inches or greater, repair as needed
Responsible Staff:	Ken Menlove

5.7 Minimize Dust

BMP Description: DC Dust Control (see detail at end of SWPPP)	
Installation Schedule:	Daily as needed
Maintenance and Inspection:	Daily or more frequently as needed
Responsible Staff:	Ken Menlove

BMP Description: Dust Control – Water Truck	
Installation Schedule:	Daily as needed
Maintenance and Inspection:	Daily or more frequently as needed
Responsible Staff:	Ken Menlove

5.8 Topsoil

BMP Description: STOCKPILE WITHIN SILT FENCE AREA SF-SILT FENCE	
Installation Schedule:	As necessary
Maintenance and Inspection:	At least every 7 days or within 24 hours after a storm of 0.5 inches or greater, repair as needed
Responsible Staff:	Ken Menlove

5.9 Soil Compaction

Not Applicable

5.10 High Altitude/Heavy Snows

Not Applicable

5.11 Linear Activities

Not Applicable

5.12 Chemical Treatment

Not Applicable

5.13 Stabilize Soils

BMP Description: ECB Erosion Control Blankets (see detail at end of SWPPP)	
☐ ***Permanent***	☒ ***Temporary***
Installation Schedule:	As needed
Maintenance and Inspection:	At least every 7 days or within 24 hours after a storm of 0.5 inches or greater, repair as needed
Responsible Staff:	Ken Menlove

BMP Description: DC Dust Control (see detail at end of SWPPP)	
☐ ***Permanent***	☒ ***Temporary***
Installation Schedule:	Daily as needed
Maintenance and Inspection:	Daily or more frequently as needed
Responsible Staff:	Ken Menlove

5.14 Final Stabilization

BMP Description: SP Seeding and Planting (see detail at end of SWPPP)	
Installation Schedule:	During final landscaping or as needed
Maintenance and Inspection:	
Responsible Staff:	Ken Menlove

SECTION 6: POLLUTION PREVENTION

6.1 Spill Prevention and Response

See Spill Clean Up BMP in Appendix M

Any discharges in 24 hours equal to or in excess of the reportable quantities listed in 40 CFR 117, 40 CFR 110, and 40 CFR 302 will be reported to the National Response Center and the Division of Water Quality (DWQ) as soon as practical after knowledge of the spill is known to the permittees. The permittee shall submit within 14 calendar days of knowledge of the release a written description of: the release (including the type and estimate of the amount of material released), the date that such release occurred, the circumstances leading to the release, and measures taken and/or planned to be taken to the Division of Water Quality (DWQ), 288 North 1460 West, P.O. Box 144870, Salt Lake City, Utah 84114-4870. The Storm Water Pollution Prevention Plan must be modified within14 calendar days of knowledge of the release to provide a description of the release, the circumstances leading to the release, and the date of the release. In addition, the plan must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate.

Agency	Phone Number
National Response Center	(800) 424-8802
Division of Water Quality (DWQ) 24-Hr Reporting	(801)-231-1769 (801) 536-4123
Utah Department of Health Emergency Response	(801) 580-6681

Material	Media Released To	Reportable Quantity
Engine oil, fuel, hydraulic & brake fluid	Land	25 gallons
Paints, solvents, thinners	Land	100 lbs (13 gallons)
Engine oil, fuel, hydraulic & brake fluid	Water	Visible Sheen
Antifreeze, battery acid, gasoline, engine degreasers	Air, Land, Water	100 lbs (13 gallons)
Refrigerant	Air	1 lb

6.2 Construction and Domestic Waste

BMP Description: PT Portable Toilet (see detail at end of SWPPP)	
Installation Schedule:	Start of project
Maintenance and Inspection:	At least every 7 days or more frequently as needed
Responsible Staff:	Ken Menlove

BMP Description: SCU Spill Clean-up (see detail at end of SWPPP)	
Installation Schedule:	Start of project
Maintenance and Inspection:	As needed
Responsible Staff:	Ken Menlove

BMP Description: WD Waste Disposal (see detail at end of SWPPP)	
Installation Schedule:	Start of building construction
Maintenance and Inspection:	At least every 7 days or within 24 hours after a storm of 0.5 inches or greater, repair as needed
Responsible Staff:	Ken Menlove

6.3 Washing of Applicators and Containers used for Concrete, Paint or Other Materials

BMP Description: CWM Concrete Waste Management (see detail at end of SWPPP)	
Installation Schedule:	At start of construction
Maintenance and Inspection:	At least every 7 days or within 24 hours after a storm of 0.5 inches or greater, repair as needed
Responsible Staff:	Ken Menlove

BMP Description: HWM Hazardous Waste Management (see detail at end of SWPPP)	
Installation Schedule:	Start of building construction
Maintenance and Inspection:	At least every 7 days or within 24 hours after a storm of 0.5 inches or greater, repair as needed
Responsible Staff:	Ken Menlove

6.4 Establish Proper Building Material Staging Areas

BMP Description: MS Material Storage (see detail at end of SWPPP)	
Installation Schedule:	At start of project
Maintenance and Inspection:	At least every 7 days or more often as needed
Responsible Staff:	Ken Menlove

6.5 Establish Proper Equipment/Vehicle Fueling and Maintenance Practices

BMP Description: VEF Vehicle And Equipment Fueling (see detail at end of SWPPP)	
Installation Schedule:	Daily as needed
Maintenance and Inspection:	Daily or more often as needed
Responsible Staff:	Ken Menlove

6.6 Control Equipment/Vehicle Washing

BMP Description: VEC Vehicle And Equipment Cleaning (see detail at end of SWPPP)	
Installation Schedule:	At start of project
Maintenance and Inspection:	Daily as needed
Responsible Staff:	Ken Menlove

6.7 Pesticides, Herbicides, Insecticides, Fertilizers, and Landscape Materials

Not Applicable

6.8 Other Pollution Prevention Practices

Not Applicable

SECTION 7: INSPECTIONS & CORRECTIVE ACTIONS

7.1 Inspections

1. ***Inspection Personnel:*** Identify the person(s) who will be responsible for conducting inspections and describe their qualifications:
   Ken Menlove, RSI

2. ***Inspection Schedule and Procedures:***

   Describe the inspection schedules and procedures you have developed for your site (include frequency of inspections for each BMP or group of BMPs, indicate when you will inspect, e.g., before/during/and after rain events, spot inspections):
   Weekly

   Describe the general procedures for correcting problems when they are identified. Include responsible staff and time frames for making corrections:

   Attach a copy of the inspection report you will use for your site.
   See Appendix E

Reduction in Inspection Frequency (if applicable)

7.2 Corrective Actions

Corrective Action Log:
See appendix F

7.3 Delegation of Authority

Duly Authorized Representative(s) or Position(s):
None

Attach a copy of the signed delegation of authority form in Appendix K.

SECTION 8: TRAINING AND RECORDKEEPING

8.1 Training

Individual(s) Responsible for Training:
Ken Menlove

Describe Training Conducted:

- General stormwater and BMP awareness training for staff and subcontractors:

- Detailed training for staff and subcontractors with specific stormwater responsibilities:

Training Attendee Name	Title of Training	Duration	Date of Training

Additional training documentation should be included in Appendix J.

8.2 Recordkeeping

Records will be retained for a minimum period of at least 3 years after the permit is terminated.

Date(s) when major grading activities occur:
See appendix I

Date(s) when construction activities temporarily or permanently cease on a portion of the site:
See appendix I

Date(s) when an area is either temporarily or permanently stabilized:
See appendix I

8.3 Log of Changes to the SWPPP

Log of changes and updates to the SWPPP
See appendix G

SECTION 9: CERTIFICATION

Owner

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: W. Scott Kjar Title: **Manager**

Signature: W. Scott Kjar Date: **02/27/18**

General Contractor

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: Ken Menlove Title: V.P.

Signature: Date: 2/27/18

SWPPP APPENDICES

Attach the following documentation to the SWPPP:

Appendix A – General Location Map

Appendix B – Site Maps

Appendix C – Construction General Permit

Appendix D – NOI and Acknowledgement Letter from EPA/State/MS4

Appendix E – Inspection Reports

Appendix F – Corrective Action Log (see CGP 5.4)

Appendix G – SWPPP Amendment Log (see CGP 7.4.3)

Appendix H – Subcontractor Certifications/Agreements

Appendix I – Grading and Stabilization Activities Log (see CGP 7.2.4.b)

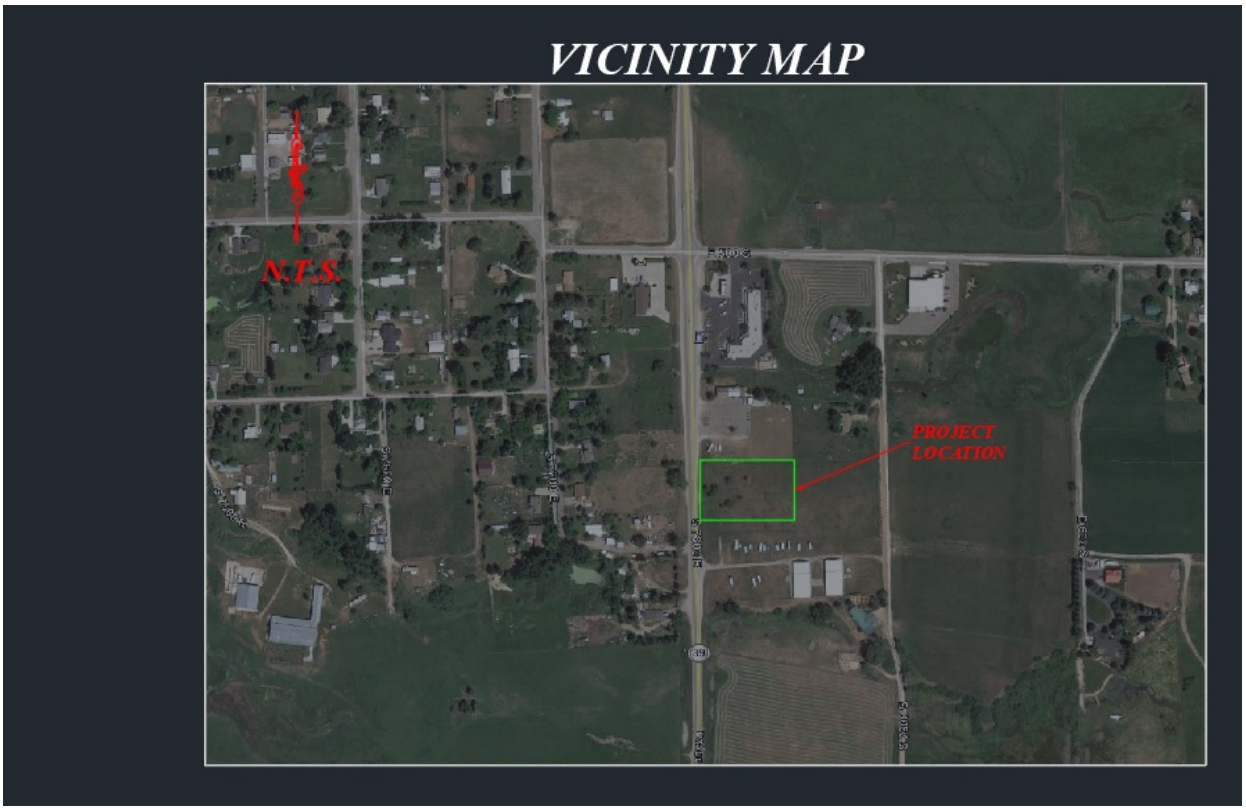
Appendix J – Training Log (see CGP 6)

