**FUEL GUIDELINE FOR SPILL PREVENTION & MANAGEMENT WORKSHEET**

The Opencut Act states that the Department cannot accept a plan of operation unless the plan provides that: the Opencut operation will be conducted to avoid fires; that procedures will be implemented to prevent significant physical harm to the affected land or adjacent land, structures, improvements, or life forms; and that surface water and ground water will be given appropriate protection, consistent with state law, from deterioration of water quality and quantity that may arise as a result of the Opencut operation (82-4-434(2), MCA). This guideline provides the basic requirements that ensure a plan of operation is acceptable for Opencut operations that have storage of fuel, regulated petroleum products, or on-site fueling operations.

# A. SITE SPECIFIC INFORMATION

1. **Operator Name:**
2. **Site Name:**
3. **Opencut Number (if permitted):**
4. **Describe how fuel will be stored or dispensed at this site (check all that apply and display location(s) on site map):**

**Mobile Fueling from Tank Vehicle**

**On-Site Fuel Tank:  Single Wall or  Double Wall**

**Designated fueling area (display on site map)**

**Other:**      

1. If required, the Operator should prepare a Spill Prevention, Control and Countermeasure Plan (SPCC Plan). See Section G below.

# B. GENERAL

Opencut operations with fuel storage or on-site equipment fueling have the potential for fires and for leaks, spills, and overfills that could contaminate surface water, groundwater, and soil. Human caused fires have become an increasingly significant issue in Montana and the Western United States. Petroleum releases that result in expensive cleanup costs and fines equate to a preventable loss of money from an Opencut mine operation. The information in this guideline is designed to:

* Ensure operators have incentives to improve fuel storage and fueling facilities in order to minimize the likelihood of accidental releases (75-11-301(6), MCA);
* Safeguard and reduce the risk of harm to human health and the environment by preventing spills (82-4-402(2) and 82-4-434(2), MCA);
* Ensure compliance with the codes adopted by the State Fire Marshal for fuel tank storage and fuel dispensing facilities (International Fire Code, Section 5704-Storage and Section 2304-Dispensing Operations adopted in ARM 23.12.402); and
* Ensure an Operator’s eligibility for reimbursement up to $1 million to assist with cleanup and damages caused by an accidental release when fully compliant with the Petroleum Tank Release Compensation (PTRC) Board requirements that pertain to the prevention and mitigation of a petroleum release (75-11-308, MCA and ARM 17.58.326(1)).

Meeting all provisions of the International Fire Code (IFC) that are applicable to stationary above- ground storage tanks should ensure compliance with Applicable Rules Governing the Operating and Management of Petroleum Storage Tanks (ARM 17.58.326), and thereby result in an Operator’s eligibility for spill reimbursement. Also, meeting all provisions of the IFC would minimize the risk of fires and the risk of spills from fuel tanks and fuel dispensing, thereby reducing or eliminating potential liability of an Operator.

# C. STORAGE

The following storage provisions apply to fixed aboveground storage tanks (ASTs) and to portable tanks with capacity greater than 660 gallons:

1. Protection from vehicle impacts by installation of properly constructed and spaced posts or approved physical barriers.
2. Secondary containment designed to contain spill of largest vessel with:
   1. Containment wall having minimum 4.6 inches of freeboard, and
   2. An audible or visual alarm signal for 90% of tank capacity; OR
   3. Impermeable secondary containment.
3. Resting on the ground or foundations made of concrete, masonry, piling, or steel designed to:
   1. Minimize the possibility of uneven settling, and
   2. Minimize corrosion in any part of the tank resting on the foundation.

# D. DISPENSING

The following dispensing provisions apply to fixed ASTs and to portable tanks with capacity greater than 660 gallons:

1. An accessible emergency disconnect switch is properly located within 20 to 100 feet to stop the transfer of fuel to the dispensers.
2. Dispensing devices are protected against physical damage and collision damage by secure bolted mounting on a concrete island 6 inches or more in height.
3. Dispensing hoses for gasoline and diesel are equipped with emergency breakaway device to retain liquids.
4. If dispensing hoses are attached to a hose-retrieving mechanism a breakaway device is located between the nozzle and the point of attachment.

# E. PIPING

If any tanks have a piping system (e.g. between tanks and asphalt plant) or an underground line connection, then additional requirements apply. See the AST Piping section of the Self-Inspection Checklist. If there is an underground line connected to an AST, registration with DEQ is required at: <http://deq.mt.gov/Land/ust/notificationregist>.

# F. SELF-INSPECTION CHECKLIST

The Operator must routinely inspect and maintain fuel tanks to prevent leaks and spills (ARM 17.24.218(1)(i)(ii)). The Department strongly recommends that Operators use the Self-Inspection Checklist to ensure compliance for all ASTs, piping and fuel dispensing at Opencut sites. If an AST is found to be out of compliance at the time a release is discovered, then eligibility for spill reimbursement is denied. If a spill occurs when the site is compliant with all items on the checklist, then an Operator should be eligible for financial assistance with the cleanup and damages caused by an accidental tank release. ASTs are either fully ineligible or eligible for reimbursement up to $1 million.

