

Red Dog Oil Spill Prevention and SPCC Training

for

“Oil Handlers”

February 2023

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Oil Handler's Training Outline

Pollution Control Laws, Rules, Regulations

Oil Discharge Prevention and Contingency Plan (ODPCP or C-Plan)

Spill Prevention Control and Countermeasure Plan (SPCC) Plan

Red Dog Spill Prevention Protocols

Equipment Inspections & Maintenance

Spill Reporting & Response

Recent Discharges & Failures - Future Prevention

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Teck's Commitment to Spill Prevention

“Achieve and maintain the highest standards for preventing discharges to navigable waters and the environment”

Prevent – Preventing pollution and spills to the environment

Improve – Continual improvement in identifying & mitigating risks

Comply – Complying with environmental, health & safety regulations, etc.

Failure to comply could lead to Notices of Violation from agencies like ADEC (*Alaska Department of Environmental Conservation*), or worst case, closure of Red Dog Operations.

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Spill Prevention & Pollution Control

Laws, Rules, and Regulations

State of Alaska (Alaska Department of Environmental Conservation)

- 18 AAC 75 Regulations
- AS 46.04 Statutes
- Regulates the following equipment:
 - Oil storage tanks > 10,000 gallons, stationary and portable
 - Tank truck loading and permanent unloading areas
 - Facility oil piping

Local

- Northwest Arctic Borough Title 9 + Agreements with Landowners

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Who Needs Spill Prevention Training?

How to Recognize an Oil Handler

Oil handlers are workers who operate, inspect, test, maintain or repair regulated equipment or oil containers, holding 55 gallons or more.

- ✓ Do you work on oil alarm systems, or leak detection systems, or automatic shutdown systems on tanks or equipment?
- ✓ Do you pump oil from trucks to tanks and equipment on the property?
- ✓ Do you participate in barge fuel transfers?
- ✓ Are you a mechanic?
- ✓ Are you a DML fuel truck driver?

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What is 'Oil'?

Oil is defined in federal and state laws.

If the product would create a sheen on water, it is considered oil.

Red Dog oil products include the following:

Diesel	Hydraulic Fluid
Gasoline	Transmission Oil
Aviation Fuel	Lube Oil
Jet Fuel	Drive Train Oil
Motor/Engine Oil	Gear Oil
Used Oil	Vegetable Oil
Oily Water	Lubricants
Blasting Emulsion	MIBC

King Eider Duck



All oil is dangerous to wildlife – please keep off wildlife,
and out off tundra and water bodies!

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Fuel Barge at the Port Site

Getting Ready for Fuel Transfer



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Tank Farm at the Port



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The Delong Mountain Logistics (DML) Fuel Truck



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Tank Farm at the Mine



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Mine Fuel Island



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Satellite Tanks

- These “can” be moved, but typically are not



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Portable Containers

- Drums, Totes, ISO-tanks



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What is the C-Plan?

(Oil Discharge Prevention & Contingency Plan)

- Describes regulated equipment at our facility, including:
 - Oil storage tanks >10,000 gallons
 - Secondary containment areas for those tanks
 - Pipelines and piping
 - Fuel Truck loading/unloading areas
- Also includes the following:
 - Response action plan (what to do if an oil spill occurs)
 - Spill prevention plan (how to PREVENT discharges)
 - Supplemental facility information



Check-Out QualTrax Document #1610

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What is the SPCC Plan?

(Spill Prevention, Control, and Countermeasure Plan)

- Applies to bulk oil containers 55 gallons and greater.
- A potential spill could reach 'navigable waters' or wetlands.
- Applies to the entire facility (Mine, Port, and Port Road).



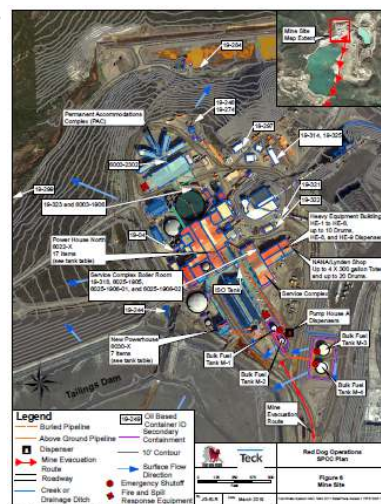
Check-Out Qualtrax Document #2564

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SPCC Plan: Contents

- Identifies on maps where ALL oil-filled storage containers are located on site (55 gallons or larger).
- Describes spill prevention equipment and practices.
- Requires periodic inspections of all regulated oil-filled containers .
- Must be amended within 6 months of any change to oil-filled storage locations.
 - *Notify Environmental Department if locations of oil filled storage containers change.*



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SPCC Regulated Oil Containers

(not regulated if oil container is < 55 gallons)

- Large Fixed Bulk Tanks
- Satellite Tanks
- Portable Containers
- Mobile Equipment
- Oil Filled Equipment
- Mobile Refuelers
- Pipelines

SPCC regs

Should I be worried about
SPCC?

NOTE: The containers above are not regulated under the SPCC Rule if they do not contain "Oil"

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SPCC Inspections

FastField Mobile Forms
& What To Look For

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Inspections = Spill Prevention

- Tank and container inspections are part of the overall spill prevention plan at Red Dog.
- Detect oil leaks, spills, or structural issues.
- Identify maintenance needs or issues.



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Large Fixed Bulk Tanks

- Large fixed oil tanks are located at the Mine and Port site.
- There are four main oil tanks at the mine site and seven located at the port facility.
- SPCC Visual inspections for this type of equipment are conducted weekly by responsible parties.
- API Inspections are conducted every 5 and 10 years by certified contract inspectors.