Appendix K – Delegation of Authority (see CGP Appendix G16.1.2)

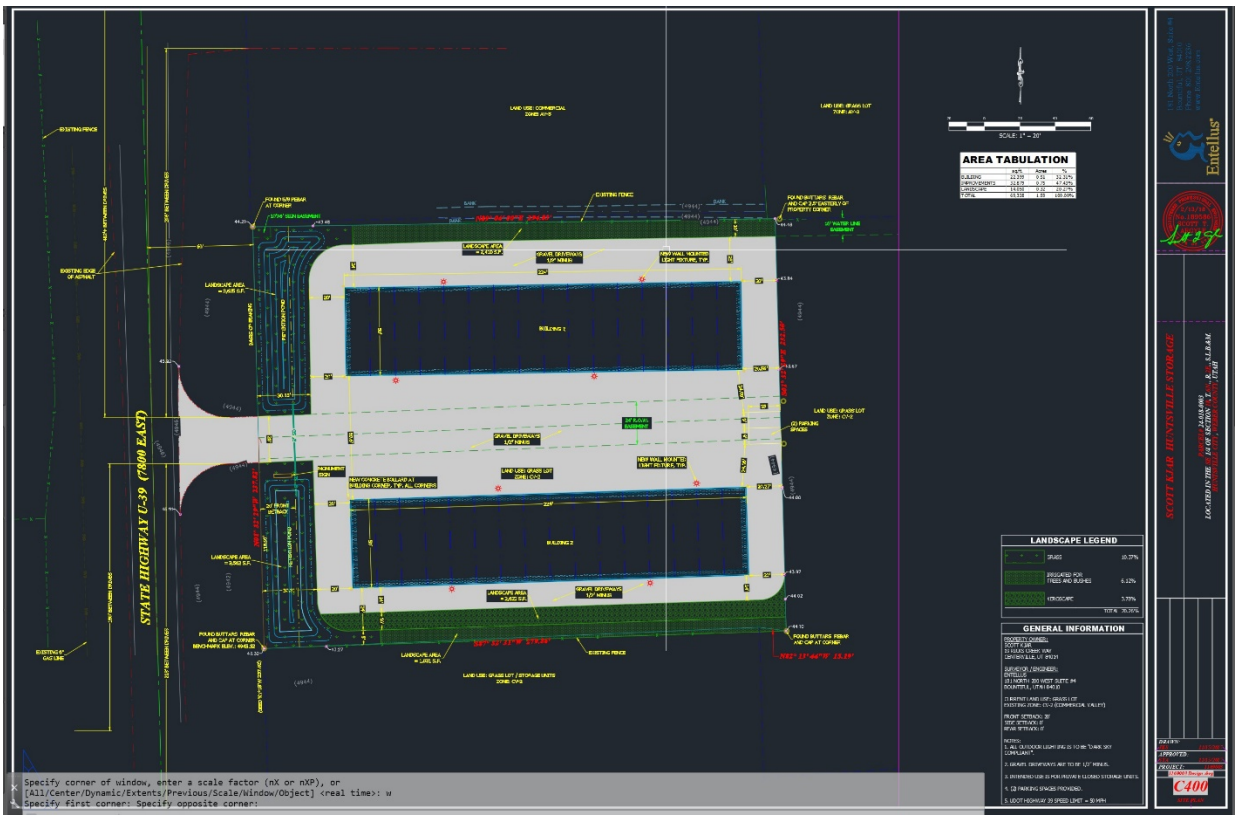
Appendix L – Additional Information (i.e., Other permits such as dewatering, stream alteration, wetland; and out of date swppp documents)

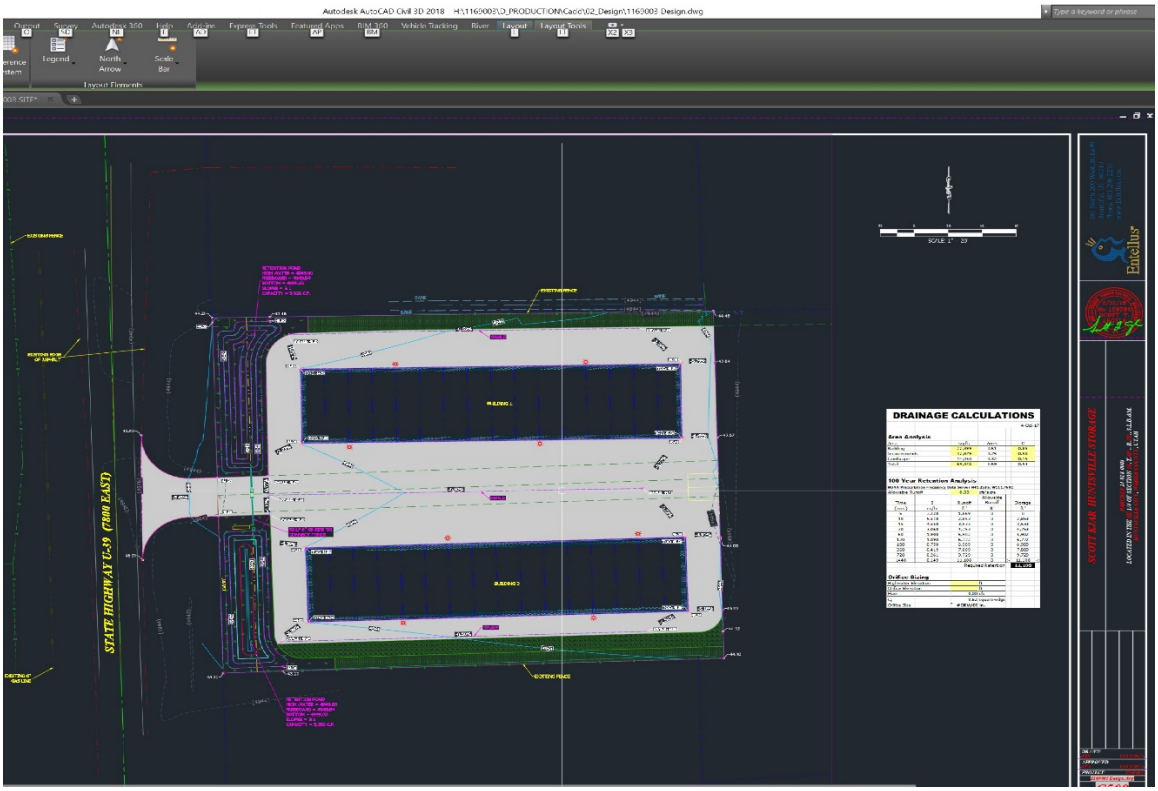
Appendix M – BMP Specifications

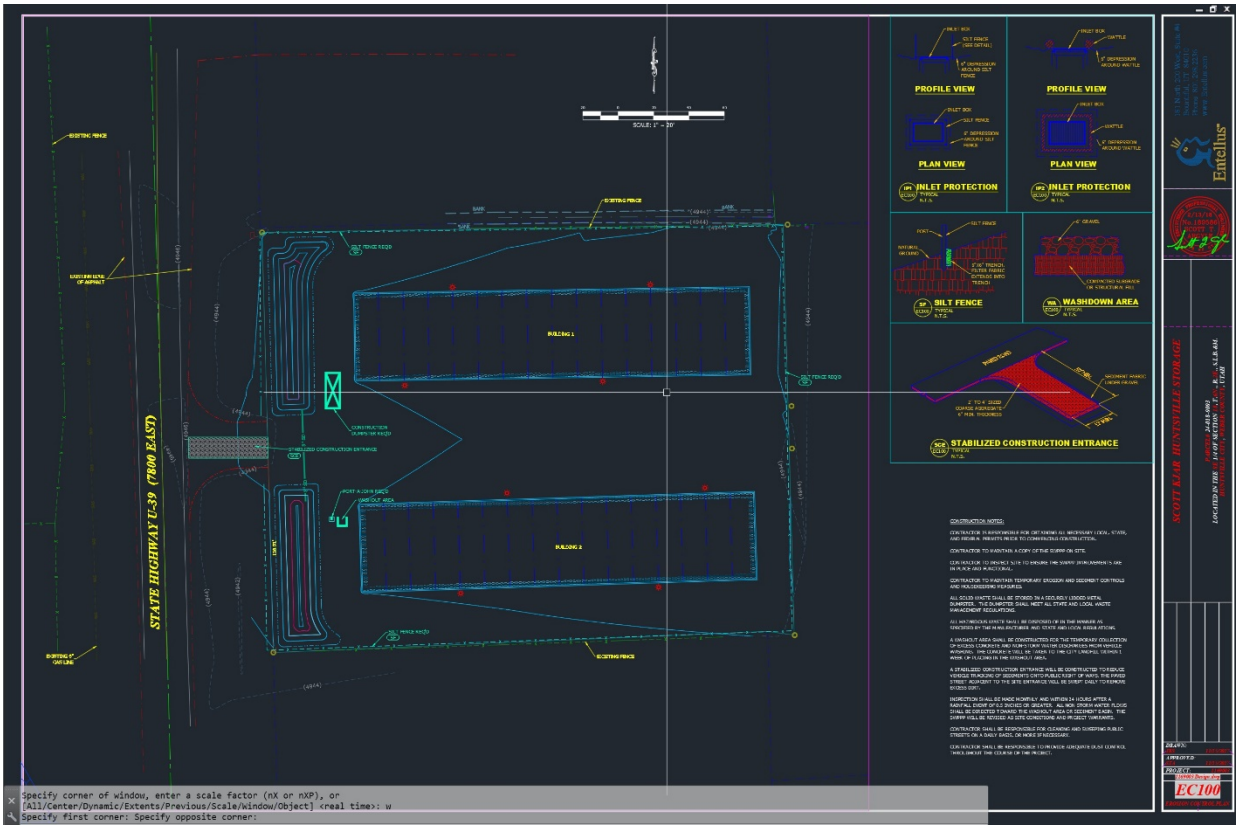
Appendix A – General Location Map



Appendix B – Site Maps


AREA TABULATION
LANDSCAPE LEGEND
GENERAL INFORMATION
STATE HIGHWAY U-39 (7800 EAST)
SCOTT KAR HUNTSVILLE STORAGE
Specify corner of window, enter a scale factor (nX or nXP), or
[All/Center/Dynamic/Extents/Previous/Scale/Window/Object] <real time>: w
Specify first corner: Specify opposite corner:


