0.2

What about PPE, C of C, other Hazards on site?

Contractor's License #643881

Accutite Environmental Engineering

35 So Linden Avenue, South San Francisco, CA 94080-6407 Tel: (415) 952-5551 Fax: (415) 952-7631 Tank Testing: (415) 952-0327

FACSIMILE COVER SHEET

TO: Eva Chu - Hazardous Materials Specialist

COMPANY: Alameda County Health Agency

FAX NUMBER: (510) 337-9335

DATE: June 30, 1995

FROM: Nancy Cornett for Willie Green

NUMBER OF PAGES:
(Including Cover Sheet) 3

MESSAGE:

Hoping the information I am faxing to you is sufficient.

If you have any questions, please feel free to call Willie Green at your convenience.

Contractor's License #643881

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Site Specific Safety and Health Plan and Workplan
Brand X
491-43rd Street
Oakland, CA 94069

Background
Accutite Environmental Engineering has been contracted by Brand X to remove one 500 gallon empty underground steel regular gasoline storage tank.

Tasks:
Permitting Alameda & Oakland
Permits will be obtained from the following agencies:
Bay Area Air Quality Management District (permit)
Underground Service Alert (USA) (notification only)
Alameda County Health Department (permit)
City of Oakland Fire Department (permit)

Prior to Excavation
Underground Service Alert (USA) will be notified at least 48 hours prior to excavation. In addition to notifying USA, Accutite will consult with Brand X about known utilities in the vicinity of the excavation limits. Accutite's excavation foreman will survey the site and mark utilities.

Bay Area Air Quality Management District will be notified of the tank removal date according to BAAQMD requirements.

Accutite will make arrangements with Alameda County and The City of Oakland Fire Department to be present at the tank removal.

Tank Removal Tasks and Safety Measures
The area around the tank removal site will be secured to keep on lookers a safe distance away. **No Smoking Signs** will be placed within the fenced area to remind employees to light up outside of the secured area.
The emergency pump disconnect switch will be pressed, and also the power to the tank removal site will be switched off at the panel and taped in the off position.
The tanks will be pumped dry of all pumpable product and waste product will be hauled off site and disposed of legally, (recycled or disposed of as hazardous waste with full documentation provided).
Ground will be broken and the concrete deadmen and cables holding the tanks down will be cut. All concrete/asphalt ground cover will be disposed of per the plans. If utilities are encountered, hand excavation will proceed until utility is properly marked and power excavation can proceed safely. The tank excavation backfill material will be removed from the excavation and the tanks "loosened" for removal.

In preparation for tank removal, the tanks will be filled with dry ice (20 pounds per thousand gallons) and with a Gastech 1214, the oxygen and lower explosion limit (LEL) will be checked. When the oxygen level is below 10% and the LEL is less than 20%, the tank will be removed from the pit and placed on the ground for inspection. Please note, tanks that have been rinsed do not typically require further measure to reduce the LEL, however if the target LEL cannot be achieved, Accutite will provide further measures, i.e. rinsing, additional dry ice, to reduce the LEL. After inspection, the tank will be placed on a truck, licensed to carry hazardous waste and transported to a licensed tank disposal company (typically Erickson, Inc.) for proper disposal.

Soil Sampling Protocol
Accutite's Project Engineer will take one (1) soil sample from under the regular gasoline storage tank and one (1) soil sample from the excavated soil stockpile to be analyzed for Total Petroleum Hydrocarbons as Gasoline (TPH-G) with Benzene, Toluene, Ethyl Benzene, and Xylenes (BTE&X) distinctions.

All samples will be placed immediately on blue ice and transported to State Department of Health Services certified laboratory.

Backfill/Resurfacing
Excavation will be backfilled and compacted on the same day with excavated material and imported material equal to the volume of the tank. Also, Accutite will resurface excavated area with concrete 5' x 9' - 4" after obtaining the soil sample results.

