
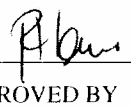
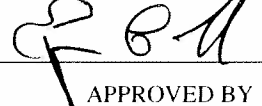




PHOENIX PARK
GAS PROCESSORS LIMITED

Contractor Safety Handbook

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CONTRACTOR SAFETY

PPGPL does not require a PPGPL Representative to be present during all contractor work activity.

The following are examples when PPGPL requires contractor employee supervision. The examples are not meant to include all situations.

- During confined space entry into vessels or tanks
- During critical operations involving potentially hazardous conditions or circumstances (e.g., excavation near pipelines, hot taps, opening of vessels or piping, etc.)

It is extremely important that good judgement be used and sound decisions made when contractor employees are to be allowed to work without direct supervision by a PPGPL representative.

Contractor employees **shall** be given a Safety Awareness Orientation and be issued an orientation card valid for one year. This card must be presented to security each time the contractor has to enter the plant.

Contractors **shall** be given a copy of PPGPL Contractor Safety Handbook. The handbook supplies the contractor employee with the basic safety requirements for work in PPGPL. The "Receipt of the Contractor Safety Handbook" **shall** be signed and filed as instructed on the sheet.

PPGPL **shall** hire only contractors with an acceptable safe work history.

Contractors **shall** have their own safety programs. Contractors would also be invited to participate in PPGPL safety meetings when working on company premises. PPGPL will assist and support contractors in their safety efforts. Small contractor firms may require special evaluation. Small contractors firms should be considered for service **only** if they can demonstrate that they can fulfill the intent of PPGPL's Contractor Safety Program.

Contractors **shall** abide by PPGPL safety policies, programs and procedures.



PPGPL CONTRACTOR SAFETY HANDBOOK

1. Introduction

PPGPL bases its approach to contractor safety on the principle that the safety and occupational health of contractor employees performing work for PPGPL will be protected to the same extent as for PPGPL employees. It is PPGPL's goal to maintain zero contractor recordable injuries. This handbook is intended to state the basic requirements for selection of contractors, assignment of basic responsibilities, setting of minimum standards and work practices and address injury and illness reporting requirements. It is not intended to cover all possible situations, but will serve as a general guideline for contractor safety performance.

2. Selection of Contractors

See Appendix - Selection Process Flowchart

Safety performance is a prime consideration in the selection of contractors. It is important that consideration be given to selecting safe contractors prior to bid solicitation or assignment of work.

Contractor selection will be based on the ability to provide and implement:

- A written Safety Policy
- Safety Manual
- Staffing Plan for contract
- Safety history, recordables, accounts, incidents, deaths, etc.
- Experience - Staff training with records
- Disciplinary action procedure/controlled substances, firearms, alcohol



- Special Safety Equipment
- Contractor Plan to Report, minimize and eliminate hazards
- Safety monitoring and assessment on site
- Safety inspection - personnel tools and equipment, frequency
- system to address deficiencies
- Safety Meetings - Frequency, records
- Safety Incentive Program
- Sub contractors management

PPGPL has the responsibility to select and use contractors who work to reduce the frequency and severity of accidents. Contractors are directly responsible for the safety and health of their employees and for controlling the manner and methods used in their operations to accomplish the assigned tasks. Contractors are not to be used for jobs to which PPGPL employees would not be assigned, unless the jobs can be completed safely with the contractors' special expertise and training.

3. Contractor Safety Orientation

Contractors **shall** be given a copy of the Contractor Safety Handbook and contractors shall be given a copy of the contractor guide. In addition, a safety orientation **shall** be given prior to the start of any job or project and repeated when any new or additional contractor employees are brought onto the site. This orientation shall be documented.

The following are minimum safety orientation topics to be reviewed.

- Requirement for clearing security when entering or leaving the compound.
- Designated parking areas, smoking areas, break areas and rest room location, potable/non-potable water locations.