Autodesk AutoCAD Civil 3D 2018
DRAINAGE CALCULATIONS
STATE HIGHWAY U-39 (7800 EAST)
SCOTT KAR HUNTSVILLE STORAGE


STATE HIGHWAY U-39 (7800 EAST)
PROFILE VIEW
PLAN VIEW
INLET PROTECTION
SILT FENCE
WASHDOWN AREA
STABILIZED CONSTRUCTION ENTRANCE
CONSTRUCTION NOTES:
SCOTT KJAR HUNTSVILLE STORAGE
Entellus
EC100

Appendix C – Construction General Permit

Appendix D – NOI Acknowledgement Letter

STATE OF UTAH, DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF WATER QUALITY
195 North 1950 West, P.O. Box 144870, Salt Lake City, Utah 84114-4870 (801) 536-4300

NOI Notice of Intent (NOI) for Storm Water Discharges Associated with Construction Activity Under the UPDES General Permit No. UTR384889 SEE REVERSE FOR INSTRUCTIONS

Submission of this Notice of Intent constitutes notice that the party(s) identified in Section I of this form intends to be authorized by UPDES General Permit No. UTR384889 issued for storm water discharges associated with construction activity in the State of Utah. Becoming a permittee obligates such discharger to comply with the terms and conditions of the permit. ALL NECESSARY INFORMATION MUST BE PROVIDED ON THIS FORM.

Is this NOI seeking continuation for previously expired permit coverage at the same site? Y ◉ N ☐
If yes, what is the number of the previous permit coverage? Permit No.

Permit Start Date 02/23/2018 Permit Expiration Date: 02/23/2019

I. OPERATOR INFORMATION

Name (Owner): Pineview Investment LLC Phone: 801-979-9963
Address: 19 W 1600 N Status of Owner/Operator: PRIVATE
City: CENTERVILLE State: UT Zip: 84014
Contact Person: Scott Kjar Phone: 801-979-9963

Name (Operator): Menlove Construction Phone: 801-671-4697
Address: 4243 West Nike Dr. Ste. C Status of Owner/Operator: PRIVATE
City: WEST JORDAN State: UT Zip: 84088
Contact Person: Ken menlove Phone: 801-671-4697

II. FACILITY SITE / LOCATION INFORMATION

Is the facility located in Indian Country? Y ☐ N ◉

Name: Huntsville Storage
Project No. (if any):
Address: 650 S 7800 E County: WEBER
City: HUNTSVILLE State: UT Zip: 84317
Latitude: 41.2534389 Longitude: -111.760363
Method (check one): ☐ USGS Topo Map, Scale ☐ EPA Web site ☐ GPS ☑ Other

III. SITE INFORMATION

Municipal Separate Storm Sewer System (MS4) Operator Name: Weber County
Receiving Water Body: Pineview Reservoir guess this is known ☐ this is a guess ◉
Estimate of distance to the nearest water body? 1 miles ft. ☐ miles. ◉
Is the receiving water an impaired or high quality water body (see http://wq.deq.utah.gov/)? Yes ◉ No ☐
List the Number of any other UPDES permits at the site:

IV. TYPE OF CONSTRUCTION (Check all that apply)

1. ☐ Residential 2. ☑ Commercial 3. ☐ Industrial 4. ☐ Road 5. ☐ Bridge 6. ☑ Utility
7. ☑ Contouring, Landscaping 8. ☐ Pipeline 9. ☐ Other (Please list)

V. BEST MANAGEMENT PRACTICES

Identify proposed Best Management Practices (BMPs) to reduce pollutants in storm water discharges (Check all that apply):

1. ☑ Silt Fence/Straw Wattle/Perimeter Controls 2. ☐ Sediment Pond 3. ☐ Seeding/Preservation of Vegetation
4. ☐ Mulching/Geotextiles 5. ☐ Check Dams 6. ☐ Structural Controls (Berms, Ditches, etc.)
7. ☐ Other (Please list)

VI. GOOD HOUSEKEEPING PRACTICES

Identify proposed Good Housekeeping Practices to reduce pollutants in storm water discharges (Check all that apply even if they apply only during a part of the construction time):

1. ☑ Sanitary/Portable Toilet 2. ☑ Washout Areas 3. ☑ Construction Chemicals/Building Supplies Storage Area
4. ☑ Garbage/Waste Disposal 5. ☑ Non-Storm Water 6. ☑ Track Out Controls 7. ☑ Spill Control Measures

VII. ADDITIONAL

Estimated Area to be Disturbed (in Acres): 1.59 Total Area of Plot (in Acres): 1.59

A storm water pollution prevention plan has been prepared for this site and is to the best of my knowledge in Compliance with State and/or Local Sediment and Erosion Plans and Requirements. Y ◉ N ○
(A pollution prevention plan is required to be on hand before submittal of the NOI.)

Enter the best e-mail address to contact the permittee: menlovec@gmail.com

VIII. CERTIFICATION: I certify under penalty of law that I have read and understand the Part 1 eligibility requirements for coverage under the general permit for storm water discharges from construction activities. I further certify that to the best of my knowledge, all discharges and BMPs that have been scheduled and detailed in a storm water pollution prevention plan will satisfy requirements of this permit. I understand that continued coverage under this storm water general permit is contingent upon maintaining eligibility as provided for in Part 1.

I also certify under penalty of law that this document and all attachments were prepared under the direction or supervision of those who have placed their signature(s) below, in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name (Owner): Pineview Investment LLC Date: 02/23/18

Signature: W. Scott Kjar

Print Name (Operator): Menlove Construction Date: 2/23/18

Signature:

Amount of Permit Fee Enclosed: $ 150.00

Appendix F – *Sample* Corrective Action Log

Project Name:
SWPPP Contact:

Inspection Date	Inspector Name(s)	Description of BMP Deficiency	Corrective Action Needed (including planned date/responsible person)	Date Action Taken/Responsible person

Appendix G – *Sample* SWPPP Amendment Log

Project Name:
SWPPP Contact:

Amendment No.	Description of the Amendment	Date of Amendment	Amendment Prepared by [Name(s) and Title]

Appendix H – *Sample* Subcontractor Certifications/Agreements

SUBCONTRACTOR CERTIFICATION
STORMWATER POLLUTION PREVENTION PLAN

Project Number: _____

Project Title: _____

Operator(s): _____

As a subcontractor, you are required to comply with the Stormwater Pollution Prevention Plan (SWPPP) for any work that you perform on-site. Any person or group who violates any condition of the SWPPP may be subject to substantial penalties or loss of contract. You are encouraged to advise each of your employees working on this project of the requirements of the SWPPP. A copy of the SWPPP is available for your review at the office trailer.

Each subcontractor engaged in activities at the construction site that could impact stormwater must be identified and sign the following certification statement:

I certify under the penalty of law that I have read and understand the terms and conditions of the SWPPP for the above designated project and agree to follow the BMPs and practices described in the SWPPP.

This certification is hereby signed in reference to the above named project:

Company: _____

Address: _____

Telephone Number: _____

Type of construction service to be provided: _____

_____

_____

Signature: _____

Title: _____

Date: _____

Appendix I – *Sample* Grading and Stabilization Activities Log

Project Name:
SWPPP Contact:

Date Grading Activity Initiated	Description of Grading Activity	Date Grading Activity Ceased (Indicate Temporary or Permanent)	Date When Stabilization Measures are Initiated	Description of Stabilization Measure and Location

Appendix J – *Sample* SWPPP Training Log

Stormwater Pollution Prevention Training Log

Project Name:

Project Location:

Instructor's Name(s):

Instructor's Title(s):

Course Location: _____ Date: _____

Course Length (hours): _____

Stormwater Training Topic: *(check as appropriate)*

- ❑ Erosion Control BMPs
- ❑ Emergency Procedures
- ❑ Sediment Control BMPs
- ❑ Good Housekeeping BMPs
- ❑ Non-Stormwater BMPs

Specific Training Objective:_____

_____

Attendee Roster: *(attach additional pages as necessary)*

No.	Name of Attendee	Company
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Appendix K – *Sample* Delegation of Authority Form

Delegation of Authority

I, _____ (name), hereby designate the person or specifically described position below to be a duly authorized representative for the purpose of overseeing compliance with environmental requirements, including the Construction General Permit, at the _____ construction site. The designee is authorized to sign any reports, stormwater pollution prevention plans and all other documents required by the permit.

_____ (name of person or position)
_____ (company)
_____ (address)
_____ (city, state, zip)
_____ (phone)

By signing this authorization, I confirm that I meet the requirements to make such a designation as set forth in _____ (Reference State Permit), and that the designee above meets the definition of a "duly authorized representative" as set forth in _____ (Reference State Permit).

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: _____

Company: _____

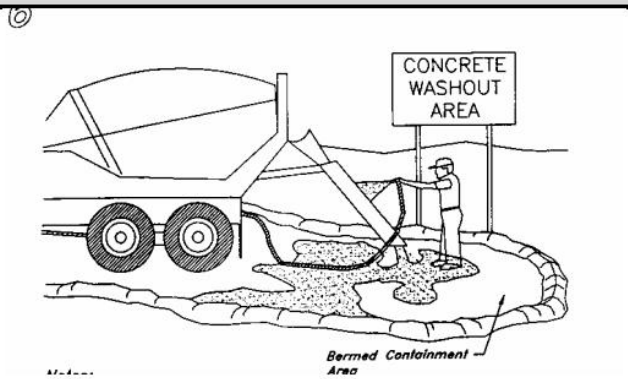
Title: _____

Signature: _____

Date: _____

Appendix M – BMP Specifications

BMP: Concrete Waste Management — CWM



DESCRIPTION:

Prevent or reduce the discharge of polllutants to storm water from concrete waste by conducting washout off-site, performing on-site washout ina designated area, and training employees and subcontractors.