Excavated Material/Contamination
In the event contamination is encountered and if Client/Alameda County Health Department elects not to backfill the excavation up to grade with excavated and imported material, Accutite will then stockpile excavated soil neatly on-site and cover with Visqueen. Open excavation to be secured at Accutite's expense until soil sample results are obtained and next-step options are made available to Client. After that time, Client to be charged for securing open excavation. Accutite reserves the right to backfill/resurface excavation after next-step options are discussed in order to relive Client/Contractor of liability associated with open excavation.

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SITE SAFETY PLAN

BRAND X Ron Simpson
491-43RD STREET 489-43rd st.
OAKLAND, CA.

PURPOSE:
This Site Safety Plan establishes the general safety requirements necessary to protect the public, contractor, employees, owner/operator and properties involved in this project.

SCOPE OF WORK:
- Accutite will excavate, remove and dispose of one 500 gallon empty underground steel regular gasoline storage tank.
- The empty tank will be rendered inert with the use of dry ice prior to removel to bring the %LEL to a level acceptable to the inspector.
- The tank will be loaded an hauled off site as hazardous waste to a licensed TSD facility where it will be steam cleaned, cut, and disposed of as scrap metal.
- Accutite's Project Engineer will tank one soil sample from under the regular gasoline sotrage tank and one soil sample from the excavated soil stockpile to be analyzed by a State Department of Health Services certified laboratory for TPH-G with BTE&X.
- Excavation will be backfilled an compacted on the same day with excavated material and imported material equal to tank level. Accutite will resurface excavated area with concrete 5' x 9' - 4" after soil sample results are obtained.

ACCUTITE PERSONNEL:
Project Manager: Willie Green (designated Health & Safety Coordinator (HSC)
Foreman: _____
Laborer/s: _____
Equipment Operator: _____
Engineer/s: _____

*Accutite personnel have taken the 40 hour Hazardous Waste Operations and Emergency Response Class and, as required by OSHA 29 CFR 1910.120.

The Health and Safety Coordinator will be on site during all work to verify adherence with the Site Safety Plan. The Health and Safety Coordinator will also coordinate all work with Local and State Health and Safety Representative as needed.

SAFETY AND PROTECTIVE PROCEDURES:
1 Accutite personnel fills out daily, an on-site Job Site Safety Meeting Report and a Daily Inspection Checklist and Correction Form (Sample copies attached)

2 If required, Accutite will notify USA 48 hours before the scheduled removal to locate underground utilities

3 If required, Accutite will notify Bay Area Air Quality Management District 5 days prior to the scheduled removal

4. The Health and Safety Coordinator will monitor the site during all work for the presence of gasoline vapors utilizing a combustible Gas Detector (GasTech Model 1314).

5. The Health and Safety Coordinator will mark the exclusion zone and monitor the site for the presence of non-OSHA trained personnel on-site. All visitors shall sign in, If non-OSHA trained visitors or personnel is on site the HSC will kindly remove the individual/s from the exclusion zone.

6. **No smoking, drinking or eating will be allowed in work areas.**

7. All personnel are properly trained and will wear half-mask air purifying cartridge respirators (organic cartridge with dust prefilter) when significant detector readings are recorded, or if a significant gasoline odor is detected.

8. Should gasoline or diesel fuel pooling be observed during the project, all work shall stop until a plan of action can be developed and regulatory agencies notified:

   (1) City of Oakland Fire Prevention Bureau (510) 238-3851.

   (2) California Regional Water Quality Control Board San Francisco Region (510) 464-1036.

   (3) Alameda County Health Services Agency Department of Environmental Health (510) 271-4320

Personnel required to work in the area of gasoline pooling will wear neoprene rubber gloves, chemical goggles, protective clothing, chemical resistant safety boots and a cartridge respirator.

In the event of emergency, personnel will be taken to the nearest hospital, in this case:

Summit Medical Center
350 Hawthorne
Oakland, CA 94609

Note: Information will be listed on site.

If any of the following exist, please list:

Physical Hazards:
* Gasoline is flammable. Avoid any source of ignition. Inert UST before removal. Check LEL and Oxygen levels.
* Avoid tripping hazard and underground/above ground utilities
* observe the backhoe bucket movement. Avoid accidents

Chemical Hazards Gasoline is flammable. Vapors will explode Keep an extinguisher on site at all times. Gasoline contains benzene, a known Carcinogen. Please see the detailed MSDS for gasoline.

