SPILL PREVENTION, CONTROL, AND COUNTERMEASURES PLAN

Foidel Creek Mine 29515 RCR27 Oak Creek, Colorado 80467

October 2011

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INTRODUCTION

Purpose

The purpose of this Spill Prevention, Control, and Countermeasures (SPCC) Plan is to describe measures implemented by Foidel Creek Mine (FCM) to prevent oil discharges from occurring, and to prepare FCM to respond in a safe, effective, and timely manner to mitigate the impacts of any discharge which may occur.

This Plan has been prepared to meet the requirements of Title 40, Code of Federal Regulations, Part 112 (40 CFR part 112), and supercedes the earlier Plan, which was most recently revised in 05/08.

In addition to fulfilling the requirements of 40 CFR Part 112, this SPCC Plan is used as a reference for oil storage information and testing records, as a tool to communicate practices for preventing and responding to discharges with employees, as a guide to facility inspections, and as a resource to be used during an emergency response situation.

FCM management has determined that this facility does not pose a risk of substantial harm under 40 CFR Part 112, as recorded in the "Substantial Harm Determination" included in Appendix B of this Plan.

This Plan provides guidance on key actions that FCM must perform to comply with the SPCC Rules:

- > Complete monthly and annual site inspections as outlined in the Inspection, Tests, and Records section of this Plan (Section 3.7) using the inspection checklists included in Appendix C.
- > Perform preventive maintenance of equipment, secondary containment systems, and discharge prevention systems described in this Plan, as needed to keep them in proper operating condition.
- > Conduct annual employee training as outlined in the Personnel, Training, and Spill Prevention Procedures section of this Plan (Section 3.8), and document the training on the log included in Appendix E.
- ➤ If either of the following occurs, submit the SPCC Plan to the EPA Region 8 Regional Administrator (RA) and the Colorado Department of Public Health & Environment/Water Quality Control Division (CDPHE/WQCD), along with other information as detailed in Section 5.4 of this Plan:
 - The facility discharges more than 1,000 gallons of oil into or upon the navigable waters of the U.S. or adjoining shorelines in a single spill event; or;
 - The facility discharges oil in quantity greater than 42 gallons in each of two spill events within any 12-month period.
- Review the SPCC Plan at least once every five (5) years and amend it to include more effective prevention and control technology, if such technology will significantly reduce the likelihood of a spill event and has been proven effective in the field at the time of the review. Plan amendments, other than administrative changes discussed above, must be recertified by a Professional Engineer on the certification page in Section 1.2 of this Plan.
- Amend the SPCC Plan within six (6) months whenever there is a change in facility design, construction, operation, or maintenance that materially affects the facility's spill potential. The revised Plan must be recertified by a Professional Engineer (PE).
- Review the Plan on an annual basis. Update the Plan to reflect any "administrative changes" that are applicable, such as personnel changes or revisions to contact information, such as phone numbers. Administrative changes must be documented in the Plan review log of Section 1.4 of this Plan, but do not have to be recertified by a PE.

1.4 Plan Review (40 CFR Parts 112.3 and 112.5)

1.4.1 Changes in Facility Configuration

In accordance with 40 CFR Part 112.5(a), FCM periodically reviews and evaluates this SPCC Plan for any change in the facility design, construction, operation, or maintenance that materially affects the facility's potential for an oil discharge, including, but not limited to:

- < commissioning of containers
- reconstruction, replacement, or installation of piping systems
- construction or demolition that might alter secondary containment structures
- changes of product or service, revisions to standard operation, modification of testing/inspection procedures, and use of new or modified industry standards or maintenance procedures

Amendments to the Plan made to address changes of this nature are referred to as technical amendments, and must be certified by a PE. Non-technical amendments can be done (and must be documented in this section) by the facility owner and/or operator. Non-technical amendments include the following:

- change in the name or contact information (i.e., telephone numbers) of individuals responsible for the implementation of this Plan
- < change in the name or contact information of spill response or cleanup contractors

FCM must make the needed revisions to the SPCC Plan as soon as possible, but no later than six months after the change occurs. The Plan must be implemented as soon as possible following any technical amendment, but no later than six months from the date of the amendment. The Facility Manager is responsible for initiating and coordinating revisions to the SPCC Plan.

1.4.2 Scheduled Plan Reviews

In accordance with 40 CFR Part 112.5(b), FCM reviews this SPCC Plan at least once every five years (in the past, such reviews were required every three years). Revisions to the Plan, if needed, are made within six months of the five-year review. A registered Professional Engineer certifies any technical amendment to the Plan, as described above, in accordance with 40 CFR PART 112.3(d). This Plan is dated *November 8*, 2011. The next plan review is therefore scheduled to take place on or prior to *November 8*, 2016

1.4.3 Record of Plan Reviews

Scheduled reviews and Plan amendments are recorded in the Plan Review Log (Table 1-1). This log must be completed even if no amendment is made to the Plan as a result of the review. Unless a technical or administrative change prompts an earlier review of the Plan, the next scheduled review of this Plan must occur by *November 8*, 2016.

1.5 Facilities, Procedures, Methods, or Equipment Not Yet Fully Operational (40 CFR PART 112.7)

1.6 Cross-Reference with SPCC Provisions (40 CFR PART 112.7)

This SPCC Plan does not follow the exact order presented in 40 CFR Part 112. Section headings identify, where appropriate, the relevant section(s) of the SPCC rule. Table 1-2 presents a cross-reference of Plan sections relative to applicable parts of 40 CFR Part 112.