APPLICATION:

This technique is applicable to all types of sites

INSTALLATION / APPLICATION CRITERIA:

- Store dry materials under cover, away from drainage areas
- Minimize excess mixing of fresh concrete, mortar or cement on site
- Do not wash out concrete trucks into storm drains, open ditches, streets, or streams
- Do not allow excess concrete to be dumped on-site, except in designated areas
- When washing concrete to remove fine particles and expose the aggregate, avoid creating runoff by draining the water within a bermed or level area (6" tall X 6' wide)
- Train employees and subcontractors in proper concrete waste management

LIMITATIONS:

- Off-site washout or concrete wastes may not always be possible

MAINTENANCE:

- Inspect subcontractors to ensure that concrete wastes are being properly managed
- If using a temporary pit, dispose of hardened concrete on a regular basis

OBJECTIVES

- ☐ Housekeeping Practices
- ☒ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☐ Control Internal Erosion

TARGETED POLLUTANTS

H	M	L	
☐	☐	☒	Sediment
☐	☐	☒	Nutrients
☐	☐	☒	Heavy Metals
☐	☐	☒	Toxic Materials
☐	☐	☒	Oil & Grease
☐	☐	☒	Floatable Materials
☐	☐	☒	Bacteria & Viruses
☒	☐	☐	Other Waste

IMPLEMENTATION REQUIREMENTS

H	M	L	
☐	☐	☒	Capital Costs
☐	☐	☒	O&M Costs
☐	☒	☐	Maintenance
☐	☒	☐	Training
☐	☐	☒	Staffing
☐	☐	☒	Administrative

H = High **M** = Medium **L** = Low

DAVIS COUNTY STORM WATER COALITION

1500 East 650 North
Fruit Heights, UT 84037

Materials Adapted From Salt Lake County Engineering Division Guidance Document and Other Sources 2006

BMP: Dust Controls — DC

DESCRIPTION:

Dust control measures are used to stabilize soil from wind erosion, and reduce dust by construction activities.

APPLICATION:

Dust control is useful in any process area, loading and unloading area, material handling agreas, and transfer areas where dust is generated. Street sweepin gis limited to areas that are paved.

INSTALLATION / APPLICATION CRITERIA:

- Mechanical dust collection systems are designed according to the size of dust particles and the amount of air to be processed. Manufacturers' recommendations should be followed for installation (as well as the design of the equipment.
- Two kinds of street sweepers are common: brush and vacuum. Vacuum sweepers are more efficient and work best when the area is dry.
- Mechanical equipment should be operated according to the manufacturers' recommendations and should be inspected regularly.

LIMITATIONS:

- More elaborate equipment may be impossible to maintain by plant personnel
- Is labor and equipment intensive and may not be effective for all pollutants (street sweepers)

MAINTENANCE:

If water sprayers are used, dust-contaminated waters should be collected and taken for treatment. Areas will probabley need to be resprayed to keep dust from spreading.

OBJECTIVES

- ☒ Housekeeping Practices
- ☐ Contain Waste
- ☐ Minimize Disturbed Areas
- ☒ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☐ Control Internal Erosion

TARGETED POLLUTANTS

H	M	L	
☒	☐	☐	Sediment
☐	☐	☒	Nutrients
☐	☐	☒	Heavy Metals
☐	☐	☒	Toxic Materials
☐	☐	☒	Oil & Grease
☐	☐	☒	Floatable Materials
☐	☐	☒	Bacteria & Viruses
☐	☐	☒	Other Waste

IMPLEMENTATION REQUIREMENTS

H	M	L	
☐	☒	☐	Capital Costs
☐	☐	☒	O&M Costs
☐	☒	☐	Maintenance
☐	☒	☐	Training
☐	☐	☒	Staffing
☐	☐	☒	Administrative

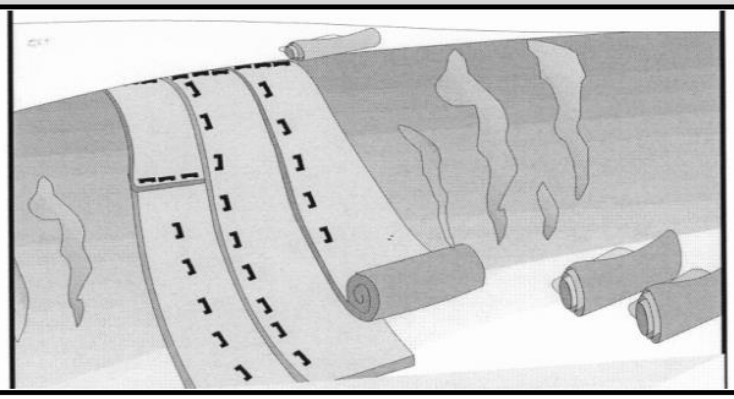
H = High **M** = Medium **L** = Low

DAVIS COUNTY STORM WATER COALITION

1500 East 650 North
Fruit Heights, UT 84037

Materials Adapted From Salt Lake County Engineering Division Guidance Document and Other Sources 2006

BMP: Erosion Control Blankets — ECB



DESCRIPTION:

Erosion control blankets are used on areas of high velocity runoff and/or steep grade, to aid in controlling erosion on critical areas by protecting young vegetation.

APPLICATION:

- Where vegetation is likely to grow too slowly to provide adequate stabilization
- In areas subject to high winds where mulch would not be effective

INSTALLATION / APPLICATION CRITERIA:

- Install erosion control blankets parallel to the direction of the slope
- In ditches, apply in direction of the flow
- Place erosion control blankets loosely on soil-do not stretch
- Ends of blankets should be buried no less than six inches deep
- Staple the edges of the blanket at least every three feet - per manufacturers' specifications

LIMITATIONS:

- Not recommended in areas which are still under construction

MAINTENANCE:

- Check for erosion and undermining periodically, particulary after rainstorms
- Repair dislocations or failures immediately
- If washouts occur, reinstall after repairing slope damage
- Monitor until permanently stabilized

OBJECTIVES

- ☐ Housekeeping Practices
- ☐ Contain Waste
- ☐ Minimize Disturbed Areas
- ☒ Stabilize Disturbed Areas
- ☒ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☐ Control Internal Erosion

TARGETED POLLUTANTS

H	M	L	
☒	☐	☐	Sediment
☐	☒	☐	Nutrients
☐	☐	☒	Heavy Metals
☐	☐	☒	Toxic Materials
☐	☐	☒	Oil & Grease
☐	☐	☒	Floatable Materials
☐	☐	☒	Bacteria & Viruses
☐	☐	☒	Other Waste

IMPLEMENTATION REQUIREMENTS

H	M	L	
☒	☐	☐	Capital Costs
☐	☒	☐	O&M Costs
☐	☒	☐	Maintenance
☐	☐	☒	Training
☐	☐	☒	Staffing
☐	☐	☒	Administrative

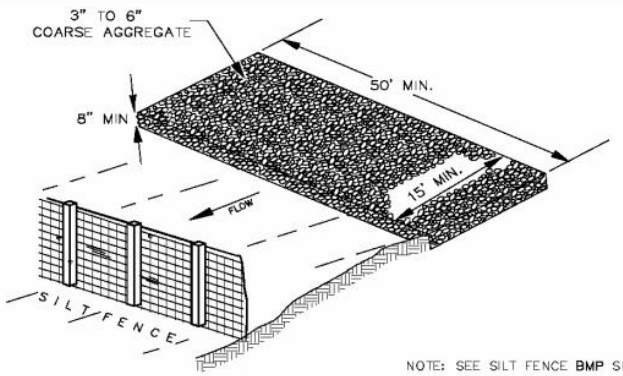
H = High **M** = Medium **L** = Low

DAVIS COUNTY STORM WATER COALITION

1500 East 650 North
Fruit Heights, UT 84037

Materials Adapted From Salt Lake County Engineering Division Guidance Document and Other Sources 2006

BMP: Equipment and Vehicle Wash Down Area — EVWA



DESCRIPTION:

A stabilized pad of crushed stone for general washing of equipment and construction vehicles.

APPLICATION:

At any site where regular washing of vehicles and equipment will occur. May also be used as a filling point for water trucks limiting erosion caused by overflow or spillage of water.

INSTALLATION / APPLICATION CRITERIA:

- Clear and grub area and grade to provide maximum slope of 1%
- Compact subgrade and place filter fabric if desired (recommended for wash areas to remain in use for more than 3 months)
- Place coarse aggregate, 1 to 2-1/2 inches in size, to a minimum depth of 8 inches
- Install silt fence downgradient (see silt fence BMP information sheet)

LIMITATIONS:

Cannot be utilized for washing equipment or vehicles that may cause contamination of runoff such as fertilizer equipment or concrete equipment. Solely used to control sediment in wash water.

MAINTENANCE:

- Inspect daily for loss of gravel or sediment buildup
- Inspect adjacent area for sediment deposit and install additional controls as necessary
- Repair area and replace gravel as required to maintain control in good working condition
- Expand stabilized area as required to accommodate activities
- Maintain silt fence as outlined in specific silt fence BMP information sheet

OBJECTIVES

- ☒ Housekeeping Practices
- ☒ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☐ Control Internal Erosion

TARGETED POLLUTANTS

H	M	L	
☒	☐	☐	Sediment
☐	☐	☒	Nutrients
☐	☐	☒	Heavy Metals
☒	☐	☐	Toxic Materials
☒	☐	☐	Oil & Grease
☐	☐	☒	Floatable Materials
☐	☐	☒	Bacteria & Viruses
☐	☐	☒	Other Waste

IMPLEMENTATION REQUIREMENTS

H	M	L	
☐	☒	☐	Capital Costs
☐	☒	☐	O&M Costs
☐	☒	☐	Maintenance
☐	☐	☒	Training
☐	☐	☒	Staffing
☐	☐	☒	Administrative

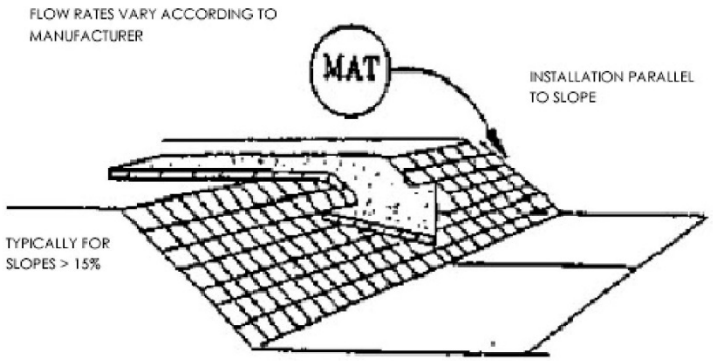
H = High **M** = Medium **L** = Low

DAVIS COUNTY STORM WATER COALITION

1500 East 650 North
Fruit Heights, UT 84037

Materials Adapted From Salt Lake County Engineering Division Guidance Document and Other Sources 2006

BMP: Geotextiles and Mats — GM



DESCRIPTION:

Mattings made of natural or synthetic material which are used to temporarily or permanently stabilize soil.