The AST checklist is included below and is available from the Petroleum Tank Release Compensation (PTRCB) at: <http://deq/mt.gov/Portals/112/DEQAdmin/PET/Documents/Forms/StorageTankChecklist.pdf>.

1. **How will ASTs be routinely inspected and maintained to prevent leaks and spills at the site:**

**PTRCB AST Self-Inspection Checklist**

**Operator AST Self-Inspection Checklist**

**Other (Describe):**

# G. SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN

If a facility has cumulative above-ground storage capacity of 1,320 gallons or more of regulated liquids, then for water protection, an Operator may be required to prepare and implement a SPCC Plan. It is the Operator’s responsibility to determine if the on-site storage of regulated liquids (fuel, asphalt binder, oil, etc.) at the site requires an SPCC Plan. Eligibility for compensation from the PTRC Board is based on, to the extent required, whether an SPCC Plan has been prepared and implemented when the EPA regulation 40 CFR 112.3 is applicable to petroleum tanks at the site.

The National Asphalt Pavement Association has environment, health & safety publications available that may assist in developing an SPCC Plan to ensure compliance: [https://store.asphaltpavement.org/.](https://store.asphaltpavement.org/)

Guidance from the EPA and acceptable SPCC formats can be found at: <https://www.epa.gov/oil-spills-prevention-and-preparedness-regulations/spill-prevention-control-and-countermeasure-17>.

If a professional scientist or engineer would be of service, a list of consultants that conduct work in Montana is available at the following link: [http://deq.mt.gov/Land/Lust/consultantlist.](http://deq.mt.gov/Land/Lust/consultantlist)

# H. MOBILE FUELING

Mobile fueling from tank vehicles into fuel tanks of motor vehicles or equipment at gravel pits is allowed in accordance with IFC Section 5706.2.8. A tank vehicle, by IFC definition has a mounted or integral cargo tank that is used for transporting fuel and includes self-propelled vehicles and full trailers and semitrailers. Tank vehicles shall not be used as storage tanks (IFC Section 5704.2.2). Fuel dispensing from tank vehicles shall be conducted not less than 50 feet from structures or combustible storage. The following mobile fueling provisions apply to dispensing fuel from tank vehicles:

* + 1. The tank vehicle’s specific function is that of supplying fuel to motor vehicle fuel tanks.
    2. The dispensing hose does not exceed 100 feet in length.
    3. The dispensing nozzle is an a*pproved* type.
    4. The dispensing hose is properly placed on an *approved* reel or in a compartment provided before the tank vehicle is moved.
    5. Signs prohibiting smoking or open flames within 25 feet of the vehicle or the point of refueling are prominently posted on the tank vehicle.
    6. Electrical devices and wiring in areas where fuel dispensing is conducted are in accordance with NFPA 70.
    7. Tank vehicle-dispensing equipment is operated only by designated personnel who are trained to handle and dispense motor fuels.
    8. Provisions are made for controlling and mitigating unauthorized discharges.