Table 1-2: SPCC Cross-Reference

Provision	Provision Plan Section				
112.3(d)	Professional Engineer Certification	2			
112,3(e)	Location of SPCC Plan	2			
112.5	Plan Review	3 Table 1-1			
112.7	Management Approval	2			
112.7	Cross-Reference with SPCC Rule	Table 1-2			
112.7(a)(3)	7(a)(3) Part 2: General Facility Information Appendix A: Site Plan and Facility Diagram				
112.7(a)(4)	5.4 Discharge Notification	25 Appendices H, I, and KI			
112.7(a)(5)	Part 5: Discharge Response	24 Appendix J			
112.7(b)	2.7(b) 3.4 Potential Discharge Volumes and Direction of Flow				
112.7(c)	13				
112.7(d)	3.6 Practicability of Secondary Containment	14			
112.7(e)	3.7 Inspections, Tests, and Records	14 Tables 3-2 and 4-2 Appendices C and G			
112.7(f)	3.8 Personnel, Training and Discharge Prevention Procedures	15			
112.7(g)	3.9 Security	16			
112.7(h)	3.10 Tank Truck Loading/Unloading	16 Table 3-3			
112.7(i)	3.11 Brittle Fracture Evaluation	17			
I 12.7(j)	3.12 Conformance with Applicable State and Local Requirements	18			
112.8(b)	4.1 Facility Drainage	19			
112.8(c)(1)	4.2.1 Construction	19			
112.8(c)(2)	4.2.2 Secondary Containment	19 Appendix I			
112.8(c)(3)	4.2.3 Drainage of Diked Areas	2) Appendix I			
112.8(c)(4)	4.2.4 Corrosion Protection	2			
I 12.8(c)(5)	4.2.5 Partially Buried and Bunkered Storage Tanks	2			
112.8(c)(6)	4.2.6 Inspection Appendix B - Facility Inspection Checklists	2 Appendix (
112.8(c)(7)	4.2.7 Heating Coils	2:			
112.8(c)(8)	4.2.8 Overfill Prevention System	2:			
112.8(c)(9)	4.2.9 Effluent Treatment Facilities	2			
112.8(c)(10)	4.2.10 Visible Discharges	2			
112.8(c)(11)	4.2.11 Mobile and Portable Containers	2			
112.8(d)	4.3 Transfer Operations, Pumping and In-Plant Processes	2			
112.20(e)	Certification of Substantial Harm Determination	Appendix			

^{*} Only selected excerpts of relevant rule text are provided. For a complete list of SPCC requirements, refer to the full text of 40 CFR part 112.

2.1.2 Fuel/Lubricant Storage

Fuel/Lubricant storage at the facility consists of 12 tanks: 5 large bulk fuel ASTs, which are either double-wall tanks or are located within designed containment structures, 5 smaller bulk lubricant or used oil tanks located inside buildings; and 2 mobile fuel tanks mounted on either trailers or utility vehicles. In addition, the facility receives and stores a varying stock of totes oil drums, lubricant pails, and cases of canned product both within and in secure areas outside of the warehouse. All tanks have secondary containment (either double-wall tanks or designed containment structures), which is sized to contain the entire contents the corresponding tank(s).

The capacities of petroleum storage containers present at the site are listed below and are also indicated on the facility diagram in Figure A-2. All containers with capacity of 55-gallons or more are included. Tank numbers are not consecutive because some numbered tanks are mobile tanks or contain non-petroleum products.

Table 2-1: Petroleum Storage Containers

FOIDEL CREEK MINE STORAGE TANKS (FIXED)

TANK	TANK LOCATION	PRODUCT	TANK TYPE	CAPACITY	DESCRIPTION
NO.				(gallons):	
AST 1	BOB Area	Diesel	Steel/Shop	6,000	Above-ground
AST 2	BOB Area	Diesel	Built	6,000	w/steel containment
AST 4	ROM Pile	Diesel	Steel/Shop Built	8,800	Above-ground w/steel containment
AST 6	Washbay	Used Oil	Tote	350	Above-ground w/masonry containment
AST 7	Shop/Warehouse	Used Oil	Steel/Shop Built -3 Compartments	2,080/1,030/ 180 – 3,290 total	Above-ground within building
AST 9	Shop/Warehouse (Light-Duty Bay)	Engine Oil/Emulsion Fluid	Steel/Shop Built - 4 Compartments	3,700 total	Above-ground within building
AST 10	Shop/Warehouse (Light-Duty Bay)	Gear Oil	Steel/Shop Built - 2 Compartments	540 total	Above-ground within building
AST 11	Shop/Warehouse (Light-Duty Bay)	Used Oil	Steel/Shop Built	10,000	Above-ground w/steel containment
AST 12	Shop/Warehouse Yard	Diesel	Steel/Field Erected	20,000	Above-ground double-wall
AST 13	Mine Storage Yard	Gasoline	Steel/Field Erected	3,000	Above-ground double-walled

FOIDEL CREEK MINE STORAGE TANKS (MOBILE)

TANK NO.	TANK LOCATION	PRODUCT	TANK TYPE	CAPACITY (gallons)	DESCRIPTION
AST 8	Mobile Tank	Diesel	Steel/Shop Built	500	Above-ground
AST 14	Mobile Tank	Diesel	Steel/Shop Built	500	Aboveground