APPLICATION:

- Typically suited for post-construction site stabilization, but may be used for stabilization of highly erosive soils.
- Channels and Streams.
- Steep slopes.

INSTALLATION / APPLICATION CRITERIA:

- Mattings may be applied to disturbed soils and where existing vegetation has been removed.
- The following organic matting materials provide temporary protection until permanent vegetation is established, or when seasonal circumstances dictate the need for temporary stabilization until weather or construction delays are resolved: Jute mattings and straw mattings.
- The following synthetic mattings may be used for either temporary or post-construction stabilization, both with and without vegetation: excelsior matting, glass fiber matting, mulch matting
- Staples are needed to anchor the matting.

LIMITATIONS:

- Mattings are more costly than other BMP practices, limiting their use to areas where other BMPs are ineffective (e.g., channels, steep slopes).
- May delay seed germination, due to reduction in soil temperature.
- Installation requires experienced contractor to ensure soil stabilization and erosion protection.

MAINTENANCE:

- Inspect twice monthly and after significant rainfall.
- Re-anchor loosened matting and replace missing matting and staples as required.

OBJECTIVES

- ☐ Housekeeping Practices
- ☐ Contain Waste
- ☐ Minimize Disturbed Areas
- ☒ Stabilize Disturbed Areas
- ☒ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☒ Control Internal Erosion

TARGETED POLLUTANTS

H	M	L	
☒	☐	☐	Sediment
☐	☒	☐	Nutrients
☐	☐	☒	Heavy Metals
☐	☐	☒	Toxic Materials
☐	☐	☒	Oil & Grease
☐	☐	☒	Floatable Materials
☐	☐	☒	Bacteria & Viruses
☐	☐	☒	Other Waste

IMPLEMENTATION REQUIREMENTS

H	M	L	
☒	☐	☐	Capital Costs
☐	☒	☐	O&M Costs
☐	☒	☐	Maintenance
☐	☐	☒	Training
☐	☐	☒	Staffing
☐	☐	☒	Administrative

H = High **M** = Medium **L** = Low

DAVIS COUNTY STORM WATER COALITION

1500 East 650 North
Fruit Heights, UT 84037

Materials Adapted From Salt Lake County Engineering Division Guidance Document and Other Sources 2006

BMP: Hazardous Waste Materials — HWM

DESCRIPTION:

Prevent or reduce the discharge of pollutants to stormwater from hazardous waste throughproper material use,waste disposal,and training of employees and subcontractors.

APPLICATION:

Many of the chemicals used on-site can be hazardous materials which become hazardous waste upon disposal. These wastes may include:

- Paints and Solvents; petroleum products such as oils, fuels, and grease; herbicides and pesticides; Acids for cleaning masonry; and concrete curing compounds

In addition, sites with existing structures may contain wastes which must be disposed of in accordance with Federal, State, and local regulations, including:

- Sandblasting grit mixed with lead, cadmium, or chromium-based paints; Asbestos; and PCB's

INSTALLATION / APPLICATION CRITERIA:

The following steps will help reduce storm water pollution from hazardous wastes:

- Use all of the product before disposing of the container
- Do not remove the original product label, it contains important safety and disposal information
- Do not over-apply herbicides and pesticides. Prepare only the amount needed. Follow the recommended usage instructions. Apply surface dressings in several smaller applications, as opposed to one large application, to allow time for infiltration and to avoid excess material being carried off-site by runoff. Do not apply these chemicals just before it rains. People applying pesticides must be certified in accordance with Federal and State regulations.

LIMITATIONS:

Hazardous wastethat cannot be reused or recycled must be disposed of by a licensed hazardous waste hauler.

MAINTENANCE:

- Inspect hazardous waste receptacles and area regularly
- Arrange for regular hazardous waste collection

OBJECTIVES

- ☐ Housekeeping Practices
- ☒ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☐ Control Internal Erosion

TARGETED POLLUTANTS

H	M	L	
☐	☐	☒	Sediment
☐	☐	☒	Nutrients
☐	☐	☒	Heavy Metals
☐	☒	☐	Toxic Materials
☐	☐	☒	Oil & Grease
☐	☐	☒	Floatable Materials
☐	☐	☒	Bacteria & Viruses
☐	☐	☒	Other Waste

IMPLEMENTATION REQUIREMENTS

H	M	L	
☐	☐	☒	Capital Costs
☐	☐	☒	O&M Costs
☐	☒	☐	Maintenance
☐	☒	☐	Training
☐	☐	☒	Staffing
☐	☐	☒	Administrative

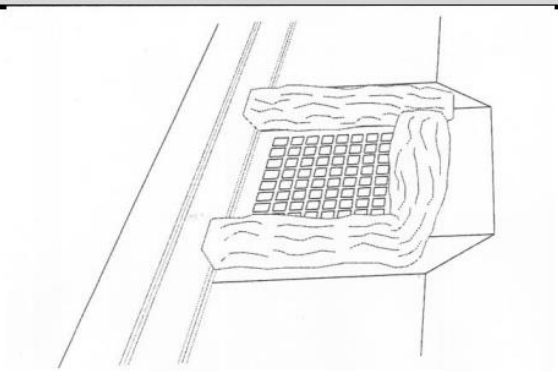
H = High **M** = Medium **L** = Low

DAVIS COUNTY STORM WATER COALITION

1500 East 650 North
Fruit Heights, UT 84037

Materials Adapted From Salt Lake County Engineering Division Guidance Document and Other Sources 2006

BMP: Inlet Protection - Gravel Bags — IP-GB



DESCRIPTION:

Sediment barrier erected around storm drain inlet.

APPLICATION:

Construct at storm drainage inlets located down-gradient of areas to be disturbed by construction

INSTALLATION / APPLICATION CRITERIA:

- Provide up-gradient sediment controls, such as silt fence during construction of inlet
- When construction of curb and gutter and roadway is complete, install gravel filled bags around perimeter of inlet
- Fill to recommended levels to reduce splitting of bags

LIMITATIONS:

- Recommended maximum contributing drainage area of one acre
- Requires shallow sloped adjacent to inlet.

MAINTENANCE:

- Inspect inlet protection following storm event and at a minimum of once every 14 days.
- Remove accumulated sediment when it reaches half the height of the bag.
- Look for bypassing or undercutting and repair or realign as needed.
- Replace and clean up spilled gravel when bags split.

OBJECTIVES

- ☒ Housekeeping Practices
- ☐ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☒ Control Site Perimeter
- ☒ Control Internal Erosion

TARGETED POLLUTANTS

H	M	L	
☒	☐	☐	Sediment
☐	☐	☒	Nutrients
☐	☐	☒	Heavy Metals
☐	☐	☒	Toxic Materials
☐	☐	☒	Oil & Grease
☒	☐	☐	Floatable Materials
☐	☐	☒	Bacteria & Viruses
☒	☐	☐	Other Waste

IMPLEMENTATION REQUIREMENTS

H	M	L	
☐	☒	☐	Capital Costs
☐	☐	☒	O&M Costs
☐	☒	☐	Maintenance
☐	☐	☒	Training
☐	☐	☒	Staffing
☐	☐	☒	Administrative

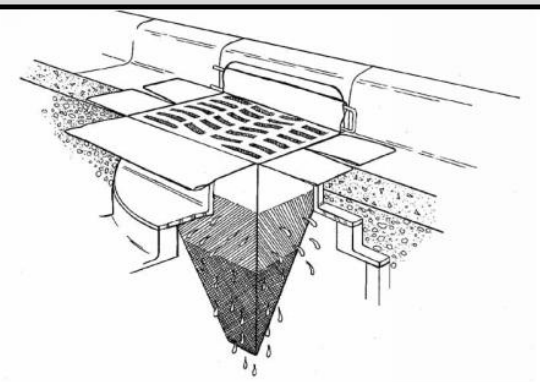
H = High **M** = Medium **L** = Low

DAVIS COUNTY STORM WATER COALITION

1500 East 650 North
Fruit Heights, UT 84037

Materials Adapted From Salt Lake County Engineering Division Guidance Document and Other Sources 2006

BMP: Inlet Protection- Silt Bags — IP-SB



DESCRIPTION:

Collect and trap sediment and debris entering catch basins from either grated or curb inlets. Insert is made of fabric and is placed in the drain inlet around the perimeter of the grate. Runoff passes through the bag before discharging into the drain outlet pipe. Overflow holes are usually provided to pass larger flows without causing a backwater at the grate. Certain manufactured products include polymers intended to increase pollutant removal effectiveness.

APPLICATIONS:

- Storm drain inlet boxes

INSTALLATION / APPLICATION CRITERIA:

- Regular Maintenance is necessary
- Evaluation of the device chosen should be balanced with cost
- Hydraulic capacity controls effectiveness
- Most useful in small drainage areas (< 1 Acre)
- Ideal in combination with other BMP's

LIMITATIONS:

- Cost
- Maintenance required to prevent plugging and remain effective

MAINTENANCE:

Inspection after all storm events and as required between events

OBJECTIVES

- ☐ Housekeeping Practices
- ☒ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☐ Control Internal Erosion

TARGETED POLLUTANTS

H	M	L	
☒	☐	☐	Sediment
☐	☐	☒	Nutrients
☐	☐	☒	Heavy Metals
☐	☐	☒	Toxic Materials
☐	☐	☒	Oil & Grease
☒	☐	☐	Floatable Materials
☐	☐	☒	Bacteria & Viruses
☐	☐	☒	Other Waste

IMPLEMENTATION REQUIREMENTS

H	M	L	
☐	☒	☐	Capital Costs
☐	☒	☐	O&M Costs
☒	☐	☐	Maintenance
☐	☒	☐	Training
☐	☐	☒	Staffing
☒	☒	☒	Administrative

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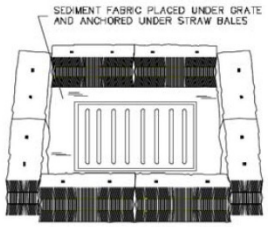
DAVIS COUNTY STORM WATER COALITION

1500 East 650 North
Fruit Heights, UT 84037

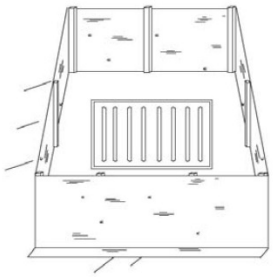
Materials Adapted From Salt Lake County Engineering Division Guidance Document and Other Sources 2006

BMP: Inlet Protection - Silt Fence or Straw Bale — IP-SF

STRAW BALE BARRIER



SILT FENCE



DESCRIPTION:

Sediment barrier erected around storm drain inlet.

