HEALTH AND SAFETY PLAN

CITY OF SCHENCTADY UST & AGT REMOVAL PROJECT
714 BROADWAY, SCHENECTADY, NEW YORK

MC ENVIRONMENTAL SERVICES

22 HUDSON FALLS ROAD
SOUTH GLENS FALLS, NEW YORK 12803

Contents

MC ENVIRONMENTAL SERVICES
SITE SPECIFIC HEALTH AND SAFETY PLAN

Project Name: City of Schenectady UST and AGT Removal Project

Project # : N/A

Site Location: 714 Broadway – Schenectady, New York

Approvals: Project Manager – Mike Craft

Plan Preparation Date: Sept.19,2005 Revision Date: _____

Site Description:

The project is located on property owned by the City of Schenectady, located at the corner of Broadway and Weaver Street, Schenectady, New York. The primary area of work is the paved parking area. The site is contaminated with gasoline-impacted soils.

Primary Hazard: Gasoline contaminated soils, UST and AGT tank cleaning, construction hazards.

EMERGENCY SERVICES: EMERGENCY PHONE NUMBER: 911

Hospital	Ellis Hospital 1101 Nott Street Schenectady, New York	518-243-4000
Ambulance	Emergency Center	911
Fire Department	Emergency Center	911
Police Department	Emergency Center	911
Poison Control Center	Upstate Medical Center	800-336-6997
US Government Chemical Toxin Spills, Oil Spills, and Pollutant Discharges		800-424-8802
National Response Center (for all emergencies)		800-424-8800
NYSDEC Oil & Chemical Spills 24-hour Hotline		800-457-7362
NYSDEC Project Manager		
Emergency Assembly Area	Southwest corner of Broadway and Weaver Streets	

1.0 PROJECT PERSONNEL RESPONSIBILITIES

1.1 Project Manager

This person will act in a supervisory capacity over all employees and activities with respect to the project. The project manager has the authority to direct response operations and assumes total control over all site activities.

1.2 Site Safety and Health Officer

This individual advises the project manager on all aspects of health and safety on site. The individual also has the authority to notify the project manager and advise of corrections that must be made to comply with public safety and health or safety. For this project, the project manager will act as the Site Safety and Health Officer.

2.0 SITE STANDARD OPERATING SAFETY PROCEDURES/ACCIDENT PREVENTION

Standard operating safety procedures include safety precautions and operating practices that all MC ENVIRONMENTAL SERVICES personnel, and sub-contractors, will follow. These include:

2.1 Operations

- All personnel going on-site must be adequately trained and thoroughly briefed on anticipated hazards, equipment to be worn, safety practices to be followed, emergency procedures, and communications.
- Any required respiratory protection and chemical protective clothing must be worn by all personnel going into areas designated for wearing protective equipment.
- Personnel on-site must use the buddy system when wearing respiratory protection. As a minimum, two other persons, suitably equipped, are required as safety backup during initial entry.
- Visual contact must be maintained between pairs on-site and safety personnel. Entry team members should remain together to assist each other during emergencies.
- During continual operations, on-site workers act as safety backup to each other. Off-site personnel provide emergency assistance.
- Personnel should practice unfamiliar operations prior to doing the actual procedure.
- Entrance and exit locations must be designated and emergency escape routes delineated. Warning signals for site evacuations must be established.

- Communications must be maintained between initial entry members at all times.
- Personnel and equipment in the contaminated area should be minimized, consistent with effective site operations.
- Work areas for various operational activities must be established.

2.2 Training

All MC ENVIRONMENTAL SERVICES employees will be 40-hour HAZWOPER trained with the annual refresher up to date.. All project managers will be trained at the 1910.120 supervisory level. All employees involved in confined space entry will be trained in accordance with 29 CFR 1910.146 Confined Space Entry. All contractors will be 40-hour HAZWOPER trained.

3.0 HEALTH AND SAFETY HAZARDS

The potential exists for personnel coming into contact with hazardous materials during the performance of the work. Areas where concentrations of hazardous materials may exceed the established permissible exposure limits will be isolated from general access. This area will be designated the exclusion zone.

The attached MSDS lists the potential chemical hazards for Gasoline.

Table 3.1 lists the potential safety hazards that may be encountered during site activities.

TABLE 3.1 - PHYSICAL HAZARD ASSESSMENT

Safety Hazards	
1. Slips, trips, falls	6. Noise
2. Heat stress	7. Sharp objects, pinch points
3. Underground utilities	8. Confined spaces
4. Mechanical hazards/equipment/tools	9. Trenches
5. Overhead power lines	10. Falls from elevated surfaces
	11. Cold/hypothermia

Activity	Hazards
General site work	1, 3, 4, 5, 6, 7, 8, 9, 10, 11
Excavating soil	1, 3, 4, 5, 6, 7, 9, 11

4.0 PERSONAL PROTECTIVE EQUIPMENT PLAN

4.1 Protective Equipment

All personnel will be provided with appropriate personal safety equipment and protective clothing when handling, or when in or exposed to hazardous areas. Each individual will be properly trained in the use of this safety equipment before the start of field activities. Safety equipment and protective clothing shall be used as directed by the Project Manager. All such equipment and clothing will be cleaned and maintained in proper condition by the personnel. The Project Manager will monitor the maintenance of personnel protective equipment to ensure proper donning/doffing procedures are followed.

Personal protective equipment will be worn at all times designated by this Health and Safety Plan. Results from the site walk-through, and on-site readings will be used to set task and location specific action levels and levels of personal protection. These are detailed in Section 6.

The personal protective equipment levels designated below are in conformance with EPA criteria for Level A, B, C, and D protection. All respiratory protective equipment used will be approved by NIOSH/MSHA.

4.2 Level A Protection

A. Personnel Protective Equipment

- Supplied air respirator approved by the Mine Safety and Health Administration (MSHA) and National Institute for Occupational Safety and Health (NIOSH). Respirators may be:

  - Pressure-demand, self contained breath apparatus (SCBA)

  OR

  - Pressure-demand, airline respirator(with escape bottle for Immediately Dangerous to Life and Health (IDLH) or potential for IDLH atmosphere).

- Fully encapsulating chemical resistant suit
- Coveralls
- Long cotton underwear
- Gloves (inner), chemical resistant, steel toe and shank (Depending on suit construction, worn over or under suit boot.)

