RESPONSIBILITIES & DUTIES

MANAGEMENT

A safe workplace begins at the top at the highest level of management; however, everyone in the organization has a role to play in the implementation and enforcement of a safety plan. It is the aim of C.L. Thomas, LLC. and/or Thomas Fuels, Lubricants and Chemicals, Inc.. to minimize the risk of injury to our employees and other persons by providing the resources for its successful implementation. A poor safety record is a management problem.

RESPONSIBILITIES:

- Safety begins with management commitment and participation.
- Set goals, establish accountability and become involved.
- Identify hazards and risks associated with tasks performed on a regular basis.
- Provide technical support for implementation of the injury and illness reporting procedures.

DUTIES

- Communicate safety commitment and policy to all employees and mandate 100% participation.
- Attend company safety meetings.
- Review accident reports and complete inspection on a regular basis.
- Make needed changes to accommodate unsafe procedures and communicate them to the team.
- Set a good example.

RESPONSIBILITIES & DUTIES

OPERATIONS MANAGERS

Operations Managers have multiple responsibilities to include that of Safety Coordinator. These individuals are responsible for carrying out the expectations of management, relaying all pertinent information regarding the Safety Program and maintaining compliance and interest in safety at the warehouse level. They are the key person for each location's successful contribution to safety.

RESPONSIBILITIES

- Compile and distribute safety and health information to all employees.
- Provide continuous safety training for employees; documenting all sessions.
- Operations Managers have a direct responsibility for all employees in their geographic areas as well as the area of fellow Operations Managers.
- They will help build safety into the work process and be alert for safety and health problems.
- Ensure follow through with all employees in their areas of control for training and compliance.
- Whenever possible, accompany injured employees to the doctor for medical attention to work related matters.
- Assist in conducting investigations and in the reporting of all incidents, and assist in case management cases.
- Evaluate effectiveness of the safety program.

RESPONSIBILITIES & DUTIES

OPERATIONS MANAGERS

DUTIES:

- Ensure training of all new employees.
- Re-Train present employees ongoing.
- Make department inspections.
- Prepare Accident Reports and forward to Risk Management.
- Follow-thru with corrective actions
- Enforce safety rules.
- Make daily safety contacts.
- Observe, resolve, report, document and correct unsafe acts and conditions immediately.
- Maintain safety equipment – (up-to-date and availability)
- Demonstrate the level of safety you expect. Lead by example.

RESPONSIBILITIES & DUTIES

EMPLOYEE

RESPONSIBILITIES:

- Demonstrate responsibility for their own safety and the safety of their fellow workers.
- Immediately report all employee injuries, customer incidents, vehicle collisions, near misses, fires, spills, and unsafe conditions or acts to their supervisor; if possible correct the situations.
- Follow the guidelines set forth in our policies regarding employee safety and training. Drivers, Warehousemen and/or Office Members must learn the hazards of their jobs and abide by safety regulations.
- Complete required safety inspections; assist in investigations if asked to do so.
- Obey any reasonable instruction aimed at protecting their health and safety while at work.
- Use appropriate equipment provided for protection at work.
- Be drug and alcohol free so as not to endanger his or her own or any other persons' health or safety.

RESPONSIBILITIES & DUTIES

EMPLOYEE

DUTIES:

- Abide by safety rules. Report hazardous conditions or concerns.
- Communicate safety to fellow employees.
- Make suggestions to help improve safety.
- Assist in identifying hazards and risks.

SAFETY TRAINING REQUIREMENTS:

- For all new employees,
- When new equipment, procedures, or processes have been introduced,
- When employee safety performance needs improvement,
- Mandatory Meetings.

Policies
Thomas Fuels, Lubricants and Chemicals, Inc.

- **Harassment -** In The Workplace
- **Drug and Alcohol –** Policy Statement
- **Drug and Alcohol –** Acknowledgement Of Policy
- **Motor Vehicle Record –** MVR Policy
- **Driving Policy**
- **Vehicle Usage Policy**
- **Return – To – Work & Light Duty Job Policy**
- **Safety Meeting Policy** – Record Keeping

Harassment
In The Workplace

POLICY

No employee shall be subjected to harassment on the basis of race, color, religion, age, sex, handicap, national origin, or veterans status.

Employee conduct that has the purpose or effect of unreasonable interfering with an individual's work performance or creating intimidating, hostile or offensive work environment, inappropriate jokes, slurs, tricks, name calling, sexual advances or comments can constitute harassment and are forbidden.

Employee conduct, whether intentional or unintentional, that results in the harassment of other employees shall not be condoned and may result in disciplinary action upon review by the Personnel Manager

and/or Steering Committee.

Harassment
In The Workplace

PROCEDURE

Any employee who believes that he/she has been subjected to harassment or discrimination at work should contact his/her supervisor, or Department Manager or the Personnel Manager.

All Managers and Supervisors who receive complaints of harassment, or if harassment problems arise in their areas, shall notify the Human Resources Manager immediately in order to conduct an internal investigation and to take appropriate action.

All complaints will be treated in the strictest confidence and there will be no reprisals or retaliation by the company or its representatives toward the individual complaint.

Drug and Alcohol Program
Policy Statement

Thomas Fuels, Lubricants and Chemicals, Inc. wants to provide each and every employee with a safe workplace. The use of drugs and alcohol in the workplace can lead to accidents and otherwise endanger our employees. In fact drug and alcohol abuse is the leading cause for workplace deaths and accidents. Therefore **Thomas Fuels, Lubricants and Chemicals, Inc.** has started a drug and alcohol program directed towards eliminating the use of drugs and alcohol in the workplace and establishing testing for drug and alcohol use.

GENERAL DEFINITION OF SAFETY SENSITIVE FUNCTION:

On-duty function, including time at carrier, terminal, public property, or other areas, waiting to be dispatched; time spent inspecting or servicing a vehicle; all driving time; loading and unloading, or supervising loading and unloading; remaining in readiness to operate the vehicle; time spent attending to or associated with an accident; repairing or assisting to a disabled vehicle.

DRUG AND ALCOHOL USE:

No driver shall use alcohol while performing safety-sensitive functions.

No driver will perform safety-sensitive functions within eight hours after using alcohol.

No employee may report to work under the influence of drugs and alcohol.

Drug and Alcohol Program
Acknowledgement of
Policy Statement

No driver who has an accident while performing safety-sensitive functions shall use alcohol for eight hours following the accident, unless the driver has been given a post-accident test.

Commercial Drivers License Drivers are required to submit to a post-accident alcohol test, random alcohol or controlled substance test, reasonable suspicion alcohol or controlled substance test, or follow-up alcohol or controlled substance test.

Any and all potential driver candidates, would be required an initial drug and alcohol screening, prior to an offer of employment.

Any employee found to be in violation of this policy will be restricted from performing a safety-sensitive function and subject to disciplinary action, not to exclude termination.

_____ _____

EMPLOYEE **Date**

_____ _____

Thomas Fuels, Lubricants and Chemicals, Inc. **Date**

Motor Vehicle Record (MVR) Policy

It is the policy of **Thomas Fuels, Lubricants and Chemicals, Inc.** to obtain and review the Motor Vehicle Record (MVR) on each prospective driver* before an offer for employment is extended to the individual. Management will review the Motor Vehicle Record to ascertain the applicant or employee holds a valid license and their driving record is within the parameters set by company driving policy.

A "Driver" is someone who could not perform the duties assigned to them without driving a vehicle.

Management will conduct an annual review of each employee's driving performance, where driving is a part of his or her job. Based upon the outcome of the annual review, the driving exposure, and the losses experienced during the time past year, MVR's may then be ordered and reviewed. As a company policy MVR's are checked each three years on all employees where driving is part of their job description, annually on drivers under the age of 25, and annually on drivers identified during the annual driving review. If the employee's driving record does not meet the criteria set by management, driving privileges may be revoked, or other disciplinary action may be taken.

Driving Policy

Thomas Fuels, Lubricants and Chemicals, Inc. has made a commitment of safety, service, and quality to both our employees and customers. **Thomas Fuels, Lubricants and Chemicals, Inc.** mandates that both our employees and non-employees operate all vehicles owned by or used by the company in a safe and economical manner. The following summarizes policy guidelines.

1. Vehicles are not to be operated unless in a safe operating condition. **[NO EXCEPTIONS]**
2. Drivers must be physically and mentally able to drive safely.
3. Drivers must conform to all traffic laws with allowances made for adverse weather and traffic conditions. **[2 HRS TO SAFE HARBOR]**
4. Respect the rights of other drivers and pedestrians. Courtesy is contagious.
5. Drivers may not use drugs or alcohol, or be under the influence of drugs or alcohol, while operating a vehicle owned by or used by the company.

ACCIDENTS

All accidents are to be reported to management of **Thomas Fuels, Lubricants and Chemicals, Inc.** within twenty-four (24) hours after the accident occurs. All accidents will be reviewed and determination made as either preventable or non-preventable. *A preventable accident is defined as an accident in which the driver failed to do everything reasonably possible to avoid it.*

Driving Policy

MVR STANDARDS

Motor Vehicle Records (MVR's) will periodically be checked on all employees where driving is a part of their job. The MVR will be reviewed to ascertain the employee holds a valid license and their driving record is within the parameters set forth by company management.

RADAR DETECTORS

The use of radar detectors is forbidden in all vehicles owned or used by the company.

PASSENGERS

Hitchhikers and passengers, other than company employees, are not permitted.

SEAT BELTS

All occupants must wear seat belts whenever the vehicle is in motion.

SECURING CARGO

Cargo will be secured and all doors locked while en route and while the vehicles are parked.

Cell Phone Policy

Employees are not to use cellular telephones under any circumstances

Vehicle Usage Policy

Thomas Fuels, Lubricants and Chemicals, Inc. has developed a vehicle usage policy. Company owned vehicles and/or those used by company employees, will be operated in a safe and economical manner.

The guidelines are:

1. Operate vehicles in a manner consistent with the Driving Policy of **Thomas Fuels, Lubricants and Chemicals, Inc.** Operating any vehicle outside outlined rules will not be tolerated.

2. All traffic violations received while operating the assigned vehicle will be paid by the employee; if at fault.

3. Report vehicle defects and needed repairs to company management so necessary repairs can be made.

4. The employee is not to give permission for the vehicle to be driven by another person. Specific permission must be obtained from company management for any personal use of the vehicle, and/or its equipment.

5. Report all accidents to the Manager consistent with **Thomas Fuels, Lubricants and Chemicals, Inc.** *"Accident Reporting Policy."*

Return-To-Work & Light Duty Job Policy

If you become ill or injured as a result of a job related accident, you will be missed by other employees in your department. Employees have the responsibility to return to work at the earliest possible time, commensurate with your health and safety.

Thomas Fuels, Lubricants and Chemicals, Inc. will actively seek to return disabled employees covered by worker's compensation to productive work as quickly as possible, in cooperation with the employee's physician or health care provider.

If necessary, a temporary job may be provided for you that is within your physical capabilities, and consistent with company needs. Even working at a partial capacity will assist your fellow employees in completing the work. Efforts will be made to return you to your previous job, when possible.

Possible Light Job Duties; depending on injury, capabilities, and company needs:

- Ensure, both Supervisor and Employee complete the Light Duty Job Policy Form, and once complete, submit to Personnel.

Safety Meeting Policy

Why have Safety Meetings?

They make a safety program take off and take root. They are a key part of Safety Training and most importantly the way we motivate workers to get safety out into the workplace.. They are a key part of Safety Training and most importantly the way we motivate workers to get safety out into the workplace. Safety Training is all in the attitude – Team involvement, focus on specific hazards and operations are all key components of an effective Safety Meeting, and more so to an effective Safety Program.

Who conducts Safety Meetings?

Your Supervisor has the responsibility to carry out the Safety Training requirements. They introduce new equipment, processes, procedures and substances to workers, and drive the operations side of the business.

How often are Safety Meetings conducted?

We should at a minimum, conduct safety meetings on a monthly basis. You are required to attend the meetings. If you cannot attend, make arrangements with your supervisor to catch up on the latest safety topic.

Safety Meeting Policy

How can you affect the Safety Topic?

Participate! Ask questions! Share experiences! Make observations! As a member of the Thomas Fuels, Lubricants and Chemicals, Inc. Team, you are important. We want to hear from you!

Attendance / Record Keeping

- Ensure all members required to participate in the training are in attendance, and that each has signed in on a Safety Meeting / Topic Sign-In Sheet.
- Good Record Keeping of the Safety Meetings held and those in attendance, will prove beneficial in several ways;
  1. Satisfy OSHA and DOT Safety Requirements
  2. Satisfy Customer requirements, particularly those with an approved (MSA) Master Service Agreement
  3. Provides discounts through our Insurance Provider(s)
  4. Minimizes Legal Liability exposure

- Keep a copy of each Safety Meeting's Safety Topic, to include a copy of the Employee Sign-In Sheet.
- Forward to Risk Management, a completed Employee Safety Sign-In Sheet, from each Safety Meeting held.

- *Meetings are mandatory for almost any company, regardless of its goals, because of the many laws and regulations governing workplace safety that have been issued by federal and state government in the recent years.*

General Safety

A. GENERAL SAFETY GUIDELINES

1. General Conditions:

a. It is Thomas Fuels, Lubricants and Chemicals, Inc. policy that all employees are entitled to safe and healthful working conditions including work place environment, tools and work procedures. This document is intended to help you and your co-workers implement that policy.

b. All published work rules must be obeyed. Violations will subject your to appropriate discipline. If you don't agree with a rule or don't understand it, you should discuss it with your supervisor, yet it must be obeyed until such time as it has been changed in writing.

c. All employees have the right and responsibility to bring any conditions that they feel to be unsafe to the attention of their supervisor. Thomas Fuels, Lubricants and Chemicals, Inc. will not knowingly allow any unsafe conditions to exist.

d. All safety rules are established to help prevent accidents. Additional rules may be required from time to time and Thomas Fuels, Lubricants and Chemicals, Inc. reserves the right to revise these rules at its discretion.

e. All employees are required to practice common sense hygiene rules such as washing before eating, changing clothes regularly, avoiding use of flammable or toxic solvent for washing hands, etc.

General Safety

B. ORGANIZATION OF SAFETY

1. General Responsibility:

The Operations Manager of a Thomas Fuels, Lubricants and Chemicals, Inc. location, has general responsibility for building and grounds safety.

2. Managerial Responsibility:

Office Managers and Supervisors are responsible for employee safety, training, and the application of safety policies in their areas of responsibility.

3. Ultimate Responsibility:

Each employee must accept the final responsibility for his/her own safety performance. Employees should help each other in the spirit of a good neighbor and quality teamwork.

C. EMPLOYEE GENERAL CONDITIONS

1. It is the responsibility of every employee to always be conscious of safety and to perform with the goal of IFO – Incident Free Operations.

2. If you are not sure on how to do a job safely, ask your supervisor.

3. Obey all safety rules and signs. All safety rules are established to help prevent accidents. Violations will subject you to appropriate discipline.

General Safety

C. EMPLOYEE GENERAL CONDITIONS

4. Company policy requires that all work related injuries or illness regardless of how minor, be reported to your supervisor immediately. If you are uncertain about an incident, but believe it has resulted in or could result in future injury or illness, don't wait until it becomes a problem. Report it immediately.

Prompt reporting allows management the opportunity to direct immediate attention to the occurrence in order to determine what happened, determine whether medical treatment is required, correct any related unsafe condition or situation, and record the case if appropriate.

Failure to promptly report an injury, illness or potential incident can lead to:

- Minor injury becoming a major injury due to lack of proper attention,
- The case being treated as NOT work related,
- Questions about whether an incident occurred,
- Disciplinary action being taken or,
- Worker's Compensation difficulties,
- OSHA record keeping violations

General Safety

D. HEALTH AND FIRST AID

1. First Aid is the emergency temporary treatment given to a victim of an accident or sudden illness requiring attention until professional medical care is given. In accordance with Thomas Fuels, Lubricants and Chemicals, Inc. policy, there will be Red Cross Certified First Aiders at your facility, trained in First Aid for artificial respiration, control of bleeding, treatment for shock, chemical burns, broken bones, chocking, heat stroke, poisoning, etc.

a. A roster of trained First Aiders is posted or listed in the facility "Emergency Information Policy." Should First Aid Services be needed, phone your facility's Dispatcher and/or Manager, with a request for these type services.

b. For a major life threatening injury, call either the Fire Department or local Rescue Squad immediately, except where local rules direct otherwise. In areas where 911 is not available, the telephone numbers of physicians, hospitals, or ambulances shall be conspicuously posted on the list of Emergency Contacts and/or posted by Dispatch Office telephones. Proper equipment for prompt transportation of the injured person to a physician or hospital or a communication system for contacting necessary ambulance service shall be provided.

c. A First Aid Kit is available and equipped with necessary supplies to handle minor injuries that may occur at your location. Report all users of first aid materials to your supervisor. This will permit replenishing the stock, so that supplies are available when next needed.

d. First aid kits shall consist of appropriate items and stored in a weather proof container with individual sealed packages of each type of item.

e. The contents shall be checked before being sent out to each job and at least weekly on each job to ensure that the expended items are replaced.

General Safety

D. HEALTH AND FIRST AID (cont'd)

f. All injuries or illness, no matter how slight, which occur on Thomas Fuels, Lubricants and Chemicals, Inc. premises or while you are doing your assigned job, even if away Thomas Fuels, Lubricants and Chemicals, Inc. premises, must be reported promptly [within 24 hrs] to your supervisor. Thomas Fuels, Lubricants and Chemicals, Inc. is required by law, to keep an accurate record of all such incidents, and in serious cases, must make immediate reports to a governmental agency. Usually an Accident Report must be filled out even if the injury or illness is treated on the job. Failure to comply with this rule will subject you to disciplinary action.

g. Eye injuries, including foreign bodies embedded in the eye, must be treated only by a nurse or physician. Do not let fellow employees attempt to remove dirt or other objects from your eye. First Aid consists only of flushing the injured eye at an approved eye wash fountain. Never use high- pressure water directly from a hose or faucet.

h. Be careful when rubbing sweat from eyes or forehead. Metal or chemicals on hand can become embedded in the eye.

i. Spilled Chemicals: Handle chemicals such as acids, alkalis, solvent or caustic agents with special care and while wearing appropriate PPE. First Aid treatment for spilled chemicals on the face or body consists of the following: IMMEDIATE WASHING of the affected area by using large quantities of water. Remove all clothing while under the shower, if the chemicals are spilled on the body. Wash for at least [10] minutes.

j. Always wash hands after finishing work, especially after using chemicals and before eating.

General Safety

E. EMERGENCY EVACUATION PROCEDURES

1. On his first day of work, each employee [new or transferred] will be shown the emergency evacuation routes for the facility. All employees starting work at Thomas Fuels, Lubricants and Chemicals, Inc. shall be informed and trained in the procedures in the event of evacuation or emergency first aid.

2. Know the rules for evacuating and be prepared to follow them if the need arises:

- You should know and recognize the facility's evacuation alarm
- When directed to evacuate, do so immediately in an orderly fashion.
- Walk quickly out of the building, but Do Not Run
- Know the location of all emergency exits
- Once you are out of the building, go directly to your predetermined meeting place, where all members can be accounted for.
- A head count will identify missing persons.
- Do not interfere with emergency crews trying to do their job, stay back out of the way.
- When an All's Clear is sounded, you may again proceed back to your work area.

General Safety

F. Personal Behavior

1. Horseplay in any form will not be tolerated on Thomas Fuels, Lubricants and Chemicals, Inc. property. This includes throwing things, scuffling, practical jokes and general fooling around.

2. Illegal drugs or intoxicants shall not be carried onto Thomas Fuels, Lubricants and Chemicals, Inc. property. No one under the influence of alcohol or drugs shall be allowed on the premises. Employees reporting to work under the influence of drugs or alcohol will be subject to disciplinary procedures that may result in termination of employment. Any employee found by subsequent urinalysis test to be a user of drugs, will be subject to disciplinary action up to and including discharge.

3. Fighting, attempted bodily injury, threatening or interfering with any fellow employee is prohibited on Company property. Violators will be subject to disciplinary procedures that may result in termination of employment.

4. Weapons of any form shall not be permitted on Thomas Fuels, Lubricants and Chemicals, Inc. property, at any time. Violations of this rule will cause disciplinary procedures that may result in termination of employment.

General Safety

F. PERSONAL BEHAVIOR – Cont'd

5. Always obey all posted "Danger", "Warning," " Hazard" and other precautionary instructional signs.

6. Do not run. Running on Thomas Fuels, Lubricants and Chemicals, Inc. property is prohibited.

7. Never jump onto or off a surface. Use the stairs or ladders provided for access.

8. Smoking in areas posted "No Smoking" may subject you to disciplinary action. "Spitting" in work areas constitutes a health hazard and will not be tolerated.

9. While working on weekends, holidays, or after regular scheduled working hours, you must observe the following rules:

- Perform work of a hazardous nature, only in the presence of a co-worker for the entire duration of the job.
- Ascertain facility security precautions
- Use only authorized machinery or equipment
- Work only in your authorized area

10. The maximum driving speed permitted on Company property is 5mph or as otherwise posted. Park your vehicle only in marked parking spaces.

11. Radios, tape players, or other devices may not be played at levels that cause a distraction. Earphone devices are prohibited.

General Safety

G. FIRE PROTECTION AND EMERGENCY EQUIPMENT

1. Always obey posted "No Smoking" signs. Smoking is permitted in designated area only.

2. Fire-fighting equipment, emergency exits, emergency equipment, and electrical panels must be kept clear and ready for immediate use. Do not block them with equipment or material. All personnel should be familiar with the location of all exits and fire fighting equipment. Never violate aisle markings for storage.

3. Never place anything in front of or across an emergency exit, an aisle leading to an emergency exit, fire extinguishers or other fire fighting equipment, fire alarm boxes, electrical lighting or power panels [especially emergency shut down switches], emergency stop or isolating valves, etc.

4. Make sure all flammable liquids and gases are not exposed to ignition sources. Always transport flammable liquids in safety cans.

5. Don't weld or use spark or heat producing equipment where flammables may be present, or when your clothes are wet with oil, grease or flammable solvents.

6. Do not leave pressure in oxy-fuel gas hoses when leaving the area. First shutoff oxygen and fuel gas supply at the cylinder or header, then vent the hose.

7. Promptly report any use of a fire extinguisher to your supervisor. Leave fire extinguishers properly hung in their designated locations. Promptly report any missing extinguishers to your supervisor.

8. If a fire occurs, an employee should notify their supervisor and the Fire Department immediately.

- ❑ Fire Extinguisher Safety (page 56)
- ❑ Flammable & Combustible Liquids Safety (page 57)

General Safety

H. Housekeeping

1. All employees are responsible for the coordination of their individual work areas. If you make a mess, you clean it up.

2. All tools, equipment, materials must be kept in designated storage areas or containers except when in use. Do not store your material in another department's work area.

3. Rags, gloves, small parts, etc. shall not be left on the floor, stairs, ladders, railings, machinery or any place other than their designated bins and/or containers.

4. Keep tools clean of oil, grease, dirt and other accumulations that may render them hazardous to use.

5. Oily rags and other combustible wastes must be placed only in proper metal containers. These containers must be emptied regularly.

6. Toxic, flammable or dangerous materials must be stored in designated safety cabinets or storage rooms, unless other guidelines direct otherwise.

7. Spills of water, oil, grease that can make floors slippery must be cleaned up promptly. Continuing spills from leaks must be reported immediately to your supervisor, and as well reported if not corrected.

8. Food scraps, beverage cups, etc. must be discarded only in designated sanitary containers. Never throw them into stock bins, scrap containers, etc.

9. Be considerate of fellow coworkers. If you borrow tools, get their permission and return them promptly. If you mess their area, clean it.

General Safety

I. DRESS FOR WORK AREAS [EXCLUDING OFFICES]

1. Do not wear loose clothing around moving machinery, where it could get caught. Keep sleeves buttoned or rolled above the elbows. Shirts must be tucked into trousers. Trousers must be full length. Coats and Jackets must be buttoned or zipped.

2. Brief shirts and other partial upper body coverings are not permitted.

3. Rings, watches, necklaces and other jewelry are generally not permitted.

4. Wear substantial work shoes/boots or other protective footwear as specified by the job.

5. Long hair shall be tied back, restrained in a cap or net, or otherwise prevented from being a hazard either by obscuring the vision or being caught in machinery or work.

6. Facial hair that may hinder a proper seal must not be present with the use of respiratory equipment.

7. Wear gloves to protect your hands where required. Do not wear gloves when working around machinery, including portable power tools in which a glove may be caught. Be sure the glove construction and material is appropriate for the job and the conditions.

General Safety

J. HAZARDOUS WORK PERMIT

1. Work Permits are required for installation of new equipment and repair of old as well as new applications, experiments and testing of new equipment for which a potential hazard exists. Work Permits are also required for the following activities:

- Entry into a vessel, confined space or area which has a possibility of creating an oxygen enriched/deficient atmosphere.
- Torch work [arc and/or gas] away from designated welding shop or welding area
- Areas where toxic materials or flammable gases/liquids may be present
- All electrical installations, repair and/or troubleshooting
- Installation, maintenance and repair of hoisting equipment.

K. CONFINED SPACE ENTRY

There are many potential hazards that must be guarded against; before entering tanks, vessels, and excavations. Among them, the obvious deficiency of oxygen, poisonous gases, explosive mixtures and harmful chemicals such as ammonia. The following rules shall be followed without exception:

- Only authorized personnel may enter a confined space.
- Self –Contained or supplied air respirators shall be used whenever entering tanks, vessels and atmospheres having an element of inhalation hazard.
- An attendant shall stay on the immediate outside in line of sight or verbal contact of the worker at all times, to summon aid if necessary. If a respirator is needed, two [2] respirators must be available, one for the person entering and the other for rescue.

General Safety

L. Commercial Vehicles

The safety precautions to be exercised in the filling, loading and unloading of a trailer and/or truck are listed below:

- Trailer landing gear shall be lowered in place prior to disengaging the tractor.
- Wheel chocks are required to be in place prior to disengaging tractors from trailers and trucks while unattended.
- On fuels or any flammable products, a grounding cable must be secured to the trailer prior to filling or discharging.
- At no time is the tractor engine to be started or allowed to run [except PTO Operation], during flammables filling operation.
- A portable stand, using flags or a printed sign, shall be placed in front of trailer during filling operations.
- No Smoking, sparks or open flame within a distance of 50 feet of filling or discharging of a flammable gas or lubricant.
- Drivers should immediately contact their Supervisor, if he observes what would be an unsafe operation of filling and/or discharging of a flammable product.
- Filling and discharging operations shall not commence or continue if any of the following conditions exist, that which would be hazardous to the transfer operation:

Prior to disconnecting the fill or discharge line, the pressure must be relieved by opening the vent valve

Failure to disconnect a transfer hose prior to moving a trailer shall be considered a serious infraction of safety rules and will be subject to disciplinary action up to and including dismissal.

General Safety (cont'd)

M.1. Rigging

- The person attaching the load is responsible for ensuring that no chain, cable, rope or hook is used to lift a weight above its normal rated capacity. All slings should carry identification tags.
- The center of gravity of the load must be directly below the main hook and below the lowest point of attachment of the slings, so that it will not tend to topple or slide out of the slings, and so that no leg of a sling will be overlooked.

  a. For odd shaped loads, the rigger must estimate the center of gravity and use trial and error methods to correctly position the load on the hook.

  b. If any load tilts more than five degrees after it is lifted clear of the ground the load must be landed and rigged again.
- Protect slings from sharp corners or edges by padding or timber blocks.
- Ensure that there are no kinks or twists in the cable when rigging a load to be lifted.
- Do not permit bending near any splice or attached fitting of a wire rope sling.
- Avoid sling angles of less than 45 degrees:

  a. Calculating sling loads can mean the difference between a safe lift or a catastrophe. As the angle formed by the sling leg and a horizontal plane decreases from a vertical (90 degree) position, the amount of lifting capacity also decreases, because the tension in each of leg increases, even though the weight of the load does not change.

General Safety (cont'd)

b. The sharp increase in sling stress which occurs at low-slung angles is emphasized in the following table:

ANGLE LOAD FACTORS

Angle of Sling Leg & Horizontal	Multiplier for Stress on Leg	Angle of Sling Leg & Horizontal	Multiplier for Stress on Leg
90 degrees (vertical)	1.000	45 degrees	1.414
85 degrees	1.004	40 degrees	1.555
80 degrees	1.015	35 degrees	1.742
75 degrees	1.035	30 degrees	2.000
70 degrees	1.064	25 degrees	2.364
65 degrees	1.104	20 degrees	2.924
60 degrees	1.155	15 degrees	3.861
55 degrees	1.221	10 degrees	5.747
50 degrees	1.305	5 degrees	11.490

NOTE: The multiplier indicated in the above table indicates how many times the stress on each leg increases as the angle of the sling leg with the horizontal plane at the top of the load decreases. The stress on each leg at 90 degrees would be half the weight of the load if there were two legs, or one-third the weight of the load if there were three legs, or one-fourth the weight of the load if there were five legs:

- When the sling angle indicates an overload condition, add slings. Use a shackle of the proper size whenever two or more slings are placed on the same hook.

- Slings shall not be placed between the sling and its load while the sling is being tightened.

General Safety (cont'd)

- Hands or fingers shall not be placed between the sling and its load while the sling is being tightened.

- Do not pull a wire rope sling out from underneath a load that is resting on the sling, since this is likely to cause abrasion and kinking.

- Makeshift links or fasteners formed from bolts or rods or other such attachments shall not be used.

2. Portable Hoisting Tools (Come-Along's and Block & Tackle)

A. Chain Type and Cable-Type Lever Operated Chain Hoists:

1.Lever-operated hoists have one hook attached to the gear housing and one at the end of the lifting chain or cable. They range in capacities from ¼ ton to 6 ton. The lever-operated hoist can be used in vertical lifting, pulling or binding on any plane, and in tugging heavy objects.

2. With cable-type lever hoists, the cable wheel must be latched to hold tension on a load.

3. The chain-type lever-operated hoist is commonly called the "come-along". Chain-type hoists have built-in brakes to secure a load at any time pulling has ceased.

4. Pulling or releasing is accomplished by a ratchet movement of the hand lever. Only a small amount of leverage is required to operate the lever, even under tension. Therefore, of it takes two men to crank the hand lever, the hoist is overloaded for the job.

5. Do not use cable-type lever hoists if the cable is frayed or damaged.

General Safety (cont'd)

3. Inspection Criteria for Wire Rope

- Because a wire rope is essentially a machine, it is subject to breakdown "failure" like any machine. The following are indicators that you may observe in the inspection you must perform each time you use it. Should you observe any of these conditions, affix a rejected tool tag on equipment that say: **"DANGER: Do Not Use"** and contact your immediate supervisor for corrective action.

- A qualified inspector will perform a thorough inspection of wire rope on a monthly basis to determine if the condition(s) observed warrants rope replacement.

- Broken Wires: Broken wires are common and can be occasionally found in any wire rope used. This does not necessarily constitute a basis for rope replacement; however, should you observe numerous broken wires in a strand or within one rope lay, the wire rope should not be used.

1. Wire rope slings must be removed from service when there are ten randomly distributed broken wires in one rope lay or five broken wires in one strand in one rope lay.
2. Wire rope used in construction operations must be removed from service when the total number of visible broken wires in any length of eight diameters exceeds 10% of the total number of wires.
3. Even when wire rope is used with the right size sheaves, repeated bending may cause fatigue and broken wires. If the sheaves are worn or the wrong size, rapid wear and broken wires are likely to result.

General Safety (cont'd)

- Rope Stretch: Rope stretch may be caused from overloading or loss of core support. Should you observe this condition, do not use the rope.

- Corrosion: Excessive corrosion can be more dangerous than wear. Should you observe severe corrosion, do not use wire rope.

- Insufficient Lubrication: Wire rope shall have sufficient lubrication in order to prevent friction. Do not use wire rope if you observe a dry, cracking cable. Although every wire rope sling is lubricated during manufacture, to lengthen its useful service life it must also be lubricated in the field. There is no set rule on how much or how often this should be done. It depends on the conditions under which the sling is used. The heaviness of the loads and the number of bends will determine how often to lubricate.

- Crushed, flattened or jammed strands: Do not use the wire rope if these conditions are observed. Notify your supervisor.

- Reduction in Rope Diameter: Any marked reduction in rope diameter is critical. It may be a result of excessive abrasion, loss of core support or corrosion. Do not use wire rope if you observe possible rope diameter reduction.

- Worn and Abraded Wires: Wear due to friction on sheaves, drums, parts, etc. will eventually cause the outer wires of a hoisting cable or wire rope sling to flatten. If you observe any of these indicators, then

- Bird caging, kinks, core protrusion, heat damage: Do not use if any of the conditions are observed.

General Safety (cont'd)

4. Pre-Use Inspection of Slings

- Slings to be used in rigging should be inspected daily, and defective gear should be removed, repaired or replaced.

- A wire rope sling should be taken out of service immediately if the following is noted: severe corrosion localized wear (shiny worn spots), a one-third reduction in outer wire diameter, damage or displacement of end fittings, hooks, rings, links, or collars-by overload or misapplication.

- Wire rope slings should be stored in a well-ventilated, dry building or shed. Never store them on the ground or allow them to be continuously exposed to the elements.

- Synthetic web (nylon) slings must be removed from service if any of the following defects exist: acid or caustic burns, melting or charring of any part of the surface, snags, punctures, tears, cuts, broken or worn stitches wear or elongation exceeding the amount recommended by the manufacturer or distortion of fittings.

- Chains must be taken out of service when stretched beyond manufacturer's stated maximum. Chains should be measured regularly and checked for wear at contact surfaces of links and attachment points.

General Safety (cont'd)

- Destroy defective rigging components before throwing them away to prevent someone who is not aware of the hazards or defects from using it.

5. **Inspection Criteria for Chains**

- One weak link in a chain can cause failure. If any of the defective conditions described in this section are observed, the chain must be taken out of service and tagged **"Danger: Do Not Use."**

- A qualified inspector will perform a thorough inspection of all chains on a monthly basis to determine whether any chains warrant repairs or replacement.

- Elongated or stretched links: When links are severely stretched, they tend to close up. Do not use if links are elongated.

- Bent, twisted, or damaged links: The presence of any crack, regardless of size, means that the chain is subject to failure. Do not use if conditions are observed.

- Excessive wear, gouges, scores, or cuts: Do not use if there is evidence of excessive wear, deep gouges, long score marks or cuts.

- Corrosion: Do not use a chain if you suspect that is has been exposed to temperatures above 900 degrees F.

General Safety (cont'd)

- Heat damage: Do not use chain if you suspect that it has been exposed to temperatures above 900 degrees F.

6. **Inspection Criteria for Hooks**

- Hoist load hooks and hooks used on slings shall be given a complete visual inspection prior to use. This inspection may indicate a need for your supervisor or another qualified inspector to decide whether the hook should be replaced.

- A qualified inspector will perform a thorough inspection of all hooks on a monthly basis to determine whether there are defects that warrant replacement.

- Excessive, wear, cracks, twists, bends: These conditions, if observed, may indicate a hook that should be removed from service. Severe twists or bends may indicate an overload condition, which may have an effect on the entire sling, crane or hoist. Do not use equipment if these conditions are observed.

Job Safety Analysis
Instructions for Performing

A Job Safety Analysis (JSA) is a way of studying a job in order to (1) identify the hazards or potential accidents associated with each step of the job, and (2) develop solutions that will eliminate, nullify or prevent such hazards. A JSA can help spot potential accident causes and eliminate potential accidents.

JSA's will be to the discretion of each manager based on Company / Drivers knowledge and experience of the job at task.

A JSA will be written in the event of the following:

1. New driver is on board and does not understand a process
2. A driver arrives to a new location and new hazards are identified and/or are not normal practices.
3. A new task that has not ever been performed by the company or the driver
4. Company / Driver is dealing with a new product and new hazard may be present / identified.

JSA STEPS

There are four steps to doing a JSA. They are:

1. Select the job to be analyzed
2. Break the job down into steps
3. Identify the hazards or potential accidents that could occur
4. Develop solutions for the potential accidents

Selecting the job to analyze:

There are many jobs and job positions that can be hazardous or dangerous to perform. To narrow the list of those that require a JSA, consider the following items to determine which to do and in what order:

1. Job accident frequency – jobs that have a history of many accidents are good candidates for a JSA.
2. Job injury severity – Those jobs that have provided serious injuries are potential JSA candidates.
3. Potential injury severity – Some jobs have no injury history, yet have the potential to produce severe or crippling injuries and/or death.
4. Newly established jobs – Changes in tools, equipment,, new machinery and/or procedure creates new hazards. The JSA will help in establishing hazards and in creating new and safe procedures, prior to having an accident.

Job Safety Analysis
Instructions for Performing

Breaking the job into steps:

The major reason for breaking each job down into steps is so that each job can be examined for hazards and the potential for accidents. It permits the analysis to be done systematically, one step at a time, in the order the job is done. Each step in the job process tells generally what must be done. (Use action verbs – remove, position, tighten, etc.) The details should be omitted. Hazards are not listed in this process, nor are any safety precautions.

Identify the hazards (Potential Accidents):

Once the job is broken down into steps, each step is studied for hazards or potential accidents. **The job is to identify all the hazards**, whether they are part of the job environment or surroundings, or of the employee's own doing. Record those that are present or may occur as the job is performed. One of the best ways to identify job hazards is to observe the job as it is done. Ask questions as the task is being observed:

1. Could the employee be struck or make contact with anything?
2. Could the employee strike something or fall in any way?
3. Could an exposure or overexposure to a gas, heat or fumes occur?
4. Could a strain or overexertion occur?

Job Safety Analysis
Instructions for Performing

Developing solutions for potential accidents (hazards):

Once all the known or observed hazards are noted, develop a solution for each hazard. Solutions may take any one of the following forms:

1. Job procedure solution – (spell out exactly what employees are to do to work safely).
2. Job environment solution – (change some aspect of the environment to make the job safer).
3. Radical solution – (combination of both 1 and 2, yet introducing an entirely new way to do the job).
4. Reduce frequency solution – (find a way to reduce the amount of repair, cleanup, wear, etc. to reduce the amount of times the task is done).

Develop and maintain a List of JSA's

Maintaining a list of this type will help you with prioritizing those tasks which need to be done, readily identify those that have been completed, and those where the opportunity to observe exist. Doing observation of certain tasks will also allow for positive feedback on task performance and perform the means for encouraging employees to work safely, using the approved JSA task process.

Thomas
FUELS • LUBRICANTS • CHEMICALS

JOB SAFETY ANALYSIS

Chevron
Lubricants

WORK ACTIVITY	JSA	DATE:
Sequence of basic job steps	**Potential accidents or hazards**	**Recommendations to reduce or eliminate hazards**
) Arrive at rig location entrance. Check in ith safety personnel	1.1.) Traffic congestion	1.1) Park in a safe location that allows other traffic to move freely, use PPE, use 3 point descending and ascending procedure from truck. Chock wheels.
) Determine tanks to receive delivery	2.1.) Over filling tanks which do not need fuel	2.1) Before unloading any product, check with the Company Man or Tool Pusher to verify delivery point; 2.1a. Ask how tank(s) is/are measured; sight glass or stic reading.
) Determine proper parking area for ıloading	3.1.) Hazardous area due to other moving equipment, rig personnel, engines, pumps, electrical lines, mud lines, water lines, etc.	3.1) Ask Company Man or Tool Pusher the best place to park.
) Move truck into recommended unloading ea	4.1.) Other vehicular traffic, pedestrian traffic and generally hazardous area	4.1) Remove wheel chocks. Release parking brake, discontinue hazard lights, and slowly move into unloadin area using spotter when backing up. Be prepared to yield for traffic and pedestrians apply brakes, chock wheels an ground trailer.
) Measure tank Volume	5.1.) Over filling tank. 5.2.) Falling from the tank when measuring inventory volume requires you to climb on top of the tank	5.1) Add tank inventory to delivery amount to determine whether or not the tank will hold the entire delivery. 5.1a.) If the entire delivery cannot be held, return to the person in charge. Inform the person of the situation and determine what amount can safely be left in the tanks. 5.2) Check Safety boots for slick surfaces, clean as necessary 5.2a) Place measuring stick near ladder 5.2b) Climb into tank using both hands 5.2c) If a ladder which is separate from the tank is required, be sure to secure that ladder to the tank or get another person to hold the ladder while you climb onto th tank. 5.2d) While measuring the tank always keep one hand on the ladder to avoid losing your balance.
) Identity tank vent.	6.1.) Exploding tank and/or bursting delivery hoses.	6.1) For non-pressurized tanks volume in equals volume out. If you will be using a 2" hose for off loading be sure the tank has a 2" unrestricted vent. If you use your 3" hose the tank must have a 3" vent. 6.1a) If the tank is not properly vented, report the matter to safety personnel on location and to the appropriate person in charge at the rig location. 6.1b) If the tank is pressurized, involve rig personnel for proper depressurization procedures before opening any valve on the fuel tank. Procedures vary due to operating procedures. Never assume you know the procedures ever if you have made deliveries to the rig before.
) Unload delivery hoses	7.1.) Strained back 7.2.) Falling from the truck 7.3.) Striking other personnel with the hose.	7.1) Pull on the hoses with a smooth motion. As the hos moves, start walking toward a connection point. 7.2) For hoses that are kept on top of the truck, climb on top of the truck using both hands. 7.3) Take one end of the hose and slowly lower that end t the ground. Before dropping the other end of the hose to the ground, look to make sure all other personnel are out of the way yell "all clear" and drop the end to the ground.
) Connect the hose to first compartment of e tank trailer and then to the truck pump.	8.1.)Spills, and personal contact with product.	8.1) Place a 5 gallon bucket under connection point. 8.1a) Remove cap or plug from hose while holding over bucket and quickly make connection to tank trailer then repeat procedure for truck pump.
) Connect hose to truck pump (discharge de) and then to tank.	9.1.) Spills and personal contact with product.	9.1) Place a 5 gallon bucket under connection point. 9.1a) Remove cap or plug from hose while holding over bucket and quickly make connection to truck pump and then to tank. 9.1b) Always wear hard hat, safety glasses, steel toed boots and gloves while unloading product.

).) Open all valves	10.1.) Spills and personal contact with product. 10.2.) Spills, and fuel spray due to improper valve position or blocked passageways.	10.1) Slowly open the valves to the tank trailer and the tank. As you o pen the valve see if any fuel leaks from th connection, if so correct connection to stop the leaks. 10.2) Listen and watch the hoses for signs of fuel movement due to gravity. Weigh the hoses by picking them up to determine if fuel is moving.
1.) Upon verifying the free flow of fuel into e hoses you are ready to engage the truck ump.	11.1.) Spills, and fuel spray due to pump pressure	11.1) Slowly engage the PTO pump drive. Observe all connections for possible leaks. If a leak occurs, stop the truck pump and repair the connection so that leaks will nc longer occur.
2.) Observe connection hoses and tank apacity while uploading	12.1.) Spills that could potentially contact the ground.	12.1) Clean up small spills immediately. Report all spills to safety and rig personnel immediately. Report all spills to the Thomas Petroleum warehouse manager.
3.) Identify when a trailer compartment has mptied.		13.1) Watch the hoses. As air enters the hoses they will begin to move indicating the compartment is emptying. Remember that hoses will always have product residue which could spill to the ground.
4.) Move suction hose to the next trailer ompartment for unloading	14.1.) Spills	14.1) With the truck pump in operating mode carefully remove the suction hoses from the trailer. Position the hose so that the fuel residue from the trailer will be captured. When the trailer compartment has completely emptied, close the trailer valve and move the hose to the next compartment connection to be emptied.
5.) Monitor tank inventory as delivery is ade.	15.1.) Over filling tank. Spills.	15.1) Throughout the delivery process, monitor the tank inventory to insure the amount to be delivered will be held. If delivery will not be held report to Company Man or Tool Pusher to determine what will be done. Extra fue may be put into another tank at the rig location or delivered to the Thomas Petroleum warehouse.
6.) Disconnect hoses after delivery is omplete	16.1.) Spilling fuel residue from hoses.	16.1) With truck pump in operation, disconnect suction hose from trailer and with it open and exposed lift hose s that lift is higher than the truck pump and walk down the hose toward the pump. 16.1a) Immediately shut off tank valve if necessary. If possible get help from rig personnel to shut tank valve at the same time the truck pump is stopped. 16.1b) Shut off truck pump. 16.1c) Place hose cap/plug on suction end of hose. 16.1d) Disconnect hoses and immediately place caps (or plugs) onto the end of the hoses.
7.) Load hoses onto truck	17.1.) Strained back. 17.2.) Falling from the top of the trailer when loading a hose on top.	17.1) Pick up the hose from a squatting position and lift with your legs. Pull the hose with a smooth motion as yo walk towards the truck. 17.1a) Carefully push the hose into the trailer carrier tube 17.2) While standing on the ground, push one end of the hose up the trailer ladder until the end will rest at the top of the trailer. 17.2a) Carefully climb the trailer ladder, being careful no to trip over the hose. 17.2b) Once on top of the trailer, take the end of the hose and drag the hose on top of the trailer as you carefully walk down the trailer. Keep-in-mind, the hose could become caught while you are loading it. Be prepared to stop your motion to avoid being pulled off balance. 17.2c) Secure the hose in place and carefully climb down from the top truck facing the ladder. Remove ground wir and unchock wheels.
8.) Exiting location	18.1.) Vehicular, pedestrian and animal traffic	18.1) Watch for speed on lease roads and animals crossin roads. 18.1a) During inclement weather conditions, drive defensively and insure there is adequate space between vehicles, on lease road, when exiting location.

SAFETY EQUIPMEMENT REQUIRED TO DO THIS JOB

lard Hats?	Fact Shield?	Barricades?
afety Shoes (steel toe)?	Goggles?	Fire Extinguisher?
afety Glasses?	SCBA?	Lockout-Tagout?
loves?	Safety Straps?	Work Permit?

Fleet Safety

- Anyone who operates a licensed vehicle owned or controlled by the company, must maintain a current drivers license, of the correct class and with the appropriate endorsements, as required by Federal and/or State regulations.
- All drivers are required to inspect their vehicles at the beginning of each work day. A vehicle check list will be provided to all drivers.
- Vehicles must be kept clean and in serviceable condition.
- Courtesy should be extended to other motorists. The vehicle and you are a rolling billboard for your company.,
- Seat Belts must be worn by all occupants, at all times.
- All drivers should use good DEFENSIVE DRIVING TECHNIQUES while operating company vehicles.
- Obey all traffic laws. All fines are the responsibility of the driver. Traffic citations are to be reported to your supervisor in writing. Repeated violations are cause for disciplinary action, which may include suspension and/or dismissal.
- Any employee that is in charge of a truck is also responsible for all tools and equipment assigned to that truck.
- All vehicles should be equipped with an appropriate Fire Extinguisher and a First Aid Kit.
- Consumption of alcohol or non-prescribed drugs is grounds for immediate dismissal whether reporting for work or while on the job. If taking prescribed medication which may affect your ability to perform your assigned duties safely, you must notify your supervisor as soon as you report to work.
- Unattended vehicles shall have the keys removed, brakes set, windows rolled up and doors locked.

Safe Backing

- Whenever possible, avoid backing situations. Find a parking spot that will allow you to leave the vehicle without backing.

- Prior to being in a backing situation, check out your mirrors. You may elect to increase the size of your side mirrors, or have wide-view, convex mirrors installed. All would assist in you having a larger, clearer picture of any hazards behind the wheel.

- Drivers should walk completely around the vehicle, looking for dangers. Watch for any low overhangs and/or signs.

- When preparing to back, roll down the window and turn off the radio. The driver should check all mirrors and look over both shoulders before starting to back. Sound the horn twice to provide further warning for pedestrians. Back up s-l-o-w-l-y!

- Add backup alarms to vehicles

- If a second person is available, use this person to guide the vehicle back. The guide should stand at the left rear driver's side of the vehicle (if room permits), and use full motion arm signals to assist the driver.

- If new to the driving ranks, you may require additional training, where a practice obstacle courser could be set-up to assist.

- Include Techniques To Safe Backing, as part of you ongoing Safety Training..

- Add dashboard stickers highlighting, **"LOOK BEFORE YOU BACK"**

- **If a driver has trouble backing, have his or her eyes tested for depth perception.**

Forklift Safety

A forklift can be adapted for almost any lifting and transporting task. Most forklift accidents result from operator error, increasing the importance of operator training. Having a positive attitude towards safety, and having completed Forklift Operation Safety Training, will greatly enhance your operation and as well minimize accidents.

- Make sure the parking brake is set and the wheels chocked on the vehicle being loaded.

- When carrying a load drive up a ramp or grade. Never drive down when you are carrying a load. Never make a turn while your forklift is on the ramp. Lower the forks to keep the center of gravity low.

- Center the forks beneath the load being lifted. Lifting an un-centered load can cause the load to fall. Tilt the uprights slightly back when raising and carrying a load.

- Do not carry any riders unless the truck is specifically designed for them. Always keep hands and feet inside. Never speed or allow unauthorized persons to drive a forklift.

- Never carry loads that obstruct your view.

- When turning, reduce your speed and maneuver carefully.

- Never smoke when refueling or when checking the battery of a forklift. Always turn off the engine when refueling.

- At blind corners, stop the forklift and sound the horn

- When the forklift is parked, fully lower the forks, put controls in neutral, turn off the engine, set the parking brake and remove the key.

Fire Extinguisher Safety

- A fire extinguisher, rated not less than 2A,10B:C, should be provided for each 3,000 square feet of the protected building area or major fraction thereof. Travel distance from any point of the protected area to the nearest fire extinguisher shall not exceed 75 feet. All qualified employees will be trained and retrained on a yearly basis.

- One or more fire extinguishers should be provided for each level of a building, typically mounted close to the stairway.

- One or more fire extinguishers of the right class, should be provided for each vehicle involved in transporting hazardous; flammable and/or combustible material.

- Fire extinguishers should be conspicuously located and readily accessible at all times. They should be periodically (monthly & annually) inspected and maintained in operating condition (visual & maintenance check) Also see page 99 & 100 Employee education/training.

- Service tags indicating last date of inspection/service, should be attached to each fire extinguisher.

- Each fire extinguisher is considered professional equipment and its effectiveness in protecting property depends on knowing: What it can and cannot do, how to use it, where to install it, how to maintain it, knowledge of classes or types of fires, what class of fire the extinguisher is capable of extinguishing.

CLASSES OF FIRES

Class A – Fires of combustible materials (wood, paper, cloth)
Class B - Fires involving flammable liquids, gases and grease
Class C – Fires which involve energized electrical equipment
Class D – Fires in combustible metals

Flammable & Combustible Liquids Safety

A flammable liquid is defined as any liquid whose flashpoint, the temperature at which vapors can ignite when there is a spark, flame or static electricity, is below 100 degrees. At higher concentrations and higher temperatures the vapors can ignite or explode without a spark. Some highly volatile flammable liquids are gasoline, acetone and alcohol. These flammable liquids must be marked with a red label. To work safely with flammable liquids the three potential hazards: temperature, concentration of vapor and ignition sources must be controlled. A combustible liquid is defined as any liquid whose flashpoint is at or above 100 degrees F.

- Only approved containers and portable tanks shall be used for storage and handling of flammable and combustible liquids.

- **No Smoking** signs shall be posted in service and refueling areas.

- Flammable liquids in bulk drums shall be grounded and bonded before and during dispensing into containers.

- Appropriate fire extinguishers shall be mounted within 50 feet of outside areas containing flammable liquids and within 10 feet of any inside storage area for such materials.

- Safety containers shall be used for the dispensing of flammable or combustible liquids.

Compressed Air Safety

- Check the condition of all hoses. Air hoses are designed to withstand pressure, but become weakened at bends, kinks, and connections to shut-off valves and nozzles. Weak points may swell and burst, throwing pieces of hose in all direction.
- Keep the air hose off the floor, it's a tripping hazard and subject to damage from trucks, doors and dropped tools.
- Always coil the hose, without kinks and hang it over a broad support when not in use.
- Use the lowest amount of pressure to do the job.
- Air pressure against the skin may cause internal hemorrhage and/or intense pain. Air that enters body openings may burst internal organs. (Never blow off yourself or someone else)
- Air Compressors shall be equipped with pressure relief valves and pressure gauges.
- Use low pressure (under 30psi) and the correct nozzle to remove dust or particles from fixtures or deep holes in parts.
- Safety devices on compressed air systems shall be checked frequently.
- Before any work is done on the pressure system of a compressor, the pressure shall be bled off and the system locked-out.
- The drive belt system shall be totally enclosed to provide protection for the front, back, top and sides.
- Air filters shall be installed on the compressor intake to ensure only clean, uncontaminated air enters the compressor.
- Signs shall be posted to warn of the automatic starting feature of the compressors.

Compressed Gases Safety

Any material that is under pressure can be dangerous if it is not handled properly. If the material is a compressed gas it may be flammable, explosive, reactive, toxic, or a combination of these.

OXYGEN: Oxygen is not flammable, but increases the tendency of things around it to burn or explode. Keep oxygen cylinders away from combustible or flammable materials and fire hazards, including oil, or grease on your hands, clothes and work area.

ACETYLENE AND HYDROGEN: Both are highly explosive gases requiring extreme caution when handling. Hydrogen escapes easily around threaded fittings. Friction of escaping gas can ignite spontaneously. Hydrogen has no odor to warn of a leak.

- Cylinders should always be chained in upright position to a wall, cylinder truck, cylinder rack or post.

- Always replace the cylinder cap when the cylinder in not in use or when it is being moved.

- Never place cylinders in a hallway or work areas where they could be hit by a forklift truck or struck by falling objects.

- Never hammer, pry, or wedge a stuck or frozen cylinder valve to loosen it, and never use a wrench. If a valve will not open by hand, call the gas distributor and request a replacement.

- Do not rely on the color of the cylinder to identify the gas inside, as suppliers use different color codes. Return any unidentifiable cylinders to the supplier.

Electrical Safety

- When electrical equipment or lines are to be serviced or adjusted, necessary switches should be opened, locked-out and tagged-out whenever possible.
- All portable electrical tools and equipment should be grounded.
- Electrical Cords insulation should be in good condition, with no noticeable breaks.
- Exposed wiring and cords with frayed or deteriorated insulation should be repaired or replaced.
- Ground fault circuit interrupts should be installed on each temporary 15 or 20 ampere, 120 volt AC circuit at locations where construction, demolition, modifications, alterations or excavations are being performed.
- Electrical installations in hazardous dust or vapor areas should meet the National Electrical Code (NEC) for hazardous locations Class I, Division 1.
- Inspect all electrical equipment before using. Use only equipment in good condition.
- Start and end electrical equipment with switch in "OFF" position. Do not leave the switch in the "ON" position and use the plug to turn the equipment ON and OFF.
- Installation work should be in compliance with the National Electrical Code Standards, OSHA, local building codes and ordinances. This work should be performed by a qualified and fully licensed electrician.
- Use of metal ladders is prohibited in areas where the ladder or the person using the ladder could come in contact with energized parts of equipment, fixtures, or circuit conductors.

Lifting Safety

PLANNING

- Inspect the floor and/or ground surface around the object to be lifted, and the route over which the object is to be carried.
- Decide the best way to grab or grasp the object (avoiding sharp edges, slivers, etc.) and make sure the load is easily within your lifting capacity.
- If the object is too heavy, get someone to help or use a mechanical lifting device.

LIFTING

- Set your feet solidly and crouch as close to the object as possible at about a 90 degree angle at the knees.
- Get a firm grip on the object, keeping your back straight, and lift by straightening your legs.
- **DO NOT TWIST** while attempting to lift
- To set the load down, bend your legs **NOT YOUR BACK.**
- Follow the lifting procedure, but in reverse order.
- Always set one corner down first, then slide your hands out so they will not get pinched.
- **AVOID TWISTING YOUR BACK!**

Ladder Safety

Step Up To Ladder Safety –

- Choose a ladder tall and strong enough to do the job

- Ladders shall be used only for the purpose for which they are designed.

- Inspect all parts of a ladder prior to use
  - Inspect ladders for presence of non-skid feet and absence of cracks, broken rungs or defective rails. Faulty equipment shall not be used. Improvised repairs must not be made.

- Set up a ladder firmly and properly
  - Straight ladders must be secured **[tied off]** at the top, or both top and bottom to prevent slipping. Set the ladder on a secure base, not a box, barrel, table, etc. with both top rails supported.
  - Extension ladders must be placed at a 4:1 ratio; one foot out for each foot up.

- Work cautiously on a ladder to prevent falls
  - All ladder rows, cleats, and steps shall be parallel, level and uniformally spaced when the ladder is positioned for use.
  - Never more than one person at a time is to be working from a ladder.
  - Grasp ladder rungs instead of rails while ascending or descending a ladder.
  - No object should be carried while ascending and/or descending a ladder, that prohibits you from being able to grasp the rungs with either hand.

Ladder Safety (cont'd)

- Engage Spreaders on a stepladder
- Ladders stored in a horizontal position should be supported at a sufficient number of points to avoid sagging.
- Any work performed on a ladder, scaffold, etc. where the persons feet are 6 feet or more above the ground, requires the use of a Hazardous Work Permit.
- Ladders shall not be loaded beyond the max intended load for which they were built nor manufacturer rated capacity.
- The ladder side rails shall extend at least 3 ft. (.9m) above the upper landing surface. When ladders are not able to be extended, then the ladder shall be secured at its top to a rigid support that will not deflect.

Office Safety

- Each office should have fire extinguishing equipment available and a training program on how to use extinguishers.
- An evacuation plan should be in place with periodic fire drills and training.
- Inspect the work place using an inspection form.
- Exit signs should be lighted and clearly visible, and emergency lighting should be installed.
- Aisles should be kept clear to allow for easy travel and exit in the event of an emergency.
- Trash and rubbish should be properly stored and discarded daily.
- Non-carpeted walking surfaces should be swept and mopped frequently to prevent grease and dirt buildup. Carpeted floors should be vacuumed regularly.
- Spills should be cleaned immediately.
- Use signs or barriers to warn of wet floors.
- Chairs should never be used as ladders.
- Loads of 40 pounds or more should not be lifted manually, unless you have help. Proper lifting techniques should be utilized.
- Adjust chairs to the right height, that which will allow you to easily reach keyboards, calculators, etc. without stretching and/or having to twist or bend.

Hazard Recognition

You cannot have a safe workplace unless all employees know safety rules and precautions, and understand the connection between those rules and precautions with their own jobs, safety and health. Weaving safety into every job function is the only practical way to recognize and reduce accidents.

Recognize Hazards

- Know your workplace. Know your risks. Be alert at all times!

- At the beginning of each work day, an initial visual survey by both the Manager and Driver of the workplace and/or the equipment / vehicles you are to operate should be completed. Note any obvious and/or potential hazards that may be present.

- Follow Pre-Trip Inspection Form / Procedures!

- DOT Violations should be brought to the attention of your supervisor immediately, fixed on the spot, or written up for maintenance to address. If the vehicle is unsafe, note it as such and do not operate until safety factors have been corrected.

Being able to identify possible hazards or situations that pose a risk will help us achieve a safer attitude, a safer workplace for all.

Hazard Recognition

Within the Forms Section is a Hazard Recognition Form has been developed, to assist anytime an employee views an unsafe act and/or condition.

- Unless immediate threat to life or limb, the information noted on the Hazard Recognition Form should be submitted to your immediate Supervisor for proper follow-up, and to be discussed at the next Safety Meeting.

- Hazard Recognition should extend beyond unsafe condition or faulty equipment, it should as well take into consideration, any unsafe acts demonstrated by that of a co-worker.

- Recognizing unsafe conditions or an unsafe act by an individual, is everyone's responsibility.

  - Do not assume the equipment in question or the situation, has been reported by another, you may be the first to have discovered such.

  - If a given situation is worth noting, it then is worth reporting, and ultimately – correcting.

  - If you view a new employee performing a given task in such a way they could be hurt, stop the individual and offer assistance. He may not have been trained on the safest way to approach that particular task.

Safety Is Everyone's Responsibility; Recognizing Potential Hazards And Taking Corrective Action is half The Battle.

Accident Investigation Process

Who Should Conduct An Investigation?

Managers/Safety Coordinator should conduct an investigation for all incidents that require medical attention; involving an employee and/or a customer.

Why Conduct An Investigation?

An investigation should aim to identify all possible **Root Causes** of the occurrence and who and what was involved. Investigators should look for causes including human error, worker carelessness, underlying problems in the work environment, faulty equipment or materials used, or the system of work and management practices.

Who witnessed the incident; what they saw, what was the cause, who reported the incident

What To Do After An Investigation –

Follow-thru is more likely to prevent further injuries or incidents. It is our goal to reduce the reoccurrence of incidents and ultimately the cost of claims.

Initiate an Action Plan, with assigned areas of responsibility / follow-up required.

(See Attached format)

Investigation Procedure

The investigation involves gathering information and making recommendations. It is important to keep an open mind about all possible causes and not to draw conclusions before all relevant information has been gathered. The following are keys to consider with your investigation.

- Assess situation; determine if anyone has been injured
- If a member (employee or customer) requires medical assistance, notify local EMS
- Notify local Police or Sheriff's Department;
  - If Law Authority investigates, we will need a copy of their report to assist with our claim
  - Obtaining a copy could take up to ten days, therefore while the Officer is still on scene, ask for the Report Case File Number
  - Please attach the Report Case File Number to your Accident/Injury Report
- Witness Reports:

  Witnesses represent another source of information. Although there may be occasions when it is not possible, every effort should be made to interview witnesses as soon as possible after the occurrence.
  - Make short notes during the interview
  - What in their opinion, caused the accident
  - Where were they positioned
- If the Accident / Incident resulted in damage to our property; submit a Request for Repairs through your Managed Maintenance Group, **maintenance@clthomas.com**
- Also, forward a copy of the Accident / Incident Report to Risk Management at RiskMgmt@clthomas.com

Incident
Reporting Procedures

Thomas Fuels, Lubricants and Chemicals, Inc. has a duty to the insurance provider to report a claim in a limited amount of time in order to minimize our exposure and/or our risk.

What Types Of Accidents Do We Report? (Any and All)

- Employee Injury
- Customer Injury
- Vehicle Damage
- General Liability
  - Environmental
  - Spills
  - Property Damage
- Near Misses

Employee Injury - :Employer's First Report of Injury or Illness Form"

Report any and all employee injuries to your supervisor immediately. Immediate is defined as within your scheduled work shift, or before you clock out to go home.

- Report the incident to your supervisor
- He or she should complete the Employer's First Report of Injury (Medical or Non-Medical Attention Required).
- Completed Form should be submitted to Risk Management / Claims Coordinator – Claims Coordinator

Medical / Non-Medical Reporting Procedures

Medical Attention –

Emergency – Get Help! If your situation is an emergency, you assume the responsibility of proper reporting procedures immediately after treatment services have been rendered. The most important thing is for you to seek help. Emergency Rooms should not be used if it has been 24-hours or more since the occurrence.

Non-Emergency – notify your Supervisor/Safety Coordinator PRIOR to treatment. The supervisor should assist you in making arrangements for treatment.

Non-Medical Attention –

(First Aid Only) – You may be contacted for more information. If your condition changes or worsens, contact your supervisor immediately for instructions and assistance in making arrangements for treatment.

- Each facility is now equipped with a First Aid Kit, to aid with minor cuts, scrapes, and/or burns.

Follow-Up Communications –

If you are given time-off from work, communicate with your Supervisor/Safety Coordinator on a regular basis. Failure to follow-up could result in disciplinary action.

Light Duty –

Thomas Fuels, Lubricants and Chemicals, Inc. supports a Return-To-Work (Light Duty) program for Occupational Injuries. You will be given guidelines and it is important that you comply with the recommendations of the treating physician and/or company representative.

Customer Incident Reporting Procedures

Customer Injury – "Customer Accident / Injury Report'; to be used anytime an accident involving a customer occurs, damage has been done to our equipment and/or to our property.

How you handle customer injuries and complaints is extremely important. The customer or citizen needs to see you are genuinely concerned. That does not mean that we are at fault, it does however represent concern for the other party. A situation of this type might occur at your facility and/or on a given field site.

- When an incident occurs, render aid as soon as you are made aware of the situation.
- Ask if the person is ok
- If severe, call for an ambulance
- Get the facts
- Report the incident to your supervisor
- Get witness information, if any were present and saw what occurred
- Take photos
- Never admit fault or say that the company accepts full responsibility
- Never let a customer or citizen leave the area thinking we do not care about them! Show compassion!

Accident / Incident
Action Plan

Initiating an Action Plan as follow-up to any and all Reportable Accidents and/or Incidents Investigation, is not only a must, it's just good business.

To achieve an"Incident Free Operation" each of us must do his / her part, to include completing a follow-up action plan. If we understand the causes of a particular incident, we then can implement appropriate preventative measures.

Steps to Creating an Effective Action Plan:

1. Ask the right questions
2. Determine any deficiencies (training, equipment, body mechanics, etc.)
3. Assign specific areas of responsibility
4. Provide realistic timelines for responses and/or a corrective course of action,
5. Ensure follow-up discussions.

- **What happened**
- **Who was involved**
- **Was anyone injured**
- **What were the causes that led up to the incident**
- **What is needed, to ensure we have no repeats**
- **Has our best defense with reoccurrence been determined**

(Refer to Safety Communication Form)

PPE

When the possibility of Occupational exposure is present, PPE will be provided at no cost to the employee such as gloves, uniforms, eye protection, hearing protectors, hard hat, etc.

Drivers must wear their Personal Protection Equipment (PPE) safety shoes, hard hats, safety glasses and protective gloves while loading or unloading any products.

Proper training includes at least, when PPE is necessary, what PPE is necessary; how to properly don, doff, adjust and wear PPE; the limitations of PPE; the proper care, maintenance, useful life and disposal of PPE.

Retraining of the employee is required when the workplace changes, making the earlier training obsolete; the type of PPE changes; or when the employee demonstrates lack of use, improper use, or insufficient skill or understanding. The certification must include the employee name, the dates of training and the certification subject.

Personal Protective Clothing

- **Uniforms** have been furnished; to include Coveralls, Bibs, Jackets, and Slicker Suits, to protect you from both the elements of weather, as well as the products you will handle.

- **Gloves** of various types; Leather, Rubber and Cotton have been assigned to ensure your hands are protected; from heat, chemicals, sharp edges, etc.

- **Eye Protection** – Must be worn at all times. The degree and/or type of Eye Protection will depend on the task; ie. Side-Shields, Mono Goggles, Face Shield.

- **Ear Protection** – must be worn whenever working around loud equipment; ie. Engines, Turbines, Shop Equipment.

PPE (cont'd)

- **Hard Hats** – have been assigned and are to be worn anytime Loading/Unloading products and/or equipment. Plant and/or Site Safety will dictate as to when Hard Hats must be worn.

- **Safety Shoes / Boots** – must be worn at all times. Leather Shoes and/or Boots reinforced with steel toes and ankle support is a must. Anytime weather and/or other factors dictate, Rubber Boots should be worn. This will ensure your feet are kept dry and not in contact with agents that could cause harm.

  NOTE: Employee owned equipment is permitted, the employer is responsible for the assurances of it adequacy, maintenance and sanitation.

Eye Protection Safety

- Protective equipment, including Personal Protective Equipment (PPE) for eyes and face, shall be provided, used, and maintained in a sanitary and reliable condition. This protection should be provided whenever it is necessary by reason of hazards of processes, chemical hazards, radiological hazards, or mechanical irritants encountered in a manner capable of causing injury or impairment in the function of any part of the body through absorption, inhalation or physical contact.

- Any defective, damaged or altered PPE that do not meet state or Federal requirements will not be used or allowed.

- Safety goggles or face shields should be worn anytime you may using hand tools, that result in flying particles, and/or when handling chemicals, where splashing could;d result.

- Eye protection should be worn when working with grinders, buffing wheels and scratch brushes.

- Protective eye and face equipment shall be required where there is reasonable probability of injury, that can be prevented by such equipment.

- Wear eye protection, keep it clean and fit for use, wear the right protection for the job.

Hand Safety

Sources of Injuries:

- Burns
- Cuts
- Electrical Shock
- Absorption of Chemicals
- Pinching
- Crushing
- Cold
- Vibration
- Receptive Motion

Analyze the work place for hazards to the hands. Look at each job and consider the possible hazards associated

Make sure all tools and machines are well maintained. Make sure all guards are in place

Employees must be properly trained in the use of the tools and machines in their area.

Ensure all employees have and are using gloves with those jobs fitting for such.

Preventing Hand Injuries:

- Use protective gloves or other protection whenever necessary. There are gloves to protect against heat, cold, sharp objects, chemicals, electricity and a wide variety of other hazards.
- Gloves should not be worn around tools and machinery with rotating or moving parts.
- Watches, rings, bracelets, or other jewelry should be removed and loose fitting clothing avoided, anytime working with rotating and/or moving machinery.
- The work place should be clean and well organized, and tools and equipment well maintained.

Foot Protection Safety

Foot protection is guarding your toes, ankles, and feet from injury. The Occupational Safety and Health Administration (OSHA) has outlined regulations that specify foot protection for the workplace.

Types of Foot Injuries:

Your feet are vulnerable to many types of skin disease, cuts, punctures, burns, sprains, and fractures, but sharp or heavy objects falling on the foot are the primary source of injury. Other hazards include:

- Compression – the foot or toe is squeezed between two objects or rolled over
- Puncture – a sharp object, like a nail, breaks the sole
- Electricity – a hazard where workers use power tools
- Slipping – surface hazards such as oil, water or chemicals
- Chemicals – corrode ordinary safety soles and can harm your feet

Safety Shoes or **Boots** offer protection against oil, water, acids, corrosives, and other industrial chemicals. They are also available with features like steel-toe caps, puncture resistant soles, and metatarsal guards. Some rubber boots are made to be pulled over regular safety shoes.

- Most employees due to the nature of your work, depend on your feet daily in order to perform your job. Ensure you have a quality pair of Safety Shoes or Boots, before getting started.

Hearing Safety

- Hearing protection must be worn in areas where sound levels exceed 85 decibels.
- Wear proper ear plugs for low level noise abatement.
- Ear muff hearing protection, along with ear plugs, may be needed in high level noise areas.
- Keep hearing protection clean and fit for use.
- Sound absorbing materials can be used to isolate the noise source helping to prevent the spread of noise.
- Altering or enclosing equipment or using quieter work processes can reduce overall noise levels

ENVIRONMENTAL PROTECTION

Container Handling and Disposal

All containers of chemicals, lubricants, products or field treating fluids brought onto a given location premises shall be properly labeled and marked, indicating contents. These materials shall be accompanied by a material safety data sheet (MSDS), which should be provided to the field/operations representative. All empty drums and containers shall be removed from the premises by the driver, once emptied and ready for pickup.

SPCC

Drivers should be familiar with their location's SPCC; Spill Prevention, Containment and Countermeasure Plan. If a spill happens during the course of work, you as the driver are responsible for shutting off the flow, contain the spill, begin cleanup, and contact the onsite operations representative, as well as your immediate supervisor.

Drip and Spill Containment

Tanks / Equipment brought onto lease premises should if at all possible,be equipped with drip and/or containment pans, whenever there is a potential for drips and leaks. Drip/Containment Pans should be checked and emptied regularly and the contents disposed of accordingly to the applicable regulatory requirements.

ENVIRONMENTAL PROTECTION

Waste Management

All solid and liquid wastes generated through your work shall be handled with all applicable local, state and federal regulations. All wastes disposal operations require a Waste Data Gathering Sheet (manifest) (see Attachment – in your Forms Section).

No waste materials shall be left on site unless specifically authorized by an on-site company representative.

Spill Reporting

All spills from any types of equipment shall be reported immediately, to both the on-site Operations Representative and your immediate Supervisor. This includes but is not limited to spills from tanks, vessels, flow lines, transports, piping, drums, sumps, pits and any type of equipment. Spills are not limited to crude oil and produced water, but include treating chemicals, cleaning solvents, liquid wastes, solid wastes, and excessive air emissions that are released into the environment.

Clean up

All spills and releases shall be addressed immediately with a high priority placed on reducing exposure to the public and to environmentally sensitive reporters such as surface waters and groundwater. Spills shall be cleaned up immediately by the responsible party. Soil or contaminated materials is to be handled and disposed of according to the applicable local, state, and/or federal regulations.

Truck Unloading Procedures

Drivers must wear their Personal Protection Equipment (PPE) safety shoes, hard hats, safety glasses and protective gloves while loading or unloading any products.

1) Driver will verify which tanks will be receiving product from the appropriate customer personnel before any bulk product is unloaded.

2) Driver will determine tank is properly vented. The vent on the tank must be equal to or larger than the size of the delivery hose.

3) Driver will gauge the tank to determine if quantity to be delivered will be held by the bulk tank.

4) Driver will make connections to truck and tanks.

Ø Transport fuel delivery procedures:

- Hoses are connected to truck and tanks using Cam Lock connections.
- All hose ends must be securely attached.
- **NO** delivery is to be made when the discharge hose end cannot be mechanically connected to the tank.
- Cam Lock ears on the hose at the truck pump must be wrapped in a closed position with a Velcro strap.
- The truck pump discharge side, *not in use,* must be capped with the ears locked in a closed position using metal pins.
- All necessary truck and tank valves are opened and the hoses are allowed to fill by gravity flow.
- Driver will examine all connections for possible leaks before engaging the pump.

Truck Unloading Procedures

Driver will engage the pump and remain by the pump control switch at all times while the pump is engaged.

- A bucket must be place under the trailer belly valve connection to catch residue as the suction hose is moved to other compartments. The suction hose can empty any residue in the bucket before the next connection to the trailer is made. The driver must place a few spill pads under any bucket in use.
- On the final disconnect, the driver must roll the suction hose, end up, to the pump so that all remaining diesel will be collected and pumped into the tank.
- The discharge hose between the truck pump and the tank must be disconnected over a bucket so that any remaining product will be captured. The driver should put this final residue in a small auxiliary diesel tank or back into the trailer.
  - Ø Bobtail Fuel and Oil Deliveries.
- Follow Transport Delivery procedures for large tank deliveries.
- For small tanks without Cam Lock connections follow these steps:
- Verify products to be delivered and existing tank/compartment inventory.
- Determine if delivery quantity will be held. If unsure, consult appropriate personnel on location before unloading.
- Although the auto shut-off nozzle will help prevent spills, the driver should never assume any amount can be delivered into a tank/compartment without first checking inventory.
- Using hose with auto shut-off nozzle, place the nozzle in the top of the tank/compartment. Be sure the nozzle is in a closed position.
- Engage the truck pump.
- Begin to dispense product at the tank with the nozzle in hand all the while watching the amount of product in the tank.

To prevent drips, be sure to wipe or wrap the end of the nozzle with a spill pad when moving to another customer tank compartment or when returning nozzle to the truck.

Steps must be repeated for each product.

Transport Loading Procedures

General Loading Procedures:

- Ground Transport by connecting grounding / scully system cable
- Connect vapor recovery hose to Trailer. Connections will be complete when green light appears on the overfill / scully ground system.
- Select appropriate product loading nozzles and couple to desired compartment fittings. Check brake interlock (if applicable) to secure it is engaged.
- Depending on local facility automation system, enter required information, and follow facility loading procedures.

It is the driver's responsibility to make sure the correct information has been entered and the correct product loading arms are connected to the appropriate tank compartment prior to the start of each load.

- Once the system has been activated to load, enter the preset volume for the tank compartment. Total product volumes requiring more than one tank compartment must have meter set for each individual compartment.
- Initiate product flow as instructed.
- Drivers are required to stay in the immediate area of the automation equipment at all times during loading.
- When loading has been completed, disconnect loading arms, vapor recovery hose, and the ground/scully system cable. Remove Transport from the loading rack bay.
- Driver should retrieve product manifest(s).
- Upon exiting the terminal, be sure exit gate is completely open before exiting. Notify terminal personnel **immediately** if the entrance or exit gate does not operate properly.

Transport Loading Procedures

Terminal Procedures and Rack Safety Precautions

- No smoking (except in designated areas), firearms, drugs, alcohol, or cameras are allowed anywhere inside the terminal gates. **No cellular phone calls are allowed inside rack area.**
- Obey the posted speed limit within the terminal property.
- All truck transports will come to a complete stop prior to entering the loading rack. At this point, all lights and electrical devices must be turned off.
- Do not enter loading area if spilled product is evident.
- No work or service checks whatsoever are to be performed on trucks, tractors, or trailers within terminal boundaries.
- If a truck stalls under the rack and fails to restart, it must be towed (not pushed) outside of the terminal boundaries. Under no circumstances will a booster battery or booster cables be connected to the truck while under the rack or within terminal boundaries.
- In the event a spill occurs, during and/or immediately after loading, all spilled product must be removed before the truck engine is started.
- Do not preset to load more product than the rated capacity for each trailer compartment.
- **Maintain a high standard of cleanliness around the loading rack.**

Transport Loading Procedures

Abnormal Operating Conditions and Emergencies

- Emergency Shut-Down switches (ESD's) are located near the loading rack. If a fire or other emergency condition occurs, these shut-down switches should be activated to minimize damage.
- Direct any questions regarding safe loading requirements to the Terminal Manager.
- In case of an emergency, contact terminal personnel immediately. Emergency contact numbers are posted at the terminal.
- All spills or unintentional release of products shall be reported to terminal personnel immediately.

A non-reported spill will result in immediate loss of loading privileges.

- All spill clean-up activities will be the responsibility of the driver / carrier to the satisfaction of the Terminal Manager.

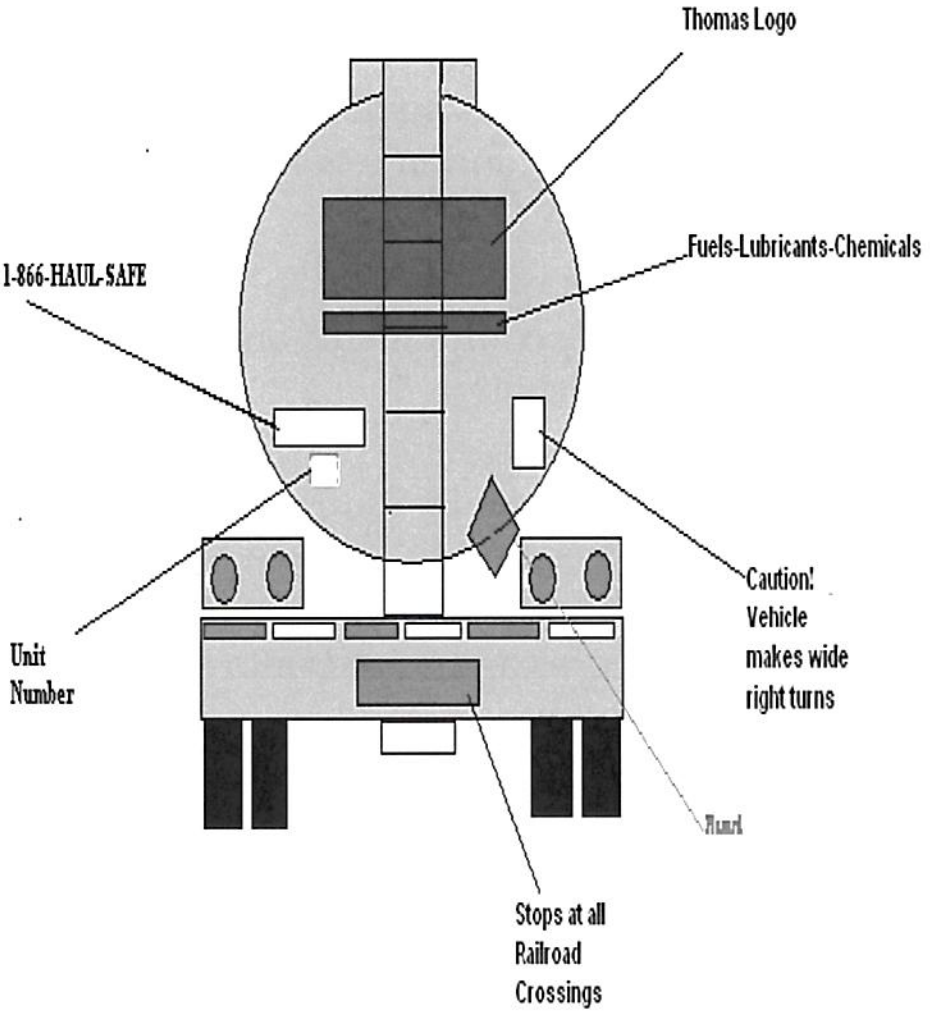
HAUL SAFE

1-866-HAUL-SAFE is a program to give our drivers the opportunity to prove to the driving world, that they are safe drivers. Both Transport and Bobtail Trucks have been decaled with our new Safety Slogan;

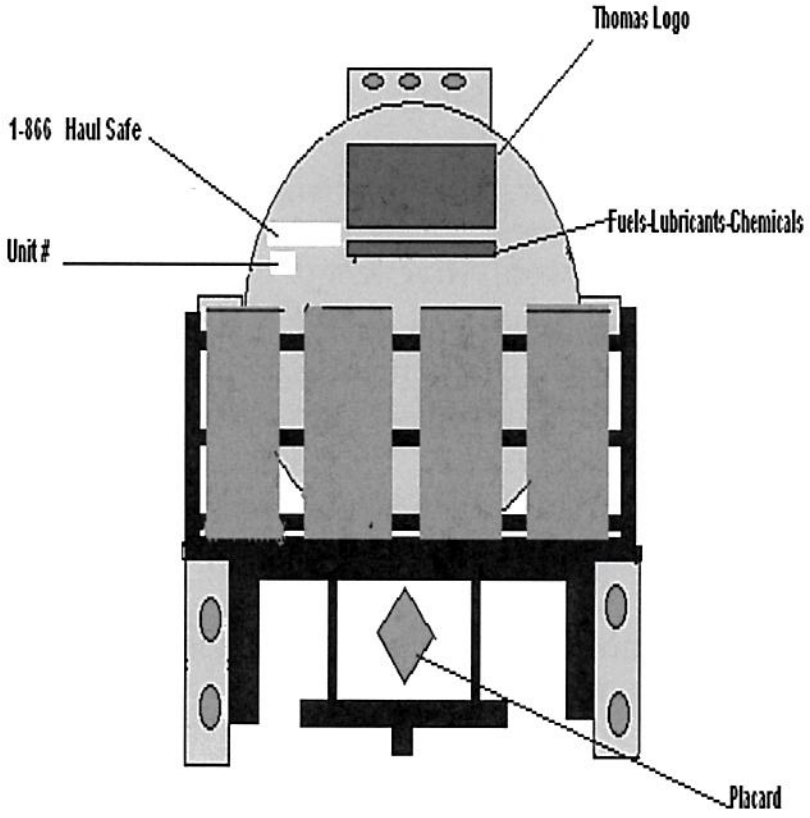
1-866-HAUL –SAFE (How is my Driving), the Vehicle Unit #, Company Logo, and a Caution – Vehicle makes Wide Right Turns

- The public has the opportunity to dial the **866-HAUL-SAFE** number and file either compliments and/or concerns with the way our drivers are driving.
- The caller will be asked to leave the date, location, truck unit number, reason for call, and a return phone number on a voicemail message system. All messages will be followed up on a weekly basis.
- Compliments/Concerns are logged onto an Investigation Report
- Safety Coordinator will research issue and provide follow up response
- If report is found to be accurate, Operations Manager of the Driver will be notified
- Operations Manager is to counsel driver, where a Performance Improvement document is to be signed by both Operations Manager and Driver

TRANSPORT STICKER LOCATION



BOBTAIL STICKER LOCATION



Bulk Oil Plant Safety

- Good housekeeping is the foundation for a safe work environment and is everyone's responsibility. Return tools and equipment to their proper place, clean spills, and remove trash. Access to electrical controls, electrical panels, and fire extinguishers must be maintained at all times.

- Report unsafe conditions to your supervisor. (Leaking valves or piping, deteriorated or damaged walking and climbing surfaces, electrical system malfunctions, and missing or discharges fire extinguishers).

- Smoking is prohibited at the bulk plants and terminals, except in designated areas. Smoking is prohibited during loading and unloading operations and within twenty-five feet of bulk trucks and transports.

- To help prevent roll away when making deliveries, always set the parking brake; on sloping terrain use chock blocks.

- Do not mix products. Think before opening valves. Avoid accidents, overfills, spills, and product mixtures.

- When loading and unloading is completed close and lock all valves with dust covers put in place, and store hoses.

- When loading through open domes, the driver will always use the static bonding cable. Stay on the loading rack or on top of the vehicle to monitor the loading and unloading operation.

- Determine if the customer tanks are correctly installed and, if inside properly vented to the outside before unloading operation is started.

- Ensure you have protective clothing and/or equipment, to safely complete the tasks at hand; Side Shield Glasses or Goggles, Face Shield, Gloves, Respirator, Safety-Toed Boots, Hard Hat

Bulk Plant
Product Sampling

- Sampling Product; ensures three areas of our business have been satisfied.

1. Bulk Product Received - [Fuel / Lubricants & Chemicals] that have been delivered by 3rd Party Freight Carries should be sampled.

Samples should be Inspected for:

- Color - contrast of the product
- Purity - of the product; is it cloudy, milky or does it contain foreign particles
- Viscosity –Does the product meet specifications
- Glycol content [Antifreeze]

2. Product to be transported to a customer
   - Each day, products to be transported should be sampled during the first Load Out
   - It should be necessary to repeat this process for any and all loads of the same product, unless your supply source has been switched to a separate tank.
3. Product in Customer's Tank
   - Sample this product prior to offloading, to ensure you are delivering the same
   - To ensure Tank/Product has not been fouled, either way we will have a contaminated situation to resolve.

Bulk Products

Introduction

The greatest danger of product contamination is during the loading, transporting and unloading of products. Possible sources of contamination are:

- Residual product left in compartments, truck pump and hoses
- Leaking valves
- Leaking compartment bulk heads
- Poorly drained manifolds
- Improper flushing between products
- Poor communication between Driver and Dispatcher

Sampling / Receiving Bulk Product(s)

- The member responsible for loading a given product should ensure a sample has been drawn from either the loading system or truck compartment once loaded. (First load of that product, or if bulk supply has been switched)
- When Bulk Product has been delivered to your location;
  - Verify the Load / Delivery Documents
  - Draw a sample to verify quality of the product
  - Inspect Hoses / Fittings
  - Ensure proper connection to both the Truck / Tank
  - Remain in the immediate area, throughout the entire Off Loading process
  - After each product is unloaded, the pump and hoses must be completely drained or purged before the next product is unloaded.

Bulk Products

Chain of Custody Log

The Chain of Custody Logs are used to record pertinent information about each product received, loaded, filled and/or stored. The following explains each of the logs and defines the column headings.

Products Received – Log 1

This Log is used to record the lubricant volumes received from the Blend Center and any containers filled from the incoming tank truck.

- **Product Name** – Name of lubricant being handled.
- **Batch Number** – Blend number from the plant
- **Date** – Date the lubricant was received, loaded, or filled.
- **Source** – The location that the product is supplied from or tank number (if the fill is from the facility storage tanks).
- **Visual Inspection** – After inspecting a product sample for color, appearance, and contamination (ie. , no particulate material, haze, or stratification), the sample should be noted in the log as "Acceptable or Not Acceptable".

Bulk Products

Products Received – Log 1 Cont'd

- **Temperature Corrected Gallons** – This is the amount of product that is actually metered into each drum after going through the temperature correction process.
- **Flush Volume** – The amount of product used to decontaminate the bulk and package filling systems.
- **Drum Fill Volume** – Total gallons put into drums from the incoming tank truck.
- **Tote Fill Volume** – Total gallons put into totes from the incoming tank truck.
- **Amount to Storage** – The amount of product put into the facility's storage tank.
- **Tank Number** – The number of the storage tank that is receiving the product.
- **Total Amount Received** – The total amount of lubricant used in flushing the system, put into packages, and put into storage tank(s).

Bulk Products

Products Delivered – Log 2

- **Product Name** – Name of lubricant being handled

- **Date** – Date the lubricant was received, loaded, or filled.

- **Source** – The location that the product is supplied from or tank number (if the fill is from the facility storage tanks).

- **Truck Compartment** – Enter the number of the bulk delivery truck compartment that is filled.

- **Visual Inspection** – After inspecting a product sample for color, appearance, and contamination (ie. , no particulate material, haze, or stratification), the sample should be noted in the log as "Acceptable or Not Acceptable".

- **Flush Volume** – The amount of product used to decontaminate the bulk and package filling systems.

Bulk Products

Products Delivered – Log 2 – Cont'd.

- **To Customer Storage** – The amount of product delivered from a Marketer's bulk delivery truck into customers bulk storage tank(s).

- **Pumped From Drums** – The amount of product that is pumped from drums to customers bulk storage tank(s).

- **Pumped From Totes** – The amount of product that is pumped from tote(s) to customers bulk storage tank(s).

- **Returned To Storage** – The amount of product that is returned to the Marketer's storage tank from the bulk delivery truck (product not delivered to customers).

- **Total Volume Delivered** – The total amount of lubricant delivered from the bulk delivery truck, drums, and totes to customers storage tank(s).

Written Hazard Communication Program

Thomas Fuels, Lubricants and Chemicals, Inc. has developed a program to establish procedures for working with and handling hazardous chemical substances. This program supports compliance with the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard as found in 29 CFR 1910.1200. This program applies to all employees.

The Hazard Communication Program will include:

- Container labeling
- Material Safety Data Sheets (MSDS)
- Employee training

The following program outlines the steps that will help accomplish this objective.

1. CONTAINER LABELING

It is the policy of THOMAS PETRLEUM, LLC that no container of hazardous substances will be released for use until the following information is verified.

Container labels should contain the following information:

* Identity of hazardous chemicals
* Appropriate hazard warnings
* Name and address of the chemical manufacturer, importer or other responsible party.

The Employer or employees shall not remove or deface labels on incoming containers of hazardous chemicals

The responsibility has been assigned to the manager / Safety Coordinator. To help ensure that employees are aware of the hazards of material used in their work areas, it is our policy to label all secondary containers.

These are examples of pictures, symbols or combination to address the appropriate hazardous warnings:

Combustible Flammable

Corrosive

Poison Toxic

Infectious

Written Hazard Communication

2. MATERIAL SAFETY DATA SHEETS (MSDS)

Copies of MSDS for hazardous substances to which employees may be exposed are kept at a location specified by management. A list of the hazardous chemicals known to be present using an identity that is referenced on the appropriate Material Safety Date Sheet (MSDS). The Safety Coordinator will be responsible for obtaining and maintaining the data sheet system for the company.

The Safety Coordinator will review incoming data sheets for new and significantly health/safety information. The Safety Coordinator will see that any new information is passed on to the affected employees.

MSDS will be reviewed for completeness by the Safety Coordinator. If an MSDS is missing or obviously incomplete, a new MSDS will be requested from the manufacturer. MSDS are available to employees in their work area for review during each work shift. If MSDS are not available or new hazardous substance(s) in use do not have MSDS, please contact your supervisor immediately.

3. EMPLOYEE INFORMATION AND TRAINING

Employers shall provide employees and new hires at their initial assignment effective information & training on hazardous chemicals in their work area and the following:

- Requirements of this program contained in the Hazard Communication Regulation, including their rights under the Regulation.
- Any operations in their work area where hazardous chemicals are present.
- Location of written Hazard Communication Program, listing of hazardous chemicals present and MSDS.
- Methods and observations that may be used to detect the presence or release of hazardous chemicals by use of monitoring devices, visual appearance or odor.
- The physical and health hazards of chemicals in the work area.
- Protection measures to be utilized to prevent exposure, appropriate work practices, emergency procedures and proper PPE to be used.
- Steps the company has taken to lessen or prevent exposure to these substances.
- Details of the hazard communication program, explanation of the labeling system and the MSDS and how employees can obtain and use the appropriate hazard information.
- All labels shall be legible in English. However, every employee employed by Thomas Fuels, Lubricants and Chemicals, Inc. is required to read and write the English language.

Written Hazard Communication

4. HAZARDOUS SUBSTANCES

Information on all hazardous substances for Thomas Fuels, Lubricants and Chemicals, Inc. can be found in the MSDS books.

5. HAZARDOUS NON-ROUTINE TASKS

Periodically, employees are required to perform hazardous non-routine tasks. Prior to starting work on such projects, each affected employee will be given information by their supervisor about hazards to which they may be exposed during such activity.

This information will include:

- Specific hazards
- Protective/safety measures which must be utilized
- Measures the company has taken to help lessen the hazards including ventilation, respirators, presence of another employee and emergency procedures.

6. INFORMING CONTRACTORS

To help ensure that outside contractors work safely in your place of business, it is the responsibility of the Safety Coordinator to provide contractors the following information.

- Hazardous substances to which they may be exposed while on the jobsite.
- Precautions the contractors may take to help lessen the possibility of exposure by usage of appropriate protective measures.

If anyone has questions or suggestions about this plan contact your Safety Coordinator. Working with your Operations / Safety Coordinator to improve safety with hazardous substances, will improve the safety for all.

Employee Education & Training

Education and Training are the foundations of a Loss Control Program. If the hazards are not known, prevention can not be practiced. New employees must be trained. Continuing Education is a fact of today's business world. Safety is no exception.

The primary purpose of Safety Training is to help employees learn how to work safely and to reduce injuries. Training is one of the main cornerstones of any Safety Program.

Safety Training is recommended:

- For all new employees
- When new equipment, procedures, or processes have been introduced, and
- When an employee's safety performance needs improvement.
- The certification will include: employee name, dates of training and the certification subject.

Whenever possible, training should stretch beyond the classroom to include actual hands-on and/or employee application and participation.

However implemented, Safety Training should be ongoing in order to have safety where it belongs… at the forefront of every tasks and/or project.

Remember – Safety is everyone's concern!

Employee Education/Training

Formal Training - in key areas that affect the safe operations of our business will be provided for all Drivers at all Warehouse locations, initially for all new drivers, and ongoing as needed for all drivers.

- HAZARD COMMUNICATION
- RECOGNITION OF HAZARDS IN THE WORKPLACE
- HAZMAT
- DEFENSIVE DRIVING
- EMERGENCY MANEUVERS/STEERING
- CONTROL OF DRIVING SPEED
- USE OF SEATBELTS
- SAFE BACKING / PARKING
- SPILL PREVENTION
- REPORTING OF ACCIDENTS / INJURIES
- FIRST AID
  - RESPIRATORY
- H2S
- FORKLIFT SAFETY
  - Anyone operating a Forklift will be Certified / Licensed
- FIRE SAFETY
- PERSONAL PROTECTION EQUIPMENT (PPE)

Training will be conducted by both in house and outside Safety Training/Consulting Firm, where training will comply with all governing agencies; ie. DOT, EPA and OSHA. Also, to ensure those trained will be certified.

Safety Incentives & Awards

Thomas FUELS • LUBRICANTS • CHEMICALS

Chevron Lubricants

Thomas Fuels, Lubricants and Chemicals, Inc. awards its Drivers; Quarterly Safety Bonus'. A Bonus is awarded if a Driver meets the following criteria:

- Worked the entire quarter of a Bonus period
- No Citations
- No Misdrops
- No Misloads
- No missing and/or Damaged Equipment
- No Injuries
- No Safety Violations
- No Missed Safety Meetings
- No Customer Complaints
- No Insubordination
- No Failure to notify manager or Dispatcher of Excessive Hours prior to occurrence
- No Incomplete and/or Inaccurate paperwork including Delivery Tickets and BOLS

Safety Coordinator and Safety Committee are reviewing other areas where incentives could be awarded; such as when and where an employee has made a significant stride towards improving safety and in reducing accidents.

If A Task Is Worth Doing; It's Worth Doing Safely

HAUL SAFE

Short Service Employee Program (SSE)

SSE personnel are defined as those members with less than six (6) months in service in the same job type.

- ✓ Each SSE shall be assigned a Mentor / Coach
- ✓ SSE's shall be identified with a specific colored Sticker on their Hard Hat; (Easily Distinguishable)

- ✓ Tenured members should be forth coming,,to ensure SSE's are made aware of potential hazards and that they perform their assigned tasks – SAFELY.

The safety of one will greatly improve the safety of all…

Spill – Emergency Planning

The Occupational Safety and Health Administration (OSHA), the Department of Transportation (DOT) , and the Environmental Protection Agency(EPA) have standards applicable to hazardous materials incidents.

An Oil Spill Emergency Plan is required of all companies that transport oil in packaging having a capacity over 3,500 gallons. Spills involving any amount of product should be reported to both your Supervisor, as well as Company Operations Manager/Representative.

- **Major Oil Company's – have a zero tolerance with regards to spilled product / materials.**

The first priority is for the protection of people… then property… then the environment. Small incidental spills may or may not result in an emergency situation depending on the surrounding conditions.

<u>Training is important</u> for controlling hazards that may be present during an unwanted release of hazardous materials. If personnel have been trained to protect themselves and others they may be able to stop a leak, as well as divert, dam, or dike an incidental spill to avoid more serious consequences.

- **Drivers need to exercise caution anytime involved in off-loading and/or transferring product; to a given tank, from tank to tank or when extracting product (s) from a tank.**
- **In the event you experience a spill on location, contact your immediate supervisor and depending on the amount of product spilled, do the best you can to contain the product.**
- **That product soaked up by dirt, absorbent, etc. should be placed in filter drums and properly disposed. Coordinate with your Manager for disposal of hazardous waste.**

Spill – Emergency Procedures

Emergency Response

Hazardous Spills that occur over open highway take on an additional set of responsibilities, where all the governing agencies previously identified; DOT / OSHA and EPA may become involved.

- Notify your Supervisor, where in-turn he can notify local Emergency Response Teams; ie. Fire Department, HAZMAT Emergency Response, etc.
- You may be ask to assist and/or provide additional details that led to the accident, however unless ask, you should stay back and allow these groups to do their job.
- From the company's perspective, we need to:

  - Assist and/or report anyone who may be injured

  - Notify your Supervisor, where you will need to provide as much detail as possible;

    Location / Injuries / Product Spilled / Cause / Clean-up Measures Completed

  - Safeguard and/or secure the vehicle / equipment

  - Complete a Spill and/or Incident Report; providing as much detail as possible

  - Be cooperative with any and all Emergency Response Officials.

  - Be prepared to perform a Post – Accident Drug and Alcohol Test.

Emergency Response Teams/Agencies on scene and investigating a hazardous spill, will be extremely concerned with these matters,.

Thomas Fuels, Lubricants and Chemicals, Inc. will be no less concerned, as you should be.

- If after a thorough investigation, driver negligence has been determined, corrective actions to include immediate termination of employment, may result.

Chemical Hazard Emergency

Emergency Contact – In the event you are involved in a chemical hazardous spill, regardless of the location, and you need hazard information or guidance, contact CHEMTREC.

- **Chemtrec operates around the clock – 24 Hours a day, 7 days a week to receive emergency calls in the event of a Chemical Transportation Emergency:**

800 - 424-9300

Provide the following:

- Name of caller and call-back number
- Location of Problem
- Shipper or Manufacturer
- Container Type
- Rail Car or Truck Number
- Carrier Name
- Consignee
- Local Conditions

Lock Out / Tag Out Procedures

Preparation for Lockout/Tag Out

Make a survey of location and identify all isolating devices to be certain which switch(s) / valve(s) or other isolating devices apply to the equipment to be locked or tagged out. More than one energy source (electrical, mechanical, others) may be involved.

Sequence of Lockout or Tag Out System Procedure

1. Notify all affected employees that a lockout or tagout system is going to be utilized and the reason therefore. The authorized employee shall know the type of magnitude of energy that the machine or equipment utilizes and shall understand the hazards thereof.

2. If the machine or equipment is operating, shut it down by normal stopping procedures (depress stop button, open toggle switch).

3. Operate the switch, valve, or other energy isolating device(s) so that the equipment is isolated from its energy source(s). Stored energy (such as that in springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas, steam, or water pressure) must be dissipated or restrained by methods such as repositioning, blocking, or bleeding down.

Lock Out / Tag Out Procedures

Cont'd.

4. Lock out and Tag out the energy isolating device(s) with assigned individual lock(s) or tag(s). Note: When tag out alone is used (without lock out) energy sources must be disabled (remove fuses or circuit breakers, close valves and remove handles, disconnect wires) so that the same level of safety is achieved as would be achieved with lockout.

5. After ensuring that no personnel are exposed, and as a check on having disconnected the energy sources, operate the push button or other normal operating controls to make certain the equipment will not operate.

NOTE: Return Operating Control(s) to "Neutral" or" Off" position after the test.

6. The equipment is now locked or tagged out.

Forms

Form / Use Description / Sample

- **EMPLOYER'S FIRST REPORT OF INJURY OR ILLNESS**

  - Instructions To Assist With Completing / Submitting
  - Complete anytime an **EMPLOYEE** has been injured, while on the job.

Employee must report injury NLT End-of-Shift; same day !

Your written / electronic reporting needs to be within 24-hours or next Business Day

- **CUSTOMER ACCIDENT / INJURY REPORT**

  - Complete anytime a Customer/Civilian has been involved in an accident, injured them self, or done damage to our property (facility / equipment)

  Report accident / injury within 24-hours

- **Near Miss Incidents**

  - Reporting of Near Miss Incidents is critical in regards to our improving Safety Awareness, and in preventing accidents before they occur.

  Report incidents within 24-hours

Forms

Form / Use Description / Sample

Near-Miss Incidents

A near-miss incident could be the most important report you complete. It provides us with a tool in which to measure the cause of the situation, and helps us to determine if the safety procedure needs to be changed, or for that matter, one developed. By looking at the facts surrounding what could have been a claim, we are able to identify the risks associated with each job function, and can prevent future occurrences.

Near-Miss Incidents should be reported in the same way and with the same sense of urgency, as that of any other claim.

- Reporting of Near – Miss Incidents

  - Complete the Near – Miss Form (with as much detail as you are able to provide)

  - Turn the completed form in to your Supervisor

  - If you are concerned about the incident and the real possible threat that exist, he too should be.

  - Be prepared to discuss the Near – Miss Incident at your next Safety Meeting; where hopefully you will have possible solutions to such.

We all learn and hopefully improve, anytime a Near – Miss Incident gets reported.

Forms

Form / Use Description / Sample

- **Vehicle Accident Report [2-Pgs]**

  - Complete anytime an employee of the company is involved in a vehicle accident, operating a company vehicle or a vehicle controlled by the company; ie. Lease / Loan

  Report incidents within 24-hours

- **Spill Report**

  - Complete anytime you experience a fuel, lubricant and/or chemical spill in excess of 20 gallons

  Report Spill within 24-hours

- **Hazard Recognition Form**

  - When and where a potentially hazardous situation exist
  - Requires,,further discussion and/or corrective actions

Unless immediate threat to life or limb, to be discussed at next Safety Meeting

Forms

Form / Use Description / Sample

- **Job Safety Analysis (JSA)**

  - A JSA assist with studying a specific job in order to identify the hazards or potential accidents associated with each step of the job. Also, a JSA will assist with determining solutions that hopefully will eliminate or nullify potential accidents.

- **Waste Gathering Sheet**

  - To be utilized anytime we have waste product(s) / materials spilled on a jobsite, that which could affect safe operations and have significant consequences on the environment.

  - Identifies the specifics associated with an incident of this type, to include disposal accountability.

- **Safety Communication Form**

  - To assist with first having identified a particular incident and/or accident,, what were the contributing factors, and what corrective measures were implemented, to ensure results from such were minimized and to hopefully prevent similar accidents from occurring.

- **Safety Meeting Sign-In Sheet**

  - Generic Topic / Employee Sigh-In Sheet; to be used for recording all in attendance, to regular, ongoing Safety Meetings.

Hazard Recognition Form

Unsafe Act or Condition: [To be completed by employee]

_____

_____

_____

Location of Unsafe Act or Condition: [To be completed by employee]

_____

_____

_____

Proposed Solution For Unsafe Act or Condition:

_____

_____

_____

[Unless immediate threat to life or limb, to be discussed at next Safety Meeting]

Date Submitted: _____

Signature: _____

[Supervisor / Safety Coordinator Evaluation:

_____

_____

_____

Plan of Action:

_____

_____

_____

Date To Be Completed: _____

Date Of Completion: _____

Signature _____

[Supervisor / Safety Coordinator]

Job Behavior Observation

The Behavior Observation will go into effect 3-1-07. This form will be utilized by management and employees as a tool to help reduce injuries, accidents, and claims while specific tasks are being performed. This form can also be filled out on other Companies that are performing work on our premises. Managers and Drivers are required to complete one Job/ Behavior Observation Form a week and turn a copy into the Safety department.

1. There is a minimum of 4 Job/Behavior Observations required monthly.
2. Observer will have a blank observation form with him/her at the time of the observation.
3. Observer will fill in the top sections before the task begins:
   - 3.1. Observer
   - 3.2. Title of Person Observing:i.e. driver, warehouseman, etc. (do not put name of person)
   - 3.3. Event Date: 00/00/00
   - 3.4. Event Time: 00:00 am/pm
   - 3.5. Employee: Y N (circle one)
   - 3.6. Number of people: #
   - 3.7. Method of Observation: DVR or in Person (circle one)
   - 3.8. DVR Camera Number(s): #
   - 3.9 Camera Name(s): Front gate, Loading rack, etc….
   - 3.10. Event(s) viewed: Description of what viewed on video

Job Behavior Observation

4. Observer will complete the remaining form after the task has been completed.

5. Observer must note in the small box next to the subject being observed:
   5.1. **A** (acceptable)
   5.2. **I** (Improvement Needed)
   5.3. **N/A** (Not/Applicable)

6. Comments: Observer is to write comments on each unacceptable action observed

7. Action Taken: Observer will indicate what actions were taken

8. After completion, all Observation Forms will be:
   8.1. Filed at the warehouse for a duration of 8 months for review
   8.2. Covered in the next on-site safety meeting
   8.3. Copy sent to Safety department for tracking purposes

Job Behavior Observation (cont'd)

Thomas Petroleum, Inc.

Job / Behavior Observation Form

Observer:		Title of Person Observing	
Event Date:			
Event Time:			
Employee: Y N (Circle One)		Contractor Company Name	# People Observed:
Method of Observation:			DVR / In Person (Circle One)
DVR Camera Number(s):	#	Camera Name(s)	
Event / Task Viewed:			

Category:	A Acceptable	I Improvement Needed	N/A Not Applicable	Include comments for unacceptable behaviors below. Identify by using numbers, letters and comments at the bottom of the form.

1. Personal Protective Equipment	A	I	N/A
A.) Eye Protection properly worn, adequate for the job			
B.) Fall protection properly worn and in good condition			
C.) Gloves properly worn and in good condition			
D.) Hearing protection properly worn, good condition			
E.) Respirator properly worn and in good condition			

2. Ergonomics	A	I	N/A
A.) Body positioned to avoid injury			
B.) Loads lifted correctly (manual)			

3. Motor Vehicle	A	I	N/A
A.) Seatbelts worn when vehicle in motion			
B.) Load appropriate for vehicle			
C.) Load properly secured			

4. Hazard Identification & Control	A	I	N/A
A.) JSA completed and on person			
B.) Safe Work Permit issued at job site and conditions followed			
C.) Work areas barricaded w/cones for hazardous work			

5. Tools & Equipment	A	I	N/A
A.) Appropriate tools used for the job			
B.) Body positioned to avoid injury if tool fails			
C.) Tools used in accordance with Safe Work Permit			

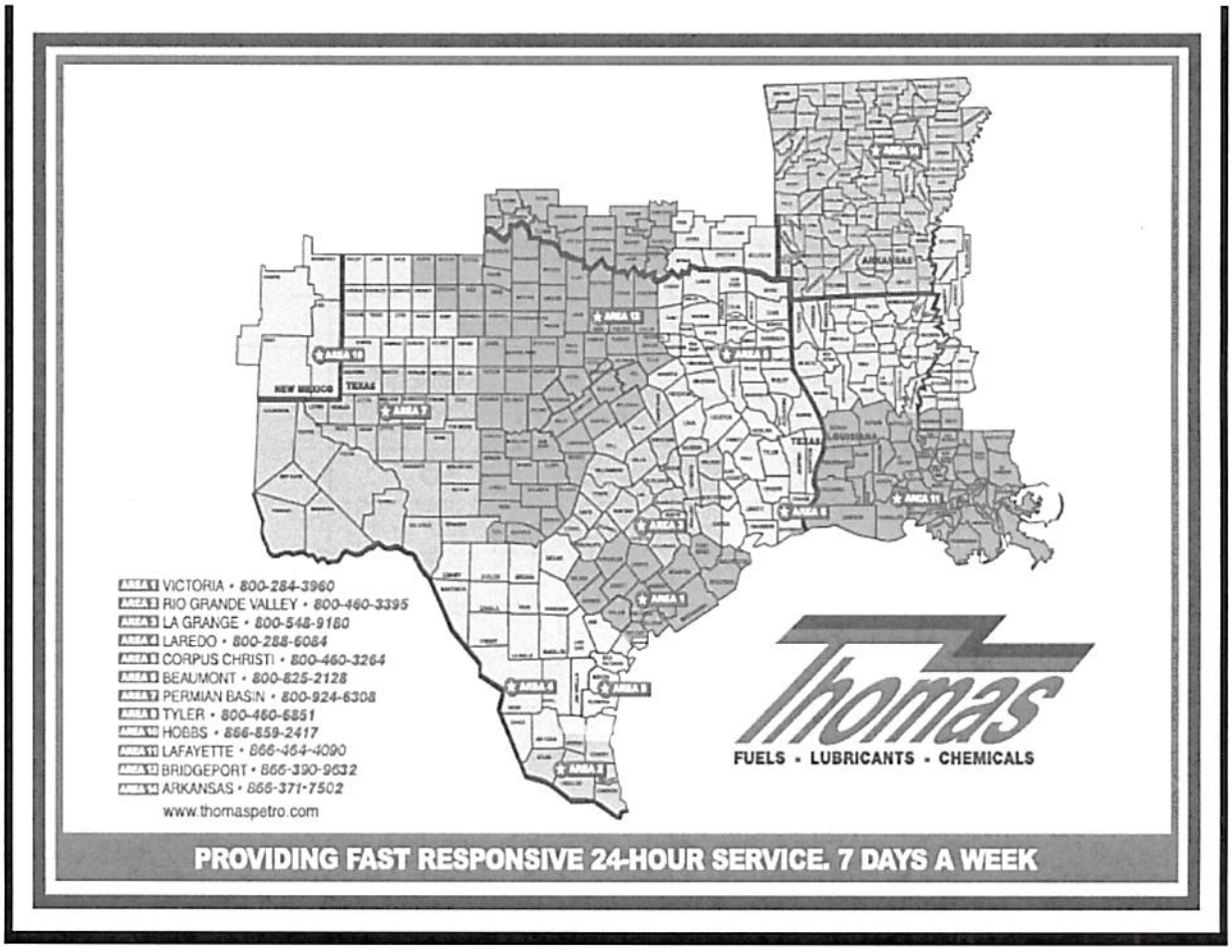
6. Work/Task Area	A	I	N/A
A.) Job site clear of all trip/fall hazards			
B.) Office areas clear of trip/fall hazards			

7. Policies / Procedures	A	I	N/A
A.) Policies / Procedures followed			

Category Number & Letter	Comments

Action Taken

Reference Guide



Strapping Table

STRAPPING TABLE				
CAP: 300 GALLONS				
38" dia. X 60" lg.				
INCHES	GALLONS		INCHES	GALLONS
1	2		20	156
2	6		21	166
3	11		22	176
4	17		23	185
5	23		24	195
6	30		25	204
7	37		26	214
8	45		27	223
9	53		28	231
10	62		29	240
11	71		30	248
12	80		31	256
13	89		32	264
14	99		33	270
15	108		34	277
16	118		35	283
17	128		36	287
18	137		37	291
19	147		38	293

Strapping Table

STRAPPING TABLE				
CAP: 518 GALLON				
INCHES	GALLONS		INCHES	GALLONS
1	2085		24	273.5
2	7.74		25	287.98
3	14.29		26	299.78
4	21.97		27	316.09
5	30.59		28	330.31
6	39.57		29	343.76
7	49.67		30	357.68
8	60.38		31	371.4
9	71.65		32	384.88
10	82.86		33	397.49
11	95.03		34	410.4
12	107.6		35	422.96
13	120.51		36	435.14
14	133.12		37	446.35
15	146.6		38	457.61
16	160.32		39	468.33
17	174.23		40	478.43
18	187.68		41	487.41
19	201.91		42	496.03
20	216.2		43	503.71
21	230.67		44	510.26
22	244.49		45	515.15
23	259		46	518

Strapping Table

STAPPING TABLE				
CAP: 1036				
INCHES	GALLONS		INCHES	GALLONS
1	5.7		24	547
2	15.48		25	575.96
3	28.25		26	599.56
4	43.94		27	632.18
5	61.18		28	660.62
6	79.14		29	687.52
7	99.34		30	715.36
8	120.76		31	742.8
9	413.3		32	769.76
10	165.72		33	794.98
11	190.06		34	820.8
12	215.2		35	845.92
13	241.02		36	870.28
14	266.24		37	892.7
15	293.2		38	915.22
16	320.64		39	936.66
17	348.46		40	956.86
18	375.36		41	974.82
19	403.82		42	992.06
20	432.4		43	1007.4
21	461.34		44	1020.5
22	488.98		45	1030.3
23	518		46	1036

PURPOSE

The purpose of the Zero Spill Product Transfer Prevention Checklist is to verify and validate safe product transfer through verifying the prevention checklist is 100% complete prior to commencing any transfer. Team Members must Stop, Slow Down, Be Careful, and Create a Spill Preventive transfer environment first, and acknowledge this via call or text for a zero spill process. Designated person(s) must review the Zero Spill Product Transfer Prevention Checklist, below, and related reminders with the Team Member BEFORE they can transfer product. A communication to validate, in writing that these items were accomplished is acceptable for all Team Members with more than 12 months of experience. Remember, Process Prevention First, Approval Second, and Product Transfer Third.

SCOPE

This policy applies to all Pilot Thomas Logistics (hereinafter referred to as The Company) Team Members and its subsidiaries.

RESPONSIBILITIES

Managers/Supervisors and/or the designated person must make themselves available to take calls/texts from drivers/employees before and after product transfers.

Team Members and any person(s) doing business for the company must call the above mentioned manager, supervisor or designated person before and after completing a product transfer.

PROCEDURE

During Normal Operations Hours, the below procedures will be followed:

- Team Member must communicate to designated manager/supervisor(s) BEFORE EVERY PRODUCT TRANSFER.
- Team member may call or text, confirming the prevention process check list is accurate and has been completed.
- Communication must verify that all 10 Checklist Requirements were 100% reviewed and all 10 Requirements were satisfactorily completed.
- A safe transfer acknowledgement by the designated manager/supervisor shall be received prior to product transfer.
- Upon completion of the successful product transfer, team member will communicate confirmation to designated manager/supervisor.

Poor Cell Service and Outside Normal Operations Hours, the below procedures will be followed:

- A Team Member who is unable to communicate with designated manager/supervisor due to poor cellular/GPS service or is working outside normal operations hours shall complete/verify the 10 Checklist Requirements form and submit at end of shift.

PLEASE SEE PAGE TWO (2) FOR THE ZERO SPILL PRODUCT TRANSFER PREVENTION CHECKLIST

ZERO SPILL PRODUCT TRANSFER PREVENTION CHECKLIST

Checklist Requirements:

1. Is the tank vented effectively?
2. What type of gauge? (sight tube, dial gauge, clock gauge)
3. Was the tank visually gauged? (strap stick used to compare to gauge)
4. What is the beginning reading of the tank?
5. What is the capacity of tank?
6. How do you know the size of the tank?
7. How much to transfer to 90% of tank capacity?
8. Are all cam-lock connections Velcro strapped?
9. Are hoses and hose connections in serviceable and safe condition?
10. Is spill prevention / containment in place?

Transfer Fundamentals

- Never leave transfers unattended
- Ensure proper venting of tanks before transferring products
- Stop pumping if you get distracted during transfer
- Verify product before beginning transfer
- Collect Samples

ENVIRONMENTAL SUSTAINABILITY

PURPOSE

Pilot Thomas Logistics (hereinafter referred to as The Company or PTL), aims to have a positive impact on environmental sustainability and environmental preservation by insuring that principles and core concepts of environmental sustainability are a driving force in our partnerships with our customers, the community and a key factor in of our operations and implementations. The Company assigns clear roles and responsibilities, and allocates adequate resources to manage our potential impact. We articulate our shared values, establish clear metrics, use them to track our improvements and hold management accountable for results. Additionally, The Company is committed to:

- Providing a quality service that insures a safe and healthy workplace for our employees and minimizing our potential impact on the environment
- Operating in compliance with all applicable federal, state, and local environmental rules and regulations

Our Environmental Sustainability Commitments

- Integrate the consideration of environmental concerns and impacts into all our decision making and activities;
- Promote environmental awareness among our employees and training them to work in an environmentally responsible manner;
- Communicate our environmental commitment to our employees, vendors, contractors, and customers;
- Train, educate and inform our employees about environmental issues that may affect their work;
- Take all reasonable steps to protect human health and the environment when hazardous materials and chemical products are used, stored and/or disposed of, including making SDS information available and issuing PPE;
- Purchase and use environmentally responsible products accordingly, where required by legislation or where significant health, safety or environmental hazards exist;
- Comply with spill prevention, control and countermeasures (SPCC) regulations to prepare for, quickly respond, and minimize environmental incidents when they occur;
- Train employees on storm water pollution prevention and implement SWPPP plans to minimize environmental impact from storm water runoff;
- Monitor and reduce our greenhouse gas emissions by purchasing new equipment that meets EPA requirements, limiting vehicle idle time, and creating a governed "safe speed";
- Recycling used oil and blending off-spec product into usable products,
- Ensure our third party contractor recovers all oily water collected by elimination of contaminants and oil. Oil is recycled and recovered for energy use and water is returned to the environment through a permitted treatment process and local city POTWs (Public Owned Treatment Works); and
- Strive to continually improve our company environmental performance.

Greenhouse Gas Reduction

Measures are taken throughout the company to reduce environmental impact and limit greenhouse gases. Our vehicle fleet is compliant with all DOT and motor vehicle emission regulations. Transports and tank wagon trucks feature emission reduction components such as selective catalyst reduction (SCR) and exhaust scrubbers. PTL has a "no idle policy" with idle shutdown components. Trucks for the Energy sector are governed at 65 MPH to increase mileage performance and reduce emissions. New trucks feature low-rolling resistance tires which burn less fuel and increases fuel mileage. Smart Drive camera systems are present in all trucks to reduce accidents and impacts upon the environment. The preventative maintenance (PM) program is robust and maintains vehicle in efficient, road-worthy condition at all times. "Green" and non-chemical parts washers are used whenever possible to reduce VOCs and hazards.

Waste Estimation and reduction

It is a corporate best practice to estimate and minimize potential wastes, trash & scrap materials recovered or generated during field operations. This increases overall efficiency and planning for containers, and waste removal, if necessary.

Disposal of Waste

The Company partners with client companies in regard to the proper disposal of wastes or scrap materials. Many time materials are recycled or blended into fluids useful for oil exploration or recovery. PTL ensures that the client is aware of whether wastes and scrap materials will be taken off site, recycled, or put back to use on the owner's site.

Energy Conservation

The Company is committed to conserving energy and taking proactive measures to reduce consumption. Terminals and facilities are expected to shut down equipment when not in use, and use energy efficient tools, equipment, and materials whenever possible.

Environmental Impact

The Company strives to minimize environmental impacts on local habitat when engaged in activities that could cause damage or have an adverse effect. The Company will have a plan to protect habitat before beginning any construction projects.

Water Conservation

The Company is committed to conserving all natural resources including water. The Company shall ensure all equipment piping, and associated water plumbing are maintained in good repair. The Company shall also use brooms and other equipment as reasonably possible instead of pressure washing where possible. Team members are encouraged to conserve water in all aspects of our business.

Safety Hazards

It is the determination of the Company to ensure that safe practices related to the immediate storage and handling of waste, scrap, or left over materials are carried out. Always be aware of what you are handling. The proper personal protective equipment (PPE) will be used and team members will be familiarized with material safety data sheets (SDS) before handling.

Handling, Organization, & Storage

It is the policy of the Company to ensure that waste materials will be properly stored and handled to minimize the potential for a spill or impact to the environment. During outdoor activities, receptacles must be covered to minimize storm water impact and prevent discharge of waste materials to the environment. Good housekeeping is emphasized.

The Company ensures that project related wastes will be stored and maintained in an organized fashion to encourage proper disposal and minimize risks to employees and the environment. Proper, covered, waste receptacles will be provided for trash and materials that may be reused or recycled during a project.

Proper Methods of Disposal

All employees are instructed in the proper method to handle and dispose of wastes. Employees of the Company receive training for the general disposal of non-hazardous wastes, trash, or scrap materials. If wastes generated are classified as hazardous, employees will be trained to ensure proper handling and disposal. Only properly permitted companies and facilities are utilized for waste removal and disposal.

Waste Segregation

It is the resolve of the Company to encourage employees to properly segregate waste or scrap materials to ensure the opportunity for reuse or recycle.

Waste Management

To assist in energy conservation, The Company utilizes vendors that recycle or repurpose the waste streams generated by our services and operations. Waste streams, to include soil, primarily in the northern and eastern segments of our U.S. geographical footprint are not landfilled. The waste streams may be recycled, repurposed, or used in energy recovery and conservation. Of the waste streams, solids are landfilled. As a best practice, when available, The Company makes a good faith determination to ensure that all waste streams are recycled, repurposed, or used in energy recovery and conservation.

AMMONIA AWARENESS

PURPOSE

Pilot Thomas Logistics (hereinafter referred to as the Company), is committed to the safety and health of our employees. The purpose of this procedure is to ensure employees are properly educated and made aware of the dangers of working with or around Ammonia.

SCOPE

This procedure applies to Company operations where employees whose work activities may involve working with or around ammonia. When work is performed on a non-owned or operated site, the operator's program shall take precedence. However this policy covers Company employees and contractors on or off Company facilities or work sites. In addition, this policy shall be followed when an operator's program is nonexistent or less stringent.

RESPONSIBILITIES

Operations Manager

- Ensure personnel are aware of ammonia being used or stored in or near their work area
- Provide proper hazard warning signs for locations where ammonia is used or stored
- Ensure an emergency action plan is established and implemented in the event of an accident release of ammonia

Employees

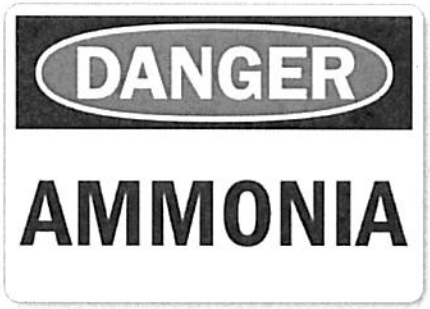
- Comply with the ammonia awareness requirements and direct any questions or concerns to the EHS Department
- Report any potential or accident release of ammonia

Hazard Assessment for Ammonia Related Work

A hazard assessment shall be completed prior to starting any work in areas where ammonia is used or stored. The hazard assessment should be documented.

Some planning or assessment elements may include:

- All proposed work requires an assessment to identify special precautions, equipment needed, and personal safety equipment requirements
- The assessment must clearly identify all hazards and specific personal protective equipment needed
- Appropriate warning signs shall be posted in or near the affected work areas. Appropriate signage shall include adequate warning as seen below.



Routes of Exposure

Ammonia can cause harm if inhaled and/or if it comes into contact with the eyes or skin. High concentrations of ammonia gas, liquid ammonia and solutions of ammonia can cause harm if inhaled or if they come into contact with eyes or skin.

Personal Protective Equipment (PPE)

Company employees shall use impervious clothing, gloves and/or face shields if there is a possibility of skin contact with liquid ammonia or vessels containing liquid ammonia. Employees shall be provided with and required to use impervious clothing, gloves, face shields and other appropriate protective clothing necessary to prevent any possibility of skin contact with liquid anhydrous ammonia or aqueous solutions of ammonia containing more than 10% by weight of ammonia. Similar precautions should be taken to prevent the skin from becoming frozen from contact with vessels containing liquid anhydrous ammonia.

TRAINING

The Company shall provide awareness training for any employees who may work with or around ammonia. Training content should include special emphasis on:

- The characteristics of ammonia
- The hazards of ammonia
- Proper PPE
- Owner client requirements

Ammonia awareness training shall be documented.

BENZENE AWARENESS

PURPOSE

The purpose of this program is to define work practices, administrative procedures and engineering controls to protect employees exposed to benzene concentrations above the OSHA action level. This plan shall be implemented and kept current by the Safety Manager as required.

SCOPE

This program covers all employees who may be exposed to benzene in the course of completing job duties. This written plan shall be made available to the Assistant Secretary, the Director, affected employees and designated employee representatives. When work is performed on a non-owned or operated site, the operator's program shall take precedence, however, this document covers Company employees and contractors and shall be used on owned premises, or when an operator's program doesn't exist or is less stringent. Employees shall be aware of provisions of site specific contingency/emergency plans by either Company or of a facility owner.

Possible locations where employees may be exposed to benzene during their job functions may include, but not limited to: petroleum refining sites, tank gauging (tanks at producing, pipeline & refining operations) and field maintenance operations.

RESPONSIBILITY

Operations Managers

- Shall be aware of an owner's contingency plan provisions
- Shall ensure personnel are aware of work that has the potential of exposure to benzene
- Shall ensure individuals responsible for monitoring areas of exposure are properly trained
- Shall ensure personnel receive documented medical surveillance exams
- Shall ensure that emergency exams are performed if an overexposure or suspected overexposure occurs
- Shall ensure employees comply with this policy
- Ensure fire extinguishers shall always be readily available where benzene is used/stored

EH&S Department

- Maintain this program, notify management of any regulatory changes and ensure compliance with regulatory, client and corporate requirements
- In coordination with the Manager, develop and implement project/task specific benzene control procedures prior to the start of activities that may include exposure to benzene
- Coordinate monitoring activities, ensuring monitoring equipment is in proper working order and, as necessary, modifying the benzene control procedures to reflect exposure monitoring data
- Coordinate the medical surveillance program, including maintenance of medical records and administration of exams

Employees

- Shall adhere to the requirements of this policy

- Shall be aware of where benzene is used at Company or client facilities and follow any additional plant safety rules required by the client
- Comply with the medical surveillance program and attend examinations if required
- Maintain respiratory protection equipment in good working order and notify the supervisor or EH&S of any problems prior to starting work
- Review Safety Data Sheets prior to handling benzene for the first time and any time there is a safety concern
- Report exposures resulting in any symptoms immediately

DEFINITIONS

Action Level – means an airborne concentration of benzene of 0.5 ppm calculated as an 8-hour time-weighted average.

Benzene – a toxic, colorless liquid or gaseous material. Benzene has an aromatic odor, is not soluble in water and is flammable.

Employee exposure – exposure to airborne benzene that would occur if the employee were not using respiratory protective equipment.

Health Effects – Short-term overexposure may cause irritation of eyes, nose and skin; breathlessness, irritability, euphoria, headache, dizziness or nausea. Long term effects may result in blood disorders such as leukemia and anemia.

BENZENE AWARENESS

Permissible Exposure Limits

The time-weighted average limit (TWA) for benzene is:

- 8-hour TWA 1 ppm
- 12-hour TWA 0.67 ppm

The short-term exposure limit (STEL) for benzene is 5 ppm.

In areas where the Company uses or stores benzene, the Company shall:

- Establish regulated areas wherever airborne concentration of benzene exceeds or can reasonably be expected to exceed the PEL or STEL
- Control access to regulated areas and limit access to authorized personnel
- Provide warning signs where benzene is used/stored. Warning signs should read:
  - DANGER – BENZENE REGULATED AREA CANCER CAUSING AGENT FLAMMABLE – NO SMOKING AUTHORIZED PERSONNEL ONLY RESPRIATOR REQUIRED
  - Warning signs shall be posted in all regulated areas when the potential exists for benzene vapors to exceed the PEL:
- Establish and implement a written program that complies with 29 CFR 1910.1028.
- Control employee exposure by means of engineering and work practice controls
- Establish an employee exposure monitoring program. Monitoring shall include:
  - 8-hour and 12-hour Time Weighted Average (TWA) monitoring

- 15 minute Short Term Exposure Level (STEL) monitoring:

- Benzene regulated areas should be monitored for:
  - A change in the production, process, control equipment, personnel or work practices which may result in new or additional exposure to benzene
  - Spills, leaks, or ruptures
  - If the area air monitoring reveals the potential for employee exposure at or above the action level but below the TWA, the Company shall require annual employee health monitoring
    - If initial monitoring reveals employee exposure to be below the action level, the Company may discontinue the monitoring.
    - If monitoring reveals that employee exposures, as indicated by at least two consecutive measurements taken at least 7 days apart, are below the action level, the Company may discontinue to monitor.
  - Personal monitoring shall be performed by use of vapor monitoring badges following manufacturer requirements. All samples shall be analyzed at an AIHA (American Industrial Hygiene Association) certified laboratory.

Medical Surveillance

- Baseline and annual medical exams shall be provided to employees that work or are anticipated to work in operations more than 10 times per year or may work in areas where benzene exposures may exceed the PEL over 30 days per year.
- Notification of monitoring results shall be provided to employees in writing within 15 working days of receipt of results.

Personal Protective Equipment

- PPE shall be selected on the basis of its ability to prevent absorption, inhalation and ingestion and based on work conditions, amount and duration of exposure and other known environmental factors.
- At a minimum, PPE shall consist of rubber boots, goggles, chemical resistant gloves, long sleeves, apron and tight fitting respirator with organic vapor cartridges.
- Approved respirators shall be selected in accordance with the following exposure levels:
  - 0 to 0.67 ppm – no respirator required
  - 0.67 to 6.7 ppm – half-mask respirator with OV cartridges
  - 6.7 to 33 ppm – full-face respirator with OV cartridges
  - Greater than 33 ppm –requires full face supplied air respiratory protection

Recordkeeping

- Medical surveillance records shall be maintained for 30 years after termination of employment
- Exposure monitoring records shall be maintained for 30 years after completion of the project
- Exposure and medical monitoring records shall be made available to affected employees or their representatives and to OSHA upon request

Communication of Benzene Hazards

- Warning signs shall be posted at all entrances of benzene storage or use areas

- Site specific contingency and emergency procedures shall be updated by EH&S and communicated to affected personnel.

EMERGENCY ACTION PLAN

PURPOSE

Pilot Thomas Logistics (hereinafter referred to as The Company), is committed to the safety and health of our employees. Each Company vehicle shall have a written Emergency Action Plan, in order to respond to an emergency that may include accidents and spills.

Each Emergency Action Plan shall be prepared to reflect all known probable emergency conditions which may arise from within the workplace and from adjacent workplaces, the minimum of which will include vehicle accidents, spills, or other emergencies.

The emergency action plan must be available to all employees to review. An emergency action plan must be in writing, kept in the vehicle and available to employees for review.

POLICY

Emergency Action Plans shall be established, implemented, reviewed, maintained and updated annually in conjunction with:

- Customer emergency services department requirements
- Safety staff and management

Emergency Procedures shall be discussed with all new/transferred personnel upon arrival for assignment.

The plan shall be reviewed when conditions warrant and should be used for routine and non-routine emergencies as well as changes in operation, and products or services which warrant new emergencies situations.

Reviewing with Employees

A review of the emergency action plan should occur with employees:

- When the plan is developed or the employee is assigned initially to a job
- When the employee's responsibilities under the plan change
- When the plan is changed

Following an Accident or Spill

The Emergency Action Plan must include procedures following an accident and/or spill. An Emergency Action Plan must include at a minimum procedures for accidents or spills, including type of responses and notification assignments to include:

- In the event of an accident, call 911 or other emergency number to report accident
- The State Police and local Fire Departments should be immediately contacted for traffic control and hazard prevention. This may not be necessary for an off road incident where there is little traffic. However, the State Police should always be called to investigate a traffic incident
- The driver or employee involved should immediately contact their respective Operations Manager /Plant Manager/Coordinator/Supervisor for further assistance or instructions. When on a customer site, their personnel should also be notified
- The Coordinator/Supervisor of the facility/Operation or their representative will immediately contact the Area EHS Manger or designated representative. If Area EHS Manager or designated representative cannot be contacted call Area EHS Manager or Regional Vice President
- It is imperative that the Area EHS Manager or other designated member of management travels to the accident site immediately. He or she should always assume the worse and be prepared for a spill. He or she should dispatch a truck immediately with equipment available at our bulk plant facilities. Every effort should be made to visit the site as soon as possible and to arrange for back up transportation equipment to off-load the wrecked vehicle or ruptured tank, etc.
- The onsite manager or Company representative should report as soon as practical to the Area EHS Manager any spill or <u>any</u> injury to the Area EHS Manager. If it is unclear whether a spill has occurred, he should report this fact as well. Again, be prepared for the worst. The Manager on site should also attempt to locate adjacent streams and/or other water sources. Utilities and other structures such as culverts that could rapidly transport petroleum products from the spill site
- Every effort should be made to contain the release and minimize the impact at the spill site. This can be accomplished with a variety of equipment items available at our bulk plants. On scene assessment will allow you to determine if outside services i.e. Vac truck, dozer, backhoe, etc. would be required. Local resource options should be weighed as well. However, no attempt should be made <u>to move</u> the wrecked vehicle or <u>to extract</u> petroleum products from the vehicle until all safety precautions have been taken including disconnecting adjacent utilities for explosion, traffic control, and spill prevention plan downstream in the event of a major rupture. It may be necessary to wait several hours until a spill program can be put in place prior to the evacuation of the tank. Conversely, it may be necessary to evacuate the contents immediately to prevent other more serious consequences, especially with gasoline. <u>Common sense must prevail in this situation</u>. You may also be instructed by the DEP, DEQ or DNR officer on site if they have arrived at the scene.

Hazardous Material Notification Emergency Response Procedures

The following sequence of calls must be made following an incident:

1. Local Operations Manager
2. Area EHS Manager
3. The Area EHS Manager, or designee, will then notify proper authorities, senior management and personnel required to assist in incident management
4. A Wrecker Service to retrieve the equipment should be called from the local area if the damage and condition of the equipment requires a tow/haul. Order the wrecker service only when ready to move the equipment to avoid wait charges
5. Outside Contractors/Spill Recovery Team - the decision to use an outside organization will be coordinated by the EHS/Operations Team if the scope of work is beyond our Spill Team's capabilities. All outside contractors must be pre-approved by the EHS Team

The Manager investigating the site should attempt to stay in contact with the Area EHS Manager as much as practical to keep everyone informed.

Mitigation / Remediation

All facilities are required to maintain, at the ready, equipment and supplies needed to respond to a spill.

Spoils are to be drummed or pumped into totes. Solid waste is to be drummed or stockpiled on the plastic sheeting. Care should be taken to ensure all stock piles are located high on a well-drained area, boomed and securely covered with the sheeting. Label all drums!

Upon arrival, in addition to stopping the flow, actions should be taken to protect all drains, downstream exposure and aquifers with secondary booms.

Attempt to clean-up and restore the site to "as before" condition, removing all drums and totes as soon as possible.

Inventory controls require that you document any resale gallons lost and inform Inventory Control Specialist. Additionally this information is required by regulatory agencies and our insurance carriers.

Media Response Plan

In the early stages of an emergency, you may be questioned by a Media Source. Please direct all media questions to one of the following individuals:

Trey Quinn, Senior VP and Chief HR Officer: 817-877-8337

Bill Woolsey, VP of EH&S: 405-406-3890

Employees must not be interviewed by anyone unless the Legal Department has given prior approval. In most cases the Legal Department will have an attorney present for such interviews.

Note: If after personnel have received approval for an interview from the Legal Department and another party's attorney appears unannounced, you should politely adjourn the interview until the Legal Department can be contacted. Personnel must not give any work related interviews, affidavits, written or recorded statements, or depositions without the express approval from the Legal Department.

In the case of interviews of employees by non-attorneys, (law enforcement, government officials, media, etc.) you must inform the Legal Department before the interview. If the interview is taped or videotaped, you must request a copy of the tape. If the interview is reduced to writing, you must ask for a copy of any notes or statements taken. This procedure is to avoid information being misrepresented.

All media requests should be referred to the Senior Vice President & Chief Human Resource Officer. Unless requested to do so by the Legal Department, other Company personnel are not to give interviews or make statements to the media. Management prefers that families of personnel involved in an incident receive initial notification from a COMPANY representative and not the media.

In the early stages of an emergency, you may have to converse with the media. If this happens to you...

Do:

- Confirm there is an incident and briefly summarize its nature
- Be as cooperative as possible
- Give the reporter only facts, using non-technical, un-dramatic brief statements
- Express compassion to those employees, neighbors, etc. affected by the incident
- Focus on providing positive, responses, expressing our commitment to managing and investigating the situation
- Assure reporters that new information will be given when available
- Keep a log of all calls, listing the reporter's name, phone number and media affiliation
- Give all reporters the same information

Do Not:

- Speculate on anything. Especially the cause or financial impact
- Assess blame, admit guilt or accept responsibility for the incident
- Go "off record" with the reporter
- Overreact or exaggerate the situation
- Let a reporter state an inaccuracy without correcting it
- Argue with a reporter
- Discuss identities or medical conditions of injured or missing

TRAINING

Training shall be provided to all affected employees on their role when the Emergency Action Plan is implemented. Training shall be documented. Training shall include:

- All employees must be given adequate instruction in the fire prevention and emergency accident and spill procedures applicable to their workplace.
- All personnel shall receive a review/update orientation at least annually, or whenever any new/revised information is to be provided.
- Employees expected to perform duties under the Emergency Action Plan will be trained prior to assuming their roles. This will include simulated accident and/or spill exercises and regular retraining, appropriate to the type of accident and/or spill commonly seen, and training records must be kept.

GAS HAZARD PROCEDURES

PURPOSE

Pilot Thomas Logistics (hereinafter referred to as the Company), is committed to the safety and health of our employees. It is the intention of the Company to provide gas hazards training and detection equipment that meets or exceeds all federal standards. This program is associated with our Respiratory Protection Program.

SCOPE

This program applies to all Company projects and operations.

This program supplements the Company Respiratory Protection Program that is in place in accordance with 29 CFR 1910.134.

DEFINITIONS

Action Level - Employee exposure, without regard to the use of respiratory protection, to a gas concentration which poses danger to employee health and where the employee must take action.

Authorized Third Party - A company that has specialized knowledge and equipment to service, maintain and inspect breathing equipment.

Breathing Zone - Defined by OSHA as the space "within a 10-inch radius of the worker's nose and mouth" that a PPE gas detector should be worn to alert the user of possible inhalation hazards at or above the action level.

Carbon dioxide (CO2) - A colorless, heavier than air, asphyxiate gas produced by the combustion of hydrocarbons (fossil fuels) that is not toxic but has potential to displace oxygen and is a significant concern while working in confined spaces.

Carbon monoxide (CO) - A toxic, colorless, odorless, and tasteless gas that is slightly lighter than air and forms from internal combustion engine operating in enclosed spaces that lacks enough oxygen to produce CO2. Therefore, similar to CO2, constant monitoring of oxygen levels is effective practice to prevent rising levels of CO.

Explosive Limit - Explosive Limit (also known as "flammable limits"), expressed in percentage (%), may be defined as the minimum and maximum concentrations of a flammable gas or vapor between which ignition can occur.

Fixed Hydrogen Sulfide Monitor - A continuous sensor mounted in a specific location to provide immediate detection of hydrogen sulfide presence for leak detection purposes or personal or community protection.

Hazardous Gas - For the purposes of this procedure including, but not limited to, Carbon Dioxide (CO2), Carbon Monoxide (CO), Hydrogen Sulfide (H2S) Lower Explosive Limit (LEL), Oxygen (O2) and Sulfur Dioxide (SO2) at a concentration sufficient to pose a respiratory or fire hazard in a work area.

Hydrogen Sulfide (H2S) - A potentially lethal, toxic, flammable, colorless, gas with the odor of rotten eggs at low concentrations, odorless at higher concentrations, soluble in water, heavier than air and a by-product of natural gas that can be commonly found in oil and gas extraction or processing installations.

Immediately Dangerous to Life and Health (IDLH) - Any condition that poses an immediate or delayed threat to life or that would cause irreversible adverse health effects or that would interfere with an individual's ability to escape unaided.

Lower Explosive Limit (LEL) - Presence of gases or vapors exceeding 10% of air and with a simultaneous ignition source, such as arc, flame or heat; can produce a flash of fire. Less than 10%, the air is to lean to burn.

Management - Any individual with supervisory responsibility, including but not limited to; leading or directing employees and/or making or enforcing operational decisions on programs or projects at a field operations site, facility or location.

Personal Gas Monitor - A gas detection device worn in the employee's breathing zone to alert audibly and visually of the presence of unsafe levels of hydrogen sulfide or sulfur dioxide, carbon monoxide, combustible vapors (LEL) and oxygen levels in the ambient air.

Qualified Person - An outside person (or organization) which has specialized or expert knowledge of instrumentation and calibration methods on gas monitoring equipment.

Self-Contained Breathing Apparatus - Full face piece, positive pressure respirator that supplies breathing air from a back strapped tank to the trained user with a service life of 30 minutes.

Sulfur Dioxide - A toxic gas with a pungent, irritating smell found in petroleum processes as some fuels may naturally contain sulfur compounds. Inhaling high concentrations of SO2 may cause disease, difficulty in breathing and premature death.

Upper Explosive Limit - Presence of gases or vapors dropping below 90% of air and with a simultaneous ignition source, such as arc, flame or heat; can produce a flash of fire. Above 90%, the air is too rich to burn.

RESPONSIBILITIES

Operations Management

Management is responsible for implementing and executing the requirements of this procedure in their locations.

Area EHS Manager

Local EHS Professionals are responsible for assisting management in the implementation of this procedure.

EHS Department

The EHS Department is responsible for reviewing this procedure as needed.

REQUIREMENTS

General

Management shall implement the requirements of this procedure for any assessed work site or area where the Company has potential to encounter hazardous gases at or above the action levels or any site or area that has not been assessed for hazardous gas. (see Appendix I):

Management shall develop, as needed specific Safe Work Procedures that are available onsite and communicated to employees that include the following at a minimum:

- Type of gas present;
- Concentration;
- Employee exposure levels;
- Enclosures and venting;
- Operation and maintenance procedure for specific site and equipment.

Management shall designate areas with unknown gas concentrations as Immediately Dangerous to Life and Health (IDLH) atmosphere until an assessment is completed.

Management shall develop or verify operation and maintenance procedures for areas with hazardous gas potential for owned or leased locations which the Company controls.

Management shall ensure all employees involved in operations with potential for hazardous atmospheres receive training on alarm systems, evacuation procedures and egress routes in accordance with this procedure.

Management shall ensure that contacted employees fully understand they are prohibited from rescuing personnel in areas that are IDLH or suspected of being IDLH; unless they possess the situational awareness of hazards involved, as well as the required training and specialized equipment to safely conduct such rescue operations.

Personal Protective Equipment

Management shall ensure employees, designated to work in areas with hazardous gas potential above the action levels, meet the requirements in accordance with the Company Respiratory Protection Program.

Management shall ensure each employee is issued a personal gas monitor before entering locations where dangerous concentrations of hazardous gas may exist.

Personal Gas Monitors shall be:

- Bump tested and calibrated in accordance with the manufacturer's recommendations;
- Worn within 10" of the nose and mouth and on the "ON" position before entering the area;
- Tagged out of service, if malfunctioned, with a "Do Not Operate' tag.

Gas releases which trigger a personal gas detection alarm shall be reported immediately in accordance with the Company Incident Reporting Procedure.

Air purifying respirators SHALL NOT be used as PPE for poisonous gasses (CO, H2S) or oxygen deficient atmospheres.

Operations using any type of supplied air respiratory equipment including SCBA, must ensure the respiratory equipment is properly maintained and inspected prior to use.

Management shall ensure all escape packs are annually inspected and tested, as well as, recharged and maintained by an authorized third party in accordance to manufacturer specifications.

Inspections of Escape Packs shall follow the manufacturer's instructions and include at a minimum:

- Signs of damage;
- Air cylinder (for full charge);
- Valve in place and secure;
- Hose in place and secured to valve and breathing hood;
- Hydro test date;
- Harness and bag (for tears and abrasions).

Escape packs not passing pre-use or annual inspections shall be removed from service and immediately tagged with a 'Do Not Operate' tag in accordance with the Company Lock-Out Tag-Out Program.

Pre Job Planning

Management shall ensure Tailgate meetings include a review of any pre-generated, safe work procedures on designated equipment that includes the following, at a minimum:

- Start up;
- Purge steps;
- Maintenance and replacement;
- Test & troubleshooting;
- Shut down;
- Emergency Response and contingency plans.

Management shall ensure a JSEA is completed in accordance to the Company Job Safety Environmental Analysis Program, and any required customer entry permit(s) are completed with authorizing signatures prior to entering a facility known to have potential for hazardous gas above action levels.

A JSEA for a hazardous gas potential environment, at a minimum, should include the following:

- Safe work procedure review;
- Entry personnel have calibrated, bump tested personal monitors;
- Wind conditions and direction are noted;
- Routes of egress and muster points are identified;
- Established a plan for rescue if needed;
- General Emergency Action Plans reviewed

Customer provided monitoring equipment is inspected by user and if suspected of being substandard or defective; employees shall immediately notify their manager in accordance to the Company Stop Work Obligation Program.

Employees assigned to work in potential hazardous air environments will pre-plan a 'buddy system' on the JSEA for the job's duration, as working alone in potential hazardous air environments is not allowed.

Management shall ensure employees assigned to potential Immediately Dangerous to Life and Health (IDLH) hazardous gas environments plan an emergency rescue and/or evacuation plan of action prior to work.

If an operator or other third party provides the stand-by person, it will be the responsibility of the Company representative in charge to verify that the person has current H2S, First Aid, CPR training, and that they provide their own respiratory protection equipment.

Hydrogen Sulfide

Areas with unknown H2S concentrations shall be considered as an Immediately Dangerous to Life and Health (IDLH) atmosphere until an assessment is completed.

Management shall ensure all employees working in H2S locations are provided initial certified training by a qualified person prior to a job assignment and at a minimum annually. H2S training will meet current American National Standards Institute (ANSI) Z390 requirements that includes:

- Potential and known sources of the hazardous gas;
- Physical and chemical properties of hazardous gas;
- Hazards of exposure and risk to human physiology;
- Signs and symptoms of exposure (acute and chronic);
- Medical evaluations;
- Safe Work and operating procedures;
- Methods of detection and monitoring;
- PPE requirements and use;
- Inspection of PPE and related equipment;
- Contingency and emergency response plans;
- Rescue techniques;
- First Aid and post-exposure evaluations.

All employees entering any H2S location shall have on their person a functioning personal H2S monitor that visually and audibly alerts users when concentrations reach or exceed 10 PPM.

Management shall ensure any site with potential of reaching 10 PPM of H2S or greater will have the following equipment, at a minimum; warning signs and strategically mounted wind socks that are visible to personnel.

If any H2S monitor (fixed or personal) alerts or malfunctions to 10 PPM or greater, employees must

- Evacuate all personnel in the immediate area immediately;
- Egress upwind and/or cross wind from emitting source;
- Gather at designated area, at least 100' from impacted area;
- Only remove breathing equipment when personal gas monitor reads below action levels;
- Report incident to Company management and customer representative;
- Return only when process equipment is isolated, opened and purged to levels verified to be below the action level;
- Return only when non-functioning gas detector is replaced or made operational;
- Return only when conditions in affected area are cleared below 10 PPM H2S.

Work requiring opening equipment with the potential of releasing concentrations 10PPM or greater, the following shall be completed:

- Clear concentration below 10PPM;
- Note wind condition/direction and routes of egress;
- Exclude non-essential personnel.

Any work in an atmosphere known to possess 100 PPM of H2S or greater must be preapprove by Management

Sulfur Dioxide

All employees entering any SO2 location shall have on their person a calibrated SO2 monitor that visually and audibly alerts user when SO2 levels reach or exceed the action limit of 2 PPM.

Management shall ensure employees; if possible; avoid areas within facilities that store SO2 and other chlorine gasses.

If any SO2 monitor (fixed or personal) alerts or malfunctions to 2 PPM or greater, employees must:

- Alert personnel in the immediate area to evacuate;
- Egress upwind and/or cross wind from emitting source;
- Gather at designated area, at least 100' from impacted area;
- Only remove breathing equipment when personal gas monitor reads below action levels;
- Report incident to management and customer representative;
- Return only when storage containers of SO2 releases are contained, SO2 tanks are secured, and SO2 levels are verified to be below the action level;
- Return only when non-functioning gas detector is replaced or made operational.
- Return only when conditions in affected area are cleared below 2 PPM SO2.

Atmospheres at or greater than 2 PPM of SO2 is not only a respiratory hazard, but also a contact hazard as SO2 gas burns the eyes and skin. Therefore, Management shall ensure work in such environments should be brief, limited to securing a release and conducted by a 3rd party HazMat service with specialized equipment and training.

Employees shall only be allowed to enter an affected area once containers of SO2 are secured and air concentrations are cleared below 2 PPM.

Carbon Dioxide

All employees entering any Carbon Dioxide location shall have on their personal CO2 Monitor that visually and audibly alerts user when CO2 concentrations is identified.

Work with the potential of releasing CO2 concentrations of 5000PPM or greater, the following shall be completed:

- A JSEA;
- Verification that CO2 emitting processes are functioning properly and located in well-ventilated area;
- Restriction of low lying or poorly ventilated areas where CO2 may accumulate in hazardous amounts;
- Ensure all isolation points with CO2 release potential are locked and tagged in accordance to the Company Lock-Out Tag-Out Program.
- All Confined Spaces are cleared before entry and continuously monitored with a calibrated direct read instrument at Oxygen levels above 19.5% and in accordance to the Company Confined Space Procedure;
- Exclude non-essential personnel.

Any work in an atmosphere known to possess 5000 PPM of CO2 or greater must be preapprove by Management

Employees shall only be allowed to enter an affected area once the CO2 emission source(s) are secured, area is properly ventilated, and air concentrations are cleared below 5000 PPM and above 19.5% 02.

Carbon Monoxide

All employees entering a location that has combustion processes and constricted areas shall use a functioning calibrated CO monitor that visually and audibly alerts user when CO reaches or exceeds the action limit of 25 PPM.

Prior to work or start-up of any vehicles or processes capable of producing CO, employees shall visually inspect areas or adequate ventilation.

Work with the potential of releasing CO concentrations of 25PPM or greater, the following shall be completed:

- A JSEA;
- Verification that CO emitting processes are functioning properly and located in well-ventilated area;
- Avoid enclosed spaces in jobs where carbon monoxide exposure is frequent;
- Ensure all isolation points with CO release potential are locked and tagged in accordance to the Company Lock-Out Tag-Out Program;
- All Confined Spaces are cleared before entry and continuously monitored with a calibrated direct read instrument at CO levels below 25 PPM, in accordance to the Company Confined Space Program;
- Exclude non-essential personnel.

If any CO monitor (fixed or personal) alerts or malfunctions to 25 PPM or greater, employees must

- Alert personnel in the immediate area to evacuate;
- Egress upwind and/or cross wind from emitting source;
- Gather at designated area, at least 100' from impacted area;
- Only remove breathing equipment when personal gas monitor reads below 25 PPM;
- Report incident to management and customer representative;
- Return only when non-functioning gas detector is replaced or made operational;
- Return only when conditions in affected area are cleared below 25 PPM CO;
- Identify and mitigate hazard(s) (i.e., ventilation and CO source) and document on JHA before proceeding with job.

Any work in an atmosphere known to possess 25 PPM of CO or greater is unnecessary and prohibited. Emitting sources must be shut down and/or isolated. An affected outdoor area must be allowed time to ventilate to levels below 25 PPM and affected enclosed spaces must have forced ventilation before entry.

Lower Explosive Limit (LEL)

All employees entering a location or area with potential to exceed LEL; shall wear, within their breathing space, a functioning, calibrated LEL monitor that visually and audibly alerts user when the LEL reaches or exceeds the action limit of 10% of the ambient air.

Due to the flammable and combustible hazard in environments where LEL is not known or when the LEL is 10% or greater, work is never allowed.

When the 90% Upper Explosive Limit (UEL) is exceeded with gasses and vapors, in theory, this air is too rich to be flammable or combustible and is not considered a fire hazard. However, this atmosphere is likely to contain inhalation and asphyxiation hazards and immediate stop work and egress is mandated.

Prior to work, employees shall inspect and continue to monitor the greater work area for potential simultaneous operations that could introduce gases or vapors in the air, possibly producing a flash of fire (arc, flame, heat) in presence of an ignition source.

If a vapor or gas inducing simultaneous operation(s) is detected while a job is being conducted; any employee is required to stop all jobs related to the hazard.

Prior to work, a Permit to Work for "Hot Work", in accordance to the Company Welding, Cutting and Hot Work Program, is required to be issued for any process that may produce an ignition source; in which, at a minimum, pre-job and continuous monitoring for LEL is required and documented.

If any LEL personal monitor or direct read instrument alerts or malfunctions, employees must

- Stop work immediately;
- Alert personnel in the immediate area without radios or phones to evacuate;
- Egress from area without starting vehicles or industrial trucks;
- Gather at muster location or safe distance;
- Report incident to management and customer representative;
- Return only when non-functioning gas detector is replaced or made operational.
- Return only when conditions in affected area are cleared below 10% LEL.
- Identify and mitigate hazard(s) that contributed to the air concentration being 10% or greater with vapors or gases and document on JHA before proceeding with job.

Areas that have been classified as having permanent processes with potential to exceed the LEL of 10%; must have explosion proof lighting, intrinsically safe equipment or spark resistant tools.

Oxygen Levels

All employees entering a location or area with a potential oxygen enriched/deficient atmosphere; shall have on their person a functioning calibrated personal gas monitor that visually and audibly alerts user when O2 level reaches or exceeds 23% or falls below 19.5%.

Lower oxygen levels are common in confined spaces; therefore, in accordance to the Company Confined Space Program, at a minimum, pre-entry/continuous/documented monitoring to ensure O2 level is above 19.5%.

Prior to work, the greater work area should be inspected for simultaneous operations and oxygen emitting/consuming processes that could introduce a combustible/flammable or asphyxiating atmosphere and may include, but not limited to: leaking pipes/valves/flanges, welding cutting process, cryogenic processes, and CO2 emitting processes.

If monitor(s) alerts or malfunctions at or above 23% or below 19.5%, employees must:

- Stop work immediately;
- Alert personnel in the immediate area to evacuate;
- Done escape pack;
- Egress from area, up wind and cross wind;
- Gather at muster location or safe distance;
- Report incident to management and customer representative;
- Return only when non-functioning gas detector is replaced or made operational.
- Return only when conditions in affected area between 19.5 and 23% oxygen.
- Identify and mitigate hazard(s) that contributed to the enriched or deficient oxygen levels and document on JHA before proceeding with job.

Work in atmospheres at or above 23% 02 is prohibited due to the fire hazard associated with oxygen enriched air. Any work in an atmosphere at or below 19.5% 02 must be preapprove by Management; who will retain the services of 3rd party rescue service and must ensure, at a minimum, work will include:

- Pre-plan an emergency rescue and/or evacuation procedure and services are verified to be in place prior to any personnel entering affected area;
- All personnel in the affected area will still maintain a 5-minute escape pack and personal 4-Gas monitor that measures 02 concentrations;
- Only a pressure demand or positive pressure airline respirator with cascade system is permitted as air purifying respirators are strictly prohibited in oxygen deficient atmospheres;
- All personnel have documented, supplied air training in accordance with HSE-PRC-US-NAO-014 Respiratory Protection Procedure.
- Buddy system in the affected area shall be utilized for duration of job:
- A " no work/rescue only", SCBA equipped Stand-by Person shall be:
    - Stationed up wind;
    - Stationed out of the affected area;
    - Stationed within 100 feet of work;
    - In clear view of workers;
    - In direct communication.
    - Increase ventilation to area or move processes to a well-ventilated area.

Employees shall only be allowed to enter an affected area once the area is properly ventilated and air concentrations are above 19.5% 02.

TRAINING

Management shall ensure all employees are provided awareness training in Initial HSE Training prior to job assignment and annually.

Hazard Gas annual awareness training (which covers all four gasses in this procedure) shall include the following at a minimum:

- Potential areas
- Hazards
- Routes of entry;
- Signs and symptoms of exposure (acute and chronic);
- PPE requirements and use;

All training & certifications shall be documented.

DOCUMENTATION

Records pertaining to employee specific medical records shall be stored confidentially with controlled access in accordance with the Company's Access to Employee Medical Records.

APPENDIX I: HAZARDOUS GAS ACTION LEVELS

Gases (this list only includes gases commonly found in our industry)	Action Levels (in Parts per Million PPM)
CO – Carbon Monoxide	At or greater than 25 PPM
CO2 – Carbon Dioxide	At or greater than 5000 PPM
H2S – Hydrogen Sulfide	At or greater than 10 PPM
SO2 – Sulfur Dioxide	At or greater than 2 PPM
LEL Lower Explosive Limit	At or greater than 10%
Oxygen Levels	At or greater than 23% At or below 19.5%

APPENDIX II: H2S EXPOSURE CHART

Exposure Chart for H2S	
Exposure	**Potential Health Effects**
0.03 ppm	Can smell. Safe for 8 hours exposure
4 ppm	May cause eye irritation. Mask must be used as it damages metabolism
10 ppm	Maximum exposure 10 minutes. Kills smell in 3 to 15 minutes. Causes GAS EYE and throat injury. Reacts violently with dental mercury amalgam fillings.
20 ppm	Exposure for more than 1 minute causes severe injury to eye nerves
30 ppm	Loss of smell, injury to blood brain barrier through olfactory nerves
100 ppm	Respiratory paralysis in 30 to 45 minutes. Needs prompt artificial resuscitation. Will become unconscious quickly (15 minutes maximum)
200 ppm	Serious eye injury and permanent damage to eye nerves. Stings eye and throat
300 ppm	Loses sense of reasoning and balance. Respiratory paralysis in 30 to 45 minutes
500 ppm	Asphyxia! Needs prompt artificial resuscitation. Will become unconscious in 3 to 5 minutes. Immediate artificial resuscitation is required.
700 ppm	Breathing will stop and death will result if not rescued immediate unconsciousness. Permanent brain damage may result unless rescued.

GASEOUS CHLORINE AWARENESS

PURPOSE

Pilot Thomas Logistics (hereinafter referred to as the Company), is committed to the safety and health of our employees. The purpose of this policy is to advise employees in areas where chlorine is being used and to supply an awareness level basis about the properties and hazards of chlorine, general guidelines and training requirements.

SCOPE

This policy applies to Company operations where employees whose work activities may involve working with or around chlorine. When work is performed on a non-owned or operated site, the operator's program shall take precedence, however, this document covers Company employees and contractors and shall be used on owned premises, or when an operator's program doesn't exist or is less stringent.

Normal Company operations do not involve contact with chlorine gas. This policy is to advise our employees in the event of contact with chlorine gas on customer work sites.

RESPONSIBILITIES

Operations Manager

- Ensure personnel are aware of work that has the potential of exposure to chlorine.
- Identify possible locations where chlorine in the workplace may be used.
- Inform the Are EHS Manager of upcoming work involving chlorine.
- Ensure employees comply with the chlorine awareness requirements.

Employees:

- Comply with the chlorine awareness requirements and direct any questions or concerns to the Operations or Area EHS Manager.

CHLORINE AWARENESS INFORMATION

Appearance

A greenish-yellow gas with a characteristic pungent odor. Chlorine is a greenish-yellow gas under normal conditions. It can be a liquid at extremely low temperatures or high pressure. It has a distinct pungent odor.

Description

Chlorine is a toxic gas with corrosive properties. It is widely used as bleach in the manufacture of paper and cloth and in manufacturing solvents, pesticides, synthetic rubber, and refrigerants. Chlorine has also been used as a chemical warfare choking agent. The lowest level at which humans can smell chlorine and notice its irritant properties generally provides sufficient warning of exposure; however, chronic exposure to chlorine causes adaptation of the sense of smell (olfactory fatigue) and tolerance to its irritant effects. Because of this, persons with a history of prolonged exposure lose the ability to identify when they are being exposed to chlorine. Chlorine is usually shipped in steel cylinders as a compressed liquefied gas.

Methods of Dissemination:

- Indoor Air: Chlorine can be released into indoor air as a gas.
- Water: Chlorine can be used to contaminate water.
- Food: Food is an unlikely route of dissemination.
- Outdoor Air: Chlorine can be released into outdoor air as a gas.
- Agricultural: If chlorine is released as a gas, it is highly unlikely to contaminate agricultural products.

Routes of Exposure

Inhalation is the main route of chlorine gas exposure. Contact with the escaping gas may cause frost bite. Compressed liquid can cause frostbite and/or chemical burns to the eyes and skin. Significant skin absorption or ingestion is unlikely. Chlorine is a gas at room temperature, making ingestion an unlikely route of exposure.

Health Effects

Some of the potential health effects of chlorine such as throat irritation, vomiting, frostbite burns and possible death at high concentration levels. Exposure to chlorine can cause throat irritation, vomiting, frostbite burns, tooth enamel corrosion and nausea. Exposure to high concentrations of chlorine can be fatal.

Possible locations where employees may be exposed to chlorine during their job functions may include, but are not limited to:

- Water treatment facilities
- Chlorine injection facilities
- Water pre-treatment areas

PRE-JOB PLANNING FOR CHLORINE RELATED WORK

Pre-job planning shall be conducted prior to starting work and the planning should be documented. Planning shall consist of those operations involving potential chlorine exposure to include any active system purging. Some planning or assessment elements include:

- All proposed work requires a jobsite visit by the requestor and a unit operator to identify special precautions, equipment status and personal safety equipment requirements.
- The permit must clearly identify all hazards and special personal protective equipment requirements.
- Appropriate signage will be utilized and adhered to. Appropriate signage will include adequate warning as seen below.


DANGER
CHLORINE
GAS


0
4
0
OX

TRAINING

Employees shall be aware of provisions of site specific contingency/emergency plans. Employees shall be aware of customer/host facility's' contingency plans and provisions. Employees must be informed where chlorine is used in the host facility and aware of additional plant safety rules.

The Company shall provide training for all affected employees including any the Company employee working with or near chlorine and the training shall emphasize:

- The characteristics of chlorine.
- The hazards of chlorine.
- Owner client requirements.

Documentation of training - Chlorine awareness training shall be documented including dates of training, location of training, employee name and trainer name.

PURPOSE

Pilot Thomas Logistics (hereinafter referred to as The Company) shall ensure all shipments of hazardous materials be transported in a safe and regulatory compliant manner. To accomplish this, the Company shall comply with, or exceed, all local, state, and federal regulations pertaining to the transportation of hazardous materials.

The Company shall administer a Hazardous Materials Program that systematically ensures the safe transportation of hazardous materials to include:

- Proper Hazardous Materials Training for all employees required by regulation
- Shipping papers/ Bill of Lading
- Emergency Response Information
- Marking/ Placarding
- Specification Cargo Tank Inspections and Compliance
- Parking and Attendance

RESPONSIBILITIES

Each HazMat employee shall be familiar with the general provisions of the applicable regulations. Each HazMat employee shall:

- Be able to recognize and identify hazardous materials
- Have a working knowledge of specific requirements related to their job function
- Be knowledgeable of emergency response information, self-protection measures, and accident prevention methods and procedures

HazMat Employee shall be defined in accordance with DOT Hazardous Materials regulations and shall include any individual who during the course of employment:

- Loads, unloads, or handles hazardous materials
- Inspects, marks, maintains, or repairs hazardous materials packaging or packages
- Prepares hazardous materials shipping papers or products for transportation
- Is responsible for safety of transporting hazardous materials
- Operates a vehicle used to transport hazardous materials
- Performs any function subject to the DOT hazardous materials regulation

REQUIREMENTS

Shipping Papers / Bill of Lading (BOL)

ALL LOADS OF HAZARDOUS MATERIAL REQUIRE SHIPPING PAPERS/BILL OF LADING (BOL).

Drivers must ensure they have a Company approved BOL in possession at all times while transporting hazardous material. A BOL is required even if a cargo tank contains only residue from a previous load.

The BOL must include:

- Proper shipping description of the hazardous material (ie. NA1993, Diesel fuel, 3, PGIII, Combustible liquid)
- Quantity and Units of Measure of hazardous material(s)

- Emergency Contact: PERS 1-800-633-8253 Customer Care#1898-0001
- Shippers Certification and Authorized Signature

The BOL must be kept in the driver's door pouch of the cab or be readily visible and accessible while restrained by the seat belt.

The BOL must accurately reflect the hazardous materials loaded on the truck and must match the displayed placards and markings.

Document Retention

A consignor must be able to produce a copy of any shipping document for two years after the date the shipping document or an electronic copy of it was prepared or given to a carrier by the consignor, for hazardous materials imported into the US, for two years after the date the consignor ensured that the carrier, on entry into the US, had a shipping document or was given an electronic copy of one, and within 15 days after the day on which the consignor receives a written request from an inspector. Therefore, the company is responsible for keeping documentation information

Emergency Response Information

All shipping papers/Bill of Lading (BOL) must be accompanied by Emergency Response Information. Emergency Response Information means information that can be used in the mitigation of an incident involving hazardous materials and, as a minimum must contain the following information:

- The basic description and technical name of the hazardous material
- Immediate hazards to health
- Risks of fire or explosion
- Immediate precautions to be taken in the event of an accident or incident
- Immediate methods for handling fires
- Initial methods for handling spills or leaks in the absence of fire, and
- Preliminary first aid measures

A Safety Data Sheet (SDS) or an Emergency Response Guidebook may be used to satisfy the requirements of having Emergency Response Information.

Emergency Response Information must be kept in the same manner as Shipping Papers/BOL.

Required Markings

Each bulk packaging including totes and cargo tanks transporting hazardous materials must be marked, in letters not less than 2", on each side and each end with

- The appropriate four digit UN/NA ID number of the hazardous material in the cargo tank (ie. 1993)
- The UN/NA ID number must be prominently displayed on all four sides of the unit
- The UN/NA ID number may be combined with the appropriately displayed hazardous materials placards

Specific Marking requirements when hauling petroleum distillate fuels:

- When hauling only diesel fuel, 1993 markings MUST be displayed

- When hauling only gasoline, 1203 markings MUST be displayed

- When hauling a mixed load of diesel fuel and gasoline, 1203 markings MUST be displayed
- When hauling a mixed load of diesel and kerosene, 1223 markings MUST be displayed

Emergency Shut Off

Each on-vehicle manually-activated remote shutoff device for closure of the internal self-closing stop valve must be identified by marking "Emergency Shutoff" in letters at least ¾ in height, in a color that contrasts with its background, and located in an area immediately adjacent to the means of closure.

Labeling

In general, each HazMat employee who offers for transportation or transports hazardous material in a non-bulk packaging shall label the package with labels specified for the material in the 172.101 table.

No employee may offer for transportation nor transport a package bearing a label unless the package contains a material that is a hazardous material and the label represents a hazard of the hazardous material in the package.

Labels shall be affixed to the surface of the package near the proper shipping name marking.

Other rules may apply. Please see 49 CFR 172.400-450 for more information.

Placards

Each bulk packaging (cargo tank) containing any quantity of hazardous material must be placarded on each side and each end with the type of placards required by regulation.

Bulk packaging must be marked and placarded even when it is emptied unless;

- Sufficiently cleaned of residue and purged of vapors
- Refilled, with a material that no longer is a hazard
- Refilled, with a material requiring different marking and placards

In general, non-bulk (<119 gal) packages of hazardous material with an aggregate gross weight of less than 1001 lbs does not require placards. Exceptions would be materials such as explosives, poison gas, organic peroxide, and radioactive materials. Non-bulk packages of hazardous material with an aggregate gross weight greater than 1001 lbs require placards.

Placards may be displayed for a hazardous material, even when not required, if the placards otherwise conforms to the regulations.

Each placard on a motor vehicle must be clearly visible from the direction it faces. A placard may be affixed to the front of a truck-tractor instead of or in addition to the placard on the front of the cargo body to which a truck-tractor is attached.

Placards must be maintained in a condition so that the format, legibility, color and visibility will not be substantially reduced due to damage, deterioration, or obscured by dirt or other matter.

Other rules may apply. Please see 49 CFR 172.500-560 for more information.

Attendance and Surveillance

Company vehicles containing hazardous materials must be attended by the driver when they are located on a public street or highway, or the shoulder of a public highway.

Attendance means the driver is on the vehicle, awake, and not in a sleeper berth, or is within 100 feet of the vehicle and has it within his/her unobstructed field of view.

Parking

Company vehicles containing hazardous material must not be parked on or within 5 feet of the traveled portion of a public street or highway except for brief periods when it is necessary for safety operation and it is impracticable to park in any other place.

Fires

Company vehicles containing hazardous material must not be operated near an open fire unless its driver has taken precautions to ascertain the vehicle can safely pass without stopping.

Company vehicles containing hazardous materials must not be parked within 300 feet of an open fire.

Smoking

No person, may smoke or carry a lighted cigarette, cigar, or pipe on or within 50 feet of a vehicle containing flammable hazardous material. This includes when the vehicle is empty but placards are displayed.

Smoking is prohibited at all times while loading or unloading hazardous material.

Fueling

When company vehicles containing hazardous materials is being fueled:

- The engine must not be operating; and
- A person must be in control of the fueling process at the point where the fuel tank is filled

Tires

A driver must examine each tire on a company vehicle at the beginning of each trip and each time the vehicle is parked.

If a tire is found to be flat, leaking, or improperly inflated, the driver must get it repaired, replaced, or inflated before the vehicle is driven. The vehicle may be driven to the nearest safe place to complete the task.

If a tire is found to be overheated, the driver shall not operate the vehicle until the problem is corrected.

Loading and Unloading

Smoking is prohibited at all times while loading or unloading hazardous material.

Extreme care should be taken by keeping fire, smoking paraphernalia or any type of ignition source including electronic devices away while loading or unloading hazardous material.

No hazardous materials shall be loaded into or unloaded from any motor vehicle unless the vehicles brakes are set and all other reasonable precautions be taken to prevent motion of the motor vehicle.

Hazardous materials are to be adequately secured with a means of containment to prevent accidental release. Under no circumstances should hazardous materials be transported in a means of containment unless the means of

containment is designed, constructed, filled, closed, secured and maintained so that under normal conditions of transport, including handling, there will be no accidental release of hazardous materials that could endanger public safety.

Cargo tanks must be attended by a qualified person at all times during loading or unloading. The qualified person must:

- Be alert
- Be within 25 feet of the cargo tank and be in close proximity of the pump controls (not in the cab)
- Have an unobstructed view of the cargo tank and delivery hose
- Be aware of the nature of the hazardous material
- Be instructed on the procedures to be followed in case of emergency
- Be authorized to move the cargo tank and has the means to do so

Bonding and Grounding

When a cargo tank is loaded through an open filling hole (including a hose), one end of a bond wire shall be connected to the stationary system piping or integrally connected steel framing, and the other end to the shell of the cargo tank to provide a continuous electrical connection.

The connection must be made before any filling hole is opened, and must remain in place until after the last filling hole has been closed.

All company cargo tank vehicles used to transport flammable liquids must have a bonding/grounding cable available for use and must be used during loading or unloading.

Manholes and Valves Closed

No employee may drive a cargo tank vehicle containing hazardous material regardless of quantity unless:

- All manhole closures are closed and secured; and
- All valves and other closures in liquid discharge systems are closed and free of leaks

Fire Extinguishers

All company power units used to transport hazardous materials must be equipped with a fire extinguisher having an UL rating of 10 BC or more.

Each fire extinguisher must:

- Be properly inspected and ready for use
- Be properly labeled and marked with the manufacturer UL rating
- Be properly charged and secured
- Include a means to permit visual determination of whether it is fully charged

Railroad Crossing

All company vehicles transporting hazardous materials requiring placards shall not cross a railroad track or tracks unless he/she first:

- Stops the vehicle within 50 feet of, and not closer than 15 feet to the tracks
- Engages the vehicles hazard lights
- Listens and looks in each direction along the tracks for an approaching train
- Ascertains that no train is approaching
- Proceeds across the tracks without changing gears
- Does not stop at any time while crossing the tracks
- Disengages the vehicles hazard lights once clear of the tracks

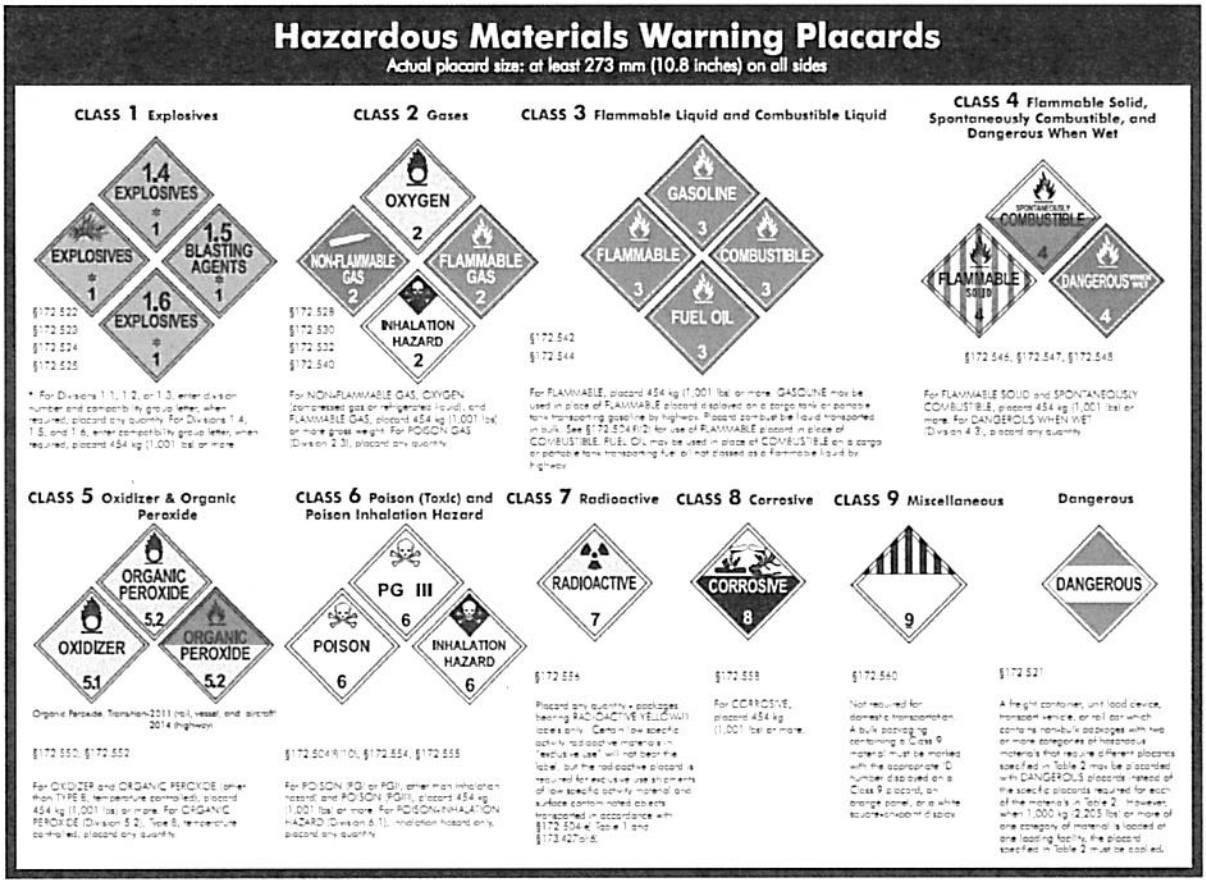
A stop need not be made at:

- Streetcar crossing, or railroad tracks used exclusively for industrial switching purposes, within a business district
- When a police officer or crossing flagman directs traffic to proceed
- When the crossing is controlled by a functioning highway traffic signal transmitting a green indication which under local law permits crossing without slowing or stopping.
- An abandoned railroad crossing which is marked with a sign indicating "abandon"
- An industrial or spur line railroad crossing marked with a sign reading "Exempt"

Response to Release of Hazardous Materials

The company must protect the public safety after an accidental release of hazardous materials. Where an accidental release of hazardous materials in excess of a prescribed quantity or concentration occurs or is imminent from a means of containment being used to handle or transport hazardous materials, any person who at the time has the charge, management or control of the means of containment shall report the occurrence or imminence of the release. Every person required to make a report shall, as soon as possible in the circumstances, take all reasonable emergency measures to reduce or eliminate any danger to public safety that results or may reasonably be expected to result from the release.

Accidental releases or spills of hazardous materials must be reported immediately. In the event of an accidental release of hazardous materials from a means of containment, a person who has possession of the hazardous materials at the time of the accidental release must make an immediate report of the accidental release to appropriate authority, if the accidental release consists of a quantity of hazardous materials that exceed quantities set out for each Class of hazardous materials.


Hazardous Materials Warning Placards
Actual placard size: at least 273 mm (10.8 inches) on all sides
CLASS 1 Explosives
1.4 EXPLOSIVES * 1
EXPLOSIVES * 1
1.5 BLASTING AGENTS * 1
1.6 EXPLOSIVES * 1
§172.522
§172.523
§172.524
§172.525
* For Divisions 1.1, 1.2, or 1.3, enter division number and compatibility group letter, when required; placard any quantity. For Division 1.4, 1.5, and 1.6, enter compatibility group letter, when required; placard 454 kg (1,001 lbs) or more.
CLASS 2 Gases
OXYGEN 2
NON-FLAMMABLE GAS 2
FLAMMABLE GAS 2
INHALATION HAZARD 2
§172.528
§172.530
§172.532
§172.540
For NON-FLAMMABLE GAS, OXYGEN (compressed gas or refrigerated liquid), and FLAMMABLE GAS, placard 454 kg (1,001 lbs) or more gross weight. For POISON GAS (Division 2.3), placard any quantity.
CLASS 3 Flammable Liquid and Combustible Liquid
GASOLINE 3
FLAMMABLE 3
COMBUSTIBLE 3
FUEL OIL 3
§172.542
§172.544
For FLAMMABLE, placard 454 kg (1,001 lbs) or more. GASOLINE may be used in place of FLAMMABLE placard displayed on a cargo tank or portable tank transporting gasoline by highway. Placard combustible liquid transported in bulk. See §172.504(f)(2) for use of FLAMMABLE placard in place of COMBUSTIBLE. FUEL OIL may be used in place of COMBUSTIBLE on a cargo or portable tank transporting fuel oil not classed as a flammable liquid by highway.
CLASS 4 Flammable Solid, Spontaneously Combustible, and Dangerous When Wet
SPONTANEOUSLY COMBUSTIBLE 4
FLAMMABLE SOLID 4
DANGEROUS WHEN WET 4
§172.546, §172.547, §172.548
For FLAMMABLE SOLID and SPONTANEOUSLY COMBUSTIBLE, placard 454 kg (1,001 lbs) or more. For DANGEROUS WHEN WET (Division 4.3), placard any quantity.
CLASS 5 Oxidizer & Organic Peroxide
ORGANIC PEROXIDE 5.2
OXIDIZER 5.1
ORGANIC PEROXIDE 5.2
Organic Peroxide, Transition-2011 (rail, vessel, and aircraft) 2014 (highway)
§172.550, §172.552
For OXIDIZER and ORGANIC PEROXIDE (other than TYPE B, temperature controlled), placard 454 kg (1,001 lbs) or more. For ORGANIC PEROXIDE (Division 5.2), Type B, temperature controlled, placard any quantity.
CLASS 6 Poison (Toxic) and Poison Inhalation Hazard
PG III 6
POISON 6
INHALATION HAZARD 6
§172.504(f)(10), §172.554, §172.555
For POISON (PGI or PGII, other than inhalation hazard, and POISON (PGIII), placard 454 kg (1,001 lbs) or more. For POISON-INHALATION HAZARD (Division 6.1), inhalation hazard only, placard any quantity.
CLASS 7 Radioactive
RADIOACTIVE 7
§172.556
Placard any quantity + packages bearing RADIOACTIVE YELLOW II labels only. Certain low specific activity radioactive materials in "exclusive use" will not bear the label, but the radioactive placard is required for exclusive use shipments of low specific activity material and surface contaminated objects transported in accordance with §172.504 e, Table 1 and §173.427(a)(6).
CLASS 8 Corrosive
CORROSIVE 8
§172.558
For CORROSIVE, placard 454 kg (1,001 lbs) or more.
CLASS 9 Miscellaneous
9
§172.560
Not required for domestic transportation. A bulk packaging containing a Class 9 material must be marked with the appropriate ID number displayed on a Class 9 placard, an orange panel, or a white square-on-point display.
Dangerous
DANGEROUS
§172.521
A freight container, unit load device, transport vehicle, or rail car which contains non-bulk packages with two or more categories of hazardous materials that require different placards specified in Table 2 may be placarded with DANGEROUS placards instead of the specific placards required for each of the materials in Table 2. However, when 1,000 kg (2,205 lbs) or more of one category of material is located at one loading facility, the placard specified in Table 2 must be applied.

NATURALLY OCCURRING RADIOACTIVE MATERIAL (NORM)

PURPOSE

To prevent exposure to naturally occurring radioactive materials (NORM) when NORM is present.

SCOPE

The operator's program shall take precedence, however, this document covers employees who work on contaminated equipment which has been determined to contain levels of technologically enhanced naturally occurring radioactive material (TENORM) and shall be used on owned premises, or when an operator's program doesn't exist or is less stringent.

DEFINITIONS

NORM – Naturally Occurring Radioactive Material – radioactive isotopes that occur naturally in the environment.

TENORM – Technologically Enhanced Naturally Occurring Radioactive Material - naturally occurring radioactive materials that have been concentrated or exposed to the environment through human activity.

RESPONSIBILITIES

The NORM program shall be administered by the EH&S Department. The responsibilities of the NORM program administrator shall be:

- To inform the organization of changes in NORM requirements
- Administer and maintain the written NORM program
- To ensure the safety of operating personnel by providing guidance and direction

Managers

- Shall gather pertinent information regarding the known presence of NORM on employee work locations
- Shall ensure employees are trained in the hazards present, work procedure, safety precautions, and use of proper PPE.

Employees

- Shall understand the hazards, work procedure, safety precautions, and proper use of PPE.

NORM Awareness

General Statement regarding the origination of NORM

Radiation naturally occurs in our environment from mainly two sources: cosmic rays external to the earth and radioactive materials found in the earth's crust. Low level radioactive scale can be produced in the course of some oil and gas operations. Oil and gas production moves NORM to the surface where it accumulates and is classified as technologically enhanced naturally occurring radioactive material (TENORM). NORM deposits may be found in piping, brine and sand filters, salt water disposal injection wells and equipment, headers, vessels, pumps and to a lesser extent compressor cylinders, bottles and piping. Produced water can contain radium 226 and 228 that may precipitate as scale in knockouts and scrubbers. In the gas stream, Radon gas decays to Lead-210, then to Bismuth-210, Polonium-210, and finally to stable Lead-206. Radon decay elements may occur as a film on the inner surface of inlet lines and compressor components.

Managers should request information from the customer regarding any known TENORM contamination in the facility where work shall commence.

If TENORM is detected and the quantity is sufficient to cause exposure, the work group and the EH&S Department shall develop a specific work-site procedure to manage control exposure. Work procedures shall contain applicable requirements for time, distance, shielding and decontamination. In addition, the elements and safety precautions listed below shall be contained and followed:

- Where exposures may occur
- Different types of radionuclides that may be present
- Contaminated equipment that is to be opened will be removed from service, vented and left idle for a minimum of four hours before work begins
- Personnel must use time, distance and shielding protection methods
- Personnel must use proper personal protective equipment (PPE) when direct contact with TENORM contamination is possible. If the work will create contaminated dusts, respiratory protection consisting of a half-mask respirator with radioactive particle, or HEPA cartridges, or self-contained breathing apparatus (SCBA)
- Personnel must thoroughly wash their hands and face upon work completion and before eating, drinking chewing gum/tobacco, or smoking. These activities are prohibited within the work area when TENORM work is being performed
- The number of personnel working in the TENORM areas shall be restricted
- Contaminated surfaces shall be handled in a wet state
- Contaminated equipment and personal protection must be disposed of in accordance with approved waste disposal procedures

Testing

When the presence of TENORM is suspected and the client has not tested, the EH&S Department shall be contacted to arrange testing through a third party Industrial Hygienist. Analysis of exposure shall be made through the EH&S Department in conjunction with an Occupational Health Physicist. Levels shall be compared against known existing rates as provided by the customer or owner of the equipment.

TRAINING

Each employee who will work in a TENORM area shall be trained before exposure to TENORM contamination and shall receive refresher training as required.

Under normal operations, the Company does not work in TENORM areas.

TENORM TRAINING LESSON PLAN

Section 1: Introduction: Radioactive Matter

Objective: To provide information about particles of matter and the relationship to radioactive isotopes.

- Radiation and Radioactivity Hazards
- Types of Radiation
    - Alpha and beta (origin/hazard/protection from)
    - Gamma and x-ray (origin/hazard/protection from)

Section 2: How To Protect Yourself and Others

Objective: To relate time, distance, and shielding as methods of reducing radiation exposure.

- Control of Radiation Exposure
- External exposure - time, distance, and shielding
- Internal exposure - modes of entry into the body
- Biological Effects of Exposure to the Human Body
- Direct effect
- Indirect effect
- Factors that determine what a given dose will cause
- Exposure risks to plant/field personnel

Section 3: Naturally Occurring Radioactive Material (N.O.R.M.) and Technologically Enhanced Naturally Occurring Radioactive Material (TENORM)

Objectives:

- To help the student understand NORM and TENORM
- To learn Isolation procedures
- Naturally Occurring Radioactive Material and locations where it can be found
- The decay scheme of Uranium
- Discussion on U-238 and its daughter isotopes
- Technologically Enhanced Naturally Occurring Radioactive Material
    - Where and how TENORM occurs
    - Hazard identification and protection
- Isolation Procedures
    - Radiation Areas
    - Contaminated Equipment
    - Storage, Transport and Disposal

Section 4: Safe Worksite Procedures

Objective: To teach proper safe protocol before, during, and after the job.

- Pre-job procedures
    - Safety Equipment
    - Pre-job safety meeting
    - Pre-job checklists
- During Work
    - Safety Procedures (HEPA filters on respirators and limitations)
- Post-job safety
    - Safety Procedures
    - Personal/Worker Surveys
    - Decontaminating articles - How to properly clean
    - Survey and cleaning of the worksite
- Normal and Emergency Actions and Situations
    - Safety Procedures
    - Isolation and notification

NON HAZARDOUS INDUSTRIAL WASTE MANAGEMENT

PURPOSE

The purpose of this procedure is to provide Operations with a process to appropriately manage Non-Hazardous Industrial Waste (NHIW) while maintaining regulatory compliance and profitability.

Note: NHIW is regulated by the EPA Resource Conservation and Recovery Act (RCRA), Subtitle D.

NHIW regulations vary by state. This procedures has been developed to address minimum NHIW regulatory requirements. There may be additional requirements outlined by the acting Environmental Manager for a particular state.

Scope

Billable Service

As part of the overall business plan, the Company provides a number of services to our customers to include handling, recycling, and/or disposal of NHIW. The primary services include selling fuels, lubricants, filters, and absorbent media to customers, but the secondary service includes staging drums or other suitable containers to collect those materials when they've reached the end of their service life. When these materials (NHIW) are generated, the Company provides a means to recycle or dispose them. This is the environmental service the Company offers and is billable under these circumstances.

Self-Generated NHIW

The operations within the Company also generate NHIW. This can be from spill cleanup, disposal of contaminated shops rags and PPE, vehicle maintenance and general housekeeping.

Scenario 1

A Company driver has a small diesel or oil spill at a customer location that impacts soil. The driver responds by cleaning up the spill and removes the contaminated soil. Soil is then place into appropriate NHIW drums. Under these circumstances, the Company is allowed to transport and dispose of the contaminated soil.

Scenario 2

*A customer asks a Company driver to pick up some drums that contain diesel contaminated soil that were generated on a site where the Company did not provide fuel. In this case, the Company is **NOT** permitted to pick up, transport or dispose of the materials. The customer must make other arrangements for such services, because the Company was not involved in the process of generation and is not permitted to do so.*

PROCEDURE

For the purposes of this program, NHIW steams consists of the following:

- Diesel fuel or lubricant contaminated absorbent material (floor dry)
- Diesel fuel or lubricant contaminated soil
- Diesel fuel or lubricant contaminated absorbent pads and/or booms
- Diesel fuel or lubricant contaminated shop rags and PPE
- Used oil or fuel filters

NHIW cannot contain any hazardous material as defined by DOT, OSHA and the EPA, such as gasoline, methanol, or solvents. If a hazardous material is suspected in the waste stream, it must be refused. The Company is not authorized to pick up, transport, or dispose of hazardous waste. (See Example in Appendix E).

NHIW drums or other containers should not contain any free liquids. If necessary, add absorbent to soak up any deminimus free liquids or decant the free liquid into another container for proper recycling/disposal. Do not allow NHIW containers to be sent to the recycler/disposal company with free liquids. Doing so will cause the Company to incur substantial surcharges.

> *Example: The average disposal charge for a container of spent absorbents without free liquids is $65. The cost of disposal for the same drum with free liquids is $180.*

All efforts should be taken to manage liquids as a different disposal stream. Please note that liquids in open top drums are not acceptable for transport under DOT regulations. (See examples in Appendix D.)

Household trash (such as, but not limited to, fast food waste, Gatorade bottle, or water bottles) should NOT be disposed of in NHIW drums. Note: This is a violation of EPA regulations and is a fineable offense.

Disposal of household trash in NHIW drums is a problem in most industries. The Company should not refuse to pick up NHIW drum with trash, but should notify the Regional Environmental Compliance Manager and provide the customer name and location.

Labeling

The compliant labels for NHIW are green and white. The labels must contain:

- The words NON-HAZARDOUS INDUSTRIAL WASTE
- Shipper (Customer) Name or (Generated By)
- Address or Site Name
- City, State, Zip
- Description of contents
- Accumulation/Pick Up Date

Labels are **NOT** to be placed on the lid or top of the drum. Labels are to be placed on the side of the drum.

NON HAZARDOUS INDUSTRIAL WASTE labels can be ordered through Coupa using the Detail Product Inc. (DPI) catalogue. The DPI description is "Non-Haz Waste Label" and the product number is PTL-6112

See Appendix A for example drum label.

Drum Seals

A plastic trailer (drum) seal is to be attached to the drum. The purpose of the seal is not for securement. The seal is used as a tracking number. The plastic seal will contain a unique serial that is to be used for tracking. Please note that the company is not using the metal seals due to the risk of hand injuries.

Trailer-Drum seals are available through Coupa using the Airgas catalogue. The product description is "Plastic Trailer Seal"; the supplier part number is J04194.

See Appendix B for example of seal and placement.

Dispatching Procedures

Empty Drums

1. Customer calls Customer Service Center (CSR) to place an order of empty drums and/or spill kit;
2. Dispatch generates an SAP Delivery Ticket for empty drums;
3. Driver receives SAP Delivery Ticket and delivers empty drums to the customer;
4. Upon delivery of empty drums to customer, the customer signs the SAP Delivery Ticket.

Full Drums

1. Customer calls dispatch and needs full NHIW drums picked up.
2. Dispatch generates an SAP Delivery Ticket and an SAP NHIW Drum manifest to pick up full drums.
3. Driver receives SAP Delivery Ticket and SAP NHIW environmental manifest and picks up the full drums from the customer.
    a. When driver picks up the drums, he/she must:
        i. Inspect and verify the contents of the drum to ensure it meets NHIW criteria;
        ii. Applies metal or plastic seal with serial number to each drum;
        iii. Records the seal number (s) onto the manifest;
        iv. Gets signature from the customer on the manifest;
    b. In the event a pickup is requested but a SAP Delivery Document or a SAP Manifest was NOT generated, the driver can generate a "handwritten" NHIW Environmental Manifest;
    c. Drivers should NOT pick up drums from customer that are not Company provided drums;
    d. Drivers should not pickup drums that are suspect to contain hazardous waste. The driver must notify the CSC if a drum is refused for pickup;
    e. The CSC will contact customer to communicate the issue.

Unloading at Facility

Driver transports the drums back to the terminal. He/she must complete the following:

1. Unloads the drums in designated area;
2. Transfer the seal #'s and manifest # over to a Drum Log;
3. Keep copy of manifest with the Drum Log;

    Note: See Appendix C for example of manifest and drum log.

4. Driver scans the Company manifest information into DocLink;

   Note: If a "handwritten" NHIW manifest was generated at the customer location, the driver must advise Dispatch so they can generate a SAP Delivery Ticket.

5. Drums are staged in designated area or on designated trailer.

Ordering Vendor Services

1. When designated trailer is full, the Warehousemen, or designee

   a. Generates a Manifest Cover Sheet for the trailer load;
   b. Requests a pickup from the NHIW Administrator by email at nhiwdrums@pilotthomas.com. The Manifest Cover Sheet must also include the Drum Log and all manifests associated with the trailer load;

2. The NHIW Administrator completes the following:

   a. Reviews that all paperwork is accurate and complete;
   b. Completes PO request for services through Coupa;
   c. Contacts approved vendor to schedule a pickup, provide PO, and obtain schedule;
   d. Sends vendor the Coversheet and Drum Log ;
   e. Provides schedule of pickup to field operations .

3. Vendor schedules the pickup:
   a. At the Company facility, the vendor verifies the drum log matches the inventory on the trailer;
   b. Vendor generates a BOL (EPA Manifest) and gets a signature from the Company and the vendor's driver signs and provides a copy to the Company Warehousemen, or designee;
   c. A copy of vendor's BOL (EPA Manifest) is sent to the NHIW Administrator.

Note: The BOL (EPA Manifest) used by the vendor is also referred to as the "Chain of Custody".

All documentation outlined in the process above are required to be kept for three years. This process is known as "cradle to grave" documentation. The documents are auditable by federal and state regulatory agencies.

APPENDIX A

NON-HAZARDOUS DRUM LABEL

Pilot Thomas LOGISTICS

ENVIRONMENTAL SERVICES

201 N. Rupert St.
Fort Worth, TX 76107

NON-HAZARDOUS INDUSTRIAL WASTE

Circle all that apply:

Absorbent Material (Oil Dry, Pads, Booms, socks)

Oil, Lube, Diesel Fuel Contaminated Soil **Oily Shop Rags/PPE** **Oil Filters/Fuel Filters**

PICK UP/ACCUMULATION DATE:

Generator/Customer:

Site Name, City, State:

Hazard Statements
Contents may contain petroleum based material. Inhalation or contact with material may irritate or burn the skin or eyes. May cause dizziness or drowsiness.

Precautionary Statements
Prevention:
Keep away from heat/sparks/open flames/hot surfaces. No smoking. Keep container tightly closed.

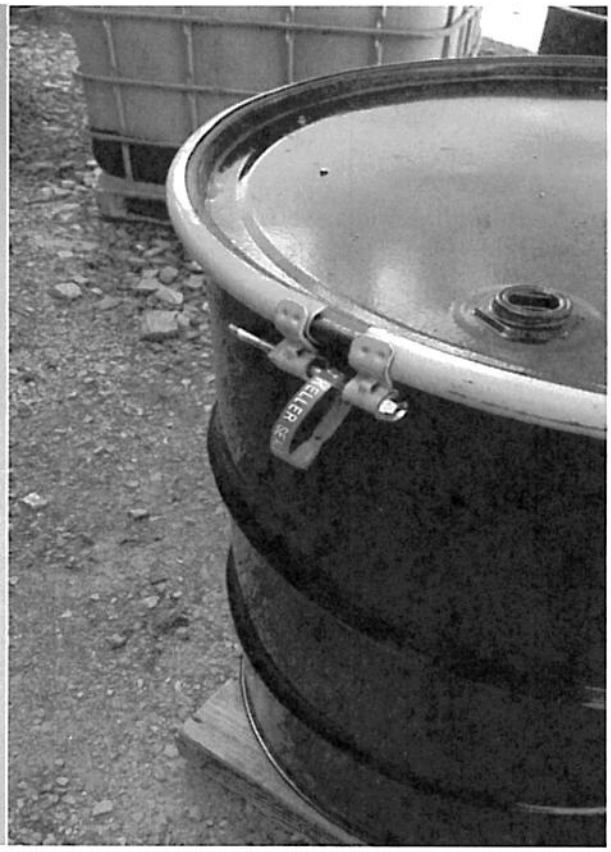
First Aid:
Move victim to fresh air. Call 911 or Emergency Medical Service. In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes. Wash skin with soap and water.

IN CASE OF EMERGENCY CALL
PERS 1-800-633-8253
Customer #1898

APPENDIX B

DRUM SEAL EXAMPLES

Note: The purpose of the seal is intended to be a tracking number; not a type of securement.



EXAMPLES

MANIFEST COVER SHEET AND DRUM LOG

Pilot Thomas LOGISTICS

Date: _____

For Non Hazardous Industrial Waste (NHIW) drum/container pickup, send this Manifest Cover Sheet via email to nhiwdrums@pilotthomas.com .

NHIW

MANIFEST COVER SHEET

Name: _____

Facility Location: _____

Total #NHIW Drums _____

Total # Empty Drums _____

Other # (Describe) _____

Notes: _____

_____

- A Drum Log that includes each drums Seal # and Manifest # must accompany this Manifest Cover Sheet
- The Recycling/Disposal Vendor will NOT pick up NHIW drum/containers without a Drum Log
- Keep copies of all documentation to include the Manifest Cover Sheet, Drum Log, Customer Manifests, and Recycling/Disposal Vendor Manifest at your terminal

For Questions, please contact your Environmental Manager

Pilot Thomas LOGISTICS

DRUM LOG

Log # _____

Facility Location: _____ Date:_____ Page ___of ___

No.	Drum ID #	Manifest #	No.	Drum ID #	Manifest #

Provide copy to Environmental Vendor at time of pickup.

Total # Drums _____

APPENDIX D

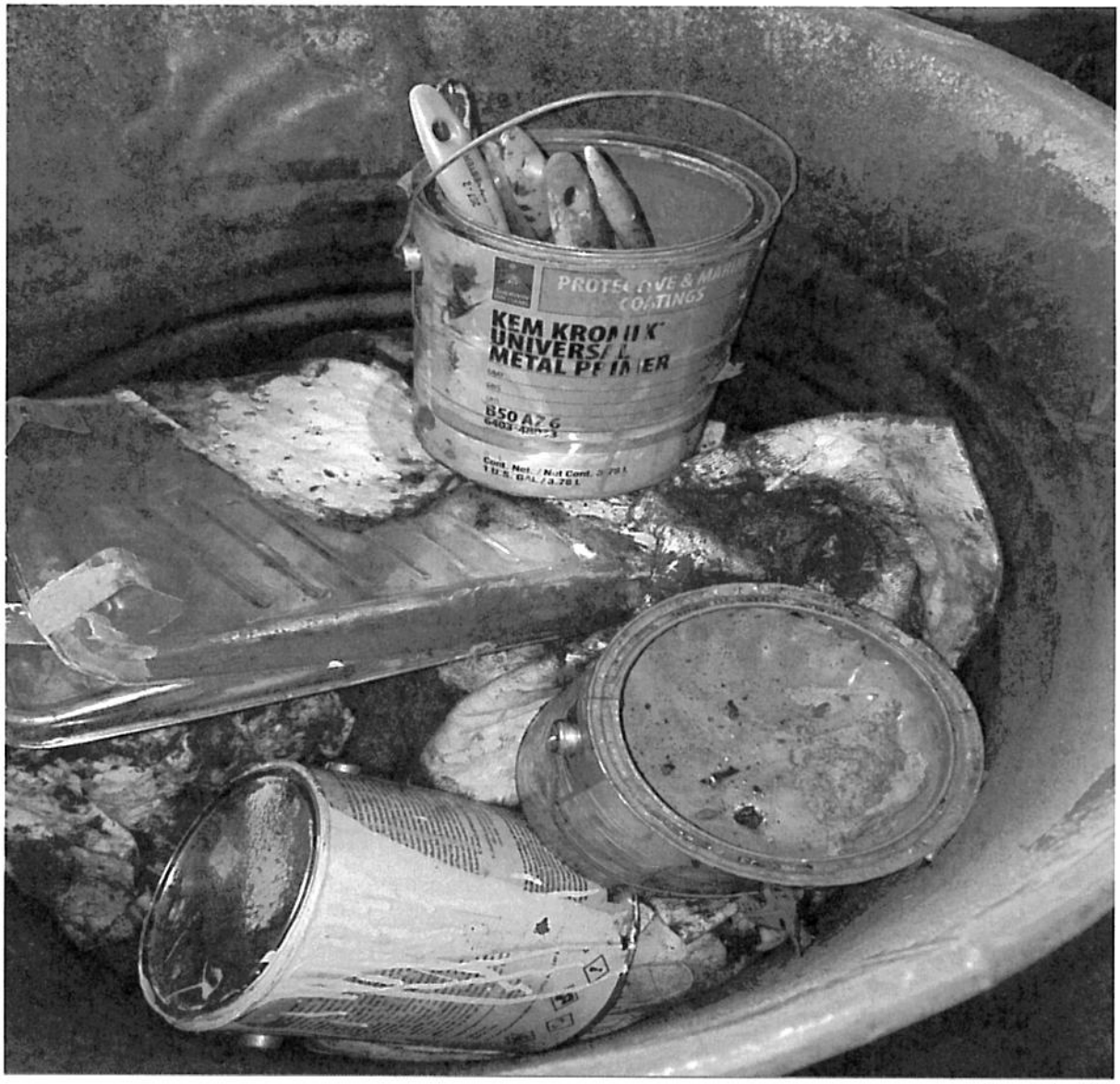
DRUMS CONTAINING LIQUIDS

Efforts should be taken to eliminate drums such as these. Managed properly, PTL could receive a credit for disposable liquids.

Appendix E

Contaminated NHIW Drums

Items such as paint, paint cans, brushes, etc. are not accepted as non-hazardous industrial waste.



SILICA AWARENESS

PURPOSE

The purpose of a silica awareness policy is to define our approach to protecting workers from harmful exposure to airborne silica dust. Pilot Thomas Logistics Company (hereinafter referred to as The Company) does not use silica in any of our work processes. However, this policy is in place to ensure our workers are aware and know what process to follow when exposure is a possibility on client work sites.

RESPONSIBILITIES

Due to the health hazards posed by silica, Company personnel involved in Frac operations should take necessary safety precautions and wear appropriate personal protective equipment to prevent silica exposure.

The Company is responsible for:

- Ensuring that the materials (e.g., tools, equipment, and personal protective equipment) and other resources (i.e., worker training materials) required to adhere to this policy are readily available to employees working on sites that use silica in their processes.
- Initiating sampling of worker exposure to hydraulic fracturing sand when there are non-standard work practices for which the control methods to be used have not been proven to be adequately protective.
- Ensuring that all required tools, equipment, and personal protective equipment are readily available and used as required.
- Ensuring supervisors and workers are educated and trained on silica sand hazards and control measures.
- Maintaining records of training, fit-test results, crew talks, and inspections (equipment, PPE, work methods/practices).
- Coordinating the work with the prime contractor and other employers to ensure a safe work environment.

The Frac Lead or Frac Team Supervisor is responsible for:

- Selecting the appropriate PPE and implementing site-specific control measures
- Providing adequate instruction to workers on the hazards of working with silica-containing materials (e.g., dust) and on the precautions specified in JSEA
- Ensuring that workers are using the proper respirators and have been fit-tested
- Directing the work in a manner that ensures the risk to workers is minimized and adequately controlled
- Communicating with the prime contractor and other sub-contractors to ensure a safe work environment

The Employee is responsible for:

- Knowing the hazards of silica dust exposure
- Using the assigned personal protective equipment in an safe and effective manner
- Setting up the operation in accordance with the JSEA
- Following established work procedures as directed by the Frac Team Supervisor
- Reporting any unsafe conditions or acts
- Knowing how and when to report exposure incidents

Silica Properties

Silica is the second most common mineral on earth and makes up nearly all of what we call "sand" and "rock." Silica exists in many forms—one of these, "crystalline" silica (including quartz), is the most abundant and poses the greatest concern for human health. Some common materials that contain silica include:

- Rock and sand
- Topsoil and fill
- Concrete, cement, and mortar
- Masonry, brick, and tile
- Granite, sandstone, and slate
- Asphalt (containing rock and stone)
- Fibrous-cement board containing silica

Silica is a primary component of hydraulic fracturing sand, and silica containing dust can be generated during operation.

Unprotected workers performing these activities, or working in the vicinity, can be exposed to harmful levels of airborne silica.

Health Hazards

Exposure to silica has been shown to cause silicosis, lung cancer, pulmonary tuberculosis and other airway diseases. Crystalline silica dust can cause a disabling, sometimes fatal disease called silicosis. The fine particles are deposited in the lungs, causing thickening and scarring of the lung tissue. The scar tissue restricts the lungs' ability to extract oxygen from the air. This damage is permanent, but symptoms of the disease may not appear for many years.

A worker may develop any of three types of silicosis, depending on the concentrations of silica dust and the duration of exposure:

- Chronic silicosis—develops after 10 or more years of exposure to crystalline silica at relatively low concentrations
- Accelerated silicosis—develops 5 to 10 years after initial exposure to crystalline silica at high concentrations
- Acute silicosis—develops within a few weeks, or 4 to 5 years, after exposure to very high concentrations of crystalline silica

Initially, workers with silicosis may have no symptoms; however, as the disease progresses, a worker may experience:

- Shortness of breath
- Severe cough
- Weakness

These symptoms can worsen over time and lead to death. Exposure to silica has also been linked to other diseases, including bronchitis, tuberculosis, and lung cancer.

Code of Practice

Risk Identification, Assessment and Control

The potential for worker exposure to silica should be identified during the hazard assessment. A worker's exposure to silica should be kept as low as reasonably achievable. Employees must not be exposed to airborne concentrations of silica in excess of 0.025 mg/cubic meter over an 8 hour time period. Atmospheric testing results should be assessed periodically.

Identifying areas where silica exposure may occur is a key step in protecting employees from overexposure. The EH&S Department shall be responsible for reviewing the planned work activities to identify those that may generate airborne silica. The EH&S Department shall:

- Identify workers at risk of exposure—For example, frac technicians who are positioned near a Sand King unit would be at greater risk of exposure than a lubricants driver.
- Determine the exposure concentration—some work activities generate more dust than others, and the exposure concentration should be determined.
- Evaluate if the exposure concentrations exceed OSHA permissible exposure limits.
- Ensure best practices, engineering and administrative controls are fully implemented.
- Ensure employees are properly equipped with appropriate respiratory protection when required.

Control Options

Effective control options must be used to eliminate or reduce the risk to workers from the hazards of silica dust exposure. The following hierarchy of control measures must be followed:

- Elimination/substitution
- Engineering controls (e.g., water, local exhaust ventilation, enclosure)
- Administrative controls (e.g., coordination of tasks with contractors, signage)
- The use of proper PPE such as gloves, coveralls and eye protection when exposed to silica. Personal protective equipment such as gloves, coveralls and eye protection will be used to control silica exposures.

The Company is committed to protecting employees from exposure to silica and encourage our customers to establish engineering controls to protect workers. Effective engineering controls such as HEPA vacuum attachments and wetting methods, which control silica dust at its source, are ideally the best means to control exposure. In the event engineering controls do not reduce airborne silica to safe levels, other control measures may be necessary to include respiratory protection.

The Company shall mitigate exposure to silica dust by selecting a combination of the following controls listed in order of preference:

- Elimination and substitution
- Engineering
- Administrative
- Personal protective equipment

Elimination and Substitution

The Company recognizes the importance of planning the work in order to minimize the amount of silica dust generated.

Engineering Control of Dust

Selecting an appropriate control measure depends on the specifics of the operation. In some cases, local exhaust ventilation (LEV) is more effective at controlling exposure (e.g., during grinding operations) than wetting methods. In a different application, wetting may be more effective (e.g., during cutting operations) than LEV. However, using LEV may reduce the amount of final cleaning required, as the silica dust is captured.

Typical dust control systems may employ three well-established techniques:

- Local exhaust ventilation (LEV)
- Wet dust suppression (WDS)
- Restricting or isolating the work activity with barriers or full enclosures (this may be the only option where LEV or WDS is not practical or effective)

Administrative Controls

The Company shall follow these safe work practices:

- Exposure control plans and the site risk assessment/work plan shall be completed before starting work.
- Housekeeping, restricting work areas, personal hygiene should be considered as part of a hazard assessment.

Personal Protective Equipment

Respiratory protection

- All employees who wear respirators will do so in accordance with the Company's Respiratory Protection Program.
- Respirators must be NIOSA approved.
- Workers who wear respirators will be clean-shaven. Filtering face piece respirators give little or no protection to workers with beards, and even a minor growth of stubble can severely reduce the effectiveness of respiratory protection.
- All workers who wear respirators shall be fit-tested prior to use.
- Employees shall be properly trained in the use of respirators

Protective clothing

The Company shall provide employees who work in restricted area with protective clothing that protects other clothing worn by the worker from silica contamination. The Company shall also ensure that employee street clothing is not contaminated by silica, and ensure that a worker does not leave a restricted area until the worker has been decontaminated.

Health monitoring

Exposures to airborne concentrations of Silica must be kept below the permissible exposure limits shown in 29 CFR 1910.1000 Table Z-3.

DOCUMENTATION

Records must be kept of the following:

- Worker education and training sessions
- Medical evaluations
- Respirator fit-testing
- Equipment maintenance and repair as required
- Worksite inspections

This Silica Awareness plan must be reviewed at least annually and updated as necessary.

EDUCATION AND TRAINING

Training is required prior to using silica-containing materials or working in an environment known to contain airborne concentrations of Silica. Refresher training should be completed as necessary. The following information shall be covered in training:

- Hazards associated with exposure to silica dust
- The risks of exposure to silica
- Signs and symptoms of silica disease
- Safe work procedures to be followed (e.g., setup of enclosures, disposal of silica waste, personal decontamination)
- Use of respirators and other personal protective equipment (e.g., donning and doffing of personal protective equipment, and cleaning and maintenance of respirators)
- Use of control systems (e.g., LEV and wet methods)
- How to seek first aid (for example, the location and use of eyewash stations)
- How to report an over-exposure to silica dust

Spill Response Protocol

Severity	Description	
1	**Minor Leaks or Spills up to 24 gal**	
	PTL Cleanup	Diesel, Non-Haz Lubes/Chemicals
		DOT Haz-Mat - not requiring specialized equipment, tools, PPE, or permits
	3rd Party Cleanup	DOT Haz-Mat - requiring specialized equipment, tools, PPE, or permits
		All products spilled impacting waters of the state (State/Fed Reportable)
2	**Moderate Leaks or Spills: 25 gal up to 99 gal**	
	PTL Cleanup	Diesel/Non-Haz Lubes/Chemicals - in/on containment or minimal soil impact
	3rd Party Cleanup	Diesel/Non-Haz Lubes/Chemicals impacting sensitive areas or requiring extensive excavation/soil remediation
		DOT Haz-Mat
		All products spilled impacting waters of the state (State/Fed Reportable)
3	**Major Leaks or Spills: 100 gal or more and ALL State/Federal reportable spills**	
	PTL Cleanup	Diesel/Non-Haz Lubes/Chemicals - in/on containment/no soil impacted (Not State/Fed Reportable)
	3rd Party Cleanup	Diesel/Non-Haz Lubes/Chemicals - off containment/soil impacted (State/Fed Reportable)
		DOT Haz-Mat
		All products spilled impacting waters of the state (State/Fed Reportable)

All PTL Cleanups Must:

Have a trained and competent person on site and in charge of the cleanup. This person will be responsible for confirming PTL clean-up is authorized by Customer (if applicable), completing a JSEA before job start, taking before/after photos of spill site, properly packaging, labeling, and staging generated waste for disposal (Coordinate with the Environmental Manager), Collecting clean closure confirmation samples (if applicable), Collecting waste samples for disposal approval (if applicable); Ensures waste is disposed of properly and is properly documented. On all product spill responses (other than diesel), Competent Person must review MSDS, identify specific product hazards, and select appropriate PPE as part of JSEA process.

PTL must be able to respond promptly with adequate personnel, equipment, and supplies to appropriately address the spill in an effective manner.

PTL must NOT engage in excavation activities that require utility marking or the use of heavy excavation equipment - Call 3rd party Contractor

DO NOT cover up any spill! All spills must be appropriately recovered via the use of vacuum equipment, absorbents, excavation, etc. Any treatment in place spills must be pre-authorized by the Environmental Manager. Bio-surfactants should also NOT be used unless specifically authorized by the Environmental Manager.

All Spills must be reported to Area EH&S Manager and the Environmental Manager regardless if PTL is cleaning up internally.

Any changes to standard internal spill cleanup protocol requires VP-EH&S and Environmental Manager approval.