APPLICATION:

- Construct at storm drainage inlets located downgradient of areas to be disturbed by construction (for inlets in paved areas see other information sheets for inlet protection)

INSTALLATION / APPLICATION CRITERIA:

- Provide upgradient sedimant controls, such as silt fence during construction of inlet
- When construction of linet is complete, erect straw bale barrier or silt fence surrounding perimeter of inlet. Follow instructions and guidelines on individual BMP information sheets for straw bale barrier and silt fence construction

LIMITATIONS:

- Recommended maximum contributing drainage area of one acre
- Limited to inlets located in open unpaved areas
- Requires shallow slopes adjacent to inlet

MAINTENANCE:

- Inspect inlet protection following storm event and at a minimum of once every two weeks
- Remove accumulated sediment when it reaches 4" in depth
- Repair or realign barrier/fence as needed
- Look for bypassing or undercutting and recompact soil around barrier/fence as required

OBJECTIVES

- ☐ Housekeeping Practices
- ☐ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☒ Control Site Perimeter
- ☒ Control Internal Erosion

TARGETED POLLUTANTS

H	M	L	
☒	☐	☐	Sediment
☐	☐	☒	Nutrients
☐	☐	☒	Heavy Metals
☐	☐	☒	Toxic Materials
☐	☐	☒	Oil & Grease
☒	☐	☐	Floatable Materials
☐	☐	☒	Bacteria & Viruses
☐	☐	☒	Other Waste

IMPLEMENTATION REQUIREMENTS

H	M	L	
☐	☒	☐	Capital Costs
☐	☐	☒	O&M Costs
☐	☒	☐	Maintenance
☐	☐	☒	Training
☐	☐	☒	Staffing
☐	☐	☒	Administrative

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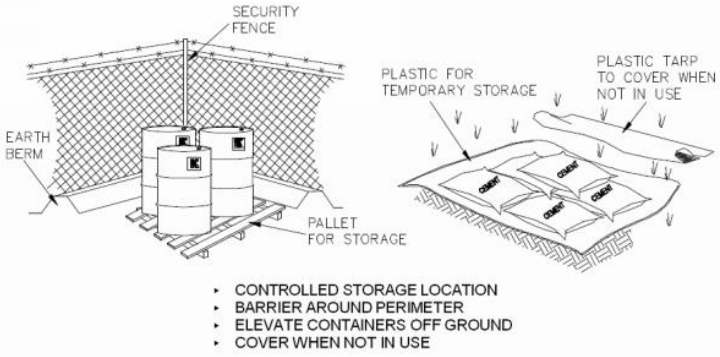
DAVIS COUNTY STORM WATER COALITION

1500 East 650 North
Fruit Heights, UT 84037

Materials Adapted From Salt Lake County Engineering Division Guidance Document and Other Sources 2006

BMP: Materials Storage — MS



- CONTROLLED STORAGE LOCATION
- BARRIER AROUND PERIMETER
- ELEVATE CONTAINERS OFF GROUND
- COVER WHEN NOT IN USE

DESCRIPTION:

Controlled storage of on-site materials.

APPLICATION:

- Storage of hazardous, toxic, and all chemical substances
- Any construction site with outside storage of materials

INSTALLATION / APPLICATION CRITERIA:

- Designate a secured area with limited access as the storage location. Ensure no waterways or drainage paths are nearby
- Construct compacted earthen berm (See Earth Berm Barrier Information Sheet), or similar perimeter containment around storage location for impoundment in the case of spills
- Ensure all on-site personnel utilize designated storage area. Do not store excessive amounts of material that will not be utilized on site
- For active use of materials away from the storage area ensure materials are not set directly on the ground and are covered when not in use. Protect storm drainage during use

LIMITATIONS:

- Does not prevent contamination due to mishandling of products
- Spill Prevention and Response Plan still required
- Only effective if materials are actively stored in controlled location

MAINTENANCE:

- Inspect daily and repair any damage to perimeter impoundment or security fencing
- Check materials are being correctly stored (i.e. standing upright, in labeled containers, tightly capped) and that no materials are being stored away from the designated location

OBJECTIVES

- ☒ Housekeeping Practices
- ☒ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☐ Control Internal Erosion

TARGETED POLLUTANTS

H	M	L	
☐	☐	☒	Sediment
☐	☐	☒	Nutrients
☐	☐	☒	Heavy Metals
☒	☐	☐	Toxic Materials
☐	☐	☒	Oil & Grease
☐	☐	☒	Floatable Materials
☐	☐	☒	Bacteria & Viruses
☐	☒	☐	Other Waste

IMPLEMENTATION REQUIREMENTS

H	M	L	
☐	☒	☐	Capital Costs
☐	☒	☐	O&M Costs
☐	☒	☐	Maintenance
☒	☐	☐	Training
☐	☐	☒	Staffing
☐	☐	☒	Administrative

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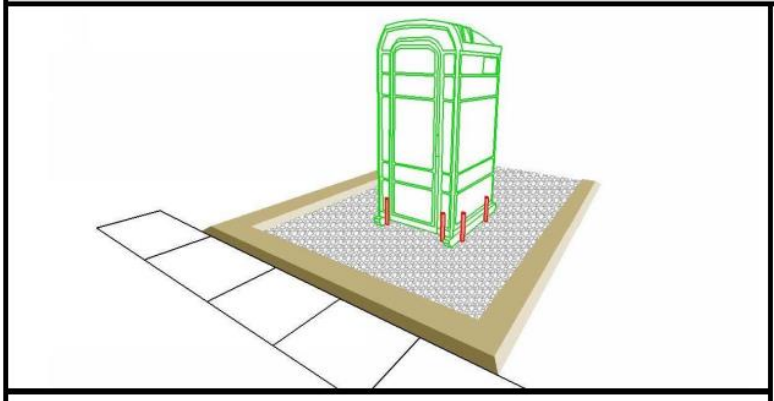
DAVIS COUNTY STORM WATER COALITION

1500 East 650 North
Fruit Heights, UT 84037

Materials Adapted From Salt Lake County Engineering Division Guidance Document and Other Sources 2006

BMP: Portable Toilet — PT



DESCRIPTION:

Temporary on-site sanitary facilities for construction personnel.

APPLICATION:

All sites with no permanent sanitary facilities or where permanent facility is too far from activities.

INSTALLATION / APPLICATION CRITERIA:

- Locate portable toilets in a convenient locations throughout the site
- Prepare level, gravel surface and provide clear access to the toilets for servicing and for on-site personnel
- Construct earth berm perimiter (see Earth Berm Barrier Sheet), control for spill / leak protection.
- Anchor the portable toilet to prevent tipping

LIMITATIONS:

No limitations

MAINTENANCE:

- Portable toilets should be maintained in good working order by licensed service with daily observation for leak detection
- Regular waste collection should be arranged with licensed service
- All waste should be deposited in sanitary sewer system for treatment with appropriate agency approval

OBJECTIVES

- ☒ Housekeeping Practices
- ☒ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☐ Control Internal Erosion

TARGETED POLLUTANTS

	H	M	L
Sediment	☐	☐	☒
Nutrients	☐	☐	☒
Heavy Metals	☐	☐	☒
Toxic Materials	☒	☐	☐
Oil & Grease	☐	☐	☒
Floatable Materials	☐	☐	☒
Bacteria & Viruses	☒	☐	☐
Other Waste	☒	☐	☐

IMPLEMENTATION REQUIREMENTS

	H	M	L
Capital Costs	☐	☒	☐
O&M Costs	☐	☒	☐
Maintenance	☐	☒	☐
Training	☐	☐	☒
Staffing	☐	☐	☒
Administrative	☐	☐	☒

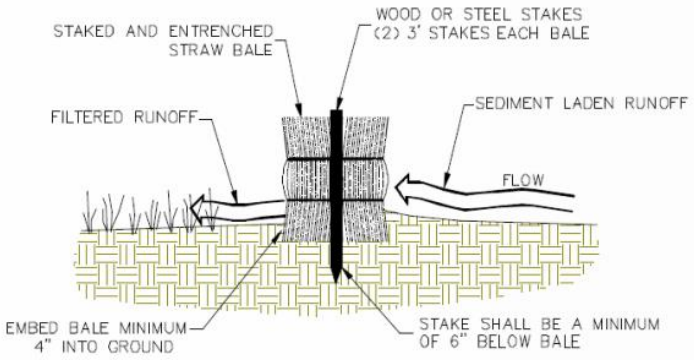
H = High **M** = Medium **L** = Low

DAVIS COUNTY STORM WATER COALITION

1500 East 650 North
Fruit Heights, UT 84037

Materials Adapted From Salt Lake County Engineering Division Guidance Document and Other Sources 2006

BMP: Straw Bale Barrier — SBB



DESCRIPTION:

Temporary sediment barrier consisting of a row of entrenched and anchored straw bales.