- Personal protective equipment required.
- Work Permit procedures and requirements (e.g., welding, cutting, electrical equipment use, confined space entry).
- Incident evacuation procedures (e.g., plant siren, exit location, assembly points).
- Location of emergency equipment (e.g., fire blankets, fire extinguishers, self-contained breathing apparatus - SCBA, eye wash, showers).
- Hazards specific to job and/or site/Job Safety Risk Analysis (JSRA).
- Substance abuse requirements

Any additional job or site specific topics not listed **shall** be included at the time of orientation.

4. Responsibilities of Contractors

All contractor personnel on PPGPL property or performing work for PPGPL shall comply with applicable governmental laws and regulations and conform to applicable PPGPL safety, occupational health and environmental rules/procedures. Contractor safety and health rules/procedures need not be identical to PPGPL rules/procedures but should be consistent with them and afford an equivalent level of protection.

Contractors shall also insure that none of their activities endanger or duly inconvenience the general public, PPGPL employees or other third parties.

The responsibilities include the following:

- Employ and use adequately trained employees under competent supervision.
- Maintain reasonable availability to PPGPL, adequate documentation to demonstrate the existence of the necessary safety, health, environmental and substance abuse prevention programs. This is required as a condition of each contract.
- Provide PPGPL with documentation not exceeding three months, that all contract employees has been drug screened.
- Obtain written approval (work permit) and clearance from the PPGPL Representative before commencing all work and notify that representative when the work has been completed.
- Keep the PPGPL Representative fully advised of any work, which may affect the safety of PPGPL employees or property.
- Ensure that all contractor personnel comply with the terms of the contract, including all applicable PPGPL safety, health and environmental rules and procedures.
- Confine contractor personnel and vehicles to PPGPL designated gates, access roads, parking areas, work sites and authorized service facilities.
- Notify the PPGPL Representative of any chemicals the contractor will be using and supply Material Safety Data Sheets (MSDS) for approval **prior** to bringing chemicals into the work site.
- Advise contractor personnel of any hazards associated with the



task to be performed, including any hazard information provided to the contractor by PPGPL. Hazard information will also be made available to the PPGPL Representative.

- Maintain all work areas in a clean, orderly and safe condition, free from unnecessary safety or health hazards.
- Actively participate in tailgate sessions prior to non-routine work activities, e.g. plant shut downs, major maintenance of equipment etc.
- Coordinate the use of all radioactive devices with the PPGPL Representative.
- Ensure subcontractor compliance with contract provisions, including safety, health and environmental requirements.
- Properly maintain and use equipment, including personal protective equipment that are appropriate for the task.
- Ensure that all contractor personnel are clean shaven and are familiar with the use of the recommended escape respirator.
- Ensure that contracting personnel venturing on the Western side of PPGPL facility i.e downwind of the Chlorine plant, are outfitted with an escape respirator.

5. Minimum Safety Standards

Certain minimum safety standards must be met by all contractors performing work for PPGPL. Failure to fulfill the safety, occupational health and environmental terms of the contract, or to maintain compliance with these standards, can lead to work stoppage or termination of the contract. This list of minimum safety standards is



not intended to be comprehensive and does not cover all situations.

- Contractors shall require their employees to wear flame resistant clothing (Du Pont Nomex III or material of equivalent fiber approved by PPGPL) while performing work at PPGPL plant and loading dock facilities. Contractors can choose from a wide range of colors available except khaki.
- OSHA-approved safety hats (ANSI Z-89.1) are required to be worn. Metal hard hats **shall not** be worn.
- OSHA-approved safety glasses (ANSI Z-87.1) are required to be worn. Safety glasses with side shields are highly recommended.
- Good quality footwear **shall** be worn. OSHA-approved steel toe footwear (ANSI Z-41) is strongly recommended. Open-toed shoes, sandals, cloth shoes, or shoes in poor repair are not allowed.
- Personal protective equipment including but not limited to hearing protection, work gloves, additional eye and face protection, respiratory protection and safety belts are to be provided by the contractor, as needed.
- Individuals entering the facility to make routine deliveries or service visits to the office building or warehouse should not normally be required to wear flame resistant clothing unless these activities require that they enter the process area. However, areas of access should be limited to minimize the exposure to the potential for flash fire.

Contractor personnel are to be provided with adequate drinking water while performing work. Drinking water **shall** be obtained only from designated drinking fountains, water jugs or other approved sources.



PPGPL is committed to the maintenance of safe, alcohol and drug free work places. Contractors are to maintain and follow a substance abuse prevention program, including any necessary drug testing procedures.

The following items are specifically prohibited from being brought onto PPGPL compound:

- Alcoholic beverages
- Illegal drugs
- Intoxicants
- Butane lighters
- "Strike-anywhere" matches
- Firearms, and ammunition
- Cell phones
- Cigarettes

The following activities are not allowed while performing work for PPGPL:

- Soliciting
- Gambling
- Fighting
- Horseplay
- Running

Activities, which could result in work disruption, such as the playing of public radios, are not allowed. Cameras may not be used without the written approval of PPGPL.

6. Safe Work Practices and Other Requirements

This list is not intended to be completely comprehensive and does not



cover all situations.

- Contractor employees must comply with the instructions of all Danger, Caution and Safety signs displayed.
- Spray painters must wear OSHA or NIOSH approved respiratory protection while engaged in spray painting operations.
- Breathing air supplied to the respiratory equipment **shall** meet Grade D breathing air requirements. When bottled air or approved breathing air compressors are not available and other sources are used, suitable in-line purifying sorbent beads and filters must be installed to assure Grade D breathing air quality is delivered to the respirator.
- **Smoking is not permitted within the boundaries of PPGPL.** All smoking paraphernalia e.g. matches, lighters, cigarettes etc. must be left with security.
- All vehicle passengers must be seated and must wear safety belts.
- Contractor is required to maintain good housekeeping in the work areas at all times.
- Contractor must legally dispose off-site all used chemicals or materials.
- Contractor must confine its employees and those of its subcontractors, agents, representatives, and visitors to the roads, parking, work, and storage areas designated by PPGPL.
- All equipment, including but not limited to cranes and cherry pickers, shall be subject to inspection and approval by PPGPL.



Crane booms must be lowered and/or securely tied off at the end of each workday or any time the crane is left unattended.

Crane booms or similar equipment **shall** maintain a ten-foot minimum clearance for lines of 50KV or less. For lines greater than 50KV, the clearance **shall** increase 0.4 inches for every K over 50KV.

Contractor must supply a flagman to walk at the "hook" end of the boom any time a crane is moved from one location to another.

A heavy lift permit must be completed for ALL loads over 10,000 pounds, or lifting over process equipment, or for loads that weight exceeds 70% of 85% of the rated load for a given radius.

Contractor must permit only fully qualified operators to operate mobile equipment and cranes on PPGPL premises.

Work platforms hoisted by cranes must have totally enclosed handrails, four-point lift lines, a safety line, and provisions for safe access or egress.

All vehicles or motorized equipment other than a standard pickup or car **shall** be equipped with adequate backup alarms.

Equipment **shall** not be left overnight on any site road without prior PPGPL approval.

Suspended loads shall not to be left unsecured or unattended for any period of time.

Riding of crane booms or buckets by any personnel is strictly prohibited.

All portable tools and equipment must be maintained in good condition at all times. Extension cords must be of the three-conductor type and

the ground wire connected during equipment operation. A Hot Work Permit **shall** be obtained when extension cords or other electrical equipment are used in classified areas (i.e., Class 1 Div. 1 or 2).

Only low-voltage lighting equipment (12 volt) **shall** be used when lighting is required inside a vessel. Contractor **shall** review lighting voltage with the PPGPL Representative prior to use of the lighting equipment.

All scaffolds must be structurally sound and have all boards, braces, handrails, and toