Date

Dave Johnston El Dorado County Environmental Management 2850 Fairlane Ct. Building "C" Placerville, CA 95667

#### SUBJECT: UNDERGROUND STORAGE TANK CLOSURE WORKPLAN (LOCATION)

Mr. Johnston,

(CONSULTANT), on behalf of (PROPERTY OWNER), presents this work plan to close by removal a and a gallon (SPECIFY CONTENTS) underground storage tanks. All work will comply with the requirements of EDC UST Ordinance 4332 Attachments A, B, C and D; California Health and Safety Code Division 20, Chapter 6.7 and California Code of Regulations Title 23, Division 3, Chapter 16. The work will be conducted under a valid permit issued by the EDC Hazardous Materials Division (HMD). At least three days prior to commencing site work, HMD will be notified to schedule an onsite inspection during tank removal and sample collection.

### **1. SITE PREPARATION**

(CONSULTANT) will perform a site drawing review and consult with a private utility locator to identify the location of any and all underground utilities in the vicinity of the UST. All appurtenant equipment, including drop tube assembly, annular space sensors, piping sump sensors and tank level sensors, will be removed. This work will include removing all electrical power to the sensors by disconnecting all wiring associated with the sensors from the monitoring system. A red tag shall be attached to the monitoring system identifying that all wiring for sensors for the tank has been disconnected from the monitor. All dispenser and piping components shall be removed.

# 2. TANK CLEANING AND INERTING

All product/waste shall be removed from the bottom of the tanks using an explosion proof pump that is properly grounded and bonded. The tanks will be triple rinsed with an inert substance to remove the remaining sludge and/or scale from the interior of the tank. The removed product, waste and rinsate generated from the triple rinsing process will be handled in accordance with all applicable California hazardous waste disposal laws (i.e. disposed of at an authorized facility under proper manifest procedures by a transporter licensed in the State of California). The rinsate may be stored on site in DOT approved 55-gallon drums for up to 7 days.

Dry ice shall be placed into the cleaned tanks at a minimum ration of 3 pounds per 100 gallons of tank volume. The dry ice shall be evenly distributed over the tank bottoms. The oxygen level in the tank will be reduced to below 10%. All openings on the tanks shall then be tightly sealed, except for a 1/8-inch vent hole in a bung cap, to allow for

temperature expansion.

## 3. EXCAVATION OF TANK AREA

The area will be coned off for safety. A (EQUIPMENT) will be used for the excavation. The backfill will be removed from around the tanks. All excavated materials suspected of being contaminated, as detected by field analysis, odor or staining, will be separately stockpiled in accordance with the erosion control guidelines identified in EDC Ordinance 4332 Attachment A. Excavated soils will be placed on plastic with the edges of the plastic secured over bales of hay to create a lined containment pool. Location of stockpile is to be determined in the field. All excavations will be fenced off until HMD approves backfilling and backfill is complete.

Utilizing appropriate heavy equipment and standard safety precautions, the tank will be lifted from the excavation and moved to a secure area for inspection. The tank will not be dragged at any time. Onsite staff and HMD shall examine the tanks for signs of leakage and structural integrity. Observations shall be noted in the final report.

### 4. LIQUID/SOIL SAMPLING AND ANALYSIS

Soil and liquid samples will be collected in accordance with EDC Ordinance 4332 Attachments C and D. An HMD inspector shall witness all soil sampling. If the excavated material is suspected of being contaminated, soil samples will be collected and analyzed in accordance with destination facility requirements. (SPECIFY DESTINATION FACILITY REQUIREMENTS)

If no water is present in the tank excavation, soil samples will be collected at a depth of one to two feet below the excavation at the worst-case locations. For a tank that is less than 1,000 gallons in size, a minimum of one sample must be collected from the fill or pump end of the tank. For a tank sized from 1,000 to 10,000 gallons at least two excavation samples will be collected, one at each end of the tank. For a tank larger than 10,000 gallons, a minimum of 3 samples will be collected from the ends and the middle of the tank. Additional samples must be collected from beneath piping runs at a minimum rate of one sample for every 20 feet of piping. All samples will be collected in accordance with the LUFT Field Manual guidelines.

If water is present in the tank excavation, the tank pit may be purged and allowed to refill before sampling. All purged water must be properly disposed at an approved facility. One liquid sample and one additional soil sample will be collected for each tank.

Soil samples will be analyzed for (SEE GUIDANCE). Water samples will be analyzed for (SEE GUIDANCE). All samples will be sent to a California Certified Laboratory in an iced cooler, under strict chain of custody. Analytical results will be delivered to HMD within 5 days of receipt.

#### 5. HEALTH AND SAFETY PLAN

(CONSULTANT) will have a site-specific Health and Safety Plan onsite that complies with 29 CFR 1910.120 and Cal OSHA regulations.

# 6. REPORT

Documentation of proper disposal of all contaminated soil, rinsate, discarded product, analytical results and tank certificates of destruction shall be provided to EMD within five days of receipt. As per Title 23 Div.3 Chapter 16 Article 7 Section 2672 B-4 the gallon tank may be used for fire protection (non-potable) water at the (?) Fire Department in El Dorado County. In lieu of a certificate of destruction, a signed statement of non-potable water storage from the Fire Department will be provided. The g and g tanks will be disposed at (DESTINATION).

### 7. CLOSURE

If based on analytical data and site observations HMD determines no further action is necessary, the excavation may be backfilled with clean material. If HMD determines additional remediation or investigation is warranted, the (CONTRACTOR) will prepare and submit a work plan for subsequent actions. If you have any questions in regards to this workplan, please contact me at any time.

Sincerely,

(CONTRACTOR)