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Large Bulk Tank Inspection

What to look for

- Tank labeled.
- Signs of leaks around tank and or associated piping or valves.
- Discoloration, stained soils, possible spill or leak.
- Any piping in contact with ground or gravel.
- Piping supports structurally sound, signs of damage.
- Lighting and alarms in working order.
- Walkways, stairs, platforms accessible and secure.
- All level gauges operable.
- Tank distortion or other structural issues.
- Evidence of corrosion and or paint coating failures on tank, piping or support structures.
- Tank chines not in contact with grave, all chine bolts secure.
- Evidence of settlement and or erosion on berms or tank foundation.



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Satellite Tanks

- Satellite Tanks onsite may range in size from a few hundred gallons to several thousand gallons. These tanks are typically used at Red Dog to provide fuel to backup gensets or boilers.



- These tanks have built in secondary containment
- Monthly inspections are conducted by either the Port, HE shop or other designated personnel.
- Only authorized personnel may fuel these tanks.

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Satellite Tank Inspection

What to look for

- Tank labeled with container ID.
- Signs of leaks around tank, associated piping or valves.
- Stained soils around tank or piping, possible spill or leak.
- Piping secured and away from roof overhangs or vehicle contact.
- All gauges operable level and interstitial containment if equipped .
- Tank distortion or other structural issues.
- Evidence of corrosion and or paint coating failures on tank, piping or support structures.
 - Protected from mobile equipment contact.
 - Overfill protection in place, Wiggins connection of overflow catchment equipped.
 - Vent free of obstructions.
 - Evidence of settled water in diesel on tank bottom (using dip stick with paste).



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Adding or Removing Regulated Tanks or Containers



Adding

Portable container or tanks may be added to a new storage or service location.

- New areas will trigger an SPCC inspection if the container or tank is ≥ 55 gallons.
- The Environmental Department must be notified so the new location can be added to the SPCC plan.



Removing

Portable container or tanks if removed permanently from an area:

- Contact the Environmental Department the location can be removed from the SPCC plan, once removed inspections no longer required for that area.

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Tanks – Part Time Use

Temporary Locations

If a tank or container is used part time during the year (ex. exploration flyable helicopter totes:

- Inspections are waived if the tank/container is emptied, labeled “Out Of Service”, dated, valves locked and any connecting lines blind flanged. Tank can be stored, inspections cease and tank may be utilized at a future date with inspections resuming.



- Contact environmental Department so SPCC tank listing can be updated.

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Oil Filled Equipment

- Oil Filled Equipment which 55 gallons or greater are regulated under the SPCC rules.
- Includes engine crankcases (non mobile), electrical transformers, hydraulic units, etc. Examples genset engine crankcase and multiple hydraulic units such as PAC elevator, ship loader and mill processing units.
- Visual inspections for this type of equipment are conducted monthly and involve looking at the oil container/lines for leaks, structural damage, leaking connections etc.



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Mobile Equipment

- Mobile Equipment with oil containers 55 gallons or greater are regulated under the SPCC rules.
- Not self-propelled (towed) equipment may include compressors, pumps, light plants, generators or heater where diesel is used to power the equipment etc.
 - This type of (newer) equipment usually has built in secondary containment from the factory.
 - If not, secondary containment may have to be provided.
- SPCC Visual inspections for this type of equipment are conducted periodically (500 hours or monthly) which involve looking at the oil container for leaks, structural damage, leaking connections etc.



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Mobile Refuelers



- Mobile refuelers are used at both the mine site and port facilities. These consist of the large DML bulk fuel transporter, lube or emulsion truck down to a light pickup with a refueling tank affixed in the bed.
- Monthly visually inspections for this type of equipment are conducted monthly and involve looking at the oil container/lines for leaks, structural damage, leaking connections etc.
- Visually inspections for refuelers container are completed during scheduled maintenance or during vehicle walk-around.

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Portable Containers & Mobile Equip Inspection

What to Look For

Portable Containers

- Containers labeled with contents.
- Signs of leaks around any containers.
- Stained soils around tank or piping, possible spill or leak.
- Evidence of container dents, distortion, bulging.
- Containers sealed or closed when not in service.



Mobile Equipment / Mobile Refuelers

- All bulk tank labeled with contents, vehicle and equipment ID present.
- Signs of leaks around any containers or connecting lines.
- Evidence of container dents, distortion, bulging.
- Spill kit and duck pond present with Mobile Refuelers.

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Oil Piping

- Piping and hoses are designed for the products they handle. Piping runs both aboveground and underground and mostly associated with large bulk or satellite tanks.
- Aboveground piping connected to tanks is visually inspected either weekly or monthly when the tank inspections are completed.



- API piping inspections are conducted every three years by a qualified contract inspector.

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Secondary Containment Inspections



What is Secondary Containment?

- Container/system that collects and captures the entire contents of the largest tank in a containment area.
 - Secondary containments can be bermed and lined areas, such as the Tank Farms.
 - Secondary containment could be a pallet designed to catch fluids that leak.



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Secondary Containment Inspections

- Secondary containment must be free of cracks or gaps or holes
- Secondary containment must be free of liquids and garbage, and vegetation



- The secondary containment system must have enough capacity to contain the 110% of the volume of the largest container that is stored on or in the containment (the extra 10% accounts for rain or snowmelt).

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Secondary Containment Inspections



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- Excessive amount of rain ponding in the secondary containment;
- It needs to be pumped out!

Secondary Containment Inspections Satellite Tanks

- Some satellite tanks have built in secondary containment (double-walled tanks, or diked tanks).
- Check that containment chamber is free of liquids (fuel or water).
- Satellite tanks may have a leak detection gauge.



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Secondary Containment and Freeze Up



Remove all liquids from secondary containment, especially prior to freezing conditions.

- If water is present in secondary containment, and it freezes, it is difficult and time-consuming, and sometimes impossible, to remove the ice.
- Prevent spills, and save time, effort, and money by maintaining clean and empty secondary containments!

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Spill Reporting

**Red Dog Spill Line
ext. 45367**

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How to Report Spills

- Tell your Supervisor, or call the Red Dog Spill Line **IMMEDIATELY** at **ext. 45367**.
- The Red Dog Spill Line is answered 24 hours a day, 7 days a week!
- If no response, try one of the following:
 - Call 911, ask for Spill Line.
 - Or, radio the Control Room, Channel 4.