- Hard hat (under suit)
- Disposal gloves and boot covers (worn over fully encapsulating suit)
- Cooling unit
- Two-way radio communications (inherently safe)

B. Criteria for Selection

Meeting any of these criteria warrants use of Level A Protection:

- The chemical substance has been identified and requires the highest level of protection for skin, eyes, and the respiratory system based on:
  - Measured (or potential for) high concentration of atmospheric vapors, gases or particulates.

OR

  - Site operations and work functions involves high potential for splash, immersion, or exposure to unexpected vapors, gases, or particulates of materials highly toxic to the skin.
  - Substances with a high degree of hazard to the skin are known or suspected to be present, and skin contact is possible.
  - Operations must be conducted in confined, poorly ventilated areas until the absence of substances requiring Level A Protection is determined.
  - Direct readings on field Flame Ionization Detectors (FID) or Photoionization Detectors (PID) and similar instruments, indicate high levels of unidentified vapors and gases in the air.

C. Guidance on Selection

1. Fully encapsulating suits are primarily designed to provide a gas or vapor tight barrier between the wearer and atmospheric contaminants. Therefore Level A is generally worn when high concentrations of airborne substances could severely affect the skin. Since Level A requires the use of a self-contained breathing apparatus, the eyes and respiratory system are also more protected.

   Until air surveillance data becomes available to assist in the selection of the appropriate Level of Protection, the use of Level A may have to be based on indirect evidence of the potential for atmospheric contamination or other means of skin contact with severe skin affecting substances.

   Conditions that may require Level A Protection include:

- Confined spaces: enclosed, confined, or poorly ventilated areas are conducive to the build up of toxic vapors, gases, or particulates. (Explosive or oxygen-deficient atmospheres also are more probable in confined spaces.) Confined space entry does not automatically warrant wearing Level A Protection, but should serve as a cue to carefully consider and to justify a lower level of protection.

- Suspected/known highly toxic substances: various substances that are highly toxic especially skin absorption for example, fuming corrosives, cyanide compounds, concentrated pesticides. Department of Transportation Poison "A" materials, suspected carcinogens, and infectious substances may be known or suspected to be involved. Field instruments may not be available to detect or quantify air concentrations of these materials. Until these substances are identified and concentrations measured, maximum protection may be necessary.

- Visible emissions: visible air emissions from leaking containers or railroad/vehicular tank cars, as well as smoke from chemical fires and others, indicate high potential for concentrations or substances that could be extreme respiratory or skin hazards.

- Job functions: initial site entries are generally walk-throughs in which instruments and visual observations are used to make a preliminary evaluation of the hazards. In initial site entries, level A should be worn when:

    * there is a probability for exposure to high concentrations of vapors, gases, or particulates;

    * substances are known or suspected of being extremely toxic directly to the skin or by being absorbed.

- Subsequent entries are to conduct the many activities needed to reduce the environmental impact of the incident. Levels of protection for later operations are based not only on data obtained from the initial and subsequent environmental monitoring, but also on the probability of contamination and ease of decontamination.

- Examples of situations where Level A has been worn are:

- Excavating of soil to sample buried drums suspected of containing high concentrations of dioxin.

- Entering a cloud of chlorine to repair a valve broken in a railroad accident.

- Handling and moving drums known to contain waste.

- Responding to accidents involving cyanide, arsenic, undiluted pesticides.

2. The fully encapsulating suit provides the highest degree of protection to skin, eyes, and respiratory system if the suit material resists chemicals during the time the suit is worn. While Level A provides maximum protection, all suit material may be rapidly permeated and degraded by certain chemicals from extremely high air concentrations, splashes, or immersion of boots or gloves in concentrated liquids or sludges. These limitations should be recognized when specifying the type of fully encapsulating suit. Whenever possible, the suit material should be matched in the substance it is used to protect against.

4.3 Level B Protection

A. Personal Protective Equipment

- Pressure-demand, self-contained breathing apparatus (MSHA/NIOSH approved).

OR

- Pressure-demand, airline respirator (with escape bottle for IDLH or potential for LDLH, atmosphere) OSHA/NIOSH approved.
- Chemical resistant clothing (overalls and long sleeved jacket; coveralls or hooded, one or two-piece chemical-splash suit; disposable chemical resistant one-piece suits).
- Coveralls
- Gloves (outer), chemical resistant
- Gloves (inner), chemical resistant
- Boots (inner), leather work shoe with steel toe and shank.
- Boots (outer), chemical resistant (disposable*)
- Hard Hat (face shield*)
- Taping between suit and gloves, and suit and boots.

B. Criteria for Selection

Anyone of the following conditions warrants use of Level B Protection:

1. The type and atmospheric concentration of toxic substances have been identified and require a high level of respiratory protection. These would be atmospheres:

- With concentrations Immediately Dangerous to Life and Health (IDLH).

OR

- Exceeding limits of protection afforded by a full-face, air purifying mask.

OR

- Containing substances for which air-purifying canisters do not exist or have low removal efficiency.

- Containing substances requiring air-supplied equipment, but substances and/or concentrations do not represent a serious skin hazard.

2. The atmosphere contains less than 19.5% oxygen.

3. Site operations make it highly unlikely that the small, unprotected area of the head or neck will be unprotected by the splashes of extremely hazardous substances.

4. Working in confined spaces.

C. Guidance on Selection Criteria

Level B equipment provides a high level of protection to the respiratory tract, but a somewhat lower level of protection to skin than Level A. The chemical resistant clothing required in Level B is available in a wide variety of styles, materials, construction detail, permeability, etc. These factors all affect the degree of protection afforded. Therefore, the Safety Officer should select the most effective chemical resistant clothing based on the known or anticipated hazards and/or job function. (It is anticipated that Level A Protection will not be required under this contract.)

Generally if a self-contained breath apparatus is required, Level B clothing rather than as fully encapsulating suit (Level A) is selected based on needing less protection against known or anticipated substances affecting the skin. Level B skin protection is selected by:

- Comparing the concentrations of known identified substances in air with skin toxicity data.

- Determining the present of substances that are destructive to and/or readily absorbed through the skin by liquid splashes, unexpected high levels of gases, vapor or particulates, or other means of direct contact.

- Assessing the effect of the substance (at its measure air concentrations or splash potential) on the small area of the had and neck unprotected by chemical resistant clothing.