TX017	Substation No. 3	Di-Electric Fluid	210	Ground Installation
TX018	Substation No. 13	Di-Electric Fluid	1310	Ground Installation
TX023	Bathhouse 5	Di-Electric Fluid	100	Ground Installation
TX024	Substation No. 1	Di-Electric Fluid	2050	Ground Installation
TX025	Substation No. 8	Di-Electric Fluid	910	Ground Installation
TX026	Spare – Elect. Yard	Di-Electric Fluid	200	Spare
TX028	Substation No. 13	Di-Electric Fluid	5770	Ground Installation
TX032	Washplant	Di-Electric Fluid	100	Ground Installation
TX033	NW Mains Fan	Di-Electric Fluid	150	Ground Installation
TX034	Substation No. 13	Di-Electric Fluid	120	Ground Installation
TX035	Light-Duty Bay	Di-Electric Fluid	490	Ground Installation
TX037	Washplant	Di-Electric Fluid	440	Ground Installation
TX038	Substation No. 13	Di-Electric Fluid	4050	Ground Installation
TX039	Old Transfer Bldg.	Di-Electric Fluid	190	Ground Installation
TX040	Spare- Elect. Yard	Di-Electric Fluid	240	Spare
TX041	Train Loadout	Di-Electric Fluid	180	Ground Installation
TX042	Spare- Elect. Yard	Di-Electric Fluid	310	Spare
TX043	Spare- Elect. Yard	Di-Electric Fluid	260	Spare
TX044	Spare- Elect. Yard	Di-Electric Fluid	390	Spare
TX045	Pond D	Di-Electric Fluid	290	Ground Installation
TX043	Substation No. 3	Di-Electric Fluid	280	Ground Installation
TX047	SubstationNo. 12	Di-Electric Fluid	2750	Pole-Mount
TX054	Substation No. 13	Di-Electric Fluid	180	Ground Installation
TX055	Substation No. 12	Di-Electric Fluid	210	Ground Installation
TX056	Washplant	Di-Electric Fluid	170	Ground Installation
TX057	Washplant	Di-Electric Fluid	390	Ground Installation
TX058	Washplant	Di-Electric Fluid	490	Ground Installation
TX059	Washplant	Di-Electric Fluid	420	Ground Installation
TX060	10-RT Pumphouse	Di-Electric Fluid	400	Ground Installation
TX061	10-RT Pumphouse	Di-Electric Fluid	570	Ground Installation
TX062	18-LT Substation	Di-Electric Fluid	900	Ground Installation
TX063	Truck Loadout	Di-Electric Fluid	430	Ground Installation
TX064	Substation No. 13	Di-Electric Fluid	430	Ground Installation
TX072	Spare - Elect. Yard	Di-Electric Fluid	200	Spare
TX081	18-LT Substation	Di-Electric Fluid	2080	Spare
)	Spare – Elect. Yard	Di-Electric Fluid	240	Spare
TX083	Spare – Elect. Yard	Di-Electric Fluid	420	Spare
TX095	Spare – Elect. Yard	Di-Electric Fluid	250	Spare
TX096	Substation No. 1	Di-Electric Fluid	250	Spare
TX097	Reclaim Tunnel	Di-Electric Fluid	130	Spare
TX098	Spare – Elect. Yard	Di-Electric Fluid	390	Spare
TX099	9-RT Borehole	Di-Electric Fluid	210	Ground Installation
TX100		Di-Electric Fluid	200	Ground Installation
TX101	Substation No. 3	Di-Electric Fluid	200	Ground Installation
TX102	Substation No. 3	Di-Electric Fluid	200	Ground Installation
TX103	Substation No. 3	Di-Biccine Finia	44490	GIOMIM HISTORIAN
Total			<u> </u>	

PART 3: Discharge Prevention - General SPCC Provisions

The following measures are implemented to prevent oil discharges during the handling, use, or transfer of oil products at the facility. Oil-handling employees have received training in the proper implementation of these measures.

3.1 Compliance with Applicable Requirements (40 CFR PART 112.7(a)(2))

All of the aboveground storage tanks have secondary containment. Any spills resulting from overfills or loading/unloading of product would not likely reach any navigable waters. There are numerous sumps, ditches, CDPS/NPDES ponds, and facilities ponds (non-NPDES) which would effectively intercept and capture any spills. Due to the distance from the fueling and loading/unloading areas to any ponds or ditches, and these intermediate drainage controls, it is unlikely that any spilled product would reach them.

All of the aboveground tanks are inspected monthly, following a regular schedule. A copy of the inspection form is in Appendix C. Any leakage from the primary container would be detected visually during the scheduled inspections. The small container storage areas are visited regularly by warehouse personnel. Any leak would typically be detected and addressed by facility personnel before any significant quantity of product could discharge to natural drainages. Corrosion poses minimal risk of failure since totes, drums, pails, and cans are single-use and remain on site for a relatively short period of time (less than one year). The small container storage areas are inspected at least quarterly, in accordance with accepted industry practice, providing an effective means of verifying container integrity, as noted by EPA in the preamble to the SPCC rule at 67 FR 47120.

3.2 Facility Layout Diagram (40 CFR PART 112.7(a)(3))

Figure A-1 in Appendix A shows the general location of the facility on a topographic map. Figure A-2 in Appendix A presents a layout of the facility and the location of storage tanks and drums. The diagram also shows the direction of surface water runoff. As required under 40 CFR PART 112.7(a)(3), the facility diagram indicates the location and content of ASTs, transfer stations, and connecting piping.

3.3 Spill Reporting (40 CFR PART 112.7(a)(4))

The discharge notification form included in Appendix I will be completed immediately upon detection of any discharge and prior to reporting a spill to the proper notification contacts.

3.4 Potential Discharge Volumes and Direction of Flow (40 CFR PART 112.7(b))

Table 3-1 presents expected volume, discharge rate, general direction of flow in the event of equipment failure, and means of secondary containment for different parts of the facility where fuel/lube is stored, used, or handled. The response to any land-based spills that might occur outside of secondary containment would include mobilizing heavy equipment, if appropriate, to berm/dike the area. No spills would reach any reservoirs.