Don't delay spill reporting, it's ok if you don't have all the information at first!

The Environmental Department will determine if the spill is reportable and deal directly with any state or federal agencies if needed.



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Incidental Release

Small Spills

- **Incidental Release**
 - Does not pose significant safety hazard during cleaning up.
 - Spill to gravel or road surface.
 - Does not have potential to become emergency.
 - Does not have potential to spread to water or tundra.

Who Do You Call?

**Your Project Manager or the Red Dog Spill Line
45367.**



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Incidental Release Response Small Spills

- The responsibility for cleanup of smaller spills that do not threaten tundra or water or wildlife is yours – don't wait for someone else to act.
- **CONTAIN THE SPILL** so it does not spread.
 - Use your spill kit: absorbent pads, duck pond, PPE, shovel.
 - Includes bags in which to dispose of used/oily absorbs, and PPE.
 - If you need assistance, ask your coworker or supervisor to provide help.
- Place oily waste, such as absorbent pads and used PPE, in bags (then incinerate).
- If needed, arrange with your project manager for removal or excavation of contaminated soil/gravel.

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Mobile Equipment Spill Kits

Light vehicles are equipped with small spill response kits to prevent/contain spills:

- The kits are stored in a duffle bag and include:
 - 28-gallon capacity duck pond
 - 10 oil absorbent pads
 - 10 coolant absorbent pads
 - 2 oily waste bags
- Verify that your vehicle has a spill response bag when completing the pre-operation vehicle inspection.
- All materials are available for resupply at Warehouse.



Figure 1: Spill Kit Contents



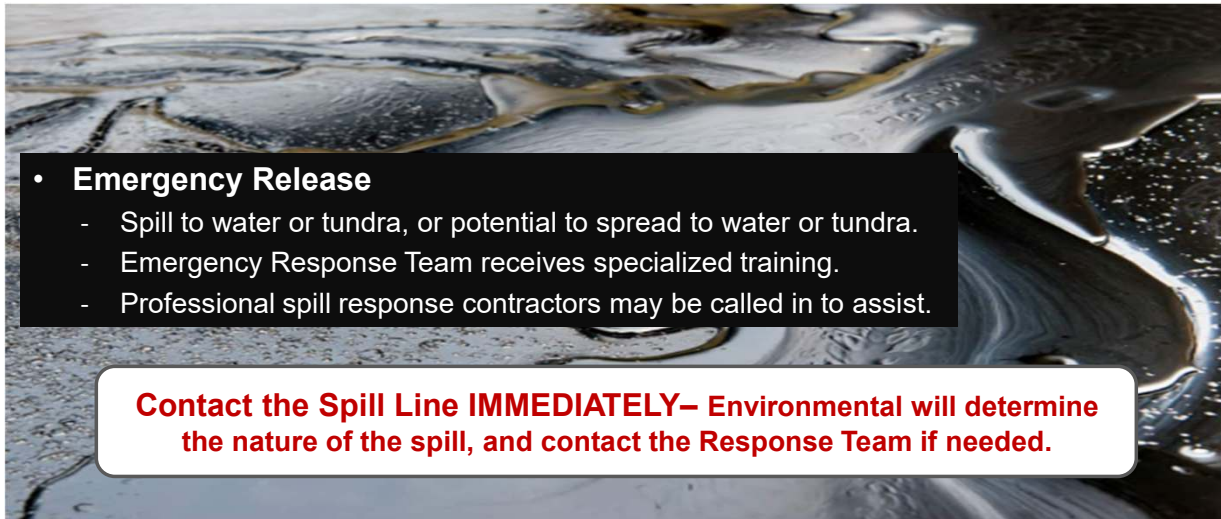
Figure 2: Spill Response Kit Storage Location

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Spill Response Emergency Release

Big Spills



- **Emergency Release**

- Spill to water or tundra, or potential to spread to water or tundra.
- Emergency Response Team receives specialized training.
- Professional spill response contractors may be called in to assist.

Contact the Spill Line IMMEDIATELY– Environmental will determine the nature of the spill, and contact the Response Team if needed.

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Emergency Release Response Training

The Red Dog Response Team (Fire Dept.) is trained to respond to emergency oil spills.



- Training for the Team occurs year-round.
- The Team performs regular maintenance and inspection of spill response equipment.
- Preparation is key for worst-case scenarios described in C-plan.



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Proper Fueling Procedures Prevent Spills

- Stay with equipment during entire fueling procedure.
- Overfilling is a common cause of spills, check your gauges before you start.
- Fuel nozzle shuts off fail frequently, especially during winter conditions.
 - Report any spills immediately.



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2023 Spills in Review

57 Reportable Spills of Petroleum "Oil" Products at Year End.

- Three largest oil spills in 2023 were related to transporting used oil and hydraulic oil stored in drums and totes: 110 gallons, 100, and 225 gallons were spilled.



- The next two largest spills were due to failed hoses on equipment, 40 and 55 gallons were spilled.

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Spill Prevention



- Be aware of spill prevention rules that apply to your job.
- Review and follow SOPs
- Conduct rigorous visual inspections to help identify possible spills before they occur
- Follow through and follow up on any maintenance issues
- Report ALL spills immediately to your Supervisor



Call the Environmental Department
(SPILL LINE x45367)

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Red Dog

SPCC Routine Tank Inspection Training

March 2023

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Routine Visual Tank Inspection Training

Who Needs This Training?