4.4 Level C Protection

A. Personal Protective Equipment

- Full-face, air purifying, canister-equipped respirator for acid/gas/organic vapor with particulate filter. (MSHA/NIOSH) approved.)
- Chemical resistant clothing (overalls and long sleeved jacket; coveralls or hooded one or two piece chemical-splash suite; disposable chemical resistant one-piece suits).
- Coveralls
- Gloves (outer), chemical resistant
- Gloves (inner), chemical resistant
- Boots (inner), leather work shoe with steel toe and shank.
- Boots, chemical resistant (disposable*)
- Hard Hat (face shield*)
- Taping between suit and gloves, and suit and boots

B. Criteria for Selection

Meeting all of these criteria permits use of Level C Protection.

- Measured air concentration of identified substances will be reduced by the respirator to, at, or below the substance's Threshold Limit Value(TLV)/Permissible Exposure Limits (PEL) and the concentration is within the service limit of the canister.
- Atmospheric contaminant concentrations do not exceed IDLH levels.
- Atmospheric contaminants, liquid splashes, or other direct contact will not adversely affect the small area of skin left unprotected by chemical resistant clothing.

4.5 Level D Protection

A. Personal Protective Equipment

- Coveralls

- Leather, steel-toed boots
- As required:
  - Hard hat
  - Safety glasses/goggles
  - Gloves

B. Criteria for Selection

Meeting all of these criteria permits the use of Level D Protection.

- Measured air concentrations of identified substances are below the substance's Permissible Exposure Limit (PEL) or TLV.
- Oxygen content is > 19.5%
- No unknown substances are present.

4.6 Site PPE

Site PPE is anticipated to be modified level D with a possibility of level C upgrade. At that time the project manager will ensure all personnel are wearing appropriate respirators, i.e. organic vapor/HEPA half face or full face respirators. Employees wearing respirators will be in medical monitoring programs and fit tested for their respirators.

5.0 DECONTAMINATION

5.1 Personnel Decontamination

For this project, personnel decontamination is not anticipated. Protective clothing - gloves, boots, tyvek suits - will be properly disposed. The manufacturer's instructions will be followed in sanitizing the respirator masks. The Project Manager will be responsible for supervising the proper protective equipment.

5.2 Equipment Decontamination

Excavating equipment will be mechanically cleaned before leaving the project site.

6.0 SITE ACTIVITIES AND ASSOCIATED PERSONNEL PROTECTIVE REQUIREMENTS

The levels of protection assigned to each activity represent an estimate of exposure potential and protective equipment needed for that exposure. Exposure assessments are based on site chemical characterization and site specific activities.

Table 6.1 identifies specific tasks and associated PPE.

TABLE 6.1

Activity	PPE	Preventive Measures	Upgrade
General Site Work	Level D*	Training, procedures, PPE, work area protection.	N/A
Tank Cleaning	Level C	Training, procedures, PPE, work area protection.	Level B – Based on UST atmosphere
Site Excavation	Level D*	Training, procedures, PPE, work area protection.	N/A

7.0 SITE EMERGENCY RESPONSE

7.1 Assessment

The Project Manager is responsible for ascertaining any possible health or environmental hazards and determining the need for evacuation and notification to the proper authorities.

Site hazards will be addressed daily at the field safety briefing.

7.2 Notification/Signals

* modified level D which includes Tyvek suit, Neoprene gloves and disposable boots, as per Safety Officer's direction.

* modified level D which includes Tyvek suit, Neoprene gloves and disposable boots, as per Safety Officer's direction.

Continuous horn blast from truck will be utilized to alert employees of a site emergency condition. The horn will be used when visual hand signals or verbal communications are impractical.

7.3 Spill Control Procedure

The employee discovering a fire, explosion, spill or other emergency situation is responsible for notifying the Project Manager as soon as possible. The Project Manager will assess the situation to determine if it can be adequately handled by project personnel or if additional assistance is needed. The Project Manager will be responsible for notifying the facility owner and/or regulatory agencies.

Before any employee attempts to clean-up and contain a spill, or take any other action, he or she must be aware of the properties of the material involved and its associated hazards. All employees are familiarized with this information during their training period and are instructed on the proper protective clothing to be worn in such a situation.

7.4 Fire and/or Explosion

The most serious emergency situation that could be faced at the site would be a chemical release or major fire. In the event of a fire or explosion, the Project Manager should be notified as described in the preceding section. The Project Manager is responsible for determining the requirements for outside assistance as well as the necessity for facility evacuation.

The Fire Department should be notified immediately once a fire is detected. Fires will require the assistance of the Fire Department. The Fire Department will be informed of the nature of the wastes handled on the property and that water is not an adequate extinguishing material. Foam will be required to extinguish major fires at the site.

7.4 Safe Area

In the event of an emergency all site employees are to report to the southwest corner of Broadway and Weaver Streets. The project manager will conduct a headcount of all employees at that time.

8.0 Work Areas/Site Control

The Work Area will be delineated with construction fencing along the southern and eastern sides of the project site. The project manager will pre-establish these areas prior to the commencement of work.

9.0 SAFETY EQUIPMENT AND PROTECTIVE CLOTHING SPECIFICATIONS

MC ENVIRONMENTAL SERVICES shall provide all of their direct employee project personnel with the necessary safety equipment and protective clothing, taking into consideration the chemical wastes at the site.

10.0 POTENTIAL SITE HAZARDS

10.1 Heat Stress

Pervious clothing: when the ambient air temperature has exceeded 100°F for more than one hour the Project Manager will begin to monitor employees for signs of heat stress. Monitoring will take the form of measuring oral temperatures. The air temperature will be measured after every shift at a minimum or as determined by the Safety Officer.

Impervious clothing: when the ambient air temperature has exceeded 70°F, the Project Manager will begin to monitor employees for signs of heat stress. Monitoring will take the form of measuring oral temperatures.

Oral temperature at the start of a rest cycle should not exceed 99.5°F. If the temperature is greater than 99.5°F at the end of rest period then the next work cycle should be shortened by 25%. No worker should be allowed to wear protective clothing if the oral temperature is above 101.6°F. Frequency of heat stress monitoring is to be done at the following intervals:

Greater than 90°F every 15 minutes of work;
85-90°F every 30 minutes;
80-90°F every 60 minutes;
75-80°F every 90 minutes;
70-75°F every 120 minutes.

A fluid/electrolyte replacement will be used as necessary to minimize fluid loss. This liquid supplement will be stored in a cooler at the edge of the decontamination zone in plastic squeeze bottles. The plastic bottles will be marked with individual's names. Disposable cups with lids and straws may be used in place of the squeeze bottles. Prior to drinking within the decontamination zone the project personnel shall follow the following decontamination procedures:

1. Personnel shall wash and rinse their outer gloves and remove them.
2. Personnel shall remove their hard hats and respirators and place on a table.
3. Personnel shall remove their inner gloves and place them on a table.
4. Personnel shall wash and rinse their face and hands.

