

Stormwater Management Plan (SWMP)

For:

Kilgore Companies LLC dba Elam Construction
Fetcher / Vale Pit
25853 County Road 62A
Clark, CO 80428

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SECTION 1: FACILITY INFORMATION

Section 1.1: Facility Information

Facility Name: Fetcher / Vale Pit
Facility Street/Location: 25853 County Road 62A
City, State, Zip: Clark, CO 80428

County: Routt County

Mailing Address: Street Address (if mailing address different from Facility Address)
City, State Zip

Primary Industrial Activity:

SIC Code: 1442 – Construction Sand & Gravel
Sector J: Mineral Mining and Processing Facilities

Latitude/Longitude for Fetcher / Vale Pit

Latitude: 40.708028° N
Longitude: 106.935079° W

Method for determining latitude/longitude:

☐ USGS topographic map (specify scale: _____) ☐ EPA Website ☐ GPS
☒ Google Earth ☐ Other (please specify): _____

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

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

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

SITE ACTIVITY INFORMATION

Analytical Monitoring Required? ☒ Yes ☐ No

If Yes, Then When: once per year or according to permit schedule.

Required Analytical Monitoring Submittal to State?

☒ Yes

☐ No

If Yes, Explain Requirement: Sampling results obtained during the reporting period on shall be the state through the online NetDMR .

Visual Monitoring Required?

☒ Yes

☐ No

When: At least once per quarter during daylight hours.

If No):

Required Monitoring Submittal to State?

☐ Yes

☒ No

If Yes, Explain Requirement: All storm water and non-stormwaters visual monitoring reports are kept onsite or available upon request.

Are spill kits located on site?

☒ Yes

☐ No

If Yes, Then Where Are they located: Spill kits are placed near petroleum product tanks

Is this a new facility or existing facility? Existing

Month and Year of Beginning Facility Operations: 2017

Section 1.2: Contact Information/Responsible Parties

Owner

Contact:

Name: Brian Harris

Title: CFO

Company: Summit Materials

Address: 1550 Wynkoop Steet, 3rd Floor

City, State Zip: Denver, CO 80202

Telephone Number: 303-515-5165

Fax/Email: brian.harris@summit-materials.com

Operator

Contact:

Name: Jon Mueller
Title: Aggregate Manager
Company: Colorado Companies, LLC dba Elam Construction
Address: 556 Struthers Ave
City, State Zip: Grand Junction, CO 81501
Telephone Number: 970-261-5782
Fax/Email: jon.mueller@elamconstruction.com

Contact:

Name: Jim Doody
Title: Environmental Manager
Company: Kilgore Companies, LLC dba Elam Construction
Address: 556 Struthers Ave
City, State Zip: Grand Junction, CO 81501
Telephone Number: 970-712-6634
Fax/Email: jim.doody@elamconstruction.com

Contact:

Name: Dionne Moores
Title: Environmental Technician
Company: Kilgore Companies, LLC dba Elam Construction
Address: 556 Struthers Ave
City, State Zip: Grand Junction, CO 81501
Telephone Number: 970-773-4108
Fax/Email: dionne.moores@elamconstruction.com

Contact:

Name: Lee Ware
Title: Environmental Director - West Region
Company: Kilgore Companies, LLC
Address: 7057 W. 2100 S.
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Fax/Email: lee.ware@kilgorecompanies.com

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Emergency Contact:

Name: Jon Mueller

Company: Colorado Companies, LLC dba Elam Construction

Telephone Number: 970-261-5782

Section 1.3: Stormwater Pollution Prevention Team

The facility has identified the following Pollution Prevention Team members and responsibilities:

The Owner/Operator – is ultimately responsible for all operations and actions of the employees that occur at their facility. The owner/operator can delegate certain responsibilities for aspects of the operations to employees to ensure they are done in compliance with terms and conditions of the stormwater permit. The owner/operator is responsible to ensure that delegated responsibilities are carried out. The owner/operator is also responsible for the development, revision, and implementation of the plan. Working with the pollution prevention team, the owner/operator ensures that all requirements of the permit are included in the pollution prevention plan.

Pollution Prevention Team

Name	Title	Phone Number	Responsibility of Team Member
Jim Doody	Environmental Manager	970-712-6634	Company Permitting and SWMP / SPCC Contact
Dionne Moores	Environmental Technician	970-773-4108	SWMP / SPCC inspection and maintain reports

Section 1.4: Facility Descriptions

Section 1.4.1: Facility and Industrial Activities Descriptions

Narrative Description

The following narrative description of current activities addresses all observed areas of the facility that have a potential to impact stormwater runoff. ***The narrative shall be updated within 30 days if there are any significant changes in operations.***

The Fetcher / Vale Pit is operated by Kilgore Companies, LLC dba Elam Construction per the requirements of the following sectors.

Sector J, SIC Code: 1442 – Construction Sand & Gravel

The Sand and Gravel Operation produce products such as sand, washed sand, gravel, washed gravel, and different types of road base. Operations include mining and washing of sand & gravel, ground de-water activities, screening and crushing of materials and production of different types of road base. Processing operations include: A front-end loader loads raw material into a hopper; as it is crushed, the material is then moved up the conveyors and screened; a washer is used to reduce or remove extra silt from some of the product. The sand, gravel, road base, and other aggregate products are then transported by conveyors and loaders into stock piles then into trucks for delivery.

Section 1.4.2: Discharge Information

Storm Sewer System:

Does this facility discharge Stormwater into a municipal separate storm sewer system (MS4)?

☐ Yes ☒ No

If Yes, name of the MS4 operator:

Receiving Waters:

Description of receiving waters:

All the on site water is directed to a detention pond located on the southeast corner of the site. Cotton Wood Gulch runs on the East side of the site and flows to the Elk River approximately 2 miles downstream.

Distance to receiving water:

The facility is located 2 miles up Cotton Wood Gulch from the receiving water, the Elk River.

Does the facility discharge directly into a surface water?

☒ Yes ☐ No

If Yes, then Describe: The on site detention pond is designed to retain the sediment while allowing it to seep into the ground while the water is returned to it's natural drainage.

If No, then Describe:

Impaired Waters:

Is the receiving water impaired?

☐ Yes ☒ No

If Yes, then describe the impairment(s):

If No, describe the basis for that decision. According to the Waterbody Report the water quality is listed as good and the stream is not a 303(d) listed. The ECHO report for the facility shows no releases or violations. No

Has a Total Maximum Daily Load been completed for any of the identified pollutants?

☐ Yes ☒ No

If Yes, then Describe:

Wetlands:

Are there wetlands on site?

☐ Yes ☒ No

Extent of wetland acreage on site: None

Describe the practices to protect the wetlands:

Section 1.4.3: Facility Estimates

Total Permitted facility area	31.5 Acre
Current Mined area	21
Percentage impervious area	2 %
Runoff coefficient	0.2

Section 1.4.4: Slopes, Drainage, and Vegetation

Slopes:

Describe the slopes:

The original topography of the site shows a ridge running west to east with a steep drop to the east towards Cottonwood Gulch. The north and south sides of the ridge also drain toward tributaries of the Elk River.

The current construction site, approximately 22 acres covers the southern two thirds of the 31.5 acre site. The pit floor is approximately 40 feet deep.

The directional flows on the site are found on the map in Appendix B.

Drainage Patterns:

Describe the drainage patterns:

The excavated site is graded to drain towards the detention pond on the southeast corner of the pit. The storm waters are retained in the pit area to allow infiltration into the soil. Excess water is directed to the detention pond and allowed to drain through the porous sidewall of the berm while retaining the sediments from the site.

Please see site map in Appendix B for additional slope and drainage information and locations.

Vegetation:

Describe the vegetation on site:

There is no significant vegetation in the pit area.

Section 1.4.5: Site/Facility Security

Section III.E.(8) Facility Security.

Facilities shall have the necessary security systems to prevent accidental or intentional entry that could cause a discharge. Security systems described in the plan shall address fencing, lighting, vehicular traffic control, and securing of equipment and buildings.

Section 1.4.6: Sensitive Areas to be protected

Describe sensitive areas such as steep slopes, or highly erodible soils that are to be preserved:

Describe areas of sensitivity or areas that need to be protected:

The nearby rivers are protected by grading the slopes away from the river or constructing berms.

Section 1.4.7: UIC Class 5 Injection Wells

Underground Injection Control Requirements

If any of the following storm water controls exists on the construction site then contact with the DWQ must be documented.

Are any of the following controls to be installed on site? Please check all that apply.

Underground Injection Controls	Control Utilized?
French Drains	<input type="checkbox"/>
Commercially manufactured pre-cast or pre-built propriety subsurface infiltration system	<input type="checkbox"/>
Drywalls, seepage pits, or improved sinkholes	<input type="checkbox"/>
No underground injection controls are to be installed on site	<input checked="" type="checkbox"/>

Section 1.5: Site Maps

The site and BMP maps can be found in Appendix B.

SECTION 2: POTENTIAL POLLUTANT SOURCES and DISCHARGES

Section 2.1: *Potential Pollutants Associated with Industrial Activity*

Table provided by EPA. This facility may not include all of the items presented.

Sector J <i>Table 1. Common Activities, Pollutant Sources, and Associated Pollutants at Mineral Mining and Processing Facilities</i> (Sector J: Crushed and Broken Stone (SIC Code 1429); Construction Sand and Gravel (SIC Code 1442); Industrial Sand and Gravel (SIC Code 1446))		
Facility Industrial Activity	Pollutant Source	Associated Pollutants
Site Preparation	Road construction	Dust, total suspended solids (TSS), total dissolved solids (TDS), turbidity
	Removal of overburden	
	Removal of waste rock to expose the mineral body	
Mineral Extraction	Blasting activities	Dust, TSS
Mineral Processing Activities	Rock sorting	Dust, TSS, TDS, turbidity, fines
	Rock crushing	Dust, TSS, TDS, turbidity, fines
	Rock washing	TSS, TDS, turbidity, pH
	Raw material storage	Dust, TSS, TDS, turbidity
	Waste rock storage	Dust, TSS, TDS, turbidity, pH
	Raw material loading	Dust, TSS, TDS, turbidity
	Processing materials unloading	Diesel/gas fuel, oil, lime
	Raw or waste material transportation	Dust, TSS, TDS, turbidity
Other Activities	Sedimentation pond upsets	TSS, TDS, turbidity, pH
	Sedimentation pond sludge removal and disposal	Dust, TSS, TDS, turbidity, pH
	Air emission control cleaning	Dust, TSS, TDS, turbidity
Equipment/Vehicle Maintenance	Fueling activities	Diesel/gas fuel, oil
	Parts cleaning	Solvents, oil, heavy metals, acid/alkaline wastes
	Waste disposal of oily rags, oil and gas filters, batteries, coolants, degreasers	Oil, heavy metals, solvents, acids
	Fluid replacement including hydraulic fluid, oil, transmission fluid, radiator fluids, and grease	Oil, arsenic, lead, cadmium, chromium, benzene, TCA, TCE, PAHs, solvents

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Reclamation Activities	Site preparation for stabilization	Dust, TSS, TDS, turbidity
	Fertilizers	Nitrogen, phosphorus

Section 2.2: *Spills or Leak Potentials*

Spill or Leak Potentials		
Instructions: Describe the areas at the facility that have spill or leak potential.		
Notes:		
Describe the locations and activities of the spill or leak potential	Potential Discharge Locations	Describe the BMPs that are in place in these areas
Loading and unloading activities in designated areas of the site.	Spills from material transfer.	Loading/unloading areas located in designated areas of the site. The hopper is loaded in a designated and contained area near the manufacturing facility. The stockpiles are kept in place and cleaned up as needed.
Equipment/vehicle use in designated areas of the site.	Leaks from equipment/vehicles	Regular inspection of equipment and vehicles. Repair or replace if needed.
Vehicle Tracking of Sediments	Sediments	Dust control with water, stabilized exit, covering as required.
Outside Storage Activities	Stormwater runoff from storage and aggregate areas	Control runoff, containment, good house keeping.
Non-industrial waste sources such as trash and portable toilets	Trash and sanitary wastes	Maintenance and waste disposal

Section 2.2.1: List of Significant Spills and Leaks

List of Significant Spills and Leaks			
Instructions: Record below all significant spills and significant leaks of toxic or hazardous pollutants that have occurred at the facility in the three years prior to the effective date of the permit.			
Definitions: Significant spills include, but are not limited to, releases of <u>oil</u> or <u>hazardous substances</u> in excess of reportable quantities.			
Significant Spills in the last 3 years? No			
Describe the location of spills or leaks (more than 25 gallons of oils or small amounts of hazardous chemicals) in the last 3 years	Quantity (Units)	Describe the cause of the spill or leak	Describe clean up and the BMPs that are in place in these areas
No history of significant spills or leaks			

Section 2.3: Non-Stormwater Discharges Documentation

Non-Stormwater is any water that is at the facility that is not from Stormwater.

Table 2.3.1 - Permissible Non-Stormwater Discharges		
Industrial facilities that qualify for coverage under this general permit may discharge the following non-stormwater discharges, through outfalls identified in the stormwater management plan, according to the requirements of this general permit:		
Non-Stormwater Discharge	Discharge or possible discharge	Observations/Location
(a) discharges from firefighting activities and fire hydrant flushings (excluding discharges of hyper chlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life);	No	
(b) potable water sources (excluding discharges of hyper chlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life);	No	
(c) lawn watering and similar irrigation drainage;	No	
(d) water from the routine external washing of buildings, conducted without the use of detergents or other chemicals;	No	
(e) water from the routine washing of pavement conducted without the use of detergents or other chemicals and where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed);	No	
(f) air conditioner condensate, compressor condensate, and condensate that externally forms on steam lines;	No	
(g) water from foundation or footing drains where flows are not impacted by pollutants (e.g. process materials, solvents, and other pollutants);	No	
(h) springs and other uncontaminated ground water; and	No	

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(i) other discharges described in Part I.C of this permit that is subject to effluent guidelines and effluent limitations.	No	Water truck dust control on gravel surfaces. There is not likely to be enough water to run off from surface area.
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Table 2.3.2 Non-permissible Non-Stormwater Discharges		
Non-Storm Discharge	Discharge or possible discharge	Observations/Location
Drains from inside processing and fluid storage areas.	No	
Runoff from outside storage areas	Yes	Spraying of aggregate piles for dust control. There is not likely to be enough water to runoff from pile area.
Runoff from oil/fluid storage and dispensing areas	No	Petroleum products are in secondary containment.
Runoff from parking lots, building roofs, and roadways	No	
Runoff from parts/vehicles washing areas	No	
Runoff from past spill and leak sites	No	

Section 2.3-1: Non-Stormwater Discharge Assessment and Certification

Non-Stormwater Discharge Assessment and Certification					
Instructions: Identify all potential sources of non-stormwater discharge. Test or evaluate the non-stormwater discharge. Describe the location, potential pollutants, and BMPs. If you cannot feasibly test or evaluate an outfall worksheet #2.3-2 must be filled out and filed with the state.					
Notes:					
Description of possible non-stormwater discharge	Possible Discharge Points	Method Used to Test or Evaluate Discharge (e.g. Visual Sample or Evaluation)	Describe Results from Test or Evaluation	Identify Potential Pollutants (e.g. Fuels, oil/grease, sediment, or detergents)	Identify BMP options to prevent pollution
Watering of stockpiles for dust control	Overland discharge to retention basin	Visual Evaluation	Observation of the water from the vehicle washing that drains to the retention pond site	Sediment	Monitor the retention basins to be sure that they do not overflow

Certification

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 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.

Name: _____

Title: _____

Signature: _____

Date: _____

Section 2.4: Salt and Coal Storage

Salt and Coal Storage				
Instructions: List information about salt and coal if it is located on site. Assess and evaluate the coal and salt storage for their potential to contribute pollutants to stormwater runoff. The locations of the salt and coal storage are shown on the SWMP map in Appendix B.				
Notes:				
Material	On Site	Quantity (Units)	Permit Requirements	Method of Storage and or Disposal
Salt	No			
Coal	No			

Section 2.5: Existing Stormwater Sampling Data

Existing quantitative stormwater discharge data records sent to state. Records available upon request.

Summary of discharge data from previous permits sent to state. Records available upon request.

SECTION 3: FACILITY EVALUATION AND STORMWATER CONTROL MEASURES

Section 3.1: Facility Evaluation Worksheets

The SWMP will be updated within 30 days if there is a significant change in the types of materials exposed or in the best management practices used to manage these materials.

When choosing BMPs, consider the following: reducing pollutants that are located on site; minimizing exposure; combining controls; understanding the type of pollutants on site; maximizing infiltration (avoiding groundwater contamination); using vegetated areas; creating buffers for sensitive areas; and implementing structural controls as needed.

Worksheet #1 Material Inventory

Material Inventory		
Instructions: List all materials that are used, stored, or produced on site other than those chemicals that will be listed on a following table. Assess and evaluate these materials for their potential to contribute pollutants to stormwater runoff. The locations of the materials are shown on the SWMP map.		
Notes:		
Material Name/Purpose of Material	Storage Methods/BMPs in place	Exposed in last 3 years (Yes/No)
(Gravel Pit info):		
Road Base / Product for use on construction projects	Stockpiles within the gravel pit/contained within pit	Yes
Sand and washed sand / Product for use on construction projects	Stockpiles within the gravel pit/contained within pit	Yes
Gravel and washed gravel /Product for use on construction projects	Stockpiles within the gravel pit/contained within pit	Yes

Rock (various sizes) / Product for use on construction projects	Stockpiles within the gravel pit/contained within pit	Yes
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Worksheet #2 Tank and Drum Identification

Tank, Drum and Chemicals Inventory			
Instructions: List all materials and chemicals stored in tanks, drums, buckets, and other containers on site. Assess and evaluate these containers and the materials or chemicals they hold for their potential to contribute pollutants to stormwater runoff. The locations of the tank, drums, buckets, and other containers are shown on the SWMP map.			
Notes:			
Material Name/Purpose of Material	Quantity (units)	Tank Type/Storage Methods/BMPs in place	Exposed in last 3 years (Yes/No)
Diesel Fuel Tank	500 gallons	Single-Walled Tanks in Secondary Containment with spill kits	Yes
Gasoline Fuel Tank	500 gallons	Single-Walled Tanks in Secondary Containment with spill kits	Yes

Worksheet #3 Machinery and Equipment Inventory

Machinery and Equipment Inventory			
Instructions: List all machinery that is used or stored on site. Assess and evaluate the machinery for its potential to contribute pollutants to stormwater runoff. The locations of the machinery or equipment are shown on the SWPPP map. If any vehicles, machinery, or equipment need maintenance, they must be confined in a designated area with measures to prevent pollution and the area must be shown on the SWPPP Map.			
Notes:			
Machinery/Equipment-Purpose	# of Vehicles	Storage Methods/BMPs in place	Exposed in last 3 years (Yes/No)
Water truck / Dust Control	1	Kept in designated areas/Regular inspections and maintenance	Yes
Service truck / servicing vehicle	1	Kept in designated areas near the vehicle maintenance shop/Regular inspections and maintenance	Yes
Excavators / Excavating of Materials	2	Kept in designated areas/Regular inspections and maintenance	Yes
Loaders / Hauling of Materials	1	Kept in designated areas/Regular inspections and maintenance	Yes
Crushers, Screens, and Conveyors	1	Kept in designated areas/Regular inspections and maintenance	Yes
Trucks and Trailers / Hauling of Materials	5	Kept in designated areas/Regular inspections and maintenance	Yes

Worksheet #4 Section 313 Chemicals

Section 313 Chemicals			
Instructions: List all Section 313 Chemicals that are used, or stored on site. Assess and evaluate the 313 chemicals for their potential to contribute pollutants to stormwater runoff. The locations of the 313 Chemicals are shown on the SWMP map. See Part III E of the MSGP for requirements of 313 Chemicals.			
Are there any Section 313 Chemicals on site? No			
Notes:			
Material Name/Purpose of Material	Quantity (units)	Storage Methods/BMPs in place	Exposed in last 3 years (Yes/No)
None Reported			

Worksheet #5 Loading and Unloading Areas

Loading and Unloading Areas

Instructions: Describe the loading and unloading areas located at the facility. Include areas where you will be loading or unloading materials, chemicals, or other items that may contribute pollutants to stormwater runoff.

Notes:

Describe the location of the Loading and Unloading Area	What is loaded or unloaded at the location	BMPs in place to prevent spills or leaks	Exposed in last 3 years (Yes/No)
Designated area within the sand and gravel pit	Aggregates	Located in designated areas on site.	Yes
Designated area near sand, gravel and roadbase stockpiles	Aggregates	Located in designated areas on site. The stockpiles are kept in place and cleaned up as needed.	Yes
Designated area near the diesel and gasoline tanks	Fuels	Located in designated areas on site. Liquid tanks are in secondary containment	Yes

Worksheet #6 Outdoor Processing Areas

Outdoor Processing Areas		
Instructions: Describe the outdoor processing areas that are located at the facility. Also describe the measures that are in place to prevent leaks, spills, or dust/particles from leaving the site.		
Notes:		
Are there any Outdoor Processing Areas on site: Yes		
Describe the location of the outdoor processing area	BMPs in place to prevent dust/particulates	BMPs in place to prevent spills or leaks
Excavation and Processing of aggregates	Move the aggregates in a manner that prevents excessive dust.	Water truck and hose is available to spray processing equipment to control dust as needed. Good housekeeping practices used and regular inspection of equipment and fueling operations.
Moving of Aggregates in designated areas on site	Move the aggregates in a manner that prevents excessive dust.	Water truck and hose is available to spray stockpiles and control dust as needed. Good housekeeping practices used and regular inspection of equipment and fueling operations.

Worksheet #7 Dust Control and Particulate Generating Processes and Vehicle Tracking

Dust Control and Particulate Generating Processes and Vehicle Tracking	
Instructions: Describe the dust and particulate generating activities at the facility and the measures taken to minimize them. Describe the dust control and vehicle tracking activities and the measures taken to minimize them. Measures that should be considered include, but are not limited to sprinkling/irrigation, vegetative cover, mulch, wind breaks, tillage, stone, or spray chemicals. Also describe any additional BMPs that may be needed.	
Notes:	
Describe the Dust Generating locations at the facility	BMPs in place to reduce dust/particulates
Crushers within the pit	Dust control is used with water.
Exit Points	Stabilized exits are in place.

Worksheet #8 Waste Management

Waste Management			
Instructions: Describe the areas at the facility that have waste that needs to be managed. Waste can include but is not limited to trashed, used oils, bi-products from industrial activities.			
Notes:			
Describe the waste management and location at the facility	Waste products	Storage/BMPs in place	Exposed in last 3 years (Yes/No)
Portable toilets	Sanitary Waste	Emptied regularly by a portable toilet company.	Yes

Worksheet #9 Illicit Connections

Illicit Connections	
Instructions: Describe where shop drains go from the facility. Describe any additional illicit connections that are possible on site.	
Are there any illicit connections or connections in question at the facility: No	
Notes:	
Description of drains on site and where they drain to	Notes/Describe any illicit connections that need to be addressed
None	

Worksheet #10 Site BMPs Responsibilities

Table is a generalized form. Not all BMP responsibilities may be required at this site.

Site BMPs Responsibilities				
Instructions: Develop a schedule for implementing each BMP. Provide a brief description of each BMP, the steps necessary to implement the BMP, (i.e., any construction or design), the schedule for completing those steps (list dates) and the person(s) responsible for implementation.				
BMPs	Description of Action(s) Required for Implementation	Scheduled Completion Dates for Required Action	Responsible for Action	Notes
Perimeter Controls	Inspect the perimeter controls for the potential of pollutants leaving the site. Maintain existing perimeter controls and install additional controls as needed.	Monthly	Facility Operator	
Properly Marked Containers	All drums, tanks, and buckets need to be properly labeled.	When Necessary as shown through inspections	Facility Operator	
Sediment and Erosion Controls	Sediment and erosion controls need to be monitored and maintained regularly.	When Necessary as shown through inspections	Facility Operator	
Management of Runoff (i.e. detention/retention pond, storm drains)	Structures or BMPs need to be monitored and maintained regularly.	Minimum of Spring and Fall. Also, When Necessary if over 50% capacity of sediment	Facility Operator	
Spill Prevention	Inspect tanks, drums, and buckets regularly. Clean up any spills or leaks immediately. Store all chemicals	Daily and Monthly	Facility Operator	

	properly. Inspect machinery and equipment regularly.			
Entrance and exit points	Inspect entrance and exit points for the potential of pollutants leaving the site. Install additional controls as needed.	Monthly	Facility Operator	
Good Housekeeping	1. Train all personnel on: raw material storage, material handling areas, storage areas, liquid storage tanks, loading/unloading areas, cleaning runoff control structures, the clean-up and spent absorbent and soil removal from leaks and spills.	1. Annual	Facility Operator	
	2. Sweep and perform trash/debris collection on a frequent basis. Clean leaks/spills upon occurrence.	2. Daily	Facility Operator	
Preventive Maintenance	1. Train all personnel on inspections, preventive maintenance of runoff control structures, and inspecting and testing facility equipment and systems. SWMP Leader to be trained on stormwater sampling.	1. Annual	Facility Operator	
	2. Perform preventive maintenance on daily basis.	2. Daily	Facility Operator	
Inspections	1. Facility Inspection	1. Monthly	Facility Operator	
	2. Facility stormwater program evaluation	2. Annually	Facility Operator	
Sampling	1. Visual Sample	1. Quarterly, as required by permit	Facility Operator	

	2. Analytical samples to lab	2. Quarterly, as required by permit	Facility Operator	
	3. Annual Coal Pile Runoff Sample	4. Annually (If required)	Facility Operator	
Spill Prevention and Response	1. Inspect stored materials, fluids, and equipment for stains, leaks, and spills.	1. Daily	Facility Operator	
	2. Employee training on spill response	2. Annually	Facility Operator	
	3. Post spill response procedures	3. As soon as possible	Facility Operator	
Management Runoff	1. Clean production and storage areas regularly. Collect trash and debris daily. Cover salt piles. Detergents and fluids monitored.	1. Ongoing	Facility Operator	
	2. Inspect storage areas regularly. Clean all spills and leaks.	2. Ongoing	Facility Operator	
	3. Take stormwater runoff samples. Rain event visual Inspections	3. Ongoing	Facility Operator	
Additional BMPs (activity and site specific)	1. Monitor fueling and fluid storage areas for fluid losses and staining. Clean spills/leaks from storage and unloading areas and remove absorbent and dispose of at regulated disposal facility.	1. Ongoing	Facility Operator	
	2. Keep fluids and associated dispensers and fill ports stored in secondary containment (when applicable).	2. Ongoing	Facility Operator	
	3. Verify fitting, hoses, valves, and tanks are in good condition. Maintain/replace as necessary.	3. Ongoing	Facility Operator	

	4. Monitor vehicle/equipment storage/maintenance areas for fluid losses from vehicles/equipment.	4. Ongoing	Facility Operator	
	5. Use absorbents to collect any and all lost fluids and reduce the likelihood of tracking. Dispose of absorbents according to local, state, and federal rules and ordinances.	5. Ongoing	Facility Operator	
	6. Keep spill response poster posted near fluid storage.	6. Ongoing	Facility Operator	
	7. Label all fluid storage containers as to current contents. Keep containers closed.	7. Ongoing	Facility Operator	
	8. Keep trash container lid closed and trash drums covered. Do not overfill. Empty regularly.	8. Ongoing	Facility Operator	
	9. Monitor protective barriers at outfall & specified flow areas to avoid possible damage.	9. Ongoing	Facility Operator	

Worksheet #11 Detention, Retention, or Sediment Pond Maintenance

Detention, Retention, Or Sediment Ponds Maintenance		
Instructions: The detention, retention, and sediment pond maintenance. Maintenance of the detention, retention, or sediment ponds needs to occur at minimum every spring and fall or when the capacity is reduced to 50% by sediment or debris. All maintenance performed on any pond needs to be recorded in the SWMP. Maintenance records need to be filed each spring and fall at minimum.		
Date	Pond Description	Describe Maintenance that was performed

Section 3.2: Stormwater Control Measures/Best Management Practices (BMPs)

When choosing BMPs, consider the following: reducing pollutants that are located on site; minimizing exposure; combining controls; understanding the type of pollutants on site; maximizing infiltration (avoiding groundwater contamination); using vegetated areas; creating buffers for sensitive areas; and implementing structural controls as needed.

Section 3.2.1: Minimize Exposure

By minimizing exposures there is a limited amount of pollutants that can come into contact with Stormwater. Below are control measures that show how this facility is minimizing exposure of pollutants at the facility.

Minimize Exposures

Describe control measures that may be used to minimize exposure:

Name the control: Containment for Material Storage Areas

Describe why the control is being used: Materials will be placed in a designated materials storage areas. Liquid materials will be sealed properly and placed in secondary containment to reduce pollutant discharge to stormwater, and exposure to rainfall.

Location: Designated areas

How to Maintain: All materials will be returned to a designated area at the end of each day if not being used. Clean up any spills if necessary.

Section 3.2.2: Pollution Prevention Controls

Below is a list of pollution prevention controls that will be implemented to prevent the discharge of pollutants from the site.

Potential Spill and Leak Controls

Describe control measures that may be used to minimize or control spills or leaks:

Name the control: Drip pans

Describe why the control is being used: Drip pans are positioned below a potential area of leakage as an added safeguard to storm water protection. Drips and leaks from piping, valves, spouts, etc. are caught by using drip pans so that the chemical or fluid may be cleaned-up or recycled easily before contaminating storm water. Drip pans can provide a temporary solution to a drip or leak where a delay in repair or replacement is warranted.

Location: Area of potential/existing leakage

How to Maintain: Place drip pans in a secure location where they cannot be bumped or spilled, but can be removed easily for disposal. Inspect and clean drip pans regularly, and replace if any cracks or holes are found. Empty when 1/3 full, using proper methods of disposal.

Name the control: Truck Positioning for Material Transfer

Describe why the control is being used: Trucks are positioned correctly prior to material transfer to eliminate or reduce pollutant discharge to stormwater via material spills or leaks.

Location: Designated areas of the site for loading & unloading of materials.

How to Maintain: Inspect material transfer equipment regularly for leaks.

Tank, Drum, and Chemical Controls

Describe control measures that are being used to prevent the discharge of pollutants from Tank, Drums, or other chemical controls:

Name the control: Secondary Containment for Fuels and Oils

Describe why the control is being used: Secondary containment systems provide an added safeguard from leaks or spills flowing into larger areas of the site, and minimizes clean up.

Location: Designated areas of the site where fuels and oils are stored.

How to Maintain: Inspect spill pallets, curbing, or other secondary containment systems regularly for any holes, cracks, breaks, or damage. Repair or replace as needed. Leakage or spills should be cleaned up immediately to prevent storm water pollution.

Non-Stormwater Controls

Describe control measures that are being used to control the discharge of pollutants from Non-Stormwater:

Name the control: Existing Retention Pond

Describe what is being controlled: Retention basin collect storm water and site discharge waters and let sit to either filter into the ground or evaporate into the air.

Location: Designated areas of the site

How to Maintain: Monitor for sediment accumulation, and clean out when needed. Inspect for damage to the embankment, and repair if needed. Stabilize for erosion control.

Stormwater Management Plant (SWMP)
*[Kilgore Companies LLC dba Elam Construction –
Fetcher / Vale Pit]*

Section 3.2.3: Good Housekeeping

Below is a list of good housekeeping practices that are being used at the facility to prevent the discharge of pollutants from the facility into the storm drain system.

Site Cleanup Controls

Describe control measures that are being used to minimize the discharge of pollutants from around the site:

Name the control: Organize and Clean Site

Describe why the control is being used: Production areas, Tanks/Drums Storage, and Loading/Unloading Areas are kept clean in order to reduce track-out, and pollutants from entering storm water.

Location: Designated areas of the site where industrial activities take place.

How to Maintain: Inspect the site on a semi-annual basis. Organize and clean-up areas needed.

Name the control: Stabilized Gravel-Drive Access Area

Describe why the control is being used: Gravel will be placed on the appropriate exit areas to reduce sediment from leaving the site.

Location: Site exit areas

How to Maintain: The stabilized areas need to be maintained when the rock begins to fill in with mud or sediment.

Waste Material Disposal

Describe control measures that are being used to dispose of the waste materials at the facility:

Name the control: Dumpster

Describe why the control is being used: Dumpsters are in place for manufacturing waste on site to prevent pollutants from entering stormwater.

Location: Designated areas of the site.

How to Maintain: Dumpsters will be emptied prior to trash and debris reaching above the rim of the dumpster. Inspect regularly for leaks, and repair or replace if needed.

Name the control: Trash and Debris Management

Describe why the control is being used: Trash and debris management keeps the site clean, and prevents pollutants from entering stormwater.

Location: Throughout the site

How to Maintain: All blowable trash must be placed in a covered trash can or bagged and placed in a dumpster. Discarded parts/equipment must be disposed of properly.

Outdoor Processing Clean Up Controls

Describe control measures that are being used to clean up outdoor processing areas to prevent the discharge of pollutants:

Name the control: Existing Water-Containment Holding Retention Pond

Describe what is being controlled: Storm Water is diverted into retention ponds to filter out sediment, and are then used for production activities. The sediment waste is then recycled.

Location: Designated areas of the site

How to Maintain: Regularly inspect, and repair as needed. Clean out when sediment or other pollutants accumulate.

Tanks, Drums, Containers, and Secondary Containment Good Housekeeping Controls

Describe control measures that are being used to keep the secondary containment, tanks, drums, and containers areas clean:

Name the control: Secondary Containment for Fuels and Oils

Describe why the control is being used: Secondary containment systems such as spill pallets, curbing, or other structures, provide an added safeguard from leaks or spills from the primary container flowing into larger areas of the site, and also minimizes clean up.

