Constantine Best Management Practices for Exploration Operations on the Palmer Project (As adopted from BLM BMPs)

If Constantine Staff have questions are on unsure of any situation, they are advised to call the nearest BLM Field Office or BLM Mining Compliance Specialist Anchorage

Field Office: 907-267-1246
Glennallen Field Office: 907-822-7301
James Whitlock (Compliance): 907-267-1284

1. WASTEWATER:

- a. Human waste will be disposed only in a Pit Privy (outhouse) that is constructed in accordance with Alaska Administrative Code Title 18, Chapter 72 (18AAC72), Wastewater Disposal: The Pit Privy shall not be placed in an area prone to flooding, be within 100 feet (measured horizontally) of the high water mark of any body of water, wetland, or drinking water source, and the bottom of the pit must be at least four (4) feet above the water table's annual highest level. Pits will be sprinkled with lime and backfilled with a minimum of two-feet of cover material when the pit has reached capacity or the permit is terminated. If the standards prescribed by 18AAC72 cannot bemet, an alternative method such as, but not limited to, using an incinerating toilet or backhauling to a proper disposal site must be used.
- b. Grey water (wash water) will not be dumped in a Pit Privy; it may be filtered then disposed of on the ground at least 100 feet (measured horizontally) from the high watermark of any body of water, wetland, or drinking water source. Construction of a septic system/leaching field will require permitting from the Alaska Department of Environmental Conservation (ADEC).

2. SOLID WASTE:

The permit area must be kept clean and litter free. All non-hazardous refuse that cannot be completely burned will be transported and disposed of in an *ADEC approved* landfill. Non-hazardous combustible materials may be burned or incinerated on-site as permitted by State Law. Burning of batteries is prohibited. Pouring or dumping of fuel or oil in a pit for any reason, to include fire starting/trash burning, is prohibited. **There will be no burial of garbage**. At least once a year, all waste (e.g. empty fuel drums, used batteries, used oils, ash, scrap metal) will be removed to a recycle center or waste disposal site approved by ADEC for that purpose, unless otherwise approved by the authorized officer.

3. FUEL AND HAZARDOUS MATERIAL STORAGE AND USE

- a. Fuel and other petroleum products and hazardous materials shall be stored in containers designed to hold that product, identified with the owner's name, the contents, and date of purchase (e.g. My Gold Mine Ltd., Lube Oil 5W30, June. 2007). Fuel tanks shall be located at least forty (40) feet from any building and 100 feet from surface waters.
- b. Fuel storage (tanks, drums, etc.) of 55 gallons and larger capacity or any sizecontainers that are situated where a spill may potentially reach any type of water body (ground and/or surface water) or watercourse requires secondary containment.
 - Secondary containment is defined as a "diked", impermeable impoundment capable of permanently containing <u>100 percent</u> of the volume of the largest independent container plus sufficient freeboard for accumulation of rain/snowmelt water.
- c. Appropriate spill response equipment and supplies must be on hand when hazardous materials or petroleum products are stored or used. It is recommended that secondary containment or drip pans be placed under all fuel container inlet and outlet points, hose connections and hose ends during fuel transfers.
- d. All reportable spills of oil or hazardous substances shall be reported to ADEC at 800-478- 9300 and to the BLM Authorized Officer at:

Bureau of Land Management Glennallen Field Office

Contact number: 1-907-822-7301

Point of Contact: Authorized Officer

On the day of the event during BLM's normal business hours: Monday through Friday 8:00 am to 4:00 pm. If the spill occurs after BLM's normal business hours, or on a federal holiday, the notification will be made not later than 8:00am the next business day. The Authorized Officer is the Glennallen Field Office Manager. Under no circumstances will leaving a voice message suffice; initial notification must be made to the Authorized Officer personally by a representative of Constantine. Spill reporting information included shall be the same as required by ADEC and will include direction received from the ADEC.

Spill reporting requirements are: Spills of any amount of oil or hazardous substances to water outside secondary containment, or greater than 55 gallons inside secondary containment must be reported as soon as possible after becoming aware of the spill.

Spills of more than 55 gallons to land must also be reported as soon as possible after

becoming aware of the spill. Spills to land of more than 10 gallons but less than 55 gallons must be reported within 48 hours of becoming aware of the spill. For spills of less than 10 gallons, the permitee will submit a written report to ADEC summarizing those spills during that month. All spills shall be cleaned up immediately taking precedence over all other matters except the health and safety of personnel.

- e. Above-ground storage of fuels or other petroleum products exceeding an aggregate capacity of 1,320 gallons; or any facility which, due to location, could reasonably expect spilled fuels to reach waters of the United States or adjoining shorelines, must prepare and maintain a *Spill Prevention Control and Countermeasure Plan* (SPCCP) in accordance with 40 CFR 112 regulations. A current copy of the SPCCP must be onhand at the facility and on file with BLM.
- f. The applicant shall be liable for damages to the natural resources of the United States resulting from his/her negligent management of petroleum products and/or wastes, hazardous materials and/or wastes, and solid materials and wastes.

4. CULTURAL RESOURCES PROTECTION:

All operations shall be conducted in such a manner as to not cause damage or disturbance to any cultural areas or subsistence uses. The Archeological Resources Protection Act prohibits the appropriation, excavation, injury, or destruction of any historic or prehistoric ruin or monument, or any other object of antiquity situated on lands owned or controls by the United States. Unnecessary and undue degradation, relating to cultural and paleontological resources, is disturbance of any archaeological or historic sites, including graves, remains of cabins, or the collection or artifacts. It also includes the collection of vertebrate fossils, including mammoth and mastodon tusks, etc. If historic or paleontological resources are encountered during operations, the items will be left in place and the Authorized Officer will be notified.

5. FIRE PROTECTION:

The Federal government shall not be held responsible for protection of the applicant's structures or their personal property. Fire protection in the area will be consistent with the approved fire management plan. The applicant shall be liable for damages to public lands resulting from his/her negligent use of fire.

6. INVASIVE, NON-NATIVE PLANT SPECIES PREVENTION AND MITIGATION:

 All vehicles, transport equipment used in access, construction, maintenance and operations of project must be thoroughly cleaned prior to moving equipment across or onto BLM managed lands. Washing and/or brushing equipment to remove material that can contain weed seeds or other propagates helps to insure equipment that is being transported across or onto BLM managed lands are weed and weed seed free. High pressure washing is recommended to treat the insides of bumpers, wheel wells, undercarriages, inside belly plates, excavating blades, buckets, tracks, rollers, drills, buckets, shovels, any digging tools, etc., to remove potential weeds, seeds, and soil carrying weed propagules, and vegetative material.

- Early detection, rapid response mitigates ecological damage from invasivespecies. Should a development or occupancy and use have invasive plantinfestations prior to development or use, proponents must confer with the land administrator to develop an invasive plant treatment plan to eliminate and/or prevent the propagation of the species.
- Site reclamation must be implemented as soon as possible after construction using the original duff layer. This original duff layer is to be removed and set aside upon initial site disturbance, and replaced on disturbed in lieu of revegetation with nonlocal materials.
- Certified weed-free mulch, hay or straw is required in areas needing mulch. Sources for weed-free mulch can be found by calling the Plant Materials Center: 907-745-4469. Revegetation Guidance can be found at: http://www:dnr.state.ak/ag/pmcwcb/PMC reveg

7. TRANSPORTATION

Helicopter and fixed wing operations will attempt to avoid wildlife whenever possible and safe. Unless safety dictates otherwise, aircraft will follow the designated flight paths. Harassment of wildlife is prohibited.