5. Personnel shall carefully remove their personal bottle or cup from the cooler to ensure that their outer clothes do not touch any bottles, cups, etc.

6. The used bottle or cups will not be returned to the cooler, but will be placed in a receptacle or container to be cleaned or disposed of.

7. Personnel shall replace their respirators, hard hats, gloves, and tape gloves prior to re-entering the hazardous zone.

10.2 Biological Hazards

Wastes from hospitals and research facilities may contain disease-causing organisms that could infect site personnel. Like chemical hazards, etiologic agents may be dispersed in the environment via water and wind. Other biologic hazards that may be present at a hazardous waste site include poisonous plants, insects, animals, and indigenous pathogens. Protective clothing and respiratory equipment can help reduce the chances of exposure. Thorough washing of any exposed body parts and equipment will help protect against infection.

10.3 Site Safety Hazards

The project site may contain numerous safety hazards such as:

- Holes or ditches.
- Precariously positioned objects, such as drums or boards that may fall.
- Sharp objects, such as nails, metal shards, and broken glass.
- Slippery surfaces.
- Steep grades.
- Uneven terrain.
- Unstable surfaces, such as walls that may cave in or flooring that may give way.

Some safety hazards are a function of the work itself. For example, heavy equipment creates an additional hazard for workers in the vicinity of the operating equipment. Protective equipment can impair a worker's agility, hearing, and vision, which can result in an increased risk of an accident.

Accidents involving physical hazards can directly injure workers and can create additional hazards, for samples, increased chemical exposure due to damaged protective equipment, or danger of explosion caused by the mixing of chemicals. Site personnel should constantly look out for potential safety hazards, and should immediately inform their supervisors of any new hazards so that mitigative action can be taken.

10.4 Electrical Hazards

Overhead power lines, downed electrical wires, and buried cables all pose a danger of shock or electrocution if workers contact or sever them during site operations. Electrical equipment used on site may also pose a hazard to workers. To help minimize this hazard, low-voltage equipment with ground-fault interrupters and water-tight, corrosion-resistant connecting cables should be used on site. In addition, lightning is a hazard during outdoor operations, particularly for workers handling metal containers or equipment. To eliminate this hazard, weather conditions should be monitored and work should be suspended during electrical storms. An additional electrical hazard involves capacitors that may retain a charge. All such items should be properly grounded before handling. OSHA's standard 29 CFR Part 1910.137 describes clothing and equipment for protection against electrical hazards.

10.5 Cold Exposure

Cold injury (frostbite and hypothermia) and impaired ability to work are dangers at low temperatures and when the wind-chill factor is low. To guard against them: wear appropriate clothing; have warm shelter readily available; carefully schedule work and rest periods; and monitor workers' physical conditions. Health and safety precautions while working in cold weather environments will be evaluated prior to entering the project. Special work place recommendations will be referenced from the ACGIH TLV Guide.

10.6 Noise

Work around large equipment often creates excessive noise. The effects of noise can include:

- Workers being startled, annoyed, or distracted.
- Physical damage to the ear, pain, and temporary and/or permanent hearing loss.
- Communication interference that may increase potential hazards due to the inability to warn of danger and the proper safety precautions to be taken.

If employees are subjected to noise exceeding an 8-hour, time-weighted average sound level of 90 dBA (decibels on the A-weighted scale), feasible administrative or engineering controls must be utilized. In addition, whenever employee noise exposures equal or exceed an 8-hour, time-weighted average sound level of 85 dBA, employers must administer a continuing, effective hearing conservation program as described in OSHA regulation 29 CFR Part 1910.95.

Employees will be required to wear hearing protection when operating power tools.

11.0 Additional Health and Safety Items

11.1 Lock Out/Tag Out

All energy systems will be de-energized and locked and tagged out prior to working on them.

11.2 Communications

To be addressed prior to commencement of site work.

11.3 Security

To be addressed prior to commencement of site work.

11.4 Sanitary Facilities

Site facilities will be utilized for bathroom and washing facilities.

11.5 Trenching and Shoring/Underground Utilities

Operations which require excavation activities will be in accordance with 29 CFR 1926.650 Subpart P, Excavations. The Project Manager will be responsible for ensuring underground facilities protection (UFPO) has been called prior to site activities.

11.6 Confined Spaces

All confined space work will require employees to be trained in confined space entry procedures. The Project Manager will be responsible for identifying specific needs such as issuing permits, air monitoring and rescue requirements.

11.7 First aid/CPR

All site employees will be trained in first aid and CPR.

12.0 Safety Meetings

The Project Manager or his designee will conduct daily safety meetings which will be mandatory for all project personnel. The meetings will provide refresher courses for existing equipment and protocols, and will examine new site conditions as they are encountered.

Additional safety meetings will be held on an as required basis.

TRAINING DOCUMENTATION

Texas Engineering Extension Service
The Texas A&M University System
Occupational and Environmental Safety Training Division

This is to certify that

Mike Craft

has satisfactorily completed the 40 hour Hazardous Materials Emergency Response Course in accordance with 29 CFR 1910.120

November 5-9, 1990

Date

105-46-7602

Certificate Number

Albert B. Stubbs

Division Head

James R. Bradley

Director, Texas Engineering Extension Service

This is to certify that

Michael Craft

has completed

29 CFR 1910.120-8 Hour Refresher Training

Instructor: R. Kip Score

Date: February 14, 2005

Saratoga Safety Inc.
Gansevoort, New York

This is to certify that

Michael Craft

has completed

29 CFR 1910.146-Confined Space Entry Training

Instructor: R. Kip Score

Date: February 14, 2005

Saratoga Safety Inc.
Gansevoort, New York

This is to certify that

Thomas Reed

has completed

29 CFR 1910.120-40 Hour HAZWOPER Training

Instructor: R. Kip Score

Date: July 7-11, 2003

Saratoga Safety Inc.
Gansevoort, New York

This is to certify that

Thomas Reed

has completed

29 CFR 1910.120-8 Hour Refresher Training

Instructor: R. Kip Score

Date: March 7, 2005

Saratoga Safety Inc.
Gansevoort, New York

This is to certify that

Thomas Reed

has completed

29 CFR 1910.146-Confined Space Entry Training

Instructor: R. Kip Score

Date: March 7, 2005

Saratoga Safety Inc.
Gansevoort, New York

This is to certify that

James Shaw

has completed

29 CFR 1910.120 – 40 Hour HAZWOPER Training

Instructor: R. Kip Score

Date: March 19-22, 2001

Saratoga Safety
Clifton Park, New York

This is to certify that

James Shaw

has completed

29 CFR 1910.120-8 Hour Refresher Training

Instructor: R. Kip Score

Date: February 14, 2005

Saratoga Safety Inc.
Gansevoort, New York

This is to certify that

James Shaw

has completed

29 CFR 1910.146-Confined Space Entry Training

Instructor: R. Kip Score

Date: February 14, 2005

Saratoga Safety Inc.
Gansevoort, New York

Certificate of Training

Brand Precision Services, Inc.