Location: Designated areas of the site where fuels and oils are stored.

How to Maintain: Inspect secondary containment regularly for any holes, cracks, breaks, or damage. Repair or replace as needed. Leakage or spills should be cleaned up immediately to prevent storm water pollution.

Section 3.2.4: Preventative Maintenance

Below is a list of preventative maintenance procedures at the facility to prevent the discharge of pollutants into the storm drain system.

Tank, Drums, and Containers Preventative Maintenance Controls

Describe the preventative maintenance control measures that are being used to minimize the discharge of pollutants from tanks, drums, and containers:

Name the control: Signs and Labels

Describe why the control is being used: Signs and labels provide the name of the material being stored, and provide easy recognition. They can also give instructions for use. Labeling can also be effective with organization efforts on large sites.

Location: Material storage areas, transfer areas, and anywhere labeling information could prevent pollution coming into contact with stormwater.

How to Maintain: Inspect signs and labels for visibility, wear & tear, and that the information listed is correct. Replace and update if needed.

Name the control: Keep Secondary Containment Clean

Describe why the control is being used: Keeping the secondary containment clean prevents overflow if there is a release from the primary container.

Location: Designated areas of site where secondary containment is required.

How to Maintain: Inspect area regularly for leaks or spills. If spillage found, clean immediately with proper methods of clean-up and disposal.

Name the control: Monitoring of Tanks and Drums

Describe why the control is being used: Monitoring methods are used to detect and identify any leakage due to observed changes, in order to prevent pollutants from entering stormwater.

Location: Designated areas of the site where tanks and drums are stored.

How to Maintain: Inspect and monitor regularly. Any leaks should be repaired, and general upkeep should be performed on a regular basis.

Section 3.2.5: Erosion and Sediment Controls and Sensitive Area Controls

Below is a list of erosion and sediment controls and sensitive area controls at this facility to prevent the discharge of pollutants into the storm drain system.

Erosion and Sediment Controls

Describe the control measures that are being used for erosion and sediment control:

Name the control: Diversion Ditch

Describe why the control is being used: Diversion ditches are used to divert storm water from running off the site to sediment basins on site.

Location: East side of site within asphalted area. Please refer to the SWMP Map.

How to Maintain: Monitored for erosion during industrial activities. If erosion occurs the spot will be smoothed over.

Describe the control: Earthen Berms

Describe why this control is being used: Berms are used to prevent sediment and pollutants from leaving the site.

Location: Designated areas of the site that will receive storm water run-off.

How to Maintain: Earthen berms need to be repaired and maintained when it starts to erode away, has been knocked over, or disturbed in any way, by reforming and compacting.

How to Maintain: Regularly inspect, and repair as needed. Clean out when sediment or other pollutants accumulate.

Section 3.2.6: Management of Run-On and Run-off

Below is a list of controls to manage runoff at this facility to prevent the discharge of pollutants into the storm drain system.

Oncoming flows

Describe control measures that are being used to control Stormwater flowing onto the facility and how these controls will minimize the discharge of pollutants from the facility:

Name the control: Earthen Berms for run-on control

Describe why this control is being used: Berms are used to protect against the rise in stream flow, which could flood the facility.

Location: Designated areas of the site that will receive storm water run-on.

How to Maintain: Berms need to be repaired and maintained when it starts to erode away, has been knocked over, or disturbed in any way, by reforming and compacting.

Sedimentation Basin

Describe control measures that are being used to control Stormwater flowing out of the facility and how these controls will minimize the discharge of pollutants from the facility:

Name the control: Sedimentation Basin

Describe what is being controlled: Sedimentation Basin collect storm water from the pit and stockpile area, allows sedimentation to occur, and finally discharging water from the basin while minimizing the release of sediments. In addition the basin provides for water infiltration into the ground and evaporation into the air.

Location: Designated area in the southeast area of the site.

How to Maintain: Monitor for sediment accumulation, and clean out when needed. Inspect for damage to the embankment, and repair if needed. Stabilize for erosion control.

Outgoing Flows

Describe control measures that are being used to control Stormwater flowing out of the facility and how these controls will minimize the discharge of pollutants from the facility:

Name the control: Earthen Berms for run-off control

Describe why this control is being used: Berms are used to prevent sediment and pollutants from leaving the site.

Location: Designated areas of the site that will receive storm water run-on.

How to Maintain: Berms need to be repaired and maintained when it starts to erode away, has been knocked over, or disturbed in any way, by reforming and compacting.

Section 3.2.7: Dust Generation and Vehicle Tracking of Industrial Materials

Below is a list of dust controls being used at this facility to prevent the discharge of pollutants from the site and into the storm drain system or into the receiving water.

Facility Vehicle Exits Dust Controls

Describe control measures that are being used to minimize dust from tracking, vehicles and equipment:

Name the control: Water Truck

Describe why the control is being used: Water trucks are used to help minimize dust on site.

Location: All exposed areas and outdoor processing locations.

How to Maintain: Make sure the water tank has adequate amounts of water.

Name the control: Stabilized Gravel Drive Access Area

Describe what is being controlled: Gravel will be placed on the appropriate exit areas to reduce sediment from leaving the site.

Location: Exit areas within exposed soil.

How to Maintain: The stabilized areas need to be maintained when the rock begins to fill in with mud or sediment.

Outdoor Processing Controls

Describe control measures that are being used to minimize dust from outdoor processing controls:

Name the control: Water Truck

Describe why the control is being used: Water trucks are used to help minimize dust on site.

Location: Where outdoor processing activities take place.

How to Maintain: Make sure the water tank has adequate amounts of water.

Describe the control: Sprinkler System

Describe why this control is being used: Sprinkler systems are used to help minimize dust on site.

Location: Exposed areas of the site, including the crusher operations area.

How to Maintain: Regular inspection and maintenance. Repair or replace parts as needed to keep system in good working condition.

Good Housekeeping Practices used (See Section 3.2.3)

Section 3.3: Sector-Specific Stormwater Control Measures/Best Management Practices (BMPs)

Section 3.3.1 Industrial Activity of Sector J

The requirements under this section apply to stormwater discharges from activities identified and described as Sector J and a co-located Sectors D and E by the following Standard Industrial Classification (SIC) codes:

SECTOR J	
SIC Code	Description of Industry Sub-sector
1442	Construction Sand and Gravel; Facilities that are primarily engaged in Mining and Quarrying of Nonmetallic Minerals, Except Fuels, are described by Standard Industrial Classification (SIC) Major Group 14. Facilities in this group that are primarily engaged in operating sand and gravel pits and dredges, and in washing, screening, or otherwise preparing sand and gravel for construction uses, are classified as SIC 1442.

SIC information retrieved from: <http://www.osha.gov/pls/imis/sicsearch.html>

Section 3.3.2 Sector J Specific Requirements

Sector J Specific Requirements

Good Housekeeping:

Requirements for site/facility:

Areas which may contribute pollutants to storm water discharges must be kept and maintained in a clean orderly manner.

Preventive Maintenance:

Requirements for site/facility:

- Periodic removal of debris from discharge diversions and conveyance systems. These activities should be conducted in the spring, after snowmelt, and during the fall season.
- Maintenance schedule for sedimentation ponds must be kept in the SWMP if a pond is on site.

Spill and Leak Prevention and Response Procedures:

Requirements for site/facility:

- Specify material handling procedures, storage requirements, and use of equipment such as diversion valves should be considered.
- Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel.
- The necessary equipment for clean ups shall be made available to the appropriate personnel.

Inspections:

Requirements for site/facility:

- Minimum of quarterly visual inspections of all BMPs.
- Temporarily and permanently inactive operations are required to perform annual inspections.
- The inspections shall include:
 - An assessment of the integrity of storm water discharge diversions, conveyance systems, sediment control and collection systems, and containment structures.
 - Visual inspections of vegetative BMPs, serrated slopes, and benched slopes to determine if soil erosion has occurred; and
 - Visual inspections of material handling and storage areas and other potential sources of pollution for evidence of actual or potential pollutant discharges of contaminated storm water.

Employee Training:

Requirements for site/facility:

- Employees need to be trained as to the SWMP and storm water facility goals.
- Training should address topics such as spill response, good housekeeping and material management practices.
- The date and log of who attended the training needs to be placed in the SWMP.

Section 3.3.3 Sector J Specific Forms

Sector Specific Forms to be inserted (if applicable)

SECTION 4: INSPECTIONS AND MONITORING/SAMPLING

Section 4.1: Routine Facility Inspections

1. *Inspection Personnel are listed in section 1.3 of this SWMP.*
2. *Inspection Schedule and Procedures*

Sector Specific Inspection Schedule

- ☒ *At least once Monthly, and an Annual Comprehensive Site Compliance Evaluation*
- ☐ *At least once Quarterly*
- ☐ *Other (if you prefer a more stringent schedule): _____*

Please see Appendix E for Inspection Forms

Section 4.2: Visual Assessment of Stormwater Discharges

Visual Examination of StormWater Quality

Visual stormwater samples will be taken twice monthly only during stormwater discharges, per requirements of the Colorado Discharge Permit.

See the Visual Inspection Form in Appendix I

Section 4.3: Monitoring/Sampling

Sector Specific Analytical Sampling (When to take samples – when to turn into the state)

Analytical Stormwater Samples (If required in your Sector)

Water Sampling Protocol to Comply with Colorado Discharge Permit

- **Introduction**

The purpose of this document is to assure uniform sampling techniques of water being discharged from Sand and Gravel, Asphalt or Concrete Batching operations that has been issued a Discharge Permit by the Colorado Department of Public Health and Environment (CDPHE).

- **Sample Location**

Sampling of water being discharged from the site shall occur at a point after treatment, or after the implementation of any Best Management Practices (BMP's). If BMP's or treatment are not implemented, sampling shall occur where the discharge leaves the control of the permittee (Elam Construction, Grand Junction Pipe and Supply, Sandco Inc), and prior to entering the receiving stream. Samples must be representative of what is entering the stream.

- **Record Keeping**

A field log book shall be maintained to document all sampling activities. All field notes shall be entered in permanent ink. The field log shall identify site for which the sample is being taken, collection date and time, sample location, sampler initials, visual observation of any oil and grease present on water surface, pH reading, water temperature, date and time sample delivered to analytical lab, initials of technician delivering sample to lab. Any correction to the field log form shall be done with a single strike through of the written data and the new data written with the initials of the technician making the correction.

- **Sampling**

Each site has been assigned, by CDPHE, specific analysis to run on each water sample, along with the frequency of sampling. Notify the designated Analytical Lab of the required testing requirements along with any limitations for each specific site. Tester shall request from the Lab, sample bottles for each site specific sample. Water samples shall be obtained from each site's designated point of discharge in the following manner:

- The water sample shall be collected by slowly immersing the laboratory supplied bottle in the water and allowed to fill completely
- As soon as possible, but no later than 15 minutes after water sample is obtained, the technician shall obtain a pH reading. The pH reading along with the water temperature shall be recorded on the field log.
- Seal sample bottle by securing cap.
- Place sample bottle label on bottle with company name, site identification and date

- Place sample bottle in cooler with ice pack for transport to Lab.
- Fill out Laboratory supplied Chain of Custody Form, noting required tests
- Deliver sample to Lab and note delivery time on Field Log

Refer to Current Discharge Permits for analysis requirements.

Section 4.4: *Annual Comprehensive Stormwater Evaluation*

The comprehensive site evaluation is to assess and improve on the facility and the SWMP program to ensure that the proper practices, controls, and BMPs are being used to meet the Colorado Department of Public Health & Environment requirements and to prevent the discharge of pollutants from this facility. The Comprehensive Site Evaluation will be performed annually and can replace one of the regularly scheduled monthly inspections. Qualified personnel will perform the evaluation and complete a full assessment of the facilities Stormwater controls and the companies Stormwater pollution prevention program. The reports will be maintained with the SWMP for a minimum of three years after the when a new NOI permit is obtained

During the Annual Comprehensive Stormwater Evaluation, the following assessments will be made and used to create a plan to improve the results of each item:

1. The analytical sampling results
2. The quarterly visual evaluations
3. The implementation of the SWMP document
4. The inspections for the year
5. The facility and operations for pollutant generating and containment activities
6. New Pollutants at the facility and its operations and how they will be included in the SWMP
7. The training of the pollution prevention team and facility personnel
8. The overall program at the facility

Please see Inspection Forms located in Appendix E

SECTION 5: DOCUMENTATION TO SUPPORT ELIGIBILITY CONSIDERATIONS UNDER OTHER FEDERAL LAWS

SWMP APPENDICES

Appendix A – General Location Map

Appendix B – Site Map

Appendix C – MSGP – Industrial Multi-Sector General Permit

Appendix D – Facility NOI Permit/NOT Form

Appendix E – Inspection Forms & Reports

Appendix F – Corrective Actions

Appendix G – SWMP Amendment Log

Appendix H – Certifications/Agreements/Delegation of Authority

Appendix I – SWDMR forms for Visual and Analytical Sampling

Appendix J – Training Log

Appendix K – Spill Response Plan

Appendix L – Additional Information

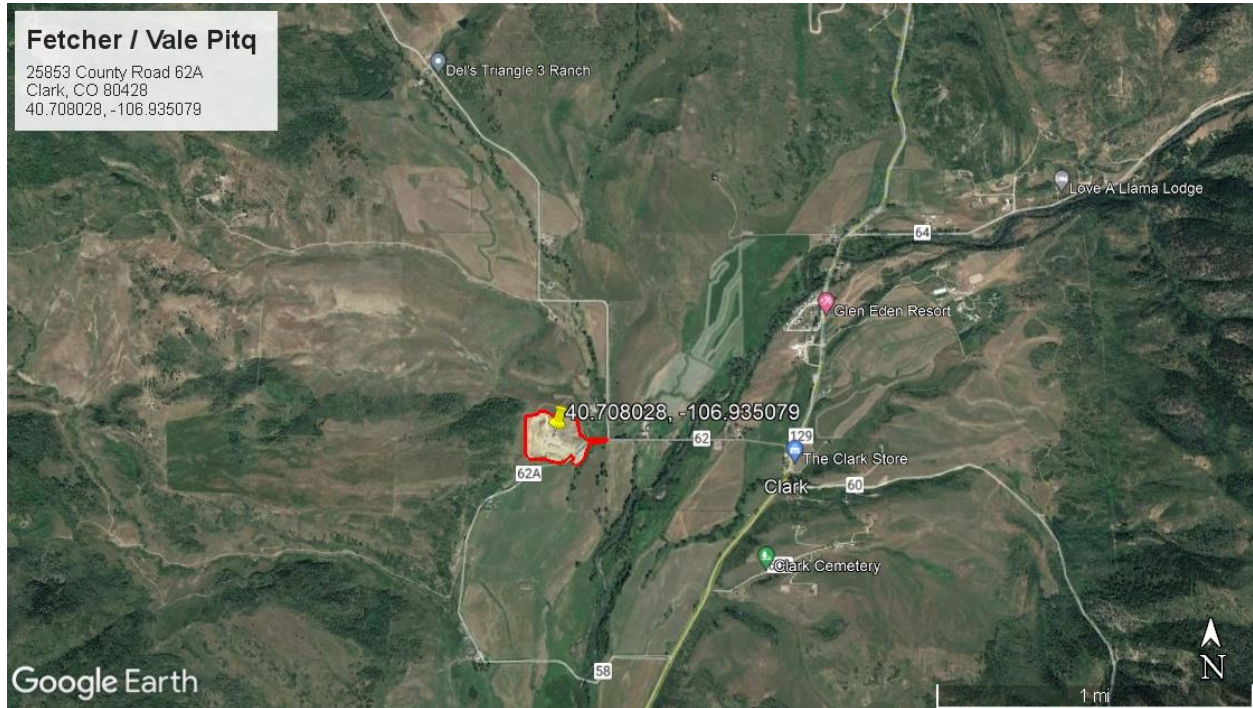
Appendix M – BMP Specifications

Appendix A – General Location Map

Site Location Map



Regional Location Map



Appendix B – Site Map

SWMP Maps

Please notify either the contact person for the operator found on the NOI in order to access this information if needed



Fetcher
Vale Pit
COG501711



Pit Boundaries



Entrances

Kilgore Companies dba Elam
Construction.
Address 556 Struthers Ave. Grand
Junction CO. 81501
Location: 25853 County Rd 62A.
Clark CO. 80428

Kilgore
Companies

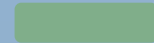
Prepared by Dionne Moores
Title: Environmental Technician
Email: Dionne.Moores@elamconstruction.com
Office: 970-242-5370 Cell: 970-773-4108



Berm



Stockpiles



Retention Pond

Kilgore Companies dba Elam
Construction.
Address 556 Struthers Ave. Grand
Junction CO. 81501
Location: 25853 County Rd 62A.
Clark CO. 80428