3.5 Containment and Diversionary Structures (40 CFR PART 112.7(c))

Methods of secondary containment at the FCM include a combination of structures (e.g.,double-walled tanks, designed steel or concrete containment structures, inherent containment within buildings),designed drainage control systems (collection and containment ditches and sedimentation ponds), and land-based spill response (e.g. mobile equipment, sorbents) to prevent oil from reaching ever navigable waters and adjoining shorelines:

For bulk storage containers (refer to Section 4.2.2 of this Plan):

- Double-wall tank construction Tanks AST 12 and 13, and the two mobile tanks (Tanks AST 8 and 14) are all double-wall tanks, with the enclosed external shell providing sufficient capacity to contain 110 percent of the inner shell capacity.
- Designed steel or concrete containment structures In the BOB Area and ROM Pile fuel storage areas, the bulk storage tanks set within designed steel containment structures providing over 110% of capacity of the largest enclosed tank. In the Shop/Warehouse, the poured concrete floor and sill plate and concrete block enclosures provide effective containment for any product storage tanks within the building. The used oil storage tank sits outside of the Shop/Warehouse Building, but is within a poured concrete basin formed by the loading apron and walls, topped by a steel containment structure, providing containment capacity for the entire contents of the used oil tank.

In transfer areas and other parts of the facility where a discharge could occur:

- Fueling Stations Equipment fueling stations are constructed with an enclosed apron (either concrete or HDPE lined), which, together with a designed concrete or steel catchment basin provide adequate containment capacity for the entire contents of the typical delivery vehicle plus precipitation. The enclosed apron is also used for equipment fueling, serving to effectively collect and contain any spillage which may occur during fueling.
- > Drainage system The FCM surface drainage system is designed and maintained to intercept all drainage from mine facilities and disturbance areas and direct the drainage to designed sedimentation ponds, allowing for sampling and treatment of the water prior to discharge. If a spill were to occur, the designed collection ditches would control the movement of spilled material and any associated runoff water, typically allowing movement of the spilled material to be stopped before it even reaches the sedimentation ponds.
- Mobile Earth-Moving Equipment The FCM has several different types of mobile earth-moving equipment readily available, including, tracked and rubber-tired dozers, wheel loaders, rubber-tired back-hoes, skid-steer loaders, and motor graders. Equipment operators are in radio contact with the Operations Control Center, and can be mobilized quickly to contain, control, and clean-up any petroleum spill that might occur.
- > Spill Kits Spill Kits containing containment and clean-up materials are located at each petroleum storage and fueling location, and at several other locations on the mine-site. These kits include containment booms and absorbent materials to isolate and recover spilled materials. Additional spill materials are also stored in the Mine Warehouse. The response equipment inventory for the FCM is listed in Appendix J of this Plan. The Spill Kits are checked monthly to assure that any materials used from the Kits is replaced.

- Observing the tank fill and discharge pipes for signs of poor connections that could cause a discharge, and tank vents for obstructions and proper operation
- Verifying the proper functioning of overfill prevention systems
- Checking the inventory of discharge response equipment and restocking as needed

Any problems regarding tanks, piping, containment, or response equipment are immediately reported to the Facility Manager. Visible oil leaks from tank walls, piping, or other components are repaired as soon as possible to prevent a larger spill or a discharge to navigable waters or adjoining shorelines. Any pooled oil is isolated and recovered immediately upon discovery.

Written monthly inspection records are signed by the Environmental Manager and maintained with this SPCC Plan for a period of three years.

3.7.3 Annual Inspection

Facility personnel perform a more thorough inspection of facilities and equipment on an annual basis. This annual inspection complements the monthly inspection described above and is performed in June of each year using the checklist provided in Appendix C of this Plan.

The annual inspection is preferably performed after a large storm event in order to verify the imperviousness and/or proper functioning of drainage control systems.

Written annual inspection records are signed by the Environmental Manager and maintained with this SPCC Plan for a period of three years.

3.7.4 Periodic Integrity Testing

In addition to the above monthly and annual inspections by facility personnel, Tanks AST 1, 2, 11, and 12 are periodically evaluated by an outside certified tank inspector following the Steel Tank Institute (STI) Standard for the Inspection of Aboveground Storage Tanks, SP-001, 2005 version, as described in Section 4.2.6 of this Plan, and consistent with the decision-tree provided in Appendix C.

3.8 Personnel, Training, and Discharge Prevention Procedures (40 CFR PART 112.7(f))

The Facility Manager is the facility designee and is responsible for oil discharge prevention, control, and response preparedness activities at this facility.

FCM management has instructed oil-handling facility personnel in the operation and maintenance of oil pollution prevention equipment, discharge procedure protocols, applicable pollution control laws, rules and regulations, general facility operations, and the content of this SPCC Plan. Any new facility personnel with oil-handling responsibilities are provided with this same training prior to being involved in any oil handling or storage operations.

Annual discharge prevention briefings are held by the Environmental Manager for all facility personnel involved in oil operations. The briefings are aimed at assuring continued understanding and adherence to the discharge prevention procedures presented in the SPCC Plan. The briefings also highlight and describe known discharge events or failures, malfunctioning components, and recently implemented precautionary measures and best practices. Facility operators and other personnel will have the opportunity during the briefings to share recommendations concerning health, safety, and environmental issues encountered during facility operations.

Records of the briefings and discharge prevention training are kept on the form shown in Appendix E and maintained with this SPCC Plan for a period of three years.