This certifies that

Frank A. Waite

has successfully completed the training program requirements for

Hazardous Waste Operations & Emergency Response

40 Hour Initial Training

29 CFR 1910.120

Awarded on this 26'th day of June 1992

Instructor
Eric Barenklau

Eric Barenklau

AC 303

This is to certify that

Frank Waite

has completed

29 CFR 1910.120-8 Hour Refresher Training

Instructor: R. Kip Score

Date: February 14, 2005

Saratoga Safety Inc.
Gansevoort, New York

This is to certify that

Frank Waite

has completed

29 CFR 1910.146-Confined Space Entry Training

Instructor: R. Kip Score

Date: February 14, 2005

Saratoga Safety Inc.
Gansevoort, New York

This is to certify that

Larry Sweet

has completed

29 CFR 1910.120 – 40 Hour HAZWOPER Training

Instructor: R. Kip Score

Date: December 7,10,12,13 & 14, 2001

Saratoga Safety
Gansevoort, New York

This is to certify that

Larry Sweet

has completed

29 CFR 1910.120-8 Hour Refresher Training

Instructor: R. Rip Stone

Date: March 31, 2005

Saratoga Safety Inc.
Gansevoort, New York

SAFETY MEETING FORM

Date: _____ Location: _____ Work Area: _____

Tasks: _____

_____

Safety Issues: Circle applicable category (See HASP for complete information)

PPE: Level D D-modified C other: _____ (specify modifications)

Physical Hazards: slips trips falls noise vehicles cold/heat stress

Control Methods/Emergency Procedures: If necessary, retreat to _____

Monitoring Equipment: PID FID CGI Drager CO other: _____

Topics Covered:

_____ Location of HASP _____ Emergency Medical Care _____ Day's Specific Safety Issues

_____ Organization and Coordination _____ Map of Route to Hospital _____ Other _____

_____ Work Assignments _____ Contingency Plans _____ Other _____

Attendee Name	Company	Signature

GASOLINE MSDS

AMERADA HESS CORPORATION

NFPA 704(Section 16)

MATERIAL SAFETY DATA SHEET

Gasoline, Premium Unleaded **MSDS No. 0324**

1. CHEMICAL PRODUCT and COMPANY INFORMATION (rev. Dec-97)

Amerada Hess Corporation
1 Hess Plaza
Woodbridge, NJ 07095-0961

EMERGENCY TELEPHONE NUMBER (24 hrs): **CHEMTREC (800)424-9300**
COMPANY CONTACT (business hours): Corporate Safety (732)750-6000

SYNONYMS: 93 Octane Conventional (Oxygenated and Non-oxygenated) and Reformulated (RFG) Premium Unleaded Gasoline

See Section 16 for abbreviations and acronyms.

2. COMPOSITION AND INFORMATION ON INGREDIENTS* (rev. Dec-97)

INGREDIENT NAME*	EXPOSURE LIMITS	CONCENTRATION PERCENT BY WEIGHT
Gasoline CAS NUMBER: 8006-61-9	OSHA PEL-TWA/STEL: None established ACGIH TLV-TWA/STEL: 300/500 ppm, A3	100
Benzene CAS NUMBER: 71-43-2	OSHA PEL-TWA/STEL: 1/5 ppm ACGIH TLV-TWA: 0.5/2.5 ppm, A1,skin US Coast Guard: same as OSHA	0.1 to 4..9 0.1 to 1.3* *for reformulated Gasoline
Methyl-tertiary butyl ether (MTBE) CAS NUMBER: 994-05-8	OSHA PEL-TWA/STEL: None established ACGIH TLV-TWA: 40 ppm, A3	0 to 15.0
Tertiary-amyl methyl ether (TAME) CAS NUMBER: 994-05-8	None established	0 to 17.2
Toluene CAS NUMBER: 108-88-3	OSHA PEL-TWA/Ceiling: 200/300ppm OSHA PEL-Peak: 500 ppm (10 min.) ACGIH TLV-TWA: 50 ppm, A4 (skin)	1-25
Xylene, mixed isomers CAS NUMBER: 1330-20-7	OSHA PEL-TWA: 100 ppm ACGIH TLV-TWA/STEL: 100/150 ppm, A4	1-15

A complex blend of petroleum-derived normal and branched-chain alkane, cycloalkane, alkene, and aromatic hydrocarbons. Butane is often added to increase volatility, especially in winter. May contain antioxidant and multifunctional additives. Oxygenated and reformulated gasoline will have legally-required amounts of oxygenates (MTBE and/or TAME).

*Also see Section 15 for list of SARA Section 313 toxic chemicals and their exposure limits.

3. HAZARDS IDENTIFICATION (rev. Dec-97; Tox-97)

EMERGENCY OVERVIEW
DANGER!
EXTREMELY FLAMMABLE – EYE AND MUCUOUS MEMBRANE IRRITANT – EFFECTS CENTRAL NERVOUS SYSTEM – HARMFUL OR FATAL IF SWALLOWED – ASPIRATION HAZARD

High fire hazard. Keep away from heat, spark, open flame, and other ignition sources.

If ingested, do NOT induce vomiting, as they may cause chemical pneumonia (fluid in the lungs). Contact may cause eye, skin and mucous membrane irritation. Harmful if absorbed through the skin. Avoid prolonged breathing of vapors or mists. Inhalation may cause irritation, anesthetic effects (dizziness, nausea, headache, intoxication), and respiratory system effects.

Long-term exposure may cause effects to specific organs, such as to the liver, kidneys, blood, nervous system and skin. Contains benzene, which can cause blood disease, including anemia and leukemia.

EYES
Moderate irritant. Contact with liquid or vapor may cause irritation.

SKIN
Moderate irritant. May cause skin irritation with prolonged or repeated contact. Practically non-toxic if absorbed following acute (single) exposure. Liquid may be absorbed through the skin in toxic amounts if large areas of skin are exposed repeatedly.

INGESTION
The major health threat of ingestion occurs from the danger of aspiration (breathing) of liquid drops into the lungs, particularly from vomiting. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure and even death.

Ingestion may cause gastrointestinal disturbances, including irritation, nausea, vomiting and diarrhea, and central nervous system (brain) effects similar to alcohol intoxication. In severe cases, tremors, convulsions, loss of consciousness, coma, respiratory arrest and death may occur.

INHALATION
Excessive exposure may cause irritations to the nose, throat, lungs and respiratory tract. Central nervous system (brain) effects may include headache, dizziness, loss of balance and coordination, unconsciousness, coma, respiratory failure and death.

WARNING: the burning of any hydrocarbon as a fuel in an area without adequate ventilation may result in hazardous levels of combustion products, including carbon monoxide, and inadequate oxygen levels, which may cause unconsciousness, suffocation and death.

CHRONIC EFFECTS AND CARCINOGENICITY
Contains benzene, a regulated human carcinogen. Benzene has the potential to cause anemia and other blood diseases, including leukemia, after repeated and prolonged exposure. Exposure to light hydrocarbons in the same boiling range as this product has been associated in animal studies with systemic toxicity. See also Section 11-Toxicological information.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
Irritation from skin exposure may aggravate existing open wounds, skin disorders, and dermatitis (rash). Chronic respiratory disease, liver or kidney dysfunction, or pre-existing central nervous system disorders may be aggravated by exposure.

4. FIRST AID MEASURES (rev. Dec-97; Tox-97)

EYES
In case of contact with eyes, immediately flush with clean, low-pressure water for at least 15 min. Hold eyelids open to ensure adequate flushing. Seek medical attention.

SKIN
Remove contaminated clothing. Wash contaminated areas thoroughly with soap and water or waterless hand cleanser. Obtain medical attention if irritation or redness develops.

INGESTION
DO NOT INDUCE VOMITING. Do not give liquids. Obtain immediate medical attention. If spontaneous vomiting occurs, lean victim forward to reduce the risk of aspiration. Small amounts of material which enter the mouth should be rinsed out until the taste is dissipated.

INHALATION
Remove person to fresh air. If person is not breathing, ensure an open airway and provide artificial respiration. If necessary, provide additional oxygen once breathing is restored if trained to do so. Seek medical attention immediately.

5. FIRE FIGHTING MEASURES (rev. Dec-97)

FLAMMABLE PROPERTIES

FLASH POINT:	-45°F (-43°C)
AUTOIGNITION TEMPERATURE:	highly variable: > 530° F (>280°C)
OSHA/NFPA FLAMMABILITY CLASS:	1A (flammable liquid)
LOWER EXPLOSIVE LIMIT (%):	1.4 %
UPPER EXPLOSIVE LIMIT (%):	7.6 %

FIRE AND EXPLOSION HAZARDS
Vapors may be ignited rapidly when exposed to heat, spark, open flame or other source of ignition. Flowing product may be ignited by self-generated static electricity. When mixed with air and exposed to an ignition source, flammable vapors can burn in the open or explode in confined spaces. Being heavier than air, vapors may travel long distances to an ignition source and flash back. Runoff to sewer may cause fire or explosion hazard.

EXTINGUISHING MEDIA
SMALL FIRES: Any extinguisher suitable for Class B fires, dry chemical, CO2, water spray, fire fighting foam, or Halon.

LARGE FIRES: Water spray, fog or fire fighting foam. Water may be ineffective for fighting the fire, but may be used to cool fire-exposed containers.

During certain times of the year and/or in certain geographical locations, gasoline may contain MTBE and/or TAME. Firefighting foam suitable for polar solvents is recommended for fuel greater than 10% oxygenate concentration-refer to NFPA 11 "Low Expansion Foam-1994 Edition."

FIRE FIGHTING INSTRUCTIONS
Small fires in the incipient (beginning) stage may typically be extinguished using handheld portable fire extinguishers and other fire fighting equipment.

Firefighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH/MSHA-approved pressure-demand self-contained breathing apparatus with full facepiece and full protective clothing.

Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied fire fighting foam.

See Section 16 for the NFPA 704 Hazard Rating.

6. ACCIDENTAL RELEASE MEASURES (rev. Dec-97)

ACTIVATE FACILITY SPILL CONTINGENCY or EMERGENCY PLAN.

Evacuate nonessential personnel and remove or secure all ignition sources. Consider wind direction; stay upwind and uphill, if possible. Evaluate the direction of product travel, diking, sewers, etc. to confirm spill areas. Spills may infiltrate subsurface soil and groundwater; professional assistance may be necessary to determine the extent of subsurface impact.

Carefully contain and stop the source of the spill, if safe to do so. Protect bodies of water by diking, absorbents or absorbent boom, if possible. Do not flush sown sewer or drainage systems, unless system is designed and permitted to handle such material. The use of the fire fighting foam may be useful in certain situations to reduce vapors. The proper use of water spray may effectively dispense product vapors or the liquid itself, preventing contact with ignition sources or areas/equipment that require protection.

Take up with sand or other oil absorbing materials. Carefully shovel, scoop or sweep up into a waste container for reclamation or disposal – caution, flammable vapors may accumulate in closed containers.

Response and clean-up crews must be properly trained and must utilize proper protective equipment (see Section 8).

7. HANDLING AND STORAGE (rev. Dec-97)

HANDLING PRECAUTIONS

*******USE ONLY AS A MOTOR FUEL*******

*******DO NOT SIPHON BY MOUTH*******

Handle as a flammable liquid. Keep away from heat, sparks, and open flame! Electrical equipment should be approved for classified area. Bond and ground containers during product transfer to reduce the possibility of static-initiated fire or explosion.

Special slow load procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when higher flash point material (such as fuel oil) is loaded into tanks previously containing low flash point products (such as this product) – see API Publication 2003, "protection Against Ignitions Arising Out of Static, Lightning and Stray Currents.

STORAGE PRECAUTIONS

Keep away from flame, sparks, excessive temperatures and open flame. Use approved vented containers. Keep containers closed and clearly labeled. Empty product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose such containers to sources of ignition.

Store in a well-ventilated area. This storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code". Avoid storage near incompatible materials. The cleaning of tanks previously containing this product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks in Flammable and Combustible Liquid Service" and API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks in Flammable and Combustible Liquid Service" and API RP 2015 "Cleaning Petroleum Storage Tanks".

WORK/HYGIENIC PRACTICES

Emergency eye wash capability should be available in the near proximity to operations presenting a potential splash exposure. Use good personal hygiene practices. Avoid repeated and/or prolonged skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities. Do not use as a cleaning solvent on the skin. Do not use solvents or harsh abrasive skin cleaners for washing this product from exposed skin areas. Waterless hand cleaners are effective. Promptly remove contaminated clothing and launder before reuse. Use care when laundering to prevent the formation of flammable vapors which could ignite via washer or dryer. Consider the need to discard contaminated leather shoes and gloves.

8. EXPOSURE CONTROLS and PERSONAL PROTECTION (rev. Dec-97)

ENGINEERING CONTROLS

Use adequate ventilation to keep vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces.

EYE/FACE PROTECTION

Safety glasses or goggles are recommended where there is a possibility of splashing or spraying.

SKIN PROTECTION

Gloves constructed of nitrile or neoprene are recommended. Chemical protective clothing such as of E.I. DuPont Tychem ®, Barricade®, or equivalent recommended based on degree of exposure.

Note: The resistance of specific material may vary from product to product as well as with degree of exposure. Consult manufacturer specifications for further information.

RESPIRATORY PROTECTION

A NIOSH/MSHA-approved air-purifying respirator with organic vapor cartridges or canister may be permissible under certain circumstances where airborne concentrations are or may be expected to exceed exposure limits or for odor or irritation. Protection provided by air-purifying respirators is limited. Refer to OSHA 29 CFR 1910.134, ANSI Z88.2-1992, NIOSH Respirator Decision Logic, and the manufacturer for additional guidance on respiratory protection selection and limitations.

Use a positive pressure, air-supplied respirator if there is a potential for uncontrolled release, exposure levels are not known, in oxygen-deficient atmospheres, or any other circumstance where an air-purifying respirator may not provide adequate protection.

9. PHYSICAL and CHEMICAL PROPERTIES (rev. Dec-94)

APPEARANCE

A clear water-like liquid

ODOR

A strong, characteristic aromatic hydrocarbon odor. Oxygenated gasoline with MTBE and/or TAME may have a sweet, ether-like odor and is detectable at a lower concentration with non-oxygenated gasoline.

ODOR THRESHOLD

	Odor Detection	Odor Recognition
Non-oxygenated gasoline:	0.5-0.6 ppm	0.8-1.1 ppm
Gasoline with 15% MTBE:	0.2-0.3 ppm	0.4-0.7 ppm
Gasoline with 15% TAME:	0.1 ppm	0.2 ppm

BASIC PHYSICAL PROPERTIES

BOILING RANGE:	85 to 437° F (39 to 220°C)
VAPOR PRESSURE:	7-15 RVP @ 100°F (38°C) (275-475 mm Hg @ 68°F (20°C)
VAPOR DENSITY (air=1):	AP 3 to 4
SPECIFIC GRAVITY (H_2O=1):	0.76
EVAPORATION RATE:	10-11 (n-butyl acetate = 1)
PERCENT VOLATILES:	100%
SOLUBILITY (H_2O):	Non-oxygenated gasoline-negligible (<0.1% @ 77°F). Gasoline with 15% MTBE – slight (0.1-3% @ 77°F)

10. STABILITY and REACTIVITY (rev. Dec-94)

STABILITY: Stable. Hazardous polymerization will not occur.

CONDITIONS TO AVOID

Avoid high temperatures, open flames, sparks, welding, smoking and other ignition sources

INCOMPATIBLE MATERIALS

Keep away from strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke). Contact with nitric and sulfuric acids will form nitrocresois that can decompose violently.

11. TOXICOLOGICAL PROPERTIES (rev. Dec-97; Tox-97)

ACUTE TOXICITY

Acute Dermal LD50 (rabbits): > 5ml/kg — Acute Oral LD50 (rat): 18.75 ml/kg
Primary dermal irritation (rabbits): slightly irritating — Draize eye irritation (rabbits): non-irritating
Guinea pig sensitization: negative

CHRONIC EFFECTS AND CARCINOGENICITY

Carcinogenicity: OSHA: NO IARC: Yes – 2B NTP: No ACGIH: YES (A3)

IARC has determined that gasoline and gasoline exhaust are possibly carcinogenic in humans. Inhalation Exposure to completely vaporized unleaded gasoline caused kidney cancers in male rats and liver tumors in female mice. The U.S. EPA has determined that the male kidney tumors are species-specific and are irrelevant for human health risk assessment. The significance of the tumors seen in female mice is not known. Exposure to light hydrocarbons in the same boiling range as this product has been associated in animal studies with effects to the central and peripheral nervous systems, liver and kidneys. The significance of these animal models to predict similar human response to gasoline is uncertain.

This product contains benzene. Human health studies indicate that prolonged and/or repeated overexposure to benzene may cause damage to the blood-forming system (particularly bone marrow), and serious blood disorders such as aplastic anemia and leukemia. Benzene is listed as a human carcinogen by the NTP, IARC, OSHA and ACGIH.

This product may contain methyl tertiary butyl ether (MTBE): anaimal and human health effects studies indicate that MTBE may cause eye, skin, and respiratory tract irritation, central nervous system depression and neurotoxicity. MTBE is classified as an animal carcinogen (A3) by the ACGIH.

12. ECOLOGICAL INFORMATION (rev. Dec-97)

Keep out of sewers, drainage areas and waterways. Report spills and releases, as applicable, under Federal and state regulations.

13. DISPOSAL CONSIDERATIONS (rev. Dec-97)

Consult federal, state and local waste regulations to determine the appropriate disposal options.

14. TRANSPORTATION INFORMATION (rev. Dec-97)

DOT PROPER SHIPPING NAME:	Gasoline
DOT HAZARD CLASS & PACKING GROUP:	3, PG II
DOT IDENTIFICATION NUMBER:	UN 1203
DOT SHIPPING LABEL:	FLAMMABLE LIQUID

15. REGULATORY INFORMATION (rev. Dec-97)

U.S. FEDERAL, STATE, AND LOCAL REGULATORY INFORMATION

This product and its constituents listed herein are on the EPA TSCA inventory. Any spill or uncontrolled release of this product, including any substantial threat of release, may be subject to federal, state and/or local reporting requirements. This product and/or its constituents may also be subject to other federal, state or local regulations; consult those regulations applicable to your facility/operation.

CLEAN WATER ACT (OIL SPILLS)

Any spill or release of this product to "navigable waters" (essentially any surface water, including certain wetlands) or adjoining shorelines sufficient to cause a visible sheen or deposit of a sludge or emulsion must be reported immediately to the National Response Center (1-800-424-8802) or, if not practical, the U.S. Coast Guard with follow-up to the National Response Center, as required by U.S. Federal Law. Also contact appropriate state and local regulatory agencies as required.

CERCLA SECTION 103 AND SARA SECTION 304 (RELEASE TO THE ENVIRONMENT)

The CERCLA definition of hazardous substances contains a "petroleum exclusion" clause which exempts crude oil, refined and unrefined petroleum products and any indigenous components of such. However, other federal reporting requirements (e.g., SARA Section 304 as well as the Clean Water Act if the spill occurs on navigable waters) may still apply.

SARA SECTION 311/312 – HAZARD CLASSES

ACUTE HEALTH	CHRONIC HEALTH	FIRE	SUDDEN RELEASE OF PRESSURE	REACTIVE
X	X	X	-	-

SARA SECTION 313-SUPPLIER NOTIFICATION

This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986 and of 40 CFR 372:

INGREDIENT NAME (CAS NUMBER)	CONCENTRATION WT. PERCENT	EXPOSURE LIMITS
Benzene (71-43-2)	0.1 to 4.9	See Section 2
Benzene (71-43-2) for reformulated gasoline	0.1 to 1.3*	See Section 2
Ethyl benzene (100-41-4)	<3	OSHA PEL-TWA: 100ppm ACGIH TLV-TWA/STEL: 100/125 ppm
n-Hexane (110-54-3)	0.5 to 4	OSHA PEL-TWA: 500 ppm ACGIH TLV-TWA: 50 ppm
Methyl-tertiary butyl ether (MTBE) (1634-04-4)	0 to 15.0	See Section 2
Toluene (108-88-3)	1 to 25	See Section 2
1,2,4 – Trimethylbenzene (95-63-6)	< 6	OSHA PEL-TWA/STEL: 25 ppm ACGIH TLV-TWA/STEL: 25 ppm
Xylene, mixed isomers (1330-20-7)	1 to 15	See Section 2

CANADIAN REGULATORY INFORMATION (WHMIS)

Class B, Division 2 (Flammable Liquid)

Class D, Division 2A (Very toxic by other means) and Class D, Division 2B (Toxic by other means)

16. OTHER INFORMATION (rev. Dec-97)

NFPA® HAZARD RATING

HEALTH: 1 Slight
FIRE: 3 Serious
REACTIVITY: 0 Minimal

HMIS® HAZARD RATING

HEALTH: 1* Slight
FIRE: 3 Serious
REACTIVITY: 0 Minimal
*CHRONIC

SUPERSEDES MSDS DATED: 9/16/96

ABBREVIATIONS:

AP = Approximately <= Less than >= Greater than
N/A = Not Applicable N/D = Not Determined ppm = parts per million

ACRONYMS:

ACGIH American Conference of Governmental Industrial Hygienists
AIHA American Industrial Hygiene Association
ANSI American National Standards Institute (212)642-4900
API American Petroleum Institute (202)682-8000
CERCLA Comprehensive Emergency Response, Compensation, and Liability Act
DOT U.S. Department of Transportation [General Info: (800)467-4922)
EPA U.S. Environmental Protection Agency
HMIS Hazardous Materials Information System
IARC International Agency for Research on Cancer
MSHA Mine Safety and Health Administration
NFPA National Fire Protection Association (617)770-3000
NIOSH National Institute of Occupational Safety And Health
NOIC Notice of Intended Change (proposed change To ACGIH TLV)
NTP National Toxicology Program
OPA Oil Pollution Act of 1990
OSHA U.S. Occupational Safety & Health Administration
PEL Permissible Exposure Limit (OSHA)
RCRA Resource Conservation and Recovery Act
REL Recommended Exposure Limit (NIOSH)
SARA Superfund Amendments and Reauthorization Act of 1986 Title III
SCBA Self-Contained Breathing Apparatus
SPCC Spill Prevention, Control And Countermeasures
STEL Short-Term Exposure Limit (generally 15 minutes)
TLV Threshold Limit Value (ACGIH)
TSCA Toxic Substances Control Act
TWA Time Weighted average (8 hr.)
WEEL Workplace Environmental Exposure Level (AIHA)
WHMIS Workplace Hazardous Materials Information System (Canada)

DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES

Information presented herein has been compiled from sources considered to be dependable, and is accurate and reliable to the best of our knowledge and belief, but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied, except those that may be contained in our written contract of sale or acknowledgment.

Vendor assumes no responsibility for injury to vendee or third parties proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third person proximately caused by abnormal use of the material, even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in their use of the material.

CONFINED SPACE ENTRY PERMIT

All confined space entry must conform to HS 14 – Permit-Required Confined Spaces

Project Name:	Project No:	Date:

Qualified Person: _____ Project Manager: _____

Supervisor of Crew: _____ Project Address: _____

Tank or Vessel No./Name: _____ _____

Anticipated Hazards: _____

Describe Material Previously in Confined Space: _____

Purpose of Entry: _____

Monitoring Instrument Used: _____

Acceptable Entry Conditions: _____ Frequency of Testing: _____

Time	% of LEL <10%	02% >19.5%/23/5%	CO <50 ppm	Toxic	Toxic	Initial

Checklist	Yes	Does Not Apply
Monitoring Equipment Calibrated		
All Lines Blanked or Disconnected		
Electrical Service Disconnected/Locked Out		
Grounding/Bonding Cables in Place		
Electrical Equipment Approved for Explosive Atmosphere		
Ground Fault Circuit Interrupters (GFI) Operational		
Ignition Sources Removed/Isolated		
Respiratory Protective Equipment Operational		
Safety Harnesses & Lifelines Operational		
Fire Suppression Equipment Available		
SCBA or Separate Rescue Breathing Supply Available		
Ventilation Equipment in Use		
Special Warning/Caution Signs Posted		
Communications Available and Tested		

Employees Assigned	Initials

Rescue & Attendant Person(s) Assigned

Rescue Systems/Equipment: _____

Respiratory/Protective Clothing Required: _____

Measures to Isolate Hazards: _____

Communications Procedures: _____

This permit is issued only for the above-named employees. Employees will initial the permit in space provided to indicate that appropriate training and entry procedure instructions have been provided.

Person Completing Permit: _____ Date: _____

Approved by: _____ Date: _____

Site Supervisor: _____ Date: _____

Health and Safety Manager Review: _____ Date: _____