**Kilgore
Companies**

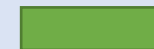
Prepared by Dionne Moores
Title: Environmental Technician
Email: Dionne.Moores@elamconstruction.com
Office: 970-242-5370 Cell: 970-773-4108



Crusher
Operations



Fuel Cell

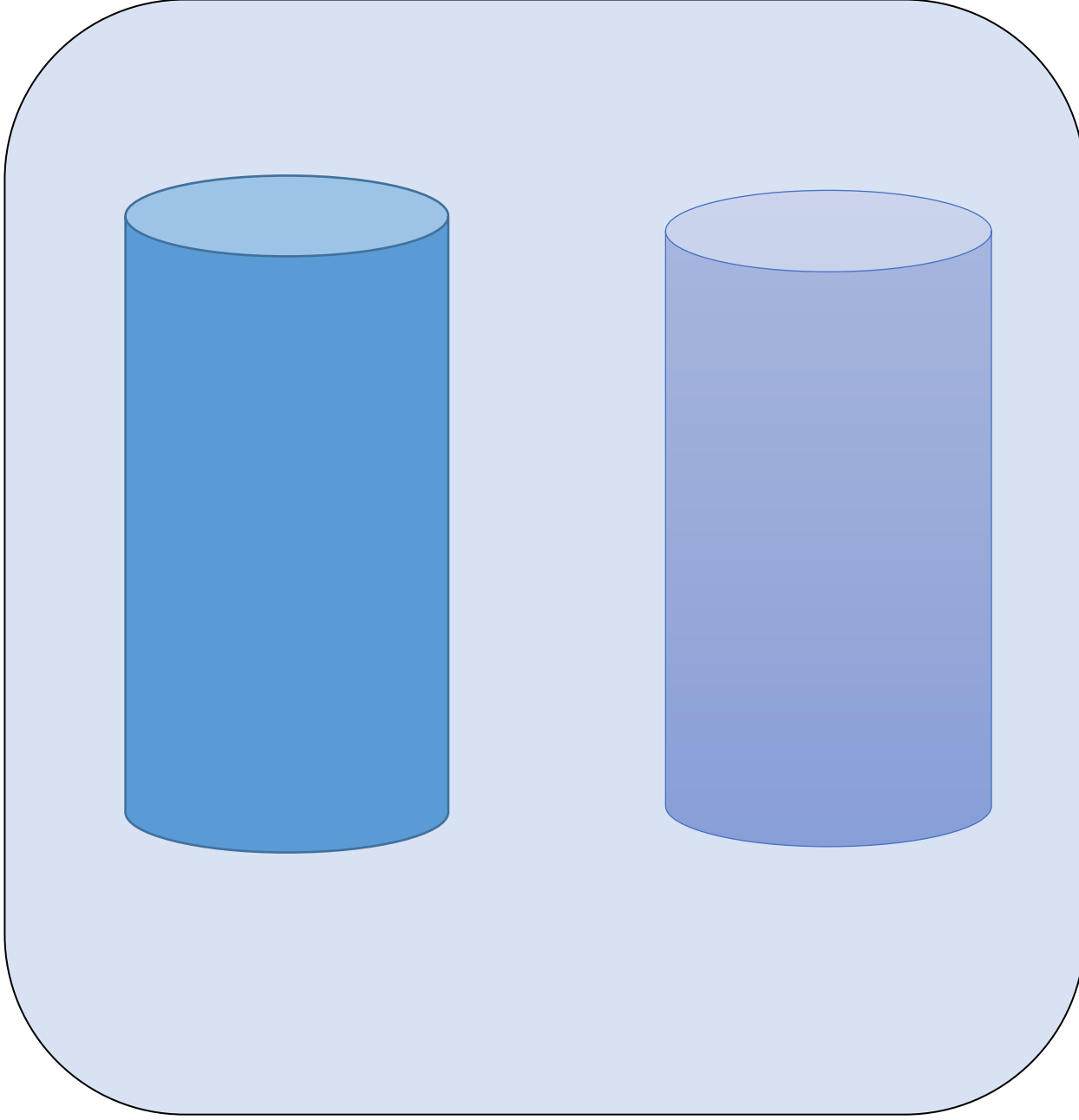


Scale House

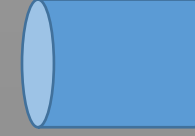
Kilgore Companies dba Elam
Construction.
Address 556 Struthers Ave. Grand
Junction CO. 81501
Location: 25853 County Rd 62A.
Clark CO. 80428

Kilgore
Companies

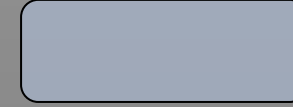
Prepared by Dionne Moores
Title: Environmental Technician
Email: Dionne.Moores@elamconstruction.com
Office: 970-242-5370 Cell: 970-773-4108



**500 Gallon
Diesel Fuel**



**500 Gallon
Gas Tank**



**Secondary
Containment**

Kilgore Companies dba Elam
Construction.
Address 556 Struthers Ave. Grand
Junction CO. 81501
Location: 25853 County Rd 62A.
Clark CO. 80428

**Kilgore
Companies**

Prepared by Dionne Moores
Title: Environmental Technician
Email: Dionne.Moores@elamconstruction.com
Office: 970-242-5370 Cell: 970-773-4108



→
Storm Water
Flow

—
Berms

Prepared by Dionne Moores
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Email: Dionne.Moores@elamconstruction.com
Office: 970-242-5370 Cell: 970-773-4108

**Kilgore
Companies**

Kilgore Companies dba Elam
Construction.
Address 556 Struthers Ave. Grand
Junction CO. 81501
Location: 25853 County Rd 62A.
Clark CO. 80428

Appendix C – Colorado Permit Information

Colorado Regulations for Industry Permits, Including Extractive Mining:

[https://cdphe.colorado.gov/Water quality Commerce and industry permits](https://cdphe.colorado.gov/Water_quality_Commerce_and_industry_permits)

Colorado's Stormwater General Permit for Non-Extractive Industries (COR900000):

<https://cdphe.colorado.gov/renewal-industrial-stormwater-general-permit>

Appendix D – Facility NOI Permit/NOT Form

Please notify the contact person for the operator found on the NOI in order to access this information if needed.

Appendix E – Inspection Forms & Reports

Please notify either the contact person for the operator found on the NOI in order to access this information if needed.

IND-Storm Water - General

Site Name:		Inspector:	
Permit #:		Inspection Frequency:	
Date of Visit:		Last Rain Event	Last Precipitation 48h Forecast

Is the "Storm Water" Folder within the Environmental filing rack on site and is a copy of the Storm Water Permit / NOI and directions to access the SWPPP (Storm Water Pollution Prevention Plan) inside and accessible?

Yes	No	N/A
-----	----	-----

Have all BMPs (Best Management Practices) detailed in the SWPPP such as containment berms, ponds, erosion and sediment controls been installed at the site?

Yes	No	N/A
-----	----	-----

Are all BMPs, controls and pollution sources (plants, plant components such as bins, silos and dust collectors, material handling areas, mining areas, processing areas, maintenance and fabrication areas, parts storage, petroleum and chemical storage, equipment washing, stormwater and process water ponds, chemical toilets, dumpsters, etc.) at the site detailed in the SWPPP and on the site map?

Yes	No	N/A
-----	----	-----

Is the SWPPP Pollution Prevention Team and Emergency Contact list current and correct?

Yes	No	N/A
-----	----	-----

Have any updates to the SWPPP identified during the last inspection been updated into the plan?

Yes	No	N/A
-----	----	-----

Have all new employees that are affected by the SWPPP been trained in the SWPPP contents and requirements? If training has been provided to personnel, has an email copy of signed and completed training log been sent to Lee Ware to be updated into to the SWPPP ?

Yes	No	N/A
-----	----	-----

General Facilities as Applicable, Including Aggs, HMA, RMX, and Shops

Is the site FREE from run-on water entering the shop, plant, processing or stockpile areas?

Yes	No	N/A
-----	----	-----

Are appropriate controls in place to divert run-on away from pollution sources at the site?

Yes	No	N/A
-----	----	-----

Are the current BMPs, Controls, (e.g., berms, inlet protection, wattles, etc.) sufficient to prevent solid materials, sediment, or chemical pollutants from leaving the site?

Yes	No	N/A
-----	----	-----

Is runoff from stockpiles, material handling areas, plant areas, fabrication and maintenance areas, truck & equipment washing areas, or other process water sources contained on site?

Yes	No	N/A
-----	----	-----

Are equipment operations and maintenance areas, parts storage areas, scrap metal, boneyards and other materials storage neatly organized?

Yes	No	N/A
-----	----	-----

IND-Storm Water - General

Site Name:		Inspector:	
Permit #:		Inspection Frequency:	
Date of Visit:		Last Rain Event	Last Precipitation 48h Forecast

Is the site FREE from trash, pollutants or materials not being properly contained or otherwise managed?

Yes	No	N/A
-----	----	-----

Is dust controlled and are site exits to public roadways (roads, ramps, sidewalks, parking areas) FREE from trackout?

Yes	No	N/A
-----	----	-----

Are mobile equipment and fueling/maintenance areas monitored for leaks and spills? Are these areas FREE from evidence of leaks, staining, spills, etc.?

Yes	No	N/A
-----	----	-----

Are secondary containment structures provided for chemical or petroleum storage?

Yes	No	N/A
-----	----	-----

Are all tanks, drums and other containers sealed or otherwise protected from storm water (i.e., under cover)?

Yes	No	N/A
-----	----	-----

Are all tanks, drums, and containers clearly labeled with the actual contents that match?

Yes	No	N/A
-----	----	-----

Is a spill kit or containment and cleanup materials available for use in the event a spill occurs?

Yes	No	N/A
-----	----	-----

Is the site FREE from reportable spills since the last inspection?

Yes	No	N/A
-----	----	-----

Are areas where cement powder and fly ash are delivered or otherwise handled swept or washed as needed?

Yes	No	N/A
-----	----	-----

Is the required storm water discharge sampling/reporting per EPA or State DEQ NOTED to being conducted prior to the end of the quarter, including (visual monitoring, analytical benchmark monitoring, effluent level monitoring)?

Yes	No	N/A
-----	----	-----

NOTES:

IND-Storm Water - General

Site Name:		Inspector:	
Permit #:		Inspection Frequency:	
Date of Visit:		Last Rain Event	Last Precipitation 48h Forecast

Certification & Signatures

Signature Certification:

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.

Electronic Signature

X

Date

Title



COG500000 Annual Report Form
Sand and Gravel Mining and Processing
Applicable to Stormwater-only discharges

FOR INTERNAL USE ONLY

Reviewer: _____

Further Review: Yes No

PART A: Permit Identification

General Permit Number: **COG500000**

Facility Certification Number **COG50**

PART B: Reporting Period Jan 1 through Dec 31

(Check one. Report due by February 28 of the following year.)

☐ 2021

☐ 2022

☐ 2023

☐ 2024

PART C: Permittee Information

Organization: _____

Mailing Address: _____

City: _____ State: _____ Zip: _____

PART D: Facility Information

Facility Name: _____

Facility Address: _____

City: _____

Facility Contact
Name: _____

Title: _____

Telephone No: _____

Email Address: _____

PART E: Permittee-conducted Inspection

Check the box for which inspection frequency applies to the permitted facility, Part I.J.:

Active Site - 4 inspections annually
(Quarterly)

☐

Inactive Site w/ No Exposure - 2
inspections annually (Spring/Fall)

☐

Inactive Site w/ Exposure - 6
inspections annually (Every 2 months)

☐

Provide the date(s) the inspections were conducted, as required by Part I.J of the permit:

If an inspection(s) was not conducted in accordance with the required frequency, attach an explanation of why.



Part F: Required Monitoring (Indicate if the following monitoring is required at the permitted facility. Refer to the facility's permit certification for information on required monitoring.)	YES	NO
- Visual Monitoring (Part I.I.1) (If any of the characteristics in Part I.I.1.b are observed, attach a summary)	<input type="checkbox"/>	<input type="checkbox"/>
- Benchmark Monitoring (Part I.I.2)	<input type="checkbox"/>	<input type="checkbox"/>
- Water Quality Standards Monitoring (Part I.I.3)	<input type="checkbox"/>	<input type="checkbox"/>
- Additional Monitoring Required by Division (Part I.I.4)	<input type="checkbox"/>	<input type="checkbox"/>
Part G: Corrective Actions (Indicate whether any of the following conditions occurred at the permitted facility.)	YES	NO
- An unauthorized release or discharge observed (e.g., spill, leak, discharge of non-stormwater not authorized under COG500000 or another permit);	<input type="checkbox"/>	<input type="checkbox"/>
- Facility control measures are not stringent enough for the discharge to meet applicable water quality standards;	<input type="checkbox"/>	<input type="checkbox"/>
- Modifications to the facility control measures are necessary to meet the practice- based effluent limits in this permit;	<input type="checkbox"/>	<input type="checkbox"/>
- The permittee finds in a facility inspection, that facility control measures are not properly selected, designed, installed, operated or maintained.	<input type="checkbox"/>	<input type="checkbox"/>
- Construction or a change in design, operation, or maintenance at the facility significantly changes the nature of pollutants discharged in stormwater from the facility, or significantly increases the quantity of pollutants discharged;	<input type="checkbox"/>	<input type="checkbox"/>
- The average of quarterly sampling results as described in Part I.I.2.e of this permit exceeds an applicable benchmark.	<input type="checkbox"/>	<input type="checkbox"/>
If the answer to any of the above is "YES," provide a description of the conditions that met the criterion/criteria and describe the corrective action(s) taken (attach additional pages as needed):		
<p>Part H: Required Certification Signature [Reg 61.4(1)(h)]</p> <p>"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 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."</p>		
Name:	Title:	
Signature:	Date signed:	

Appendix F – Corrective Actions

Responsive (Corrective) action items will be identified in the inspection report and action log. Once identified and reported, responsible parties in section 1 will correct problems according to the multi-sector general permit.

Please notify the contact person for the operator found on the NOI permit in order to access this information if needed.

Appendix G – SWMP Amendment Log

Sector Specific Amendment requirements: 5-year review

Please notify the contact person for the operator found on the NOI in order to access this information if needed.

SWMP Amendment Log

The SWMP Map updates and amendments are noted and dated on the SWMP Map. All other amendments to the SWMP document will be noted on this log.

Project Name: _____

Project Location: _____

Date	Description of the Amendment	SWMP Section	Amendment Prepared by

Appendix H – Certifications/Agreements/Delegation of Authority

Please notify the contact person for the operator found on the NOI in order to access this information if needed.

Owner / Operator Certification

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: Brian Harris Title: CFO

Signature: _____ Date: _____

Company: Summit Materials

Facility: Fetcher / Vale Pit

Appendix I – SWDMR forms for Visual and Analytical Sampling

The following are sample forms that can be used for Visual and Analytical sampling.

Industrial Stormwater Permit

Visual Monitoring – Example Tracking Form

Visual Monitoring (One Sample per Form)		
Year: _____	Quarter (circle one): 1 2 3 4	Date: _____
<i>Visual monitoring must be conducted once each quarter for the entire permit term. The permittee must collect a stormwater sample from each outfall (or a substantially identical outfall) and conduct a visual assessment of each sample.</i>		
Required Documentation:		
Personnel collecting the sample and performing visual assessment:	Print Name: _____ Title: _____ Provide Signature: _____	
Sample location:		
Sample collection date and time:		
Visual assessment date and time:		
Nature of the discharge (i.e., runoff or snowmelt):		
Results of observations of the stormwater discharge:		
Probable sources of any observed stormwater contamination:		
If applicable, why it was not possible to take samples within the first 30 minutes:		
<i>The visual assessment must be made of a sample in a clean, clear glass, or plastic container, and examined in a well-lit area. The permittee must visually inspect the sample for the presence of the following water quality characteristics, and document the visual assessment results:</i>		
*	Color	
*	Odor	
*	Clarity	
*	Floating Solids	
*	Settled Solids	
*	Suspended Solids	
*	Foam	
*	Oil sheen	
*	Other obvious indicators of stormwater pollution	
Required Documentation Regarding Corrective Action:		
If the visual monitoring indicates the control measures are inadequate or are not being properly operated and maintained, the permittee must conduct corrective actions.		
****Use the Corrective Action Summary Sheet to provide a summary and schedule of implementation of any corrective action(s) that has or will be taken based on this visual monitoring.		

2X Monthly Only During Discharge

[illegible]



COLORADO

Department of Public
Health & Environment

Dedicated to protecting and improving the health and environment of the people of Colorado

**CERTIFICATION TO DISCHARGE UNDER CDPS GENERAL PERMIT COG500000
DISCHARGES ASSOCIATED WITH SAND & GRAVEL MINING AND PROCESSING
(and other Nonmetallic Minerals except fuel)**

Certification Number: **COG501711**

This Certification to Discharge specifically authorizes:

Elam Construction Inc
to discharge from the facility identified as

Fetcher Vale Pit
to:
Cottonwood Gulch - Elk River

Facility Located at:	Clark, Routt County, CO 81639
	Center Point Latitude 40.708028, Longitude -106.935079

Defined Discharge Outfall(s) to Surface Water	Outfall(s) Lat, Long	Discharge Outfall(s) Description	Receiving Stream
Outfall Number 001-A	40.708028, -106.935079	Stormwater discharge	Cottonwood Gulch to Elk River

All discharges must comply with the lawful requirements of federal agencies, municipalities, counties, drainage districts and other local agencies regarding any discharges to storm drain systems, conveyances, or other water courses under their jurisdiction.