Vehicle filling operations are performed by facility personnel trained in proper discharge prevention procedures. The truck driver or facility personnel remain with the vehicle at all times while fuel is being transferred. Transfer operations are performed according to the minimum procedures outlined in Table 3-3. This table is also posted next to the loading/unloading point.

Table 3-3: Fuel Transfer Procedures

Stage	•	Tasks
Prior to loading/	Pull tanker veh	nicle onto fueling pad so that trailer is entirely within pad area
unloading	Secure the tank	ker vehicle with wheel chocks and interlocks
unioaunig	Assure that the	e vehicle's parking brakes are set
	J Visually check	all hoses for leaks and wet spots
	J Verify that suf	ficient volume (ullage) is available in the storage tank or truck
	Verify proper	alignment of valves and proper functioning of the pumping system
	are fully close	k truck, inspect the lowermost drain and all outlets to assure that they
	Lock in closed	position all drainage valves of the secondary containment structure.
	☐ Establish adeq	juate bonding/grounding prior to connecting to the fuel transfer point
	☐ Turn off cell p	
During loading/	☐ Driver must s	stay with the vehicle at all times during loading/unloading activities
During loading/ unloading	□ Periodically i	inspect all systems, hoses, and connections
umoading	with the pres	g, keep internal and external valves on the receiving tank open along sure relief valves
	□ When makin:	g a connection, shut off the vehicle engine. When transferring Class 3 ut off the vehicle engine unless it is used to operate a pump.
	☐ Monitor the	liquid level in the receiving tank to prevent overflow
	☐ Monitor flow	meters to determine rate of flow
	☐ When toppin	g off the tank, reduce flow rate to prevent overflow
	☐ Do not allow	fuel to be handled in a manner that would result in vapor releases to ere for extended periods of time.
	☐ Minimize fu	el spills.
After loading/	☐ Make sure the	e transfer operation is completed
unloading	□ Close all tank	and loading valves before disconnecting
	☐ Securely clos disconnecting	e all vehicle internal, external, and dome cover valves before
	☐ Secure all hat	
		rounding/bonding wires
	☐ Make sure th	e hoses are drained to remove the remaining oil before moving them the connection. Use a drip pan
	Cap the end cuncontrolled	of the hose and other connecting devices before moving them to preven
		el chocks and interlocks
	□ Inspect the l	owermost drain and all outlets on tank truck prior to departure. If
	necessary, ti leaking whi	ighten, adjust, or replace caps, valves, or other equipment to prevent oil
	☐ Clean up sp	ills as expeditiously as practicable
	☐ Cover all fu when not in	el containers and all fuel storage tank fill-pipes with a gasketed seal use.
	□ Minimize ft	iel sent to open waste collection systems that collect and transport fuel
	to reclamati	on and recycling devices, such as oil/water separators.

3.12 Conformance with State and Local Applicable Requirements (40 CFR PART 112.7(j))

The state and local authorities do not require registering the tanks.

Treated storm water runoff is discharged to Foidel Creek as permitted under CDPS permits CO-0027154, CO-0042161, and CO-0036684. The maximum allowable daily oil/grease concentration is 15 mg/L. If a visible sheen is present, a sample is taken following the monitoring requirements specified in the CDPS permit.

Table 4-1: List of Oil Containers

Tank	Location	Type (Construction Standard)	Cap. (gallons)	Contents	Discharge Prevention & Containment
AST 1	BOB Area	AST vertical (UL142)	6,000	Diesel	Steel containment Liquid level gauge Overfill protection
AST 2	BOB Area	AST vertical (UL142)	6,000	Diesel	Steel containment Liquid level gauge Overfill protection
AST 4	ROM Pile	AST vertical (UL142)	8,800	Diesel	Steel containment Liquid level gauge Overfill protection
AST 6	Washbay	Tote	350	Used Oil	Masonry containment Visible fluid level
AST 7	Shop/Warehouse	Steel/Shop Built – 3 compartments	3,290	Used Oil	Contained in building Liquid level gauge Overfill protection
AST 9	Shop/Warehouse (Light-Duty Bay)	Steel/Shop Built – 4 compartments	3,700	Engine Oil/Emulsion Fluid	Contained in building Liquid level gauge Overfill protection
AST 10	Shop/Warehouse (Light-Duty Bay)	Steel/Shop Built – 2 compartments	540	Gear Oil	Contained in building Liquid level gauge Overfill protection.
AST 11	Shop/Warehouse (Light-Duty Bay)	Steel/Shop Built	10,000	Used Oil	Concrete/steel containment Liquid level gauge Overfill protection
AST 12	Shop/Warehouse Yard	AST horizontal – Double-wall	20,000	Diesel	Double-wall tank Leak detection Liquid level gauge Overfill protection
AST 13	Mine Storage Yard	AST horizontal – Double-wall	3,000	Unleaded Gasoline	Double-wall tank Leak detection Liquid level gauge Overfill protection
AST 8	Mobile Tank	Steel/Shop Built	500	Diesel	Double-wall tank Liquid level gauge
AST14	Mobile Tank	Steel/Shop Built	500	Diesel	Double-wall tank Liquid level gauge
Oil-Filled Transformers	Various (see Table 2.1)	Steel Case - Manufactured	Varies	Dielectric Fluid	Inspections Drainage controls
Small Containers	Shop/Warehouse And Fueling Stations	350 gal. Totes 55 gal. Drums 5 gal. Pails Cases of Cans	Max. 15,000	Oil, lubricants, used oil	Contained in building Spill pallets with built-in containment capacity.