APPLICATION:

- Perimeter Control: place barrier at downgradient limits of disturbance
- Sediment barrier: place barrier at toe of slope or soil stockpile
- Protection of existing waterways: place barrier at top of stream bank
- Inlet Protection

INSTALLATION / APPLICATION CRITERIA:

- Excavate a 4" minimum deep trench along contour line, i.e., parallel to slope, removing all grass and other material that may allow underflow
- Place bales in trench with ends tightly abutting; fill any gaps by wedging loose straw into openings
- Anchor each bale and compact to prevent piping; backfill on uphill side to be built up 4" above ground at the barrier

LIMITATIONS:

- Recommended maximum area of 0.5 acre per 100' of barrier
- Recommended maximum upgradient slope length of 150 feet
- Recommended maximum uphill grade of 2:1 (50%)
- Maximum duristation of use is 6 months

MAINTENANCE:

- Inspect immediately after any rainfall and at least daily during prolonged rainfall
- Look for runoff bypassing ends of barriers or undercutting barriers
- Repair or replace damaged areas of the barrier and remove accumulated sediment
- Realign bales as necessary to provide continuous barrier and fill gaps
- Recompact soil around barrier as necessary to prevent piping

OBJECTIVES

- ☐ Housekeeping Practices
- ☐ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☒ Protect Slopes/Channels
- ☒ Control Site Perimeter
- ☒ Control Internal Erosion

TARGETED POLLUTANTS

H	M	L	
☒	☐	☐	Sediment
☐	☐	☒	Nutrients
☐	☐	☒	Heavy Metals
☐	☐	☒	Toxic Materials
☐	☐	☒	Oil & Grease
☐	☐	☒	Floatable Materials
☐	☐	☒	Bacteria & Viruses
☐	☐	☒	Other Waste

IMPLEMENTATION REQUIREMENTS

H	M	L	
☐	☒	☐	Capital Costs
☐	☐	☒	O&M Costs
☐	☒	☐	Maintenance
☐	☐	☒	Training
☐	☐	☒	Staffing
☐	☐	☒	Administrative

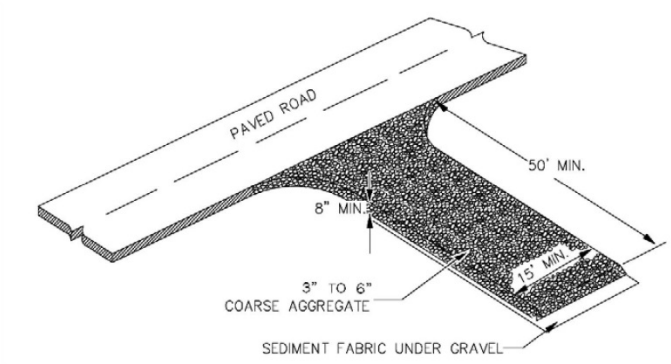
H = High **M** = Medium **L** = Low

DAVIS COUNTY STORM WATER COALITION

1500 East 650 North
Fruit Heights, UT 84037

Materials Adapted From Salt Lake County Engineering Division Guidance Document and Other Sources 2006

BMP: Stabilized Construction Entrance — SCE



DESCRIPTION:

A stabilized pad of crushed stone located where construction traffic enters or leaved the site from or to paved surface.

APPLICATION:

At any point of ingress and egress at a construction site where adjacent traveled way is paved. Generally applies to sites over 2 acres unless special conditions exist.

INSTALLATION / APPLICATION CRITERIA:

- Clear and grub area and grade to provide maximum slope of 2%
- Compact subgrade and place filter fabric if desired (recommended for entrances to remain for more than 3 months
- Place coarse aggregate, 3-6 inches in size, to a minimum depth of 8 inches

LIMITATIONS:

- Requires periodic top dressing with additional stones
- Should be used in conjuction with street sweeping on adjacent public right-of-way

MAINTENANCE:

- Inspect daily for loss of gravel or sediment buildup
- Inspect adjacent roadway for sediment deposit and clean by sweeping or shoveling
- Repair entrance and replace gravel as required to maintain control in good working condition
- Expand stabilized area as required to accommodate traffic and prevent erosion at driveways

OBJECTIVES

- ☒ Housekeeping Practices
- ☐ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☒ Control Site Perimeter
- ☐ Control Internal Erosion

TARGETED POLLUTANTS

H	M	L	
☒	☐	☐	Sediment
☐	☐	☒	Nutrients
☐	☐	☒	Heavy Metals
☐	☐	☒	Toxic Materials
☐	☐	☒	Oil & Grease
☐	☐	☒	Floatable Materials
☐	☐	☒	Bacteria & Viruses
☐	☐	☒	Other Waste

IMPLEMENTATION REQUIREMENTS

H	M	L	
☐	☒	☐	Capital Costs
☐	☒	☐	O&M Costs
☐	☒	☐	Maintenance
☐	☐	☒	Training
☐	☐	☒	Staffing
☐	☐	☒	Administrative

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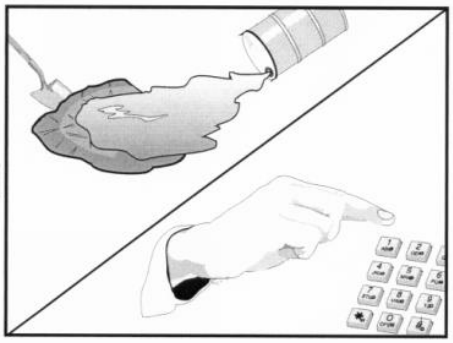
DAVIS COUNTY STORM WATER COALITION

1500 East 650 North
Fruit Heights, UT 84037

Materials Adapted From Salt Lake County Engineering Division Guidance Document and Other Sources 2006

BMP: Spill Clean-Up — SCU



Standard Symbol

BMP Objectives
- Soil Stabilization
- Sediment Control
- Tracking Control
- Wind Erosion Control
- Non-Storm Water Management
- Materials and Waste Management

DESCRIPTION:

Practices to clean-up leakage/spillage of on-site materials that may be harmful to receiving waters.

APPLICATION:

All sites

GENERAL:

- Store controlled materials within a storage area
- Educate personnel on prevention and clean-up
- Designate an Emergency Coordinator responsible practices and for providing spill response
- Maintain a supply of clean-up equipment on-site response agencies with phone numbers

METHODS:

- Clean-up spills/leaks immediately and remediate cause
- Use as little water as possible. NEVER HOSE DOWN OR BURY SPILL CONTAMINATED MATERIAL
- Use rags or absorbent material for clean-up. Excavate contaminated soils. Dispose of clean-up material and soil as hazardous waste
- Document all spills with date, location, substance, volume, actions taken and other pertinent data.
- Contact local Fire Department and State Division of Environmental Response and Remediation (Phone #536-4100) for any spill of reportable quantity

OBJECTIVES

- ☒ Housekeeping Practices
- ☒ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☐ Control Internal Erosion

TARGETED POLLUTANTS

H	M	L	
☐	☐	☒	Sediment
☐	☐	☒	Nutrients
☐	☐	☒	Heavy Metals
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☐	☒	☐	Oil & Grease
☐	☐	☒	Floatable Materials
☐	☐	☒	Bacteria & Viruses
☐	☐	☒	Other Waste

IMPLEMENTATION REQUIREMENTS

H	M	L	
☐	☒	☐	Capital Costs
☐	☐	☒	O&M Costs
☐	☐	☒	Maintenance
☒	☐	☐	Training
☐	☐	☒	Staffing
☐	☐	☒	Administrative

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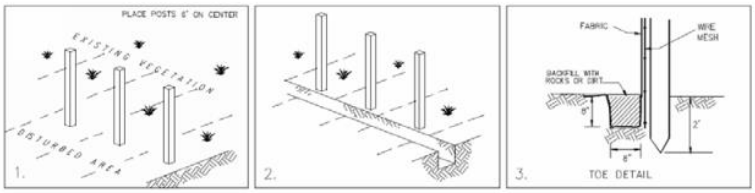
DAVIS COUNTY STORM WATER COALITION

1500 East 650 North
Fruit Heights, UT 84037

Materials Adapted From Salt Lake County Engineering Division Guidance Document and Other Sources 2006

BMP: Silt Fence — SF



DESCRIPTION:

A temporary sediment barrier consisting of entrenched filter fabric stretched across and secured to supporting posts.

APPLICATION:

- Perimeter control: place barrier at downgradient limits of disturbance
- Sediment barrier: place barrier at toe of slope or soil stockpile
- Protection of existing waterways: place barrier at top of stream bank
- Inlet protection: place fence surrounding catch basins

INSTALLATION / APPLICATION CRITERIA:

- Place posts 6' apart on center along contour (or use preassembled unit) and drive 2' minimum into ground. Excavate an anchor trench immediately up gradient of posts
- Cut fabric to require width, unroll along length of barrier and drape over barrier. Secure fabric to mesh with twine, staples, or similar, with trailing edge extending into anchor trench
- Backfill trench over fabric to anchor
- Fabric must have 85% minimum sediment removal efficiency

LIMITATIONS:

- Recommended maximum drainage area of 0.5 acre per 100 feet
- Recommended maximum upgradient slope length of 150'
- Recommended maximum uphill grade of 2:1 (50%)
- Recommended maximum flow rate of 0.5 cfs
- Ponding should not be allowed behind fence

MAINTENANCE:

- Inspect immedialty after any rainfall and at least daily during prolonged rainfall
- Look for runoff bypassing ends of barriers or undercutting barriers
- Repair or replace damaged areas of the barrier and remove accumulated sediment
- Reanchor fence as necessary to prevent shortcutting
- Remove accumulated sediment when it reaches 1/2 the height of the fence

OBJECTIVES

- ☐ Housekeeping Practices
- ☐ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☒ Protect Slopes/Channels
- ☒ Control Site Perimeter
- ☒ Control Internal Erosion

TARGETED POLLUTANTS

H	M	L	
☒	☐	☐	Sediment
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☐	☐	☒	Floatable Materials
☐	☐	☒	Bacteria & Viruses
☐	☐	☒	Other Waste

IMPLEMENTATION REQUIREMENTS

H	M	L	
☐	☒	☐	Capital Costs
☐	☒	☐	O&M Costs
☐	☒	☐	Maintenance
☐	☐	☒	Training
☐	☐	☒	Staffing
☐	☐	☒	Administrative

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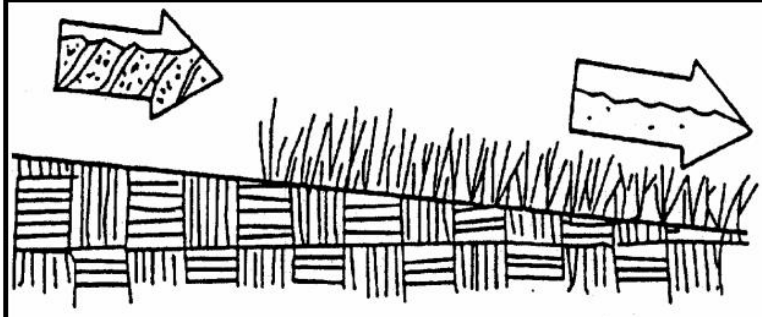
DAVIS COUNTY STORM WATER COALITION

1500 East 650 North
Fruit Heights, UT 84037

Materials Adapted From Salt Lake County Engineering Division Guidance Document and Other Sources 2006

BMP: Seeding and Planting — SP



DESCRIPTION:

Seeding of grass and plantings of trees, shrubs, vines and ground covers provide long-term stabilization of soil. In some areas, with suitable climates, grasses can be planted for temporary stabilization.

APPLICATION:

- Appropriate for site stabilization both during construction and post-construction
- Any graded/cleared areas where construction activities have ceased
- Open space cut and fill areas
- Steep slopes, spoil piles, vegetated swales, landscape corridors, stream banks. Use in conjunction with matting, mulch or blanketing where appropriate.

INSTALLATION / APPLICATION CRITERIA:

Type of vegetation, site and seedbed preparation, planting time, fertilization and water requirements should be considered for each application.