Stormwater Monitoring Requirements

Permit Limitations and/or Monitoring Requirements apply to outfall 001A as outlined in the Permit in Part I.C.2 and Parts I.G through I.Q.

On the effective date of this certification, the Fetcher Vale Pit is subject to the monitoring requirements identified below at each discharge point of stormwater from the facility.

A. Visual monitoring, Part I.I.

Per Part I.I.1 of the permit, the permittee must collect a stormwater sample from each outfall (or a substantially identical outfall pursuant to Part I.H.1 of the permit) and conduct a visual assessment of each of these samples once each **quarter** for the entire permit term.

B. WQBEL/Water Quality Standards, Part I.I.4

Discharges authorized under this permit must be controlled as necessary to meet applicable water quality standards.



Stormwater Reporting Requirements [include for all stormwater only outfalls]

ICIS Code	Description	Due date	Frequency
00308	The permittee shall submit an annual report to the division for the reporting period January 1 through December 31.	February 28	Annual(10)

Modified and reissued: 5/10/2017 Effective: 5/10/2017 Expiration Date: 12/31/2021

Modification 1 to change permittee name to Elam Construction Inc.

Certification issued: 3/17/2017 Effective: 4/1/2017

This certification under the permit requires that specific actions be performed at designated times. The certification holder is legally obligated to comply with all terms and conditions of the permit.

Approved by
Kathleen Rosow
Permits Unit 3 Work Group Leader
Water Quality Control Division



Appendix J – Training Log

Employee Training

Training is required for all categories listed below. A training log needs to be completed for each training that occurs.

- a. Annually
- b. When a new employee starts
- c. Inspectors
- d. Maintenance personnel
- e. All members of pollution prevention team
- f. Employees
- g. Record training with the Kilgore SharePoint Training system. Records available upon request



SharePoint Training

Topic:

SharePoint Training

TT-KC-SignInSheet-000

Page 1 of 2

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We are Equal Opportunity Employers and encourage minorities and women to apply. Everyone is encouraged to recruit.

Date	Time	Length	Job #	Location	Supervisor	Who Conducted Training

Job Specific or other Subjects/Topics covered in this environmental training meeting

1		2		3	
---	--	---	--	---	--

Recent Incident/Near Miss Reviewed:

Topics discussed: Environmental awareness

SharePoint

	Print Name	Emp #	Initials
1			
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	Print Name	Emp #	Initials
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Employee Comments

Supervisor Remarks/Instruction

Feel Empowered: If You See Something, Say Something! Stop the Job! Nobody Gets Hurt!

Training Sign-in Sheet

Date: 2/7/2023

Time: 0800 - 1630

556 Struthers Avenue

2023 Annual MSHA Refresher

Grand Junction, Colorado 81501

Location: Workforce Center

Phone: (801) 250-0132 Fax: (801) 250-0671

Presentors: Chance Densley

Dionne Moores

Training Subject:

Elam Construction - Annual Refresher

- Environmental Training

	Employee #	Employee Name	Employee Name	Job Description
	1234	John Example	John B. Example	Operator
1	7090	JAMES J. Dooey	<i>[Signature]</i>	Enviro Manager
2	7343	Dionne S. Moores	<i>[Signature]</i>	Enviro tech
3	909111	Samantha Moores	<i>[Signature]</i>	Scale house op.
4	907183	Sarah Frost	<i>[Signature]</i>	QC
5	7322	Barbara D. McGracken	Barbara McGracken	QC
6	7041	Shawn R. Jessup	<i>[Signature]</i>	Construction Super Asphalt
7	908802 908502	Ryan Foster	<i>[Signature]</i>	QC
8	908070	Tyler B. Settle	<i>[Signature]</i>	QC
9	908334	Michael George-Taylor	<i>[Signature]</i>	QC
10		JEREMIAH PATRICK	Jeremiah B. Patrick	
11	7086	JONATHAN MUELLER	<i>[Signature]</i>	LABORER
12	7034	Fernando Rojas	<i>[Signature]</i>	Foreman
13	7176	KENNETH TOWN	<i>[Signature]</i>	MECH.
14		DAMION J FINK	<i>[Signature]</i>	OPERATOR
15	7509	Loren S. Lucero	<i>[Signature]</i>	Field mechanic
16	907324	Gregory A. Smith	<i>[Signature]</i>	Field mechanic
17	7011	Anthony J. Reid	<i>[Signature]</i>	Field mechanic
18	7130	Michael Gallagher	<i>[Signature]</i>	Foreman
19	905075	Michael Peshlakai	<i>[Signature]</i>	Crusher
20				
21				

Training Sign-in Sheet

Date: 2-6-2023

Time: 0800 - 1630

556 Struthers Avenue

2023 Annual MSHA Refresher

Grand Junction, Colorado 81501

Location: Workforce Center

Phone: (801) 250-0132 Fax: (801) 250-0671

Presentors: Chance Densley - Dianne Moore

Training Subject:

Elam Construction - Annual Refresher - Environmental Training

Employee #	Employee Name	Employee Name	Job Description
1234	John Example	John B. Example	Operator
1 07109	GABRIEL Samora	GABRIEL M. Samora	operator
2 903-307	Juan Sandoval	Juan Sandoval	Loader operator
3 908365	John# Noorlander		loader operator
4 908182	Jami D Davis	Jami D Davis	Operator
5 7043	Dianne S. Moore	Dianne S. Moore	Enviro. Tech.
6 904594	Jonathan L. Hull		Crusher hand
7 7074	ANDRES HERRERA	Andres Herrera	Crusher operator
8 908023	Tyler S. Drutton		Crusher hand
9 7298	LUCAS C. Frost		foreman
10 909198	Joshua J. Pitchford		hand
11 903434	Brandon Gibson		don't know
12 908962	Christopher J. Moody		Operator
13 7069	Kim L Bailey	Kim Bailey	operator
14 7022	Rick L. NARANJO		Foreman
15 7122	Glenn A. Moore		Foreman
16 907965	Patrick W. Noel		OP
17 905207	Chanting Host		Tech
18 908075	CLAYTON Wilson		TECH
19 908205	Chris Metzger		QC Manager
20 904027	Gerardo Ortega		QC Lab Manager
21 904172	Gary Watson		Lead Tech

22	Kirk S. Hansen			
23	7148	Kirk S. Hansen	Operator	Kirk S. Hansen
24	7349	Sean W. Murphy	operator	Sean W. Murphy
25	7195	JAMES P. EDIS	Foreman	JAMES P. Edis
26	902446	William E. Piccini	operator	W E Piccini
27	7005	Harry B. Krosky	operator	Harry B. Krosky
28				
29				
30				



Training Sign-in Sheet

P.O. Box 869, Magna, UT 84044
7057 West 2100 South, West Valley City, UT 84128
Phone: 801.250.0132 Fax: 801.252.2302

Date: 2/13/2023

Time: 0730-1630

Location: Moab UT

Presenter: Chance Densley - Dionne Moore

Training Subject: Part 46 MSHA Refresher 2023 8 hours - Environmental Training

Employee #	Employee Name (Print)	Employee Name (Signature)	Job Description	Division	Supervisor Name
1234	John Example	John B. Example	Laborer	LI	John J Supervisor
1 6344	John D Tangreen	John D Tangreen	Foreman	LJ South	Mitch Peterson
2 6333	Mitch Peterson	Mitch Peterson	General sup.	LS south	Ryan Holyoak
3 6339	Danny Dalken	Danny Dalken	operator	LJ South	Mitch Peterson
4 6324	Cody Schriver	Cody Schriver	Shop hand	LI South	Obie H.
5 6328	Tim Hamilton	Tim Hamilton	oiler	LJ south	obie H.
6 6392	Tyler Mankland	Tyler Mankland	Part 8	LS south	Obie H.
7 905108	Lamont L Harvey	Lamont L Harvey	operator	LJ south	Mitch Peterson
8					
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Training Sign-in Sheet

P.O. Box 869, Magna, UT 84044
7057 West 2100 South, West Valley City, UT 84128
Phone: 801.250.0132 Fax: 801.252.2302

Date: 2/13/2023

Time: 0730-1630

Location: Moab UT

Presenter: Chance Densley - Dionne Moore

Training Subject: Part 46 MSHA Refresher 2023 8 hours - Environmental Training

Employee #	Employee Name (Print)	Employee Name (Signature)	Job Description	Division	Supervisor Name
1234	John Example	John J. Example	Laborer	U	John J. Supervisor
1 3121	Douglas Stevens	[Signature]	Driver	W	Ryan Holvack
2 6350	Samuel A. Mealey	[Signature]	operator	Elam Aggregates	Tyson Carroll
3 908958	David D. Gardner	[Signature]	QC Tech	Elam Aggregates	Jerry Ortega Jr.
4 904027	Gerardo Ortega	[Signature]	QC Lab Mgt.	"	Tom Middewright
5 901198	Gage Hansen	[Signature]	operator	LJ	Ryan Holvack
6 908926	Kyle Cheavitt	[Signature]	Driver	LJ	Ryan Holvack
7 6374	Angus Stocks	[Signature]	Operator	Elam Agg	Tyson Carroll
8 6342	Colby Hilcenfeld	[Signature]	Mechanic	LJ	Obie Hilcenfeld
9 10325	Obie Hilcenfeld	[Signature]	Shop	LJS	Jim Hecht
10 6347	STEVE BUNGE	[Signature]	Foreman	LJS	RYAN HOLVACK
11 6238	JAMES SHEPHERD	[Signature]	Operator	LJS	STEVE BUNGE
12 7277	Brian Backs	[Signature]	"	Elam Agg	Tyson Carroll
13 6346	Tyson Carroll	[Signature]	Supervisor	Elam Agg	John Mueller
14					
15					



Training Sign-in Sheet

P.O. Box 869, Magna, UT 84044
7057 West 2100 South, West Valley City, UT 84128
Phone: 801.250.0132 Fax: 801.252.2302

Date: 3/7/2023
Time: 0800-1700

Location: Silverthorne CO
Presenter: Chance Densley

Training Subject: Part 46 MSHA Refresher 2023 8 hours Including First Aid/CPR/AED

Employee #	Employee Name (Print)	Employee Name (Signature)	Job Description	Division	Supervisor Name
1234	John Example	John B. Example	Laborer	Triple C	John J Supervisor
1 8711	Brady Kuntz	Brady Kuntz	Laborer		Mike Shearer
2 908368	Henry Cordova	Henry Cordova	laborer		M. Shearer
3 9092	Ty Shearer	Ty Shearer	Manager		Russ Larson
4 9115	David Willingham	David Willingham	Maintenance		Tye
5 9110	James Van Hoizen	James Van Hoizen	Water Truck		Tye
6 9074	ANTHONY PARR	ANTHONY PARR	OPERATOR		MIKE SHEAR
7 9049	Don H Henson Jr	Don H Henson Jr	operator		Ty Shearer
8 4447	Saul I Mendoza	Saul I Mendoza	laborer		Ty Shearer
9					
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[illegible]



Topic: **Enivronmental Training**

SharePoint Training

Sign In Sheet

2-23-23

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We are Equal Opportunity Employers and encourage minorities and women to apply. Everyone is encouraged to recruit.

Date	Time	Length	Job #	Location	Supervisor	Who Conducted Training
2-23-23	10:00	1 HR		Una Pitt	Jon Mueller	Dionne Moores

Job Specific or other Subjects/Topics covered in this environmental training meeting

1	Annual Environmental Training	2		3	
---	-------------------------------	---	--	---	--

--	--

Topics discussed: Environmental awareness

	Print Name	Emp #	Initials
1	Debra Earls	7048	DE
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10			

	Print Name	Emp #	Initials
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20			

Employee Comments

Supervisor Remarks/Instruction

Feel Empowered: If You See Something, Say Something!



SharePoint Training

Topic: Fuel Spill Response Form

SharePoint Training

TT-KC-SignInSheet-000

Page 1 of 2

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Date	Time	Length	Job #	Location	Supervisor	Who Conducted Training
10/22					Jon Mueller	Dionne Moores

Job Specific or other Subjects/Topics covered in this Safety Training Meeting

1		2		3	
---	--	---	--	---	--

Recent Incident/Near Miss Reviewed:

Topics discussed applies to these Safety Principles: (Circle all that apply to topics discussed)

SharePoint

	Print Name	Emp #	Initials
1	Jeanette Abadie	90859	JA
2	KRISTIE DAVIS	90917	PD
3			
4			
5			
6			
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Front
County
TX

	Print Name	Emp #	Initials
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Employee Comments

Supervisor Remarks/Instruction

Feel Empowered: If You See Something, Say Something! Stop the Job! Nobody Gets Hurt!

Content and Intent of this Tool Box Talk: The loss prevention information described in this *Toolbox Talk* is general information only and provided as a guide as to how to identify and help avoid risk or injury to employees and property. Such information is not intended to meet any particular federal, state or local health or safety law or regulation. It does not aim to be complete or to negate or substitute any safety policy, inspection, OSHA/MSHA Regulation presently in place. Kilgore Companies, its staff, volunteers and insurance provider and subsidiaries do not warrant that all risks can be controlled or insured against, or that such risks are covered under the policies in place at any point in time.



SharePoint Training

Topic:

SharePoint Training

TT-KC-SignInSheet-000

Page 1 of 2

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We are Equal Opportunity Employers and encourage minorities and women to apply. Everyone is encouraged to recruit.

Date	Time	Length	Job #	Location	Supervisor	Who Conducted Training
11/22	11:00	20 min		ura/5 miles	Jon Mueller	Dionne Morris

Job Specific or other Subjects/Topics covered in this ^{ENVRD} Safety Training Meeting

1	Swamp	2	Spec	3	SOS Sheets
---	-------	---	------	---	------------

Recent Incident/Near Miss Reviewed:

Topics discussed applies to these ^{ENVRD} Safety Principles: (Circle all that apply to topics discussed)

SharePoint

Print Name	Emp #	Initials
1 DAMION Fink		DF
2 Deana Taylor	7161	DT
3		
4		
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Print Name	Emp #	Initials
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Employee Comments

Supervisor Remarks/Instruction

Feel Empowered: If You See Something, Say Something! Stop the Job! Nobody Gets Hurt!

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SharePoint Training

Topic:

SharePoint Training

TT-KC-SignInSheet-000

Page 1 of 2

Corporate Office: 7057 W 2100 South • West Valley City, UT 84128
801.250.0132 O. • 801.252.2392 F. • www.kilgorecompanies.com

We are Equal Opportunity Employers and encourage minorities and women to apply. Everyone is encouraged to recruit.