4.2.2 Secondary Containment (40 CFR PART 112.8(c)(2))

Tanks AST 1, 2, 4, and 5 set in fabricated steel containment structures, with roofs to minimize accumulations of precipitation. The containment structures for Tanks AST 1 and 2 and Tanks AST 5 have capacities of approximately 11,220 and 14,960 gallons, respectively. Tanks AST 7, 9, and 10 are located within the Shop/Warehouse facility, which has a concrete floor and sill plates and concrete block enclosures. The facility is staffed 24-hours a day, therefore any leakage or spill from these tanks would be detected, and could be addressed before it could escape the building. The surface of the concrete floor, the inside and outside of the sill plate, and the interface of the floor and walls, are visually inspected during the monthly facility inspection to

Table 4-2 summarizes inspections and tests performed on bulk storage containers ("EE" indicates that an environmentally equivalent measure is implemented in place of the inspection/test, as discussed in Section 3.1 of this Plan).

Table 4-2: Scope and Frequency of Bulk Storage Containers Inspections and Tests

				·		Т	ank ID						_
Inspection/Test	1	2	4	6	7	9	10	11	12	13	8	14	SC
Visual inspection by facility personnel (as per checklist of Appendix C)	M A	M A	M A	M A	M A	M A	M A	M A	M A	M A	M A	M A	М
External inspection by certified inspector (as per STI Standard SP-001)	EE	EE	EE			A CALLED TO THE CALL ASSESSED.		EE	EE	EE			

Legend: SC is Small Containers

M: Monthly, A: Annual, EE: Inspection not required given use of environmentally equivalent measures (refer to Section 3.1 of this Plan).

4.2.7 Heating Coils (40 CFR PART 112.8(c)(7))

This section is not applicable, since there are no heating coils at this facility.

4.2.8 Overfill Prevention Systems (40 CFR PART 112.8(c)(8))

All tanks are equipped with a direct-read level gauge. Additionally, all large fixed ASTs (Tanks #1, 2, 4, 5, 11, 12, and 13) are equipped with high-level alarms set at 90 percent of the rated capacity. As previously described, all tanks are provided with secondary containment, which would also contain any spillage in the event of an overfill situation, as described in this Plan.

Oil-filled transformers are not normally subject to filling, and small containers are typically one-time use and are not refilled, therefore overfill prevention systems do not apply to transformers or small containers.

Facility personnel are present during tank filling operations to monitor the product level in the tanks.

4.2.9 Effluent Treatment Facilities (40 CFR PART 112.8(c)(9))

The facility's storm-water effluent discharge to Foidel Creek is monitored at the frequency required by the applicable CPDS permits (at least once per quarter or more frequently) and discharge monitoring records are maintained.

4.2.10 Visible Discharges (40 CFR PART 112.8(c)(10))

Any visible discharge from a container or associated connections; including seams, gaskets, piping, pumps, valves, rivets, and bolts, will be addressed immediately upon discovery to stop or slow any discharge and

- Minimizing gasoline spills through personnel training and controls such as fueling procedure signage, automatic shutoff nozzles, and overfill alarms.
- Covering all gasoline containers and gasoline storage tank fill pipes with a gasketed seal when not
 in use. Portable gasoline containers are the metal safety can type with gasketed lids. Gasoline
 storage fill pipes have latched gasket seals.
- Minimizing the amount of gasoline sent to reclamation / recycling devices, such as the oil / water separator. The oil water separator is primarily used for treatment of drainage from the truck wash and shop. Negligible gasoline spillage is expected from these areas. The gasoline storage tanks and fueling areas are located such that any spillage outside of the containment does not drain through the oil water separator.
- Following a spill, personnel implement response, control, and cleanup procedures as expeditiously as practicable.

In the event of a major discharge, the following guidelines apply:

- > If there is a potential health or safety hazard, all workers must immediately evacuate the discharge area via the designated exit routes and move to the designated staging areas at a safe distance from the discharge. Exit routes are included on the facility diagram and posted in the Shop/Warehouse, the Office/Bathhouse, and in the Facility Tech. area.
- > If the Spill Coordinator or Facility Manager are not present at the facility, the senior on-site person will notify both the Spill Coordinator and the Facility Manager of the discharge and has authority to initiate notification and response. Certain notifications are dependent on the circumstances and type of discharge. For example, any discharge that has reasonable potential to reach Foidel Creek or other area drainages, may require immediate notification to downstream users.
- > The Spill Coordinator, or Facility Manager (or senior on-site person) must call for medical assistance if workers are injured
- > The Spill Coordinator, or Facility Manager (or senior on-site person) must notify the Fire Department or Police Department if there is an associated fire or potential for fire
- > The Spill Coordinator, or Facility Manager (or senior on-site person) must call the spill response and cleanup contractors listed in the Emergency Contacts list in Appendix H
- > The Spill Coordinator, or Facility Manager (or senior on-site person) must immediately contact the Colorado Department of Public Health and Environmental Incident Response Number (303.756.4455) and the National Response Center (888.424.8802)
- > The Spill Coordinator, or Facility Manager (or senior on-site person) must record the call on the Discharge Notification form in Appendix I and attach a copy to this SPCC Plan
- > The Spill Coordinator, or Facility Manager (or senior on-site person) coordinates cleanup and obtains assistance from a cleanup contractor or other response organization as necessary

If the Spill Coordinator, or Facility Manager is not available at the time of the discharge, then the next highest person in seniority assumes responsibility for coordinating response activities.

5.3 Waste Disposal

Wastes resulting from a minor discharge response will be containerized in impervious bags, drums, or buckets. The Environmental Manager will coordinate characterization of the waste for proper disposal and assure that it is removed from the facility by a licensed waste handler.