What to Look for When Inspecting a Tank

Responding to Inspection Deficiencies

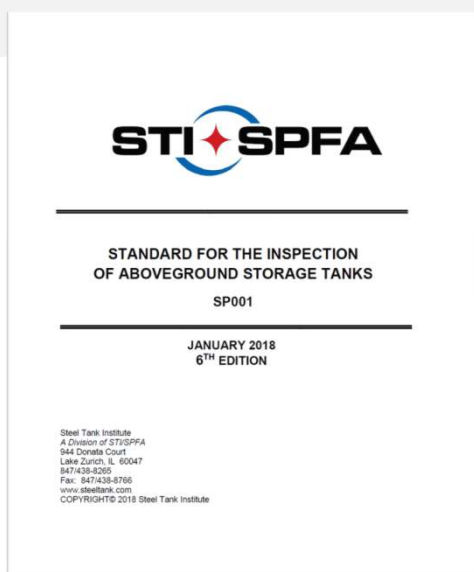
Documentation & FastField Inspection Forms

Managing Secondary Containments

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Who Needs This Training?



- Red Dog employees or contactors who complete routine inspections of regulated oil-filled containers 55-gallons or greater.
- Tanks and piping must be inspected (monthly) following the Steel Tank Institute (STI) Standard SP001.
- The standard applies to visual monitoring of the external condition of the Aboveground Storage Tank (AST)

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Knowledgeable - Not Certified



- You do not have to be a certified inspector to perform the monthly SPCC inspections, but you do need this training to meet federal regulatory requirements.

Steel Tank Institute Standard SP001.

- 4.1.2 The personnel performing these inspections shall be knowledgeable about storage facility operations, the type of AST and its associated components, the spill control system for the facility, and characteristics of the liquid stored. Owner's inspectors must also be familiar with pumping, piping, and valve operations of the AST system.

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What to Look at When Inspecting a Tank

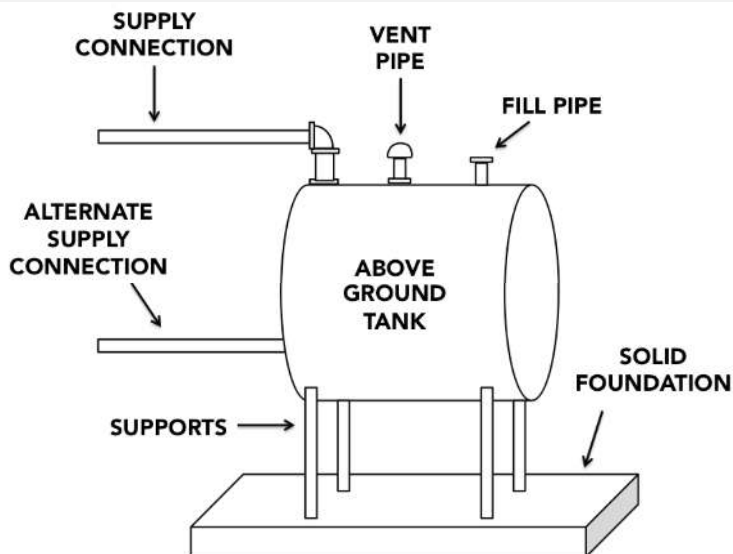


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Parts of a Primary Tank

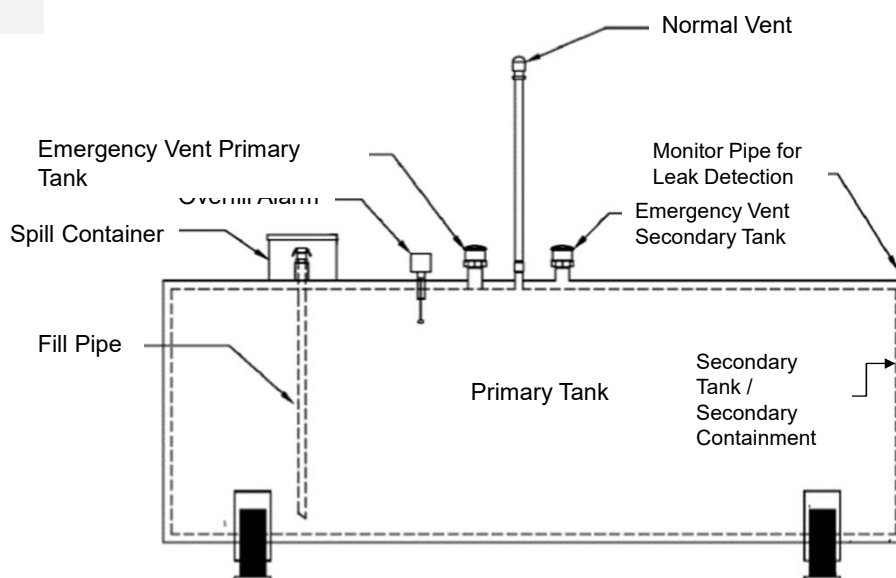
- A single walled – primary tank with all the basic parts labeled.
- An SPCC inspection looks at all the structures of a tank.



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Parts of a Double-Walled Tank



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Tank Gauges & Alarms – Overflow Protection

- Tanks onsite have a variety of gauges and alarms to help prevent overflow during tank filling.
- Wiggins quick fuel connectors provide more overflow protection, they kick off when the tank is full.



Check and record any gauge reading available for the tank you are inspecting.



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Tank Overflow Protection

- Here is an example of an mechanical level gauge and some site glass level gauges used to help prevent overfilling a tank.
- Using a dipstick is another common way to determine fuel level before filling.



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Tank Overflow Protection



Spill catchment structures need to be kept cleaned out and oily absorbents disposed of at the incinerator.

- Another form of overflow protection are spill catchments surrounding the fill pipe.

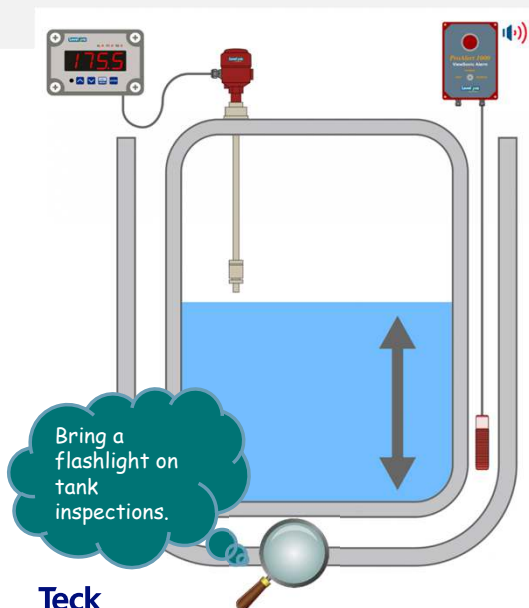


Example of a Wiggins fast connector inside a yellow spill catchment box.