Date	Time	Length	Job #	Location	Supervisor	Who Conducted Training
1/4/17/62	1600	20m		office	Tyson Cates	Dionne Madres

Job Specific or other Subjects/Topics covered in this ^{Envi'd} Safety Training Meeting

1	Swmp	2	SPCC	3	SOS
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Recent Incident/Near Miss Reviewed:

Topics discussed applies to these ^{Envi'd} Safety Principles: (Circle all that apply to topics discussed)
SharePoint

	Print Name	Emp #	Initials
1	JEANETTE ABADIE	909519	JA
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	Print Name	Emp #	Initials
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Employee Comments

Supervisor Remarks/Instruction

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Date	Time	Length	Job #	Location	Supervisor	Who Conducted Training
11/14/20	11:00	20m		MOAB	Ryan Holyoak Environ	Dianne Moore

Job Specific or other Subjects/Topics covered in this Safety Training Meeting

1	Swamp	2	SPCCC	3	SPS Sheets
---	-------	---	-------	---	------------

Recent Incident/Near Miss Reviewed:

Topics discussed applies to these Safety Principles: (Circle all that apply to topics discussed)

SharePoint

	Print Name	Emp #	Initials
1	Barbara Hudnall	904220	BH
2	Danielle Hansen	6671	DH
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	Print Name	Emp #	Initials
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Employee Comments

Supervisor Remarks/Instruction

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Date	Time	Length	Job #	Location	Supervisor	Who Conducted Training
1/14/22	1300	20		MOAB Shop	Obie Hilgese Jim Heigh	Diane Mearns

Job Specific or other Subjects/Topics covered in this Safety Training Meeting

1	Swamp	2	SPCC	3	SPS Shells
---	-------	---	------	---	------------

Recent Incident/Near Miss Reviewed:

^{G.N.V.}
Topics discussed applies to these Safety Principles: (Circle all that apply to topics discussed)
SharePoint

	Print Name	Emp #	Initials
1	Tyler Markland	6392	T.M.
2	Cody Schriver	6324	C.S.
3	Obie Hilgese	6325	O.H.
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	Print Name	Emp #	Initials
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Employee Comments

Supervisor Remarks/Instruction

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Date	Time	Length	Job #	Location	Supervisor	Who Conducted Training
11/11/22	1030	20min		GRMX	Jacob Green	Dionne Moores

Job Specific or other Subjects/Topics covered in this Safety Training Meeting

1	Swamp	2	Spccc	3	SDS Sheets
---	-------	---	-------	---	------------

Recent Incident/Near Miss Reviewed:

Topics discussed applies to these Safety Principles: (Circle all that apply to topics discussed)
SharePoint

	Print Name	Emp #	Initials
1	Nicole Lashus	904305	NL
2	JACOB GREEN	907230	JG
3	MARK CARTER	906069	MC
4	Mark McKinsey	7219	MD
5	Andrew Page	909087	AP
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	Print Name	Emp #	Initials
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Employee Comments

Supervisor Remarks/Instruction

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Date	Time	Length	Job #	Location	Supervisor	Who Conducted Training
11/10/22	1300	20m		MOAB Rmt	Jacob Green	Dionne Moores

Job Specific or other Subjects/Topics covered in this ~~Safety~~ Training Meeting

1	SWMP/SPCC	2		3	
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Recent Incident/Near Miss Reviewed:

none

^{Environ}
Topics discussed applies to these ~~Safety~~ Principles: (Circle all that apply to topics discussed)
SharePoint

	Print Name	Emp #	Initials
1	Matthias Cappa	8354	MC
2	Marshall Carlton	8428	MC
3	Bryant Marshall	6408	BW
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	Print Name	Emp #	Initials
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Employee Comments

Showed Employees where SDS Sheets were located
talked Briefly about TRI Reporting

Supervisor Remarks/Instruction

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Date	Time	Length	Job #	Location	Supervisor	Who Conducted Training
11/10/20	1400	20		MOAB HMA mobile in pit	Randy Fickler	Dianne Moore

Job Specific or other Subjects/Topics covered in this Safety Training Meeting

1	SPCCC	2	SWMP	3	
---	-------	---	------	---	--

Recent Incident/Near Miss Reviewed:

Topics discussed applies to these Safety Principles: (Circle all that apply to topics discussed)

SharePoint

	Print Name	Emp #	Initials
1	Joseph Wilmarth	903508	JW
2	A. /mm	908365	JRN
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	Print Name	Emp #	Initials
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Employee Comments

Supervisor Remarks/Instruction

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Date	Time	Length	Job #	Location	Supervisor	Who Conducted Training
11/22	1300	20 min	020914	Vagner	Jon Mueller	Dionne Morris

Job Specific or other Subjects/Topics covered in this ^{ENVR}Safety Training Meeting

1	Swamp	2	Spec	3	SOS Sheets
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Recent Incident/Near Miss Reviewed:

Topics discussed applies to these ^{ENVR}Safety Principles: (Circle all that apply to topics discussed)
SharePoint

	Print Name	Emp #	Initials
1	Ornel Lucero	7319	EL
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	Print Name	Emp #	Initials
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Employee Comments

Supervisor Remarks/Instruction

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SharePoint Training

Topic: Fuel Release Response

SharePoint Training

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Date	Time	Length	Job #	Location	Supervisor	Who Conducted Training
10/20					John Wheatley	Dionne Moore

Job Specific or other Subjects/Topics covered in this Safety Training Meeting

1		2		3	
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Recent Incident/Near Miss Reviewed:

Topics discussed applies to these Safety Principles: (Circle all that apply to topics discussed)

SharePoint

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Print Name	Emp #	Initials
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Employee Comments

Supervisor Remarks/Instruction

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Appendix K – Spill Response Plan

Spill response procedures will be taught to all employees as part of the required training for the pollution prevention plan. The BMPs identified in the SWMP will be implemented to minimize or prevent contamination of stormwater from spills. Drums, tanks, and other containers will be clearly labeled, and containers storing hazardous waste or materials will be properly labeled, stored, and disposed of. This section will focus on the spill response procedures in the event of a spill. All facilities that are required to have a SPCC (Spill Prevention Control and Countermeasures Plan) must adhere to the said plan as priority and to supersede general SWMP response plan.

Spill Response Plan

Spills require action. Identify immediate dangers to human life and health, equipment, and the environment. Identify the product spilled and select the appropriate level of protective gear. Only allow personnel with appropriate protective gear into the area.

First Response	
Call 911 if an emergency	Call 911 if there is a fire or a hazardous material has been released
Assess the Situation	Identify Immediate Dangers to Human Life, Health, Equipment, and the Environment, and Product Spilled. Select Appropriate Level of Protective gear needed. Only Allow Personnel with Appropriate protective gear into the area
Stop Source of Spill	If it is safe to do so, act quickly to secure pumps, close valves, etc. using intrinsically safe equipment to stop the source of the spill.
Shut off ignition sources to prevent fire	Check for hazards such as flammable material, noxious fumes, cause of spill, etc. If flammable liquid is present, turn off engines and nearby electrical equipment. If hazards are present, leave the area and call 911. LARGE SPILLS ARE LIKELY TO PRESENT A HAZARD.
Warn people in the area	Warn workers, local populace, and others in the area likely to be affected of the spill. Secure the area to prevent access by unauthorized individuals.
Clean up Response	
Call Supervisor; Get appropriate people to help as needed	Call supervisor as soon as possible after the spill and then contact the appropriate personnel to clean up the spill. If needed, call the local fire

	department or a hazmat company to clean up the spill.
Contain Spill	Dike and contain the spill around the tanks and direct the spill to containment if possible. If the spill is in the water, use an oil boom to contain it. If possible, stop the spill from entering storm and sewer drains using spill kits, absorbents, or other materials, closing the valve to the drain, or covering or plugging the drain. Stop the spill from spreading to other locations using spill kits, absorbents, or other materials.
Clean up Spill	Refer to the MSDS sheets to be sure that the spilled materials can be cleaned up and handled properly with a spill kit, absorbent, or other materials. Clean up spilled material and absorbent without flushing the area with water. If outside clean-up service is required, phone numbers for cleanup companies are located on the following pages. Check to see if cleaned area is slippery. If it is, put down no-slip material or mark area with a “slippery when wet” sign
Dispose of contaminated material appropriately	Dispose of the contaminated material appropriately. Take the contaminated material to a licensed material company or have a licensed company come to pick up the material.
Notifications	
Notify Management	Company management needs to be notified of the spill.
Notify State	The state must be notified as soon as possible following the spill. The spill must be reported if the reportable quantities were reached as indicated on the following pages. If a hazardous materials is spilled, contact State of Colorado, 24-hour Emergency Spill Reporting Line: 1-877-518-5608
Notify EPA	The EPA must be notified if more than 42 gallons were released in two separate incidents or if more than 1000 gallons was released in one spill. Contact EPA at 800-424-8802.
Notify City or sewer district	The city or the sewer district must be notified if any material entered the storm drains or sewer

Appropriate Paperwork; Changes needed; and Amendment of the SWMP Plan	<p>The appropriate paperwork must be filled out and filed according to the size of the spill. The SWMP Plan must also be amended. See the paperwork on the following pages.</p> <p>Note: The Colorado Department of Public Health & Environment / Water Quality Control Division must receive the paperwork within 14 days EPA Region 8 must receive the paperwork within 60 days.</p>
---	--

Releases of Reportable Quantities of Hazardous Substances and Oil

Material	Media Released To	Reportable Quantity
Fuel	Air, Land, Water	25 Gallons
Engine Oil, hydraulic & brake fluid	Land	25 Gallons
Engine Oil, hydraulic & brake fluid	Water	Visible Sheen
Antifreeze	Land	100 lbs. (13 Gal)
Battery Acid	Land, Water	100 lbs. (13 Gal)
Freon/Refrigerant	Air	1 lb.
Engine Degreasers	Air, Land, Water	100 lbs. (13 Gal)
Oil Products	Any	1. The facility discharges more than 1,000 gallons of oil into or upon navigable water of the United States or adjoining shorelines in a single event; or 2. The facility discharges more than 42 gallons of oil in each of two discharge events within any 12- month period.

Points of Contact in case of a reportable quantity release:

EPA National Response Center 800-424-8802

State of Colorado, 24-hour Emergency Spill Reporting 877-518-5608
 Line:

EMERGENCY NUMBERS

Routt County Sheriff 970-879-1060

North Routt Fire Protection 970-879-6064

Emergency 911

Required Reporting

If one of the following occurs:

- 1. The facility discharges more than 1,000 gallons of oil into or upon navigable water of the United States or adjoining shorelines in a single event; or*
- 2. The facility discharges more than 42 gallons of oil in each of two discharge events within any 12- month period.*

Fill out a report that includes all the items listed below. The report must be sent to the Regional Administrator for EPA Region 8 and state.

1. Name of facility;
2. Name(s) of the owner or operator of the facility;
3. Location of the facility;
4. Maximum storage or handling capacity of the facility and normal daily throughput;
5. Corrective actions and/or countermeasures taken, including a description of equipment repairs and/or replacements;
6. An adequate description of the facility, including maps, flow diagrams, topographical maps as necessary, and diagrams which show the location of exempted tanks;
7. The cause of the discharge, including a failure analysis of the system or subsystem that failed;
8. Additional preventative measures taken or contemplated to minimize the possibility of recurrence; and
9. Such other information the Regional Administrator may require pertinent to the Plan or discharge.
- 10. Please report online or send the report to the State of Colorado with 14 days and to EPA Region 8 within 60 days.**

Colorado Department of Public Health & Environment
Water Quality Control Division
4300 Cherry Creek Drive South
Denver, CO 80246

EPA Region 8 Office

US EPA Region 8
1595 Wynkoop Street
Denver, CO 80202-1129
303-312-6312
1-800-227-8917 (Region 8 states only)

In addition to Federal and State reporting requirements also complete the Kilgore Companies Spill / Release Response Form provided on the following page.

In Field Spill / Release Response Procedures

Hazardous Material Spills / Releases Priority

- 1 st Priority: Protect yourself and people
- 2 nd Priority: Protect environment
- 3 rd Priority: Protect equipment / operation

FETCHER VALE PIT, CLARK, CO



Response / Action	Details
Call 911 in an emergency	Call 911 if there is an emergency or potential for one
Assess the Situation	Identify immediate dangers to life & health, the environment, equipment & operations. Alert situation to onsite personnel. Warn others!
Stop Source of Spill/Release Shut off Ignition Source to Prevent Fire	-Stop the source if safe to do so.(e.g., Act quickly to secure pumps, close valves, etc.) -Check for hazardous(flammable material, noxious fumes, root cause)-If flammable liquid, turn off engines. If serious hazards are present, leave area and call 911. Ensure contact has been made to alert situation. Warn others!
Spill / Release Containment	After assessing situation & material and ensuring appropriate PPE, implement spill response controls & materials to help contain the release to minimize impact to environment and equipment
Contact Management (who, what, when, where, why & how...?)	<div>Jon Mueller Aggregate Manager 970-261-5782</div> <div>Jim Doody Environmental Manager 970-712-6634</div> <div>Dionne Moores Environmental Technician 970-773-4108</div> <div>Environmental Director: Lee Ware (801)831-7402</div>
Complete & email Spill/Release Report	From the S&R Form, found on Sharepoint, complete and email to Lee.Ware@Kilgorecompanies.com



Kilgore Companies Spill / Release Response Form

For the spill / release response reporting of environmental hazardous material, including diesel fuel and other production related chemicals.

Instructions:

Upon the completion of the initial response, containment, management contact, etc. during a release event, please answer the following questions and provide needed information regarding the specifics of this event on the Form below. Please press "Submit" when finished.

Should there be any questions, please contact Lee Ware (801) 831-7402

* Required

1. Date of incident? *

2. What time did the spill / release occur? *

3. Location name and address of release? *

Enter your answer

4. If Diesel Fuel or an oil related product, was the release greater than 25 gallons? *

☐ Yes

☐ No

5. Estimated volume of release? *

The value must be a number

6. What was the product released? *

☐ Diesel Fuel

☐ Other

7. If you entered the product released as "other", please identify the product released.

Enter your answer

8. Was the release captured with secondary containment? *

☐ Yes

☐ No

☐ Not all of it

9. Did any of the release go onto the ground (Not covered by concrete or asphalt)? *

Enter your answer

10. Did any of the release enter into a storm drain, body of water (lake, creek, stream, etc.)? *

☐ Yes

☐ No

11. What was the cause of the release? *

Enter your answer

12. Who responded to the release? *

Enter your answer

13. What time was the release responded to? *

Enter your answer

14. Was the release contained? *

☐ Yes

☐ No

15. Who contained the release? (Enter a name) *

Enter your answer

16. What materials were used to respond and help contain the release? *

☐ Absorbents

☐ Absorbent Pads, wattles & pigs

☐ Sand or other sediment aggregates

☐ Other

17. Was an outside contractor or service provider at fault for the release? *

☐ Yes

☐ No

☐ Maybe

18. If you entered "Yes" or "Maybe", please identify the name of the contractor or service provider at fault. *

Enter your answer

19. Was appropriate management contacted, including the Environmental Director (Lee Ware)? *

☐ Yes

☐ No

20. If needed, please provide any additional details that would help describe the release.

Enter your answer

Submit

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Spill Kit Information:

The information below is to assist in obtaining the correct materials and equipment for spill response and spill clean-up.

Absorbents – pads, pillows, booms, socks, dikes, rolls, and loose or particulate sorbents

1. Universal – absorbs – oils, water based fluids, water, coolants, solvents, and most non-hazardous liquids.
2. Oil Only – Absorbs oils and repels water
3. Hazmat – Absorbs most fluids including corrosive liquids

Containment:

1. Spill Berm – A mobile containment boom – designed to contain a spill or protect an inlet
2. Drain Seals – Designed to seal an inlet to prevent any liquid from entering the inlet to allow for clean-up of the spill
3. Drain absorbents – designed to absorb oils while allowing water to pass through

Tools (Non-sparking, chemical and corrosion resistant):

1. Shovel – A shovel that does not produce sparks
2. Scoops – to clean up absorbents
3. Broom – sweep up absorbents
4. Squeegee
5. Plastic bags
6. Container – to hold the spill cleaned-up debris

Personal Protective Equipment:

1. Heavy Duty Gloves made of nitrile or neoprene
2. Safety Glasses or goggles that are chemical resistant
3. Disposable lab coat or apron
4. Boot covers

Other Supplies (May be needed):

1. Warning Tape or signs
2. Labels – to mark the cleaned-up equipment for disposal
3. Markers
4. MSDS

Appendix L – Additional Information

Appendix L includes:

- Endangered Species Certification
- Historic Preservation
- Permit Regulations-Applicable Federal, Tribal, State, or Local Programs
- Consistency with Other Plans and Permits
- Out of Date SWMP documents
- Expired Permits
- Other SWMP documentation

Endangered Species Certification

The US Fish and Wildlife Service has available a list of endangered species by state. The list for Colorado was found at the below website and is also listed on the following page.

<http://criticalhabitat.fws.gov/>

<http://ecos.fws.gov/ecos/indexPublic.do>

1. Are endangered or threatened species present on or near project.

☐ Yes ☒ No

Describe: None reported

2. Determine whether or not the construction storm water discharges or discharge related activities could negatively affect listed Threatened/ Endangered Species or Designated Critical Habitat near this project.

Describe: Water quality of stormwater discharges are determined.

3. Determine if measures can be implemented to avoid adverse effects.

Describe: Protect nearby water surfaces from polluted discharge from site.

4. Determine if eligibility contact with the Western Colorado Ecological Service Field Office is required for this project.

Describe: Discharge has been approved by Colorado.