Wastes resulting from any major discharge response will be removed and disposed of by a cleanup contractor.

5.4 Discharge Notification

Any size discharge (i.e., one that creates a sheen, emulsion, or sludge) that affects or threatens to affect navigable waters or adjoining shorelines must be reported immediately to the National Response Center (1.800.424.8802). The Center is staffed 24 hours a day. Notification requirements for any other discharges will be based on the volume and nature of the discharge. Notification contacts are provided in Appendix H.

A summary sheet is included in Appendix I to facilitate reporting. The person reporting the discharge must provide the following information:

- Name, location, organization, and telephone number
- Name and address of the party responsible for the incident
- ❖ Date and time of the incident
- ❖ Location of the incident
- Source and cause of the release or discharge
- ❖ Types of material(s) released or discharged
- Quantity of materials released or discharged

SPILL RESPONSE KITS

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AKEA	CONTAINER	1	SNICO	1	ייים וייים וייים	21	
MAIN FACILITY							
Pond A (dlesel tank)							
Bob Pile Avea Diesel tanks Fiammable chemical shed Lubricant shed							
Stack lube (Propylene Glycoi)							
Train Load Out (Pond C)							container missing lid
New Wash Plant							
Old Wash Plant					•		
Main Diesel Tank (op. warehouse)							
Portal area - coal exit							
Warehouse area Inside shop - used oil fanks Outside - 10K used oil & anilfreeze inside small quantity oils			\$				
Light Duly Bay							
Gasoline tankimag chlor, area							
Weld shop							
Old Wash Bay							
Old Barn							
Electric shap							
OFF SITE							
FCBH (EC building small quanlity lub.)							Recommend diapers only
6MM compressor building							
18RT Bleeder shaft (diesel tank)							
Empire							
			T	J	4		

APPENDIX C Facility Inspection Checklists and Inspection Forms

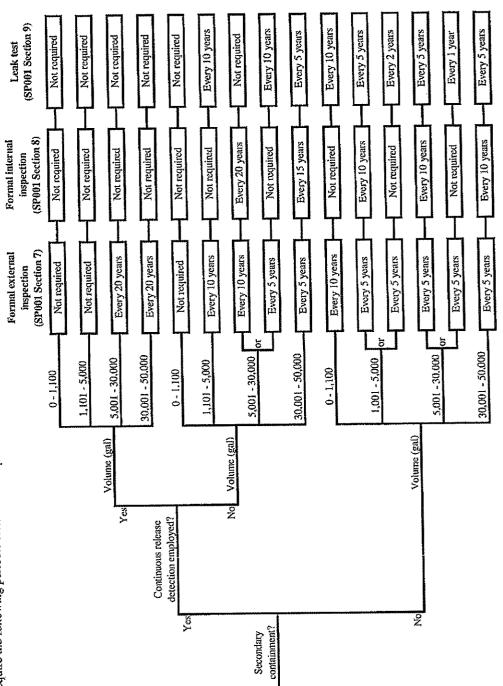
The following checklists and forms are to be used for monthly and annual facility-conducted inspections. Completed checklists and forms must be signed by the inspector and maintained at the facility, with this SPCC Plan, for at least three years.

	Υ*	N	Description & Comments
Level gauges or alarms are inoperative			
Leakage in exhaust from heating coils			
Concrete dike			
Secondary containment is stained			
Dike drainage valve is open or is not locked			
Dike walls or floors are cracked or are separating			
Dike is not retaining water (following large rainfall)	<u></u>		
Piping			
Valve seals or gaskets are leaking	<u> </u>		
Pipelines or supports are damaged or deteriorated			
Joints, valves and other appurtenances are leaking			
Buried piping is exposed			
Out-of-service pipes are not capped		 	
Warning signs are missing or damaged			
Loading/unloading and transfer equipment			
Loading/unloading rack is damaged or deteriorated			
Connections are not capped or blank-flanged			
Rollover berm is damaged or stained			
Berm drainage valve is open or is not locked			
Drip pans have accumulated oil or are leaking			
Oil/water separator			
Oil/water separator > 2 inches of accumulated oil			
Oil/water separator effluent has a sheen			
Security			
Fencing, gates, or lighting is non-functional			
Pumps and valves are not locked (and not in use)			
Response equipment			
Response equipment inventory is incomplete			



for Aboveground Storage Tanks (up to 50,000 gallons volume) based upon STI SP001, 4th Ed., July 2006 Tank Inspection & Integrity Test Decision Chart

All tanks require monthly visual inspections conducted in accordance with STI SP001 (4th Ed.), Section 6.0. In addition, tanks require the following periodic tests and/or inspections:



APPENDIX E Record of Annual Discharge Prevention Briefings and Training

Briefings will be scheduled and conducted by the facility owner or operator for operating personnel at regular intervals to ensure adequate understanding of this SPCC Plan. The briefings will also highlight and describe known discharge events or failures, malfunctioning components, and recently implemented precautionary measures and best practices. Personnel will also be instructed in operation and maintenance of equipment to prevent the discharge of oil, and in applicable pollution laws, rules, and regulations. Facility operators and other personnel will have an opportunity during the briefings to share recommendations concerning health, safety, and environmental issues encountered during facility operations.

Date	Subjects Covered	Employees in Attendance	Instructor(s)
		1.00	
•			
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APPENDIX (cont.)