Grasses:

- Ground preparations: fertilize and mechanically stabilize the soil
- Tolerant of short-term temperature extremes and waterlogged soil composition
- Appropriate soil conditions: shallow soil base, good drainage, slope 2:1 or flatter
- Mowing, irrigating, and fertilizing are vital for promoting vigorous grass growth

Trees and Shrubs:

- Selection criteria: vigor, species, size, shape & wildlife food source
- Soil conditions: select species appropriate for soil, drainage & acidity
- Other factors: wind/exposure, temperature extremes, and irrigations needs

Vines and Ground Covers:

- Ground preparation: lime and fertilizer preparation
- Use proper seeding rates
- Appropriate soil conditions: drainage, acidity and slopes
- Generally avoid species requiring irrigation

OBJECTIVES

- ☐ Housekeeping Practices
- ☐ Contain Waste
- ☐ Minimize Disturbed Areas
- ☒ Stabilize Disturbed Areas
- ☒ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☐ Control Internal Erosion

TARGETED POLLUTANTS

H	M	L	
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☐	☒	☐	Nutrients
☐	☐	☒	Heavy Metals
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☐	☐	☒	Oil & Grease
☐	☐	☒	Floatable Materials
☐	☐	☒	Bacteria & Viruses
☐	☐	☒	Other Waste

IMPLEMENTATION REQUIREMENTS

H	M	L	
☐	☒	☐	Capital Costs
☐	☒	☐	O&M Costs
☐	☒	☐	Maintenance
☐	☐	☒	Training
☐	☐	☒	Staffing
☐	☐	☒	Administrative

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DAVIS COUNTY STORM WATER COALITION

1500 East 650 North
Fruit Heights, UT 84037

Materials Adapted From Salt Lake County Engineering Division Guidance Document and Other Sources 2006

BMP: Street Sweeping — SS

DESCRIPTION:

Prevent sediment from entering storm water by sweeping the streets near construction activities.

APPLICATION:

- Useful for any paved streets near construction sites where sediment is blown, tracked, or spilled onto the streets.

INSTALLATION / APPLICATION CRITERIA:

- The equipment used should be appropriate for the conditions. Vacuum sweepers work more effectively when the area is dry. Brush sweepers work better when the sediment is wet or stuck to the surface.
- Mechanical equipment should be operated and maintained according to the manufacturer's recommendations

LIMITATIONS:

- Is labor and equipment intensive
- May cause dust

MAINTENANCE:

- The street should be checked daily for any sediment deposits. Street sweeping should be implemented whenever sediment from construction activity is found on the streets

OBJECTIVES

- ☒ Housekeeping Practices
- ☐ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☒ Control Site Perimeter
- ☐ Control Internal Erosion

TARGETED POLLUTANTS

H	M	L	
☒	☐	☐	Sediment
☐	☐	☒	Nutrients
☐	☐	☒	Heavy Metals
☐	☐	☒	Toxic Materials
☐	☐	☒	Oil & Grease
☐	☐	☒	Floatable Materials
☐	☐	☒	Bacteria & Viruses
☐	☐	☒	Other Waste

IMPLEMENTATION REQUIREMENTS

H	M	L	
☐	☐	☒	Capital Costs
☐	☒	☐	O&M Costs
☒	☐	☐	Maintenance
☐	☐	☒	Training
☐	☐	☒	Staffing
☐	☐	☒	Administrative

H = High **M** = Medium **L** = Low

DAVIS COUNTY STORM WATER COALITION

1500 East 650 North
Fruit Heights, UT 84037

Materials Adapted From Salt Lake County Engineering Division Guidance Document and Other Sources 2006

BMP: Vehicle And Equipment Cleaning — VEC

DESCRIPTION:

Prevent or reduce the discharge of pollutants to storm water from vehicle and equipment cleaning by using off-site facilities, washing in designated, contained areas only, eliminating discharges to the storm drain by infiltrating or recycling the wash water, and/or training employees and subcontractors.

INSTALLATION / APPLICATION CRITERIA:

- Use off-site commercial washing businesses as much as possible. Washing vehicles and equipment outdoors or in areas where wash water flows onto paved surfaces or into drainage pathways can pollute storm water. If you wash large number of vehicles or pieces of equipment, consider conducting this work at an off-site commercial business. These businesses are better equipped to handle and dispose of the wash waters properly. Performing this work off-site can also be economical by eliminating the need for a separate washing operation at your site.
- If washing must occur on-site, use designated, bermed wash areas to prevent wash water contact with storm water, creeks, rivers, and other water bodies. The wash area can be sloped for wash water collection and subsequent infiltration into the ground.
- Use as little water as possible to avoid having to install erosion and sediment controls for the wash area. Use phosphate-free biodegradable soaps. Educate employees and subcontractors on pollution prevention measures. Do not permit steam cleaning on-site. Steam cleaning can generate significant pollutant concentrations.

LIMITATIONS:

- Even phosphate-free, biodegradable soaps have been shown to be toxic to fish before the soap degrades
- Sending vehicles/equipment off-site should be done in conjunction with Stabilized Construction Entrance

MAINTENANCE:

- Minimal, some berm repair may be necessary

OBJECTIVES

- ☒ Housekeeping Practices
- ☐ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
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- ☒ Control Site Perimeter
- ☒ Control Internal Erosion

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☐	☐	☒	Other Waste

IMPLEMENTATION REQUIREMENTS

H	M	L	
☐	☒	☐	Capital Costs
☐	☐	☒	O&M Costs
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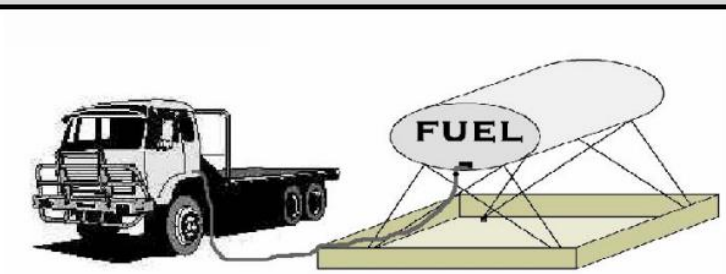
BMP: Vehicle And Equipment Fueling — VEF



DESCRIPTION:

Prevent fuel spills and leaks, and reduce their impacts to storm water by using offsite facilities, fueling in designated areas only, enclosing or covering stored fuel, implementing spill controls, and training employees and subcontractors.

INSTALLATION / APPLICATION CRITERIA:

- Use off-site fueling stations as much as possible. Fueling vehicles and equipment outdoors or in areas where fuel may spill/leak onto paved surfaces or into drainage pathways can pollute storm water. If you fuel a large number of vehicles or pieces of equipment, consider using an off-site fueling station. These businesses are better equipped to handle fuel and spills properly. Performing this work off-site can also be economical by eliminating the need for a separate fueling area at your site.
- If fueling must occur on-site, use designated areas, located away from drainage courses, to prevent the run on of storm water and the runoff of spills. Discourage "topping-off" of fuel tanks.
- Always use secondary containment, such as a drain pan or drop cloth, when fueling to catch spills/leaks. Place a stockpile of spill cleanup materials where it will be readily accessible. Use adsorbent materials on small spills rather than hosing down or burying the spill. Remove the adsorbent materials promptly and dispose of properly.
- Carry out all Federal and State requirements regarding stationary above ground storage tanks.(40 CF Sub. J) Avoid mobile fueling of mobile construction equipment around the site; rather, transport the equipment to designated fueling areas. With the exception of tracked equipment such as bulldozers and perhaps forklifts, most vehicles should be able to travel to a designated area with little lost time. Train employees and subcontractors in proper fueling and cleanup procedures.

LIMITATIONS:

Sending vehicles/equipment off-site should be done in conjunction with Stabilized Construction Entrance

MAINTENANCE:

- Keep ample supplies of spill cleanup materials on-site
- Inspect fueling areas and storage tanks on a regular schedule

OBJECTIVES

- ☒ Housekeeping Practices
- ☐ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☐ Control Site Perimeter
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TARGETED POLLUTANTS

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IMPLEMENTATION REQUIREMENTS

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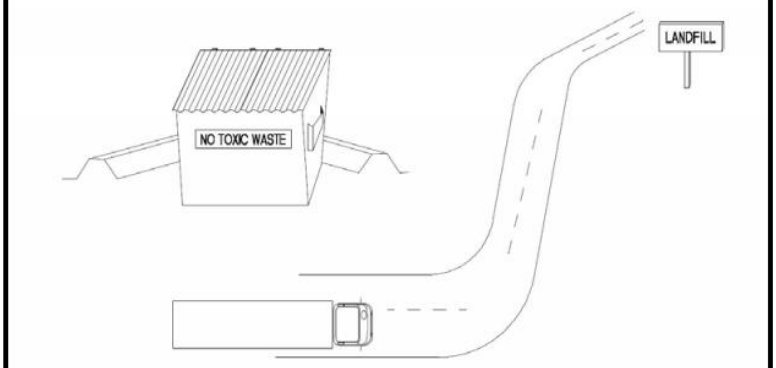
BMP: Waste Disposal — WD



DESCRIPTION:

Controlled storage and disposal of solid waste generated by construction activities.

APPLICATION:

All construction sites

INSTALLATION / APPLICATION CRITERIA:

- Designate one or several waste collection areas with easy access for construction vehicles and personnel. Ensure no waterways or storm drainage inlets are located near the waste collection areas.
- Construct compacted earthen berm (See Earth Berm Barrier Information Sheet), or similar perimeter containment around collection area for impoundment in the case of spills.
- Ensure all on site personnel are aware of and utilize designated waste collection area properly and for intended use only (e.g. all toxic, hazardous, or recyclable materials shall be properly disposed of separately from general construction waste).
- Arrange for periodic pickup, transfer and disposal of collected waste at an authorized disposal location. Include regular Porto-potty service in waste management activities.

LIMITATIONS:

- On-site personnel are responsible for correct disposal of waste

MAINTENANCE:

- Discuss waste management procedures at progress meetings
- Collect site trash daily and deposit in containers at designated collection areas
- Randomly check disposed materials for any unauthorized waste (e.g. toxic materials).

OBJECTIVES

- ☒ Housekeeping Practices
- ☒ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
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- ☐ Control Internal Erosion

TARGETED POLLUTANTS

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Nutrients	☐	☐	☐
Heavy Metals	☐	☐	☐
Toxic Materials	☒	☐	☐
Oil & Grease	☐	☒	☐
Floatable Materials	☒	☐	☐
Bacteria & Viruses	☐	☐	☐
Other Waste	☒	☐	☐

IMPLEMENTATION REQUIREMENTS

	H	M	L
Capital Costs	☒	☐	☐
O&M Costs	☒	☐	☐
Maintenance	☐	☒	☐
Training	☒	☐	☐
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