Contacts:

Western Colorado Ecological Service Field Office
445 West Gunnison Avenue, Suite 240
Grand Junction, CO 81501-5711
(970) 628-7180



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Western Colorado Ecological Services Field Office
445 West Gunnison Avenue, Suite 240
Grand Junction, CO 81501-5711
Phone: (970) 628-7180 Fax: (970) 245-6933



In Reply Refer To:
Project Code: 2023-0084206
Project Name: Fetcher Vale Pit

May 21, 2023

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/birds/policies-and-regulations.php>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
 - USFWS National Wildlife Refuges and Fish Hatcheries
 - Migratory Birds
 - Wetlands
-

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Western Colorado Ecological Services Field Office

445 West Gunnison Avenue, Suite 240

Grand Junction, CO 81501-5711

(970) 628-7180

PROJECT SUMMARY

Project Code: 2023-0084206
Project Name: Fetcher Vale Pit
Project Type: Surface Extraction - Non Energy Materials
Project Description: 25853 County Road 62A, Clark, C80428
Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@40.70818985,-106.93583104269564,14z>



Counties: Routt County, Colorado

ENDANGERED SPECIES ACT SPECIES

There is a total of 9 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 4 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Canada Lynx <i>Lynx canadensis</i> Population: Wherever Found in Contiguous U.S. There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3652	Threatened
Gray Wolf <i>Canis lupus</i> Population: U.S.A.: All of AL, AR, CA, CO, CT, DE, FL, GA, IA, IN, IL, KS, KY, LA, MA, MD, ME, MI, MO, MS, NC, ND, NE, NH, NJ, NV, NY, OH, OK, PA, RI, SC, SD, TN, TX, VA, VT, WI, and WV; and portions of AZ, NM, OR, UT, and WA. Mexico. There is final critical habitat for this species. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> ▪ Lone, dispersing gray wolves may be present throughout the state of Colorado. If your activity includes a predator management program, please consider this species in your environmental review. Species profile: https://ecos.fws.gov/ecp/species/4488	Endangered

BIRDS

NAME	STATUS
<p>Mexican Spotted Owl <i>Strix occidentalis lucida</i></p> <p>There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8196</p>	Threatened
<p>Yellow-billed Cuckoo <i>Coccyzus americanus</i></p> <p>Population: Western U.S. DPS</p> <p>There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3911</p>	Threatened

FISHES

NAME	STATUS
<p>Bonytail <i>Gila elegans</i></p> <p>There is final critical habitat for this species. Your location does not overlap the critical habitat. This species only needs to be considered under the following conditions:</p> <ul style="list-style-type: none"> Water depletions in the upper Colorado River basin adversely affect this species and its critical habitat. Effects of water depletions must be considered even outside of occupied range. <p>Species profile: https://ecos.fws.gov/ecp/species/1377</p>	Endangered
<p>Colorado Pikeminnow <i>Ptychocheilus lucius</i></p> <p>Population: Wherever found, except where listed as an experimental population</p> <p>There is final critical habitat for this species. Your location does not overlap the critical habitat. This species only needs to be considered under the following conditions:</p> <ul style="list-style-type: none"> Water depletions in the upper Colorado River basin adversely affect this species and its critical habitat. Effects of water depletions must be considered even outside of occupied range. <p>Species profile: https://ecos.fws.gov/ecp/species/3531</p>	Endangered
<p>Humpback Chub <i>Gila cypha</i></p> <p>There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3930</p>	Threatened
<p>Razorback Sucker <i>Xyrauchen texanus</i></p> <p>There is final critical habitat for this species. Your location does not overlap the critical habitat. This species only needs to be considered under the following conditions:</p> <ul style="list-style-type: none"> Water depletions in the upper Colorado River basin adversely affect this species and its critical habitat. Effects of water depletions must be considered even outside of occupied range. <p>Species profile: https://ecos.fws.gov/ecp/species/530</p>	Endangered

INSECTS

NAME	STATUS
<p>Monarch Butterfly <i>Danaus plexippus</i></p> <p>No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743</p>	Candidate

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

-
1. The [Migratory Birds Treaty Act](#) of 1918.
 2. The [Bald and Golden Eagle Protection Act](#) of 1940.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern \(BCC\)](#) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Dec 1 to Aug 31
Cassin's Finch <i>Carpodacus cassinii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9462	Breeds May 15 to Jul 15

NAME	BREEDING SEASON
Evening Grosbeak <i>Coccothraustes vespertinus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 15 to Aug 10
Olive-sided Flycatcher <i>Contopus cooperi</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

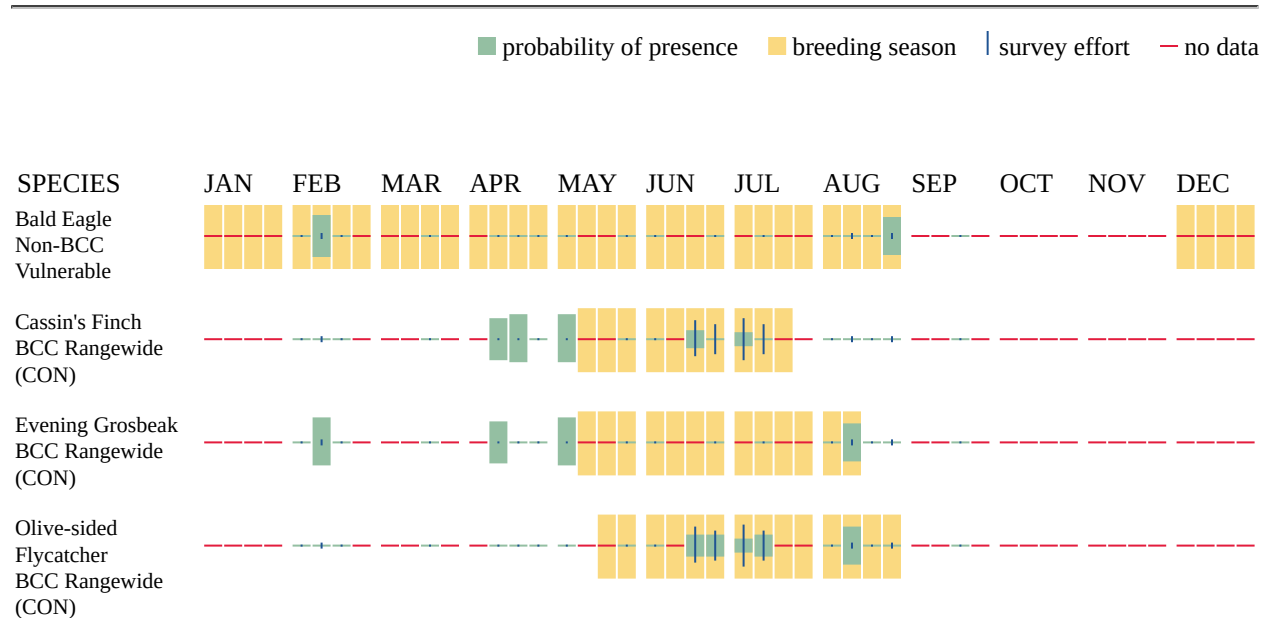
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

MIGRATORY BIRDS FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very

helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of

certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

WETLANDS

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

IPAC USER CONTACT INFORMATION

Agency: Klemetson Engineering, LLC
Name: Stanley Klemetson
Address: 475 East 1960 South
City: Orem
State: UT
Zip: 84058
Email: stanley.klemetson@gmail.com
Phone: 8013686476

Historic Preservation

Are there any historic sites on or near the construction site?

☐ Yes ☒ No

Describe how this determination was made:

- If any registered historic properties are present on or near the facility, they will be marked with a purple circle on the map below.
- There are no historic properties on or near the site.

This project will not have a negative environmental impact on a federally listed historic site as certified in the Historic Preservation Report. A list of State and Nationally Registered Historic Sites is included as part of this section. See the following websites:

<http://nrhp.focus.nps.gov/natreg/docs/Download.html>

<http://www.nationalregisterofhistoricplaces.com/state.html>



Permit Regulations-Applicable Federal, Tribal, State, or Local Programs

This Project may also be governed by the local MS4 stormwater ordinance. Specific requirements that are different or unique from the State of Colorado SWMP permit are outlined below.

MS4 Requirements: Site not located in a city MS4 service area

State of Colorado: General state requirements

<https://cdphe.colorado.gov/wq-municipal-ms4-permits>

Consistency with Other Plans and Permits

The SWMP must address any requirements from any other permit as well as any federal, state, or local rules and regulations. The following plans or requirements were considered for the facility:

Plan/Permit/Requirement	Comment
Spill Prevention Control and Countermeasures (SPCC) Plan - This is required if more than 1,320 gallons of petroleum products are stored onsite in aboveground or in certain underground storage tanks and have the potential to reach Waters of the U.S.	None Required
Clean Air Act Permits - Required for certain industrial activities that have air emissions.	Clean Air Act Permits on site.
Wetland Permits - Required whenever a facility disturbs more than 0.5 acres of a wetland habitat.	No disturbance of Wetlands on site; permit not required.
Waste Water Discharge Permit - Required whenever industrial waste water is discharged to a municipal waste water treatment facility.	No discharges; permit not needed.
Other Colorado Discharge Permit System (CDPS) discharge permits	None

Appendix M – BMP Specifications

BMP Specifications that may be used on the site are inserted in this section.

**DESCRIPTION:**

Employee training, like equipment maintenance, is a method by which to implement BMPs. Employee training should be used in conjunction with all other BMPs as part of the facility's SWPPP.

The specific employee training aspects of each of the source controls are highlighted in the individual information sheets. The focus of this information sheet is more general, and includes the overall objectives and approach for assuring employee training in stormwater pollution prevention. Accordingly, the organization of this information sheet differs somewhat from the other information sheets in this chapter.

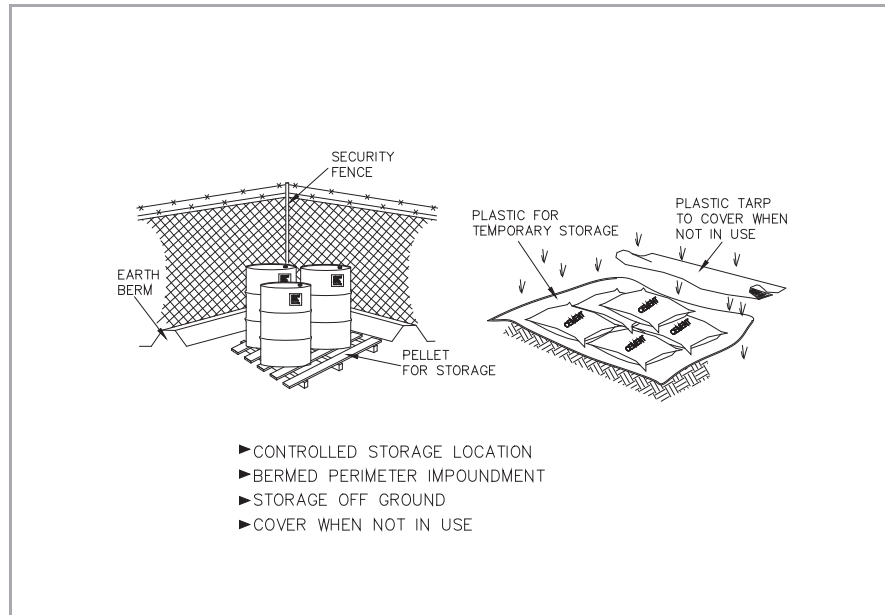
OBJECTIVES:

Employee training should be based on four objectives:

- ◆ Promote a clear identification and understanding of the problem, including activities with the potential to pollute stormwater;
- ◆ Identify solutions (BMPs);
- ◆ Promote employee ownership of the problems and the solutions; and
- ◆ Integrate employee feedback into training and BMP implementation.

APPROACH:

- ◆ Integrate training regarding stormwater quality management with existing training programs that may be required for your business by other regulations.
- ◆ Businesses that are not regulated in Federal, State, or local regulations, may use the information in this handbook to develop a training program to reduce their potential to pollute stormwater.
- ◆ Employee training is a vital component of many of the individual source control BMPs included in this manual.



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:

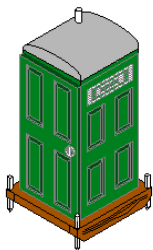
- ◆ Designate a secured area with limited access as the storage location. Ensure no waterways or drainage paths are nearby.
- ◆ Construct compacted earthen berm (See Earth Berm Barrier Information Sheet), or similar perimeter containment around storage location for impoundment in the case of spills.
- ◆ 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.



Waste Management

WM-4 Sanitary Waste Management

Definition	Practices and procedures such as providing convenient, well-maintained facilities, and arranging for regular service and disposal prevents the discharge of pollutants to stormwater from sanitary and septic waste.
Purpose	Proper sanitary and septic waste management prevent the discharge of pollutants to stormwater from sanitary and septic waste.
Conditions Where the Practice Applies	Sanitary septic waste management practices are suitable for use at all construction sites that use temporary or portable sanitary and septic waste systems.
Specifications: Design and Installation	Sanitary or septic wastes should be treated or disposed of in accordance with state and local requirements. In many cases, one contract with a local facility supplier will be all that it takes to make sure sanitary wastes are properly disposed.

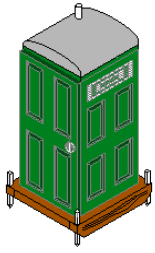
Storage and Disposal Procedures

- Temporary sanitary facilities should be located away from drainage facilities, watercourses, the Project perimeter, and from traffic circulation. When there is a risk of high winds, temporary sanitary facilities should be secured (staked down or tied to a sturdy structure) to prevent overturning.
- Temporary sanitary facilities should be located on a permeable surface at all times. If a temporary sanitary facility needs to be placed on an impermeable surface than it must be placed in an overflow pan or bin.
- Wastewater should not be discharged or buried within the Project site.
- Only reputable, licensed sanitary and septic waste haulers should be used.
- Sanitary facilities should be located in a convenient location.
- Untreated raw wastewater should never be discharged or buried.
- Temporary septic systems should treat wastes to appropriate levels before discharging.
- Sanitary and septic facilities should be maintained in good working order by a licensed service.
- Regular waste collection by a licensed hauler should be arranged before facilities are full. Sanitary and septic facilities should never overflow.

Education

- Educate employees, subcontractors, and suppliers on sanitary and septic waste storage and disposal procedures.
- Educate employees, subcontractors, and suppliers of potential dangers to humans and the environment from sanitary and septic wastes.
- Instruct employees, subcontractors, and suppliers in identification of sanitary and

Sources include EPA, SWRCB, Caltrans, CASQA
Waste Management



Waste Management

WM-4 Sanitary Waste Management

septic waste.

- Hold regular meetings to discuss and reinforce disposal procedures (incorporate into regular safety meetings).
- Establish a continuing education program to indoctrinate new employees.

Maintenance & Inspection

- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities.
- Inspect BMPs prior to forecast rain, daily during extended rain events, after rain events, and weekly throughout the life of the Project.
- Arrange for regular waste collection.
- If high winds are expected, portable sanitary facilities must be secured with spikes to prevent over turning.

Secondary Containment

Minimum Measure: Prevent accidental releases or spills

Subcategory: Fuels and Oils / Hazardous Materials



Secondary Containment

Secondary containment is a safeguard measure used to prevent accidental releases or spills of toxic or hazardous substances to the environment (water, soil & air). Secondary containment can be a structure that is chemically compatible to hold a release and remain liquid tight until clean up occurs. Secondary containment can also be an engineered means to redirect a spill away from water or other sensitive receptor to a temporary diversion system.

I. What is required?

Fuel tanks stored on site must have secondary containment and all other spill sources that may be a threat to human health or the environment must have secondary containment. The phrase “may be a threat” is subjective, and without prescriptive regulatory guidance, PEs and Ecology inspectors use professional judgment to determine the necessary and reasonable secondary containment requirements that fit each individual circumstance.

Permit or specification language does not have exemption language that allows projects to deviate from the requirements when secondary containment is impractical. However, PEs has the authority to modify Standard

Specification requirements as reasonably necessary, whether to allow for deviations or to increase protection measures in high risk situations.

II. What needs secondary containment?

Requirements

Secondary containment requirements are not straightforward and regulatory guidance is not black and white. This is a good thing, because secondary containment should be adjusted to match site specific conditions without unnecessarily increasing project costs.

The NPDES Permit **requires** secondary containment for:

1. On-site fueling tanks (except double walled tanks)
NOTE: Even though “Doubled-walled tanks do not require additional secondary containment,” extra preventative measures may still be necessary with high risk construction activities in environmentally sensitive areas.
2. Chemicals, liquid products, petroleum products, and other materials that **have the potential** to pose a threat to human health or the environment. (*This is a **subjective and left to interpretation** based on Other Factors described below*).

The 401 or HPA Permits **may require more stringent** secondary containment for in water or over water work activities.

Regulatory inspectors in the Northwest Region typically expect the following materials and work activities to always have secondary containment:

- Fuel tanks (single walled)
- Fuel transfer activities, for both mobile and stationary areas
- Volumes of stored or used liquid located adjacent/up gradient to water, where there is a reasonable potential of a worst case scenario spill could reach water. Examples such as:
 - Large volumes stored in drums and tanks
 - Large volumes used in large generators and pumps, hydraulic power packs
 - Moderate volumes located directly near water (within 5-10 ft) or unprotected drainage system that directly discharges to water
- Storage of material that may potentially pose a threat to

Single Walled Fuel Tanks



Material Storage



Fuel Transfers



human health or the environment that is not in constant or regular daily use (i.e., general good housekeeping practices following Ecology's BMPs)

Other Factors

Multiple other factors must be considered when deciding what needs secondary containment. To assess spill risks, evaluate the project and the surrounding environment and consider worst case scenarios.

Consider how things could fail and how to prevent or protect in event of a failure.

Consider the location, type and quantity of stored materials or any risky construction activities (e.g., fueling) and take into account the topography (slope and gradient) and the proximity to water or other environmentally sensitive areas. Could a worst case scenario spill reach water?