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Interstitial Leak Detection



- Double walled tanks often have some sort of leak detection system in place to determine whether the space between the tanks is filling with fuel or water.
- Removing the cap and checking the interstitial space for liquid with a flashlight is often the best way to check for leaks into the secondary tank.



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Water in the Fuel

1 Apply paste onto a clean dipstick



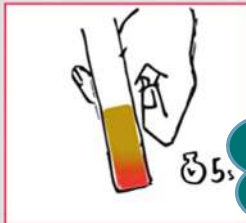
2 Smear paste flat onto dipstick*



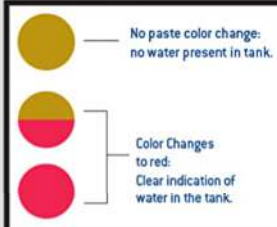
3 Insert dipstick into fuel tank for 10 seconds max



4 Remove dipstick and examine paste within 5 seconds.



Here's what to look for:



This method can also be used to test for leaks into double-walled tank interstitial spaces.

- All tanks are tested on a periodic basis (during non-freezing conditions) for water that may have collected below the fuel using color-changing paste.
- The HE Shop is responsible for testing satellite tanks at the Mine. The Port Tanks are tested by Supply Chain and Port personnel.
- Tank requires monthly testing, if no water is present for 4 months, the testing is reduced to annually.

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Tank Vents

- Tank venting allows air to move into and out of a fuel tank and equalize with the pressure outside the tank, which also allows the pumps to work correctly and fuel to flow.
- Double-walled tanks have two vents, one for the primary tank and the secondary tank.
- Make sure vents have a proper cap and are not blocked or clogged.



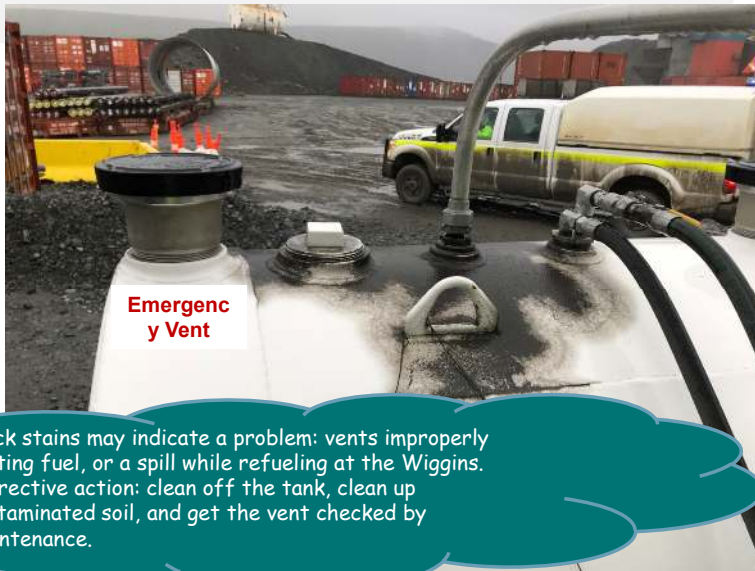
Notice the excellent labeling of the tank components! Highly recommended!

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Emergency Tank Vents

- Emergency venting is a pressure relief device designed to protect the tank from being over pressurized beyond its design limits
- Emergency vents prevent tank ruptures when other vents are blocked.



Black stains may indicate a problem: vents improperly misting fuel, or a spill while refueling at the Wiggins. Corrective action: clean off the tank, clean up contaminated soil, and get the vent checked by Maintenance.

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What NOT to do With Tank Vents



Here is an example of a tank deficiency that needs to be addressed, a rock is not an effective vent cap. The interstitial space is filling with rainwater leaking in around the rock. This should have been noted on a monthly inspection and a corrective action (MWO) to replace the vent cap done as soon as possible.

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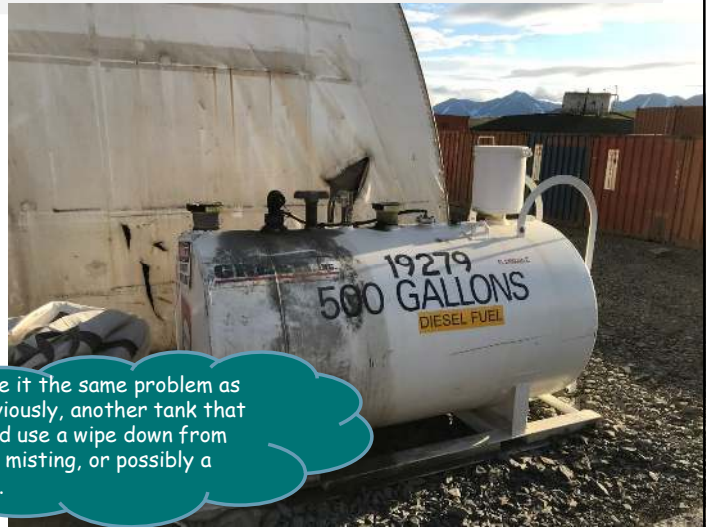
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Tank Foundation / Anchors / External Supports

- Tanks are placed on a number of different types of foundations.
- Is the foundation and other structural support functioning as it was designed to?
- Is erosion threatening the stability of the tank or pipeline? Are fuel pipelines sagging?



Here it the same problem as previously, another tank that could use a wipe down from fuel misting, or possibly a spill.