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Tank	Location	Source Material	Containment Calculation
AST 9	Light Duty	Engine Oil/	Tank Volume = 4 compartments totaling 3,700 gals
	Bay	Emulsion	Assume failure of entire tank @ $3,700 \text{ gals} = 495 \text{ ft}^3$
			Containment: Masonry Block
			$V_{C} = 3[(10 \times 2.17) + (27.83 \times 11) + (5 \times 8.29) + \frac{1}{2}(8.29 \times 6.17)] = 1.184 \text{ ft}^{3}$
	A A A A A A A A A A A A A A A A A A A		Tank Displacement: $3(\pi(3.59)^2(3)) = 364.4 \text{ ft}^3$
			Net Containment: 1,184 - 364.4 = <u>819.6 ft</u> ³
	1		Freeboard: $3 \frac{495}{\left(\frac{819.6}{3}\right)} = 1.2 \text{ ft}$
AST	Light Duty	Gear	Tank Volume (2) = 540 gals on stands = 72 ft^3
10	Bay	Lubricant	Assume failure of one tank @ $540 \text{ gals} = 72 \text{ ft}^3$
			Containment: Masonry block: 15' x 5' x 2' = $\underline{150 \text{ ft}}^3$
	a de la companya de l		Freeboard: $2 - \frac{72}{(15)(5)} = 1.0 \text{ ft}$
AST 11	Light Duty Bay	Used Oil/ Used	Tank Volume: Used Oil @ 10,000 gals = 1,337 ft ³ Used Antifreeze @ 1,000 gals = 134 ft ³
		Antifreeze	Assume failure of largest tank @ $10,000 \text{ gals} = 1,337 \text{ ft}^3$
			Containment:
			Steel Walls: $(15.25')(27.46')(4.17') = 1,746 \text{ ft}^3$
		B-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0	Antifreeze Tank Displacement: (7.46')(7.48')(4.17') = 232 ft ³
			Net Containment = $1,746 - 232 = 1,514 \text{ ft}^3$
			Freeboard: $4.17 - \frac{1,337}{\left(\frac{1,514}{4.17}\right)} = 0.5 \text{ ft}$
			(4.17)

APPENDIX G Records of Tank Integrity and Pressure Tests

Attach copies of official records of tank integrity and pressure tests.

APPENDIX I Discharge Notification Form

Part A: Discharge Inf	formation ,		
	hen reporting a spill to outside au		
Name:	Foidel Creek Mine		
Address:	29515 RCR27		
	Oak Creek, Colorado 80467		
Telephone:	970.879.3800		
Owner/Operator:	Twentymile Coal, LLC		
	29515 RCR27		
	Oak Creek, Colorado 8046		
Primary Contact:	Jerry Nettleton, Environmen Work: 970.870.27		
	Cell (24 hrs): 970.846.67		
	Cell (24 lits). 370.840.07		1 372
Type of oil:	<u> </u>	Discharge Date	
Quantity released:	<u></u>	Discovery Date	
Quantity released to a	waterbody:	Discharge Dura	ion:
Location/Source:			
Actions taken to stop.	remove, and mitigate impacts of t	he discharge:	
		J	
Affected media:			
G air		G storm water s	ewer/POTW
G water		G dike/berm/oil	-water separator
G soil		G other:	
Notification person:		Telephone cont	act:
110111111111111111111111111111111111111		Business:	
		24-hr:	
Nature of discharges,	environmental/health effects, and	damages:	
Injuries, fatalities or e	vacuation required?		
Part B: Notification	Checklist		
		Date and time	Name of person receiving call
Discharge in any am	ount		
Jerry Nettleton, Envir	onmental Manager		
970.870.2712/970.840	6.6784		
Discharge in amoun	t exceeding 10 gallons and <i>not a</i>	ffecting a waterbo	dy or groundwater
Routt County Departr	ment of Environmental Health		
970.879.0185			
	*		
CDPHE – Emergency	/ Kesponse		
303.756.4455			
Discharge in any am	nount and affecting (or threaten	ing to affect) a wa	terbody
Routt County Departs	ment of Environmental Health		

APPENDIX J

Discharge Response Equipment Inventory

The discharge response equipment inventory is verified during the monthly inspection, and must be replenished as needed.

Tank Truck Loading/Unloading Areas

G	Empty 55-gallons drums to hold contaminated material	4
G	Loose absorbent material	100 pounds
G	Absorbent pads	4 boxes
G	Containment booms	4 booms
G	Nitrile gloves	8 pairs
G	Neoprene gloves	8 pairs
G	Non-sparking shovels	4
G	Brooms	4
G	Drain seals or mats	2

Maintenance Buildings

G	Empty 55-gallons drums to hold contaminated material	10
G	Loose absorbent material	200 pounds
G	Absorbent pads	5 boxes
G	Containment booms	4 booms
G	Nitrile gloves	2 boxes
G	Neoprene gloves	10 pairs
G	Non-sparking shovels	4
G	Brooms	4
G	Drain seals or mats	2
G	Sand bags	20

Other

- G Heavy equipment (wheel loaders, tracked dozers)
- G Fire Truck
- G Ambulance
- G Fire extinguishers
- G First-aid kits

Cause of the discharge(s), including a failure analysis of the system and subsystems in which failure occurred: Corrective actions and countermeasures taken, including a description of equipment repairs replacements: Additional preventive measures taken or contemplated to minimize possibility of recurrence Other pertinent information:	failure Correc	ive actions and counterm				
Additional preventive measures taken or contemplated to minimize possibility of recurrenc	Correc replace	ive actions and counterm ments:	easures taken, inc	cluding a descript	tion of equipment r	
Additional preventive measures taken or contemplated to minimize possibility of recurrenc	replac	ments:				epairs
	13					
Other pertinent information:	Additi	onal preventive measures	taken or contemp	lated to minimize	e possibility of recu	rrence
Other pertinent information:			-			
N control of the cont	Other	pertinent information:				