Apply practicality and use common sense when enforcing secondary containment requirements. Use "worst case" to assess risk, but apply the knowledge listed below to establish reasonable means to manage the risk. Recognize that there is only so much energy, time, and money to expend to achieve full compliance on a project. Make a good faith effort to control pollution sources and require what is reasonable based on the project specific circumstances and environmental conditions.

Consider the following factors when making a judgment call pertaining to secondary containment:

1. Surrounding environment
2. Timeframe in use
3. Condition of equipment
4. Security and vandalism
5. Weather
6. Available manpower
7. Equipment and materials

Surrounding Environment

1. Is the work located over water, or below the Ordinary High Water Line?
2. Is the work or storage area located near environmentally sensitive areas, such as
 - a) stormwater systems and ditches that discharge directly to water or wetlands?
 - b) shallow groundwater or protected drinking water aquifers?
3. What is the distance of the nearest waterway or drainage system?
4. Will rain/stormwater come in contact with chemicals, fuels, or other hazardous materials used or stored on the project

Spill + Water = BIG/MULTIPLE FINES

If the project is near water or other sensitive receptor, you may need to apply increased protections. It is not *only* about secondary containment, because other measures like using pristine equipment, increased maintenance and inspection, enhanced security, and increased man power should also be considered in lieu of or together with varied levels of secondary containment needs.

Timeframe in Use

1. Will the spill source be on the project for a long period of time?
2. Would the containment structure become susceptible to wear and tear?

Long Term Project = Increased Risk

Depending on the project location, increased security of the project, storage and staging areas (i.e., fencing & lightening) may be needed. Don't forget the IFC requirements for fittings, devices and padlocks that prevent malicious tampering or siphoning.

Consider increasing the robustness of containment to increase the durability and resistance of wear and tear and exposure to weather elements over time. Or, ensure regular inspection, maintenance and replacement of containment throughout the entire project.

Condition of Equipment

1. Is equipment relatively new and/or in good condition?
2. Based on experience, is there a reasonable potential for equipment failure?
3. Does the equipment have unprotected high pressure hoses and valves?
4. Could high vibrations or friction cause increase wear and tear on containment structure?

Equipment Must Be Maintained

Secondary containment is not an option for leaking equipment. Equipment should always be inspected and maintained; otherwise it should be removed from the job site. Leaking equipment usually results in violations.

Many spills are a result of sprays from hydraulic hoses due to damage, chaffing, sharp bend points, broken fittings or maintenance /testing. Hoses should be protected from damage. Some hydraulic power packs have built in secondary containment.

Inspections, tests, maintenance and repair are the first lines of defense against spills. If these are not performed appropriately, or the nature of the work is in environmentally sensitive areas, add or increase secondary containment protection measures. Otherwise, if the first lines of defense are faithfully carried out, secondary containment of equipment may not be necessary.

Portable Pump



Security and Vandalism

1. Is the project located in an area easily accessible by pedestrians?
2. Is there a high rate of crime in the project area?
3. Does the project and designated areas have adequate fencing and lighting?
4. Does equipment and storage tanks have protection measures, such as
 - a) devices, such as Power Cord and Plug Locks, oil pump starters
 - b) padlocks on pumps or hoses to secure to hanger
 - c) anti-siphoning device
 - d) self closing nozzles
 - e) automatic shut off valves
 - f) locks on drain or other valves

Fencing



Electrical Locks



AST Fill Port Lock



Alarm Systems



Cap Lock



Emergency Shut-Off Valve



Locking Container



72-Hour Spill Holding Timeframe

Ecology's [BMP C153](#) requires that containment must hold a spill for at least **72 hours** in order to be considered "sufficiently impervious." The 72 hour standard first came from EPA's attempt to define "sufficiently impervious" in [40 CFR Part 112](#) (Oil Pollution Prevention regulation). The rationale was that a containment system that is impervious to oil for 72 hours would allow time for discovery and removal of an oil discharge in most cases. In the 2002 rule revisions the proposed EPA 72 hour standard was withdrawn; however Ecology continues to maintain the 72 hour standard per BMP C153. Ecology expects spill cleanup work to start immediately once a spill is discovered and in most cases be completely cleaned up within 72 hours.

BMP C153

"Secondary containment facilities shall be impervious to the materials stored therein for a minimum contact time of 72 hours"

For storage of large quantities of chemicals other than petroleum, consider asking the product supplier to specify in writing that the containment system meets Ecology's 72 hour impermeability standard. If there is a justifiable reason that clean up cannot feasibly occur within 72 hours of a spill (highly uncommon), provide additional protection measures (i.e., increased inspections, limit quantities stored, etc.) and then consider more robust products that exceed the 72 hour standard.

Quantity

The NPDES permit and amended Specification 1-07.15(1) requires the capacity to equal 110% of the volume contained in the largest tank (or container) within the containment structure. The extra 10% is intended to accommodate precipitation and a safeguard against miscalculations.

Ecology's Spill Prevention, Preparedness and Response Program began creating a new Excel tool to help calculate containment volumes. For more information or a copy of this calculation tool, contact the Ecology Spills Program at 360-407-6458. For area calculations, see EPA example at: <http://www.epa.gov/region6/6sf/sfsites/oil/samppln.htm>

EPA Example Calculation

Formula: **(volume of single largest tank + 10%) x 0.1337 cubic feet/gallon**

Question: **What is the area of the minimum containment volume for a 25,000 gallon fuel tank?**

Calculation:
25,000 gal + 10% = 27,500
27,500 x 0.1337 = 3676.75

Secondary containment should be as level as possible. If using plastic sheeting, the surface should be clear of rocks and debris that could puncture the material. If a containment structure must be placed on a slope, the downhill side of the structure wall must be taller. Ecology's Excel tool (mentioned above) also helps calculate dimensions of secondary containment walls on slopes.

Increase protection if operating equipment is subject to vibration. Use thicker material, vibration dampening, and require more frequent inspections.



The frequency of inspection and maintenance depends on several variables as described above. Inspection and maintenance should be regular, routine and documented as necessary.

A man wearing a white hard hat, a light blue and white striped short-sleeved shirt, and blue jeans is standing next to a yellow excavator. He is looking down at a small object in his hands, possibly a clipboard or a small device. The excavator's tracks are visible, and the background shows a construction site with other equipment.

IV. What encourages compliance?

Good communication is the best means to encourage compliance. When a regulatory inspector is assigned to a project, increase your chances of a positive outcome by clarifying gray areas in advance with respect to how the inspector might interpret the permit conditions. Ask for clarifications. Inspections are designed to help and the Contractor maintain legal compliance. Do not be afraid to ask for technical assistance, whether it be from Ecology or your HazMat Specialist. Working together is important and discussions to improve the situation are encouraged.

To prevent the most common spill violations, projects should

- i) follow their Spill Prevention, Control and Countermeasures (SPCC) Plan,
- ii) give more attention to secondary containment needs, and
- iii) encourage better housekeeping practices.

Unfortunately sometimes, there is a lack of resources or commitment to comply with the requirements. Some projects lack the manpower, equipment and material to expeditiously follow the SPCC plan or permit requirements. When a contractor fails to comply with a PE's repeated attempts to correct a problem, here are a few suggestions.

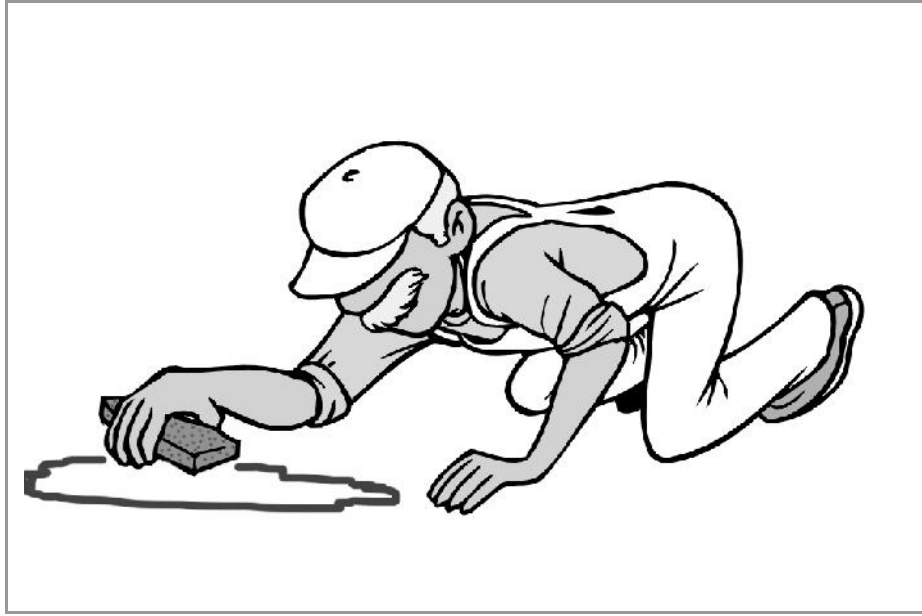
- i) Remind staff and Contractors about the significant costs and fines associated with spills. In addition to construction delays and clean up costs, there are significant fines. Under water quality regulations, a spill to water is \$10,000 to \$100,000 per day **per violation**. Damage to habitat may also result in a Natural Resource Damage Assessment fine. For habitat protected under the Endangered Species Act, damage or "taking" of habitat may result in civil penalties up to \$25,000 per violation. There can be many violations in a single spill incident.
- ii) Call the HazMat Specialist to conduct an internal assessment, where the specialist works directly with the PE and then the PE uses the report to communicate and encourage compliance
- iii) Call local fire marshal, who enforces the International Fire Code
- iv) Call Ecology's spill prevention program to request an informal assessment
- v) Utilize some of the following Standard Specification "hammers" to contractually force compliance:
- vi) **1-05.1 Authority of the Engineer** – The Engineer and Project Engineer can suspend all or part of the Contract Work. can also use other resources to complete the Work.
- vii) **1-05.2 Authority of Assistants and Inspectors** – Inspectors are not authorized to accept or approve any Work not meeting the intent of the Contract. Inspectors have the authority to reject defective material and suspend Work that is being done improperly, subject to the final decision of the PE.
 - Compliance with environmental laws and regulations is part of the Contract.



- viii) **1-05.6 Inspection of Work and Materials** – The Engineer can order the Contractor to remove and replace materials used without inspection. The Contractor shall correct any substandard Work or materials. The Engineer will reject unsuitable Work or materials or materials even though previously inspected or paid for.
- This condition allows to reject secondary containment structures, systems or BMPs that are not installed properly.
- ix) **1-05.7 Removal of Defective and Unauthorized Work** – will not pay for unauthorized or defective Work. This is anything that doesn't conform to the Contract, Work done beyond the lines and grades set by the Plans or Engineer, or extra Work and materials furnished without the Engineer's approval.
- This applies to improper secondary containment structures, systems or BMPs.
- x) **1-05.13 Superintendents, Labor, and Equipment of Contractor** – The Engineer can, with written statement, remove a superintendent from the project for failing repeatedly to follow the Engineers written or oral orders, directions, instructions, or determinations. This also applies to other employees of the Contractor.
- Poor environmental performance caused by the Contractor, whether chronic or acute, does not have to be tolerated.
- xi) **1-08.1 Subcontracting** – Approval to subcontract shall not relieve the Contractor's responsibility to carry out the Contract or to relieve the Contractor of any obligation or liability under the Contract. In addition, the Engineer can request the Subcontractor to be removed from the project.
- xii) **1-08.6 Suspension of Work** – The Engineer may suspend all or any part of the Work if unsuitable weather prevents satisfactory and timely performance of the Work, if the Contractor does not comply with the Contract, or it is in the public interest.

Suspending work is usually a last resort effort, but it does catch the Contractor's attention because they are responsible for any lost working days.

*Information obtained from Washington State Department of Transportation

**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 techniques.
- ◆ Designate an Emergency Coordinator responsible for employing preventative practices and for providing spill response.
- ◆ Maintain a supply of clean-up equipment on-site and post a list of local 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 the Salt Lake County Health Department (313-6700) for any spill of reportable quantity.



Waste Management

WM-2 Trash Containment

Definition	Provide designated waste collection areas and containers, arranging for regular disposal, and training employees and subcontractors.
Purpose	Prevent or reduce the discharge of pollutants to stormwater from solid or construction waste.
Conditions Where the Practice Applies	<p>This BMP is suitable for construction sites where the following wastes are generated or stored:</p> <ul style="list-style-type: none"> • Solid waste generated from trees and shrubs removed during land clearing, demolition of existing structures (rubble), and building construction. • Packaging materials including wood, paper, and plastic. • Scrap or surplus building materials including scrap metals, rubber, plastic, glass pieces, and masonry products. • Domestic wastes including food containers such as beverage cans, coffee cups, paper bags, plastic wrappers, and cigarettes. • Construction wastes including brick, mortar, timber, steel and metal scraps, pipe and electrical cuttings, non-hazardous equipment parts, Styrofoam and other materials used to transport and package construction materials. • Planting wastes, including vegetative material, plant containers, and packaging materials.
Specifications: Design and Installation	<p>The following steps will help keep a clean site and reduce stormwater pollution:</p> <ul style="list-style-type: none"> • Select designated waste collection areas onsite. • Inform trash-hauling Contractors that only watertight dumpsters with lids will be accepted for onsite use. Inspect dumpsters for leaks and repair any dumpster that is not watertight. • Provide an adequate number of containers with lids to keep rain out, prevent loss of wastes when it is windy, and to keep birds and animals out. • Plan for additional containers and more frequent pickup during the demolition phase of construction. • Collect site trash daily throughout the life of the Project, especially during the rainy and windy conditions. • Remove solid waste promptly since erosion and sediment control devices tend to collect litter. • Make sure that toxic liquid wastes (used oils, solvents, and paints) and chemicals (acids, pesticides, additives, curing compounds) are not disposed of in dumpsters designated for construction debris. • Do not hose out dumpsters on the construction site. Leave dumpster cleaning to the trash hauling Contractor. • Arrange for regular waste collection before containers overflow. Do not allow

Sources include EPA, SWRCB, Caltrans, CASQA

Waste Management



Waste Management

WM-2 Trash Containment

containers to overflow.

- Clean up immediately if a container does spill.
- Make sure that construction waste is collected, removed, and disposed of only at authorized disposal areas.

Education

- Have the Contractor's superintendent or representative oversee and enforce proper solid waste management procedures and practices.
- Instruct employees and subcontractors on identification of solid waste and hazardous waste.
- Educate employees and subcontractors on solid waste storage and disposal procedures.
- Hold regular meetings to discuss and reinforce disposal procedures (incorporate into regular weekly meetings).
- Require that employees and subcontractors follow solid waste handling and storage procedures.
- Prohibit littering by employees, subcontractors, and visitors.
- Minimize production of solid waste materials whenever possible.

Collection, Storage, and Disposal

- Littering on the Project site is prohibited.
- To prevent clogging of the stormwater drainage system, litter and debris removal from drain gates, trash racks, and ditch lines should be a priority.
- Trash receptacles should be provided in the Contractor's yard, field trailer areas, and at locations where workers congregate for lunch and break periods.
- Trash receptacles from work areas within the construction limits of the Project site should be collected and placed in watertight dumpsters at least weekly, regardless of whether the litter was generated by the Contractor, the public, or others. Collected litter and debris should not be placed in or next to stormdrain inlets, stormwater drainage systems, watercourses, or near the site perimeter.
- Dumpsters of sufficient size and number should be provided to contain the solid waste generated by the Project.
- Full dumpsters should be removed from the Project site and the contents should be disposed of properly by trash hauling contractor.
- Construction material visible to the public should be stored or stacked in an orderly manner.
- Stormwater runoff should be prevented from contacting stored solid waste through the use of berms, dikes, or other temporary diversion structures or through the use of measures to elevate waste from site surfaces.
- Solid waste storage areas should be located at least 50 feet from drainage facilities

Sources include EPA, SWRCB, Caltrans, CASQA
Waste Management



Waste Management

WM-2 Trash Containment

and watercourses and should not be located in areas prone to flooding or ponding.

- Dispose of planting waste in watertight dumpsters.
- Segregate potentially hazardous waste from non-hazardous construction site waste.
- Make sure that toxic liquid wastes (used oils, solvents, and paints) and chemicals (acids, pesticides, additives, curing compounds) are not disposed of in dumpsters designated for construction debris.
- For disposal of hazardous waste, see WM – 7 Hazardous Waste Management. Have hazardous waste hauled to an appropriate disposal and/or recycling facility.
- Salvage or recycle useful vegetation debris, packaging and surplus building materials when practical. For example, trees and shrubs from land clearing can be used as a brush barrier or converted into wood chips, then used as mulch on graded areas. Wood pallets, cardboard boxes, and construction scraps can also be recycled.

Maintenance & Inspection

- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities.
- Inspect BMPs prior to forecast rain, daily during extended rain events, after rain events, and weekly throughout the life of the Project.
- Inspect construction waste area regularly.
- Arrange for regular waste collection.
- Monitor employees, subcontractors, and visitors and ensure no littering.