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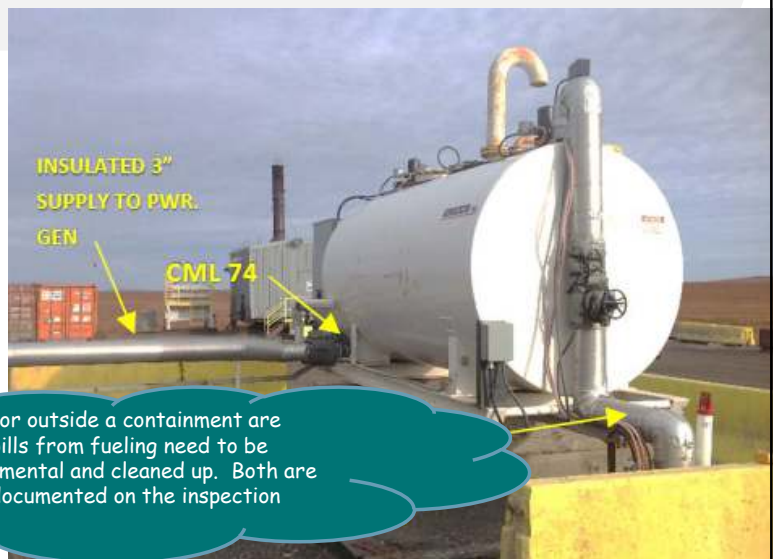
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Tank Valves, Piping, Hoses & Connections

- All valves and connections need to be checked for leaks and drips.
- Always check the surround area for dark diesel stains.



Diesel stains inside or outside a containment are spills. Even small spills from fueling need to be reported to Environmental and cleaned up. Both are corrective actions documented on the inspection form.



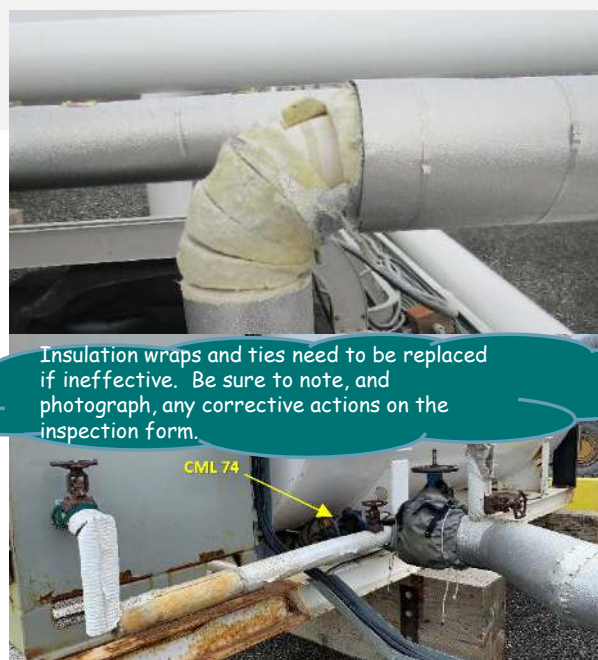
Power Generation Area Day Tank at the Port

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Pipe Insulation Covering

- Insulation covering may be found on the piping, and around valves and connections.
- If exposed to weather, damp insulation corrodes pipe.
- This gate valve is wrapped in a gray waterproof blanket to keep the insulation dry.



Insulation wraps and ties need to be replaced if ineffective. Be sure to note, and photograph, any corrective actions on the inspection form.

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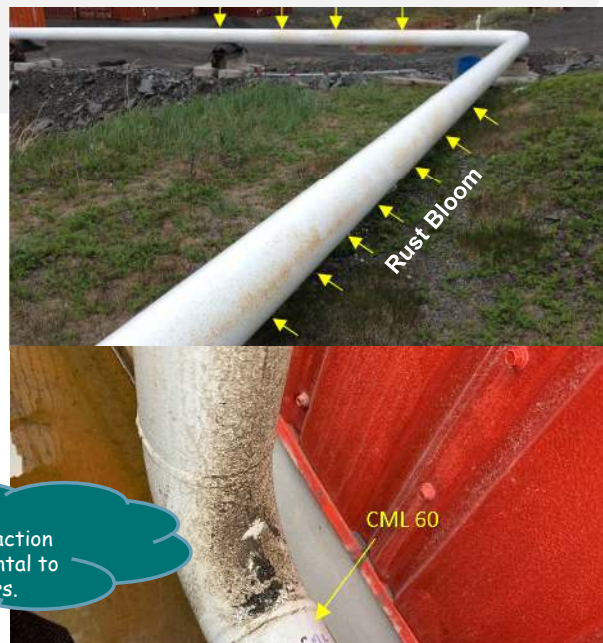
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Corrosion

- Here are a couple examples of coatings that are beginning to fail.
- Rust blooms on paint may look minor, but indicate maintenance is needed.
- Pitted and flaking coatings are even more significant damage.



When corrosion is first documented, the corrective action includes notifying Environmental to help plan the follow-up repairs.



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Corrosion

- Here are some more advanced examples of corrosion.

Be sure to carefully identify location of rust, any contributing factors (i.e. originally unpainted, in contact with soil) and photograph the damage.



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Corrosion

- The undersides of pipes, or where pipes touch the soil or wooden support or shims, increase the chance of corrosion occurring.



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Damage

- Examples of damage to be noted on an inspection:
 - Gouging
 - Denting



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Oil-filled Operational Equipment

- Oil-filled operational equipment that contains 55-gallons or more of oil and also requires a monthly inspection.
- Inspect all connections for leaks, make sure structural integrity is intact.



Lube Skid 4

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Oil-filled Mobile Equipment

- Inspect for structural integrity and leaks.
- The definition of oil-filled mobile equipment is: non-motive equipment (not used to propel vehicles), and contains 55-gallons or greater amounts of oil.



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Portable Tanks

- All drums, totes, and portable double-walled tanks that are 55-gallons or greater require monthly SPCC inspections.
- They also may require secondary containment at least 110% capacity for the largest container stored there.



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Spill Containment / Secondary Containment

- Secondary containments can require a lot of management if exposed to the weather.
- “Can the containment hold liquid?” and “Is the containment empty and clean?” are the primary concerns during the inspection.
- More about managing/pumping containments later in the presentation.



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Responding to Inspection Deficiencies



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Labeling Guidelines - Tanks

19-283

- Labeling required for fuel storage tanks:
 - ID Number
 - Contents (Diesel)
 - No Smoking



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Labeling Guidelines – Portable Containers



- Required signage required for portable containers in a secondary containment storage area includes:
 - Contents labeled on every portable container
 - “No Smoking” signage

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Secondary Containment Inspection Deficiencies

- Outdoor, uncovered, secondary containments, either for a single tank, or a group of portable containers, need intensive management.

If possible, use a lined shipping container, or move the containment into a building or tent. Talk to Environmental about other options.

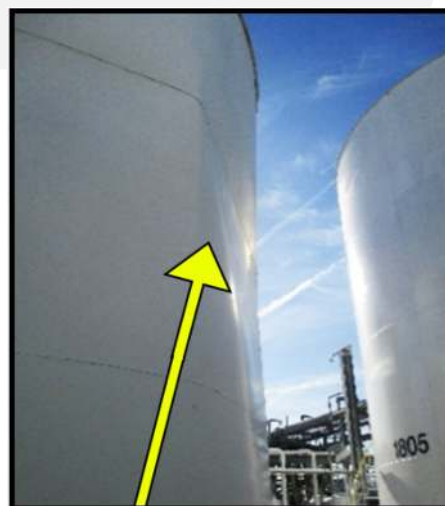
- Water or snow or ice should **not** accumulate in the containment area, as this would reduce its capacity to prevent a spill.
- If you are inspecting this type of secondary containment be prepared to pump it dry after every summer storm, and shovel it out after every snow.

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Significant Issues

- ! Deformation of tank shell
- ! Damage to a tank support or foundation
- ! Corrosion more severe than light surface rust
- ! A leaking secondary containment
- Problems of this scope need to be evaluated by a qualified engineer.
- Notifying Environmental to help arrange a formal inspection of the problem and a plan to fix it.



Damaged tank shell

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Documenting Significant Issues

- All deficiencies must be described in the comments and a photo taken on what you did on the spot to fix them.
- Some issues may need long-range planning before they can be repaired.
- After a corrective action is in place, continue to document the problem and status of the corrective action on each monthly inspection.
- There needs to be a continuous chain of documentation until the deficiency is completely resolved to remain in compliance.



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Inspection Documentation

Inspections are required monthly for tanks and secondary containments.

If the secondary containments you inspect are exposed to precipitation they need to be inspected after every significant rain or snow event.

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Not Accessible Due to Snow & Inclement Weather



Severe Weather Events Or Significant Maintenance Events

Ensure all critical operation components are in working order.

- After severe weather (snow, ice, or wind storms) a tank inspection is required as soon as it is safe to do so.
 - Weather events may trigger an earlier-than-scheduled monthly inspection.
 - Significant maintenance, like applying a new coating to a tank, should also trigger an inspection as soon as the job is completed.
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Managing Secondary Containments after the Inspection

Guidelines for Pumping & Spill Reporting

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“Sheen” versus “Spill” In a Secondary Containment

- Before pumping out a secondary containment be sure you know the difference between a “Sheen” and a “Spill”.

SHEEN = a very thin, floating layer of oil on the surface of the water that can be cleaned up by floating a few absorbent pads on the surface.

SPILL = a thicker layer of oil on the surface of the water that **cannot** easily be soaked up by a few absorbents, and is a potentially reportable spill.

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Secondary Containment Maintenance

There is more than water in the containment!

Before pumping water from secondary containment, inspect for an oil sheen or evidence of a prior/existing release.

If there is a thick oil layer present?

Confirm if release has stopped.

Call the Spill Line (X 45367)

Notification of Environmental will trigger the creation of a containment clean-up plan.

Depending on amount of oil, disposal methods may differ.

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Secondary Containment Maintenance

Pumping Containments

Is a slight sheen present?

Remove the sheen with absorbents prior to draining or pumping water from containment (absorbents are disposed of at the incinerator).

Is garbage present?

Remove garbage from secondary containment.

No sheen present, just water?

Water can be pumped, or drained onto the ground.

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Secondary Containment Maintenance

Pumping Logs

Pumping a containment requires documentation.

Either a FastField pumping log, or a hardcopy, A *Secondary Containment Pumping_Drain Log* must be filled out.

Be prepared, be familiar with the necessary SOP and forms for pumping containments.

#179 –Secondary Containment Pumping SOP

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Non-SPCC Secondary Containments

Different Pumping Requirements

If there are indications of a non-oil contaminant contact Environmental to help with the clean-up plan before you start pumping.

If you are pumping out a secondary containment area for portable containers, some containers may hold non-oil products or chemicals.

Just checking for a sheen is not enough, some products do not leave a sheen when spilled.

Before pumping:

- Check for discoloring.
- Unusual smells.
- Check every portable container for signs of leaking.

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Signature Needed on Sign-In Sheet

Please be sure to put your signature on the sign-in sheet!

- It is a State of Alaska requirement that you acknowledge you have received the Oil Handlers Training.
- At the end of this PDF is a blank sign-up sheet. Please fill it out and scan a copy to the Environmental group address provided at the top.
Environment.reddog@teck.com
- Email us if you have any questions!

Environment.reddog@teck.com

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Environmental Oil Handlers (SPCC) Quiz

		Date:	
Printed Name	Signature		PIN#

- Oil is defined by federal and state laws, as a product that will create a _____ on water.
- The C-Plan or Contingency Plan describes the Red Dog fueling facilities and includes how to respond to and prevent spills..... TRUE FALSE
- SPCC stands for Spill _____, Control, and Countermeasures Plan.
- If an oil-filled container is less than 55-gallons it is NOT covered under the SPCC Rule.....
TRUE FALSE
- FastFields documentation is the preferred method for conducting SPCC inspections, depending on the size and type of tank inspections may occur (check all that apply):
A. Annually B. Monthly C. Weekly D. A, B & C

6. Draw a line to the correct action required if:

A portable oil-filled tank of 55-gallons or greater is added to the mine site.

Notify Environmental when a tank is temporarily unused so the SPCC plan can be updated.

A portable oil-filled tank of 55-gallons or greater is removed from the mine site.

Notify Environmental of new tank so the SPCC plan and maps can be updated.

A portable oil-filled tank of 55-gallons or greater is temporarily removed from service.

Notify Environmental when decommissioning of a tank the SPCC plan and maps can be updated.

- Secondary containment is designed to collect and capture most of the contents in the containment area if a leak or spill occurs..... TRUE FALSE

8. Secondary containment needs to be free of gaps and leaks, garbage, vegetation, and snow, and if there is water present, it needs to be _____ out.
9. If there is a thick oil sheen in a secondary containment:
 Step 1 = Confirm the release of oil has _____.
 Step 2= Call the _____ - (x45367) to report the spill.
 Step 3= Follow the Environmental Departments secondary containment _____ plan.
10. If a slight sheen of oil is present inside a secondary containment it OK to pump the water onto the ground..... TRUE FALSE
11. If no sheen of oil is present inside a secondary containment it OK to pump the water onto the ground. TRUE FALSE
12. If there is a spill, you should notify your supervisor, or call the Spill Line (ext. 45367) immediately, even if you don't have all the information (like size of the spill) at first. TRUE FALSE
13. If you respond to a small spill you need to (number actions in order of occurrence):

A	Report the Spill to your Supervisor or Environmental immediately.	
B	Place oily waste (absorbs, used PPE) into plastic bags.	
C	CONTAIN THE SPILL so it does not spread.	
D	Use your spill kit to contain the spill with absorbs, duck pond, shovel and PPE.	
E	Try and stop the source of the spill (turn off nozzle or emergency shut-off valve) if possible.	
F	Take plastic bags of spill cleanup wastes to incinerator for disposal.	
G	If needed, arrange with Surface Crew for removal of contaminated soil or gravel.	

14. Big spills, or spills with the potential to contaminate water, or tundra need to be reported immediately so Environmental can determine whether the Repose Team is needed to deal with an emergency.....
 TRUE FALSE
15. If safe to leave a vehicle unattended when fueling, automatic shut off nozzles are always reliable.....
 TRUE FALSE

Quiz Review

Getting it Right

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Quiz Review

1

Oil is defined by federal and state law, as a product that will create a _____ on water.

sheen

2

The C-Plan or Contingency Plan describes the Red Dog fueling facilities and includes how to respond to and prevent spills.

True

3

SPCC stands for Spill _____, Control, and Countermeasures Plan.

Prevention

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Quiz Review

4

If an oil-filled container is less than 55-gallons it is NOT covered under the SPCC Rule.

True

5

FastFields documentation is the preferred method for conducting SPCC inspections, depending on the size and type of tank inspections may occur (check all that apply):

D: Annually,
Monthly, Weekly

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Quiz Review

6. Draw a line to the correct action required if:

A portable oil-filled tank of 55-gallons or greater is added to the mine site.

A portable oil-filled tank of 55-gallons or greater is removed from the mine site.

A portable oil-filled tank of 55-gallons or greater is temporarily removed from service.

Notify Environmental
when a tank is temporarily
unused so the SPCC plan
can be updated.

Notify Environmental
of new tank so the
SPCC plan and maps
can be updated.

Notify Environmental
when decommissioning of
a tank the SPCC plan and
maps can be updated.

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Quiz Review

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Secondary containment is designed to collect and capture most of the contents in the containment area if a leak or spill occurs.

False, designed to capture 110%

8

Secondary containment needs to be free of gaps and leaks, garbage, vegetation, and snow, and if there is water present, it needs to be _____ out.

Pumped

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Quiz Review

9

If there is a thick oil sheen in a secondary containment:
 Step 1 = Confirm the release of oil has _____.
 Step 2 = Call the _____ (x45367) to report the spill.
 Step 3 = Follow the Environmental Departments secondary containment _____ plan.

Step 1 = Stopped
 Step 2 = Spill Line
 Step 3 = Clean-Up

10

If a slight sheen of oil is present inside a secondary containment it OK to pump the water onto the ground.

False; oil sheen needs to be removed with absorbs.

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Quiz Review

11

If no sheen of oil is present inside a secondary containment it OK to pump the water onto the ground.

True

12

If there is a spill, you should notify your supervisor, or call the Spill Line (ext. 45367) immediately, even if you don't have all the information (like size of the spill) at first.

True

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Quiz Review

13. If you respond to a small spill you need to (number actions in order of occurrence):

A	Report the Spill to your Supervisor or Environmental immediately.	4
B	Place oily waste (absorbs, used PPE) into plastic bags.	5
C	CONTAIN THE SPILL so it does not spread.	2
D	Use your spill kit to contain the spill with absorbs, duck pond, shovel and PPE.	3
E	Try and stop the source of the spill (turn off nozzle or emergency shut-off valve) if possible.	1
F	Take plastic bags of spill cleanup wastes to incinerator for disposal.	6
G	If needed, arrange with Surface Crew for removal of contaminated soil or gravel.	7

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Quiz Review

14

Big spills, or spills with the potential to contaminate water, or tundra need to be reported immediately so Environmental can determine whether the Repose Team is needed to deal with an emergency.

True

15

If safe to leave a vehicle unattended when fueling, automatic shut off nozzles are always reliable.

False

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Any Questions?

Environmental is here to help!

Environmental.reddog@teck.com

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SPCC Oil Handlers Training Attendance Log

Department _____ Date: _____

Please scan and email to: environmental.reddog@teck.com

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