Level of Protection (A to D): Level D

Nearest Phone and Emergency Numbers: Call 911. Use nearest telephone.

DEPARTMENT/JOBSITE SAFETY MEETING REPORT

DEPARTMENT:_____ MEETING DATE:_____

JOBSITE:_____ TIME:_____A.M./P.M.

EMPLOYEES IN ATTENDANCE:

ACCIDENTS:

REVIEW OF ANY ACCIDENTS THAT HAVE OCCURRED SINCE LAST MEETING:

UNSAFE ACTS/CONDITIONS FROM INSPECTION:

REVIEW OF UNSAFE ACTS/CONDITIONS FROM LAST MEETING:

SAFETY TOPICS DISCUSSED:

EMPLOYEE/SUBCONTRACTOR/SUGGESTIONS/RECOMMENDATIONS/REMARKS:

JOBSITE FOREMAN/SUGGESTIONS/RECOMMENDATIONS/REMARKS:

OLYMPIAN/ACCUTITE ENVIRONMENTAL ENGINEERING
INSPECTION CHECKLIST AND CORRECTION FORM

MONTHLY:_____
DAILY:_____
WEEKLY:_____

GENERAL AREA OR JOB SAFETY CLASS: TANK INSTALLATIONS, REMOVALS, OVEREXCAVATIONS & DRILLING

DATE PREPARED_____ PREPARER_____

SAFE WORK CONDITION, SAFE WORK PRACTICES OR PERSONAL PROTECTIVE EQUIPMENT	CHECKED (INITIAL)
1. CAL/OSHA PERMIT ON SITE (IF REQUIRED)	
2. U.G. UTILITIES MARKED BY U.S.A.	
3. EXCAVATION BARRICADED	
4. SPOILS PILES 2 FEET OR MORE FROM EDGE	
5. EMPLOYEES WEARING PROPER PROTECTION	
5A. HARD HATS	
5B. SAFETY SHOES	
5C. RESPIRATORS AVAILABLE	
6. FIRE EXTINGUISHERS WITHIN 75 FEET OF EXCAVATION	
7. FIRST AID KITS ON SITE	
8. ALL VEHICLES, EQUIPMENT, AND POWER TOOLS IN SAFE OPERATING ORDER	
9. POTABLE WATER AVAILABLE	
10. EMERGENCY MEDICAL SERVICES AVAILABLE	