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|  | | **Tank #** | **Tank#** | **Tank#** | **Tank #** | **Tank #** |
| 1 | Is the aboveground storage tank (AST) temporary or permanently removed from service? (If yes, notification to the State Fire Marshal’s office is required) | YES NO | YES NO | YES NO | YES NO | YES NO |
| 2 | Is there an underground line connected to the aboveground storage tank? (If yes, registration with DEQ is required.) | YES NO | YES NO | YES NO | YES NO | YES NO |
| 3a | (i) Is the aboveground tank protected from vehicle impacts by posts constructed of steel not less than 4 inches in diameter and concrete filled? (ARM 17.58.326(1)(a)(i)) | YES NO | YES NO | YES NO | YES NO | YES NO |
| (ii)Are the guard posts spaced not more than 4 feet between posts on center? (ARM 17.58.326(1)(a)(i)) | YES NO | YES NO | YES NO | YES NO | YES NO |
| (iii) Are the guard posts set not less than 3 feet deep in a concrete footing of not less than 15-inches in diameter? (ARM 17.58.326(1)(a)(i)) | YES NO | YES NO | YES NO | YES NO | YES NO |
| (iv) Are the guard posts set with the top of the posts not less than 3 feet above the ground? (ARM 17.58.326(1)(a)(i)) | YES NO | YES NO | YES NO | YES NO | YES NO |
| (v) Are the guard posts located not less than 3 feet from the protected object? (ARM 17.58.326(1)(a)(i)) | YES NO | YES NO | YES NO | YES NO | YES NO |
| 3b | **Or** is the tank protected by a physical barrier at least 36 inches in height and can resist a force of 12,000 pounds applied 36 inches above the adjacent ground surface? (ARM 17.58.326(1)(a)(i)) | YES NO | YES NO | YES NO | YES NO | YES NO |
| 4 | Is the secondary containment of the outdoor storage area designed to contain a spill of the largest vessel? (ARM 17.58.326(1)(a)(v)) | YES NO | YES NO | YES NO | YES NO | YES NO |
| 5 | Does the aboveground tank secondary containment wall have at least  4.6 inches of freeboard? (ARM 17.58.326(1)(a)(v)) | YES NO | YES NO | YES NO | YES NO | YES NO |
| 6a | Does the aboveground tank have an audible or visual alarm signal to notify the person filling the tank the fluid level has reached 90 percent of tank capacity no later than December 31, 2013? (ARM 17.58.326(1)(a)(vi)(A)) | YES NO  N/A | YES NO  N/A | YES NO  N/A | YES NO  N/A | YES NO  N/A |
| 6b | **Or** does the tank have a petroleum impermeable secondary containment designed in accordance with the International Fire Code no later than December 31, 2013? (ARM 17.58.326(1)(a)(vi)(B)) | YES NO  N/A | YES NO  N/A | YES NO  N/A | YES NO  N/A | YES NO  N/A |
| 7 | Is the metal tank welded, riveted and caulked, bolted, or constructed using a combination of these methods? (ARM 17.58.326(1)(b)(i)) | YES NO | YES NO | YES NO | YES NO | YES NO |
| 8 | Is the aboveground tank resting on the ground or on a foundation made of concrete, masonry, piling, or steel? (ARM 17.58.326(1)(b)(ii)) | YES NO | YES NO | YES NO | YES NO | YES NO |
| 9 | Is the aboveground tank foundation designed to minimize the possibility of uneven settling of the tank and to minimize corrosion in any part of the tank resting on the foundation? (ARM 17.58.326(1)(b)(iii)) | YES NO | YES NO | YES NO | YES NO | YES NO |
| 10 | If required by 40 Code of Federal Regulations, Section 112.3, do you have a Spill Prevention, Control and Countermeasure Plan? (ARM 17.58.326(1)(e)) | YES/ NO/ Not Required | | | | |
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|  | | **Tank #** | **Tank#** | **Tank#** | **Tank #** | **Tank #** |
| **AST Piping** | | | | | | |
| 1 | Is the piping maintained liquid tight? (ARM 17.58.326(1)(b)(iv)) | YES NO | YES NO | YES NO | YES NO | YES NO |
| 2 | Is the piping joint liquid tight and welded, flanged, threaded or mechanically attached? (ARM 17.58.326(1)(b)(v)) | YES NO | YES NO | YES NO | YES NO | YES NO |
| 3 | Are the threaded aboveground joints made with a suitable thread sealant or lubricant? (ARM 17.58.326(1)(b)(vi)) | YES NO | YES NO | YES NO | YES NO | YES NO |
| 4 | Is the aboveground piping system subject to external corrosion protected? (ARM 17.58.326(1)(b)(vii)), (ARM 17.58.326(1)(c)(ii)) | YES NO | YES NO | YES NO | YES NO | YES NO |
| 5 | Is the piping in contact with the soil properly engineered, installed and corrosion protected? (ARM 17.58.326(1)(c)(i)) | YES NO | YES NO | YES NO | YES NO | YES NO |
| 6 | Is the aboveground piping substantially supported and protected against physical damage? (ARM 17.58.326(1)(d)(x)(A)) | YES NO | YES NO | YES NO | YES NO | YES NO |
| **Dispensers** | | | | | | |
| 1 | Is the tank provided with an accessible emergency disconnect switch in an approved location to stop the transfer of fuel to the dispensers in the event of a fuel spill or other emergency? (ARM 17.58.326(1)(a)(ii)) | YES NO | YES NO | YES NO | YES NO | YES NO |
| 2 | Is the emergency disconnect switch for exterior fuel dispenser located within 100 feet of, but not less than 20 feet from the fuel dispensers? (ARM 17.58.326(1)(a)(ii)) | YES NO | YES NO | YES NO | YES NO | YES NO |
| 3 | Are the dispensing devices protected against physical damage by mounting on a concrete island six inches or more in height? (ARM 17.58.326(1)(a)(iii)) | YES NO | YES NO | YES NO | YES NO | YES NO |
| 4 | Are the dispensing hoses for gasoline and diesel equipped with a listed emergency breakaway device designed to retain liquid on both sides of the breakaway point? (ARM 17.58.326(1)(a)(iv)) | YES NO | YES NO | YES NO | YES NO | YES NO |
| 5 | If the dispensing hoses are attached to a hose-retrieving mechanism, do they have a breakaway located between the hose nozzle and the point of attachment of the retrieval mechanism to the hose? (ARM 17.58.326(1)(a)(iv)) | YES NO  N/A | YES NO  N/A | YES NO  N/A | YES NO  N/A | YES NO  N/A |
| 6 | Are the dispensing devices mounted on concrete islands and securely bolted in place and protected against collision damage? (ARM 17.58.326(1)(c)(iii)) | YES NO | YES NO | YES NO | YES NO | YES NO |
| **Comments:** | | | | | | |