CORRECTIVE ACTION NEEDED/TAKEN:_____
_____
_____
_____
_____
_____

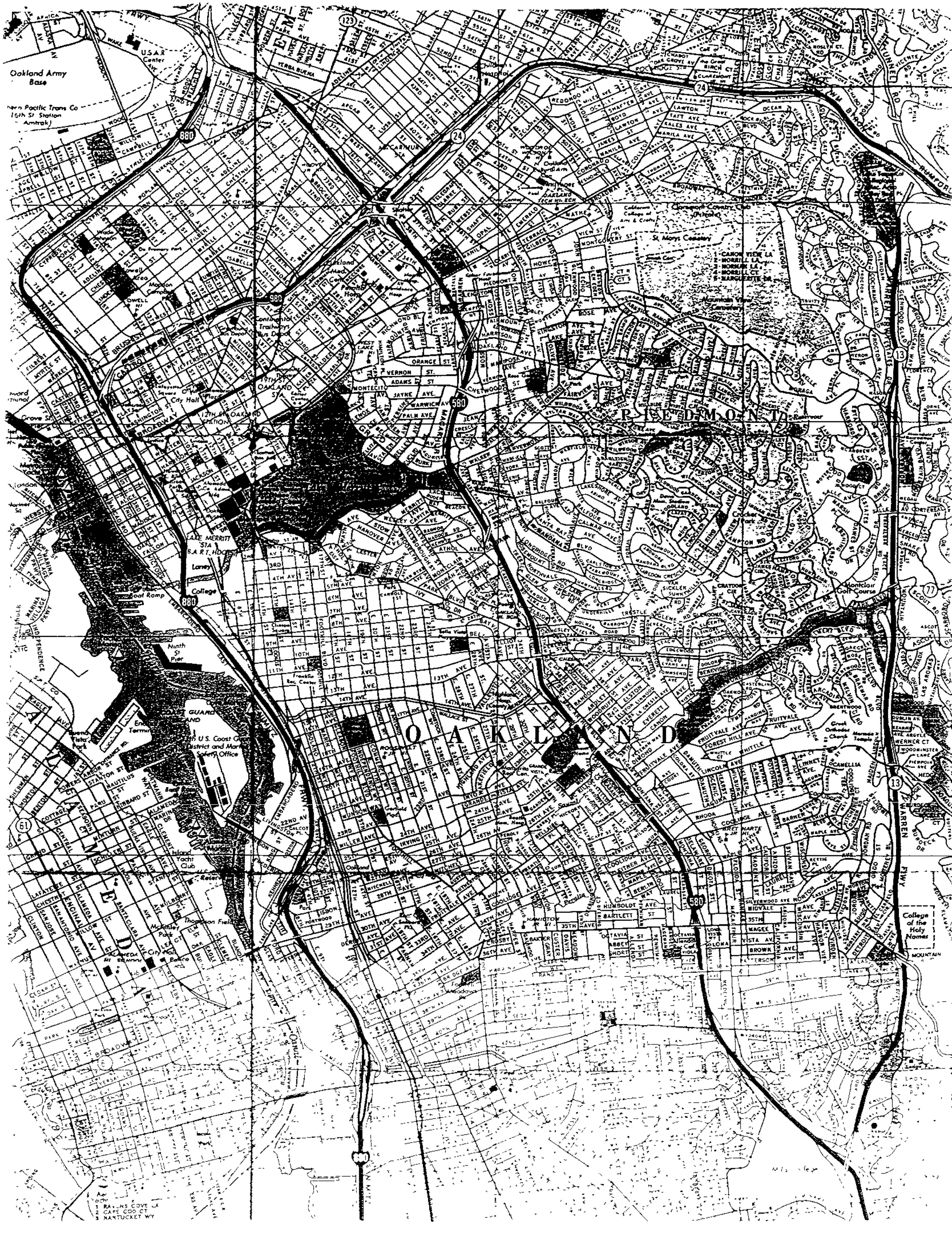
IS EQUIPMENT LOCKED OUT DUE TO IMMINENT HAZARD?_____
_____

PERSON RESPONSIBLE FOR CORRECTION:_____

COPY PROVIDED:_____
(DATE) (TIME)

CORRECTED:_____

REVIEWED BY:_____ DATE:_____



Oakland Army Base
USAR Center
OAKLAND
PIEDMONT
ALAMEDA
St. Marys Cemetery
Mountain View Cemetery
Claremont Country Club
Lake Merritt
Laney College
Ninth St Pier
Montclair Golf Course
College of the Holy Names
Thompson Field
Island Yacht Club
City Hall
Oakland City Hall
19TH ST OAKLAND STA.
12TH ST OAKLAND STATION
LAKE MERRITT STA B.A.R.T. HDQTS
Continental Trailways Bus Depot
Boat Ramp
Embarcadero
MacARTHUR
BROADWAY
WARREN FWY
YERBA BUENA
FRUITVALE AVE
FOOTHILL BLVD
1 RAVENS COVE LA
2 CAPE COD CT
3 NANTUCKET WY

Chemical Fact Sheet

Gasoline

The information in these sheets applies to work place exposure resulting from processing, manufacturing, storing or handling and is not designed for the population at large. Any generalization beyond occupational exposures should not be made. The best industrial hygiene practice is to maintain concentrations of all chemicals at levels as low as practical.

Content:

GENERAL INFORMATIONS

Chemical Name: Gasoline

Trade Names: Gasoline, Petrol, Ethyl, Av-Gas and others.

Uses: Gasoline is primarily a fuel for internal combustion engines but is also used as a solvent for rubber adhesives and as finishing agent for artificial leather.

Appearance: Liquid; gasoline with lead may contain colored dyes, usually red, blue, green, or purple.

Odor: Strong, fairly pleasant.

HEALTH HAZARD INFORMATIONS

OSHA Standard: None established.

NIOSH Recommended Limit: None established.

ACGIH Recommended Limit: Threshold Limit Value (TLV) 300 ppm (900mg/m3) for an average 8-hour workday exposure.

A - Short Term Exposure:
Inhalation:Nose and throat irritation have been reported after exposure to 900 ppm for 1 hour. Drowsiness, dizziness, nausea and numbness may occur at 1,000 ppm after 15 minutes exposure. In animal studies, death occurred after 30,000 ppm for five minutes.

Skin:May cause itching and burning of the skin, and after a long exposure, redness and blistering.

Eyes: Moderate irritation of the eye has been reported after one hour exposure to 500 ppm. Mild irritation has been reported after an 8 hour exposure to 140 ppm.

Ingestion: Gasoline causes a burning sensation in the mouth, throat and stomach. Vomiting, diarrhea, drowsiness and intoxication may follow. As little as 3 to 4 ounces may be fatal. Inhalation of liquid gasoline into the lungs following ingestion or vomiting may result in an accumulation of fluid in the lungs, rapid breathing or death.

B - Long Term Exposure:
Continuous 8 hour exposure to 200 ppm has resulted in eye irritation only. Long term exposure may produce fatigue, muscle weakness, nausea, vomiting and abdominal pain. Hexane, a component of gasoline, can produce nerve damage resulting in tremors, numbness of hands and feet and loss of muscle control. Benzene, also a gasoline component, has been linked to blood disorders in man, including leukemia. Lead additives can produce nausea, cramps, loss of appetite, sleep problems, headaches and agitation.

EMERGENCY AND FIRST AID INSTRUCTIONS

Inhalation: Move victim to fresh air. Give artificial respiration or oxygen if necessary. Seek medical attention.

Skin: Remove clothing contaminated with gasoline. Wash affected areas with soap and water.

Eyes: Wash eyes with large amounts of running water for 15 minutes. Seek medical attention.

Ingestion: Do not induce vomiting, get medical attention immediately.

FIRE AND EXPLOSION INFORMATIONS

National Fire Protection Association (NFPA) - Hazard Identification

Health (blue)	Flammability (red)	Reactivity (yellow)
1	3	0

General: Highly flammable, vapors will explode, fumes may spread great distances to flame and flash back. Gasoline will ignite at -50 deg. F (-45 deg. C).

Flammable or Explosive Limits: (Approximate Percent by Volume in Air)
Estimated Values: Lower Flammable limit 1.4%
Upper Flammable limit 7.6%.

Extinguisher:
Foam, dry chemical or carbon dioxide. Water may be ineffective on fire. Cool exposed containers with water.
If a leak or spill has ignited, use water spray to disperse the vapors and to protect men attempting to stop the leak. Water spray may be used to flush spills away from exposures. Minimize breathing gases, vapor, fumes or decomposition products.

Decomposition Products Under Fire Conditions:
Fumes, smoke, carbon monoxide, aldehydes and other decomposition products, in the case of incomplete combustion.

SPECIAL PRECAUTIONS

Storage and Handling:

. Keep containers tightly closed and out of direct sunlight. Outdoor or detached storage is preferred. Indoors, where allowed, use a standard cabinet for combustible liquids.
. Do not use pressure to empty drums or explosion may result.
. Do not transfer liquid to an unlabeled container.
. Empty containers retain residue (liquid and/or vapor) and can be dangerous. Do not Pressurize, cut, weld, solder, drill, grind or expose such containers to heat, flame sparks or other sources of ignition; they may explode and cause injury or death.

Engineering Control:

. Keep containers closed when not in use. Do not handle or store near heat, sparks, flame, or strong oxidants.
. Adequate ventilation sufficient to prevent exceeding recommended exposure limit or buildup of explosive concentrations of vapor in air.
. Use explosion proof equipment.
. Use as a motor fuel only. Do not use as a cleaning solvent, or thinner, or for other non-motor fuel uses.
. Do not siphon by mouth. Minute amounts of liquid gasoline aspirated into the lungs may cause potentially fatal chemical pneumonitis.

Protective Clothing:

. Splash proof goggles, gloves, and coveralls are recommended if contact with gasoline is possible.
. Protective clothing should not be substituted for proper handling and engineering control.

PROCEDURES FOR SPILLS AND LEAKS

. Shut off and eliminate all ignition sources.
. Get all workers out of the spill area.
. Stop leak if you can do it without risk.
. Recover free product where possible.
. Add sand, earth or other suitable absorbent to spill area.
. Contain spill to a confined area by diking with sand, earth or other suitable absorbent.
. Minimize breathing vapors.
. Minimize skin contact.
. Ventilate confined spaces. Open all windows and doors.
. Keep product out of sewers and watercourses by diking or impounding. For large spills dike far ahead of spill.
. Advise authorities if product has entered or may enter sewers, watercourses (storm drains, creeks,...) or extensive land areas.
. Place sand and absorbent materials in containers for later proper disposal.
. Continue to observe precautions for volatile, flammable vapors from absorbed material.
. Inform and assure conformity with applicable governmental regulations.

WATER POLLUTION

. Harmful to aquatic life in very small concentrations.
. Fouling to shoreline.
. May be dangerous if it enters water intake.
. Notify local health and wildlife officials.
. Notify operators of nearby water intakes.

- Aquatic Toxicity: 90 ppm/24 hr juvenile American shad/ TLm/ fresh water. 91 mg/l/24 hr/juvenile American shad/ TLm/ salt water.
- Waterfowl Toxicity: Data no available.
- Biological Oxygen Demand (BOD): 8%, 5 days.
- Food Chain Concentration Potential: none.

CHEMICAL REACTIVITY

. Reactivity with Water: No reaction
. Reactivity with common materials: No reaction
. Stability During Transport: Stable
. Neutralizing Agents for Acids and Caustics: Not pertinent
. Polymerization: Not pertinent
. Inhibitor of Polymerization: Not pertinent

. Conditions to Avoid: Avoid contact with liquid or fumes with any source of heat or flame. Strong oxidizers such as chlorine, permanganates and dichromates may cause fire or explosion.

PHYSICAL AND CHEMICAL PROPERTIES

(should not be used for precise design purposes)

. Solubility in water: Negligible, (less than 0.1% @ 1 atm. and 25 C (77F)), will float on surface.
. Physical State at 15 C and 1 atm: Liquid
. Molecular Weight: Not pertinent
. Boiling Range: 140 - 390 F = 60 - 199 C.
. Freezing Point: Not pertinent.
. Specific Gravity: 0.7321 at 20 C (liquid)
. Vapor pressure: Varies seasonally from approximately 5 to 15 psi Reid Vapor Pressure.
. pH: Essentially neutral.
. Evaporation: Gasoline evaporates rapidly. The fumes are heavier than air and will sink.
. Vapor (Gas) Specific Gravity: 3.4 to 5
. Viscosity: Approximately 0.5 cSt @ 25 C.
. Percent Volatile by Volume: 100
. Evaporation Rate @ 1 atm. and 25 C (77 F) (n-Butyl Acetate = 1): approximately 10 - 11.

NOTES AND REFERENCES

Notes:
The information and recommendations contained herein are, to the best of Accutite's belief, accurate and reliable as of the date issued. Accutite does not warrant or guarantee their accuracy or reliability, and Accutite shall not be liable for any loss or damage arising out of the use thereof.

The information and recommendations are offered for the user's consideration and examination and it is part of the user's responsibility to satisfy itself that they are suitable and complete for its particular use.

The information and recommendations presented herein by Accutite should not be substituted for any Government required employee training program, unless approved by enforcing Agencies. This information is based on materials from the references listed below.

References:
. Bureau of Toxic Substance Assessment, New York State Department of Health.
. Exxon Company USA, Jobber Unleaded Gasoline 87, MSDS issued 7/1/85.
. Hazardous Chemicals Data Book, G. Weiss, 1980.
. Patty's Industrial Hygiene and Toxicology, 3rd Revised Edition.

For additional details contact your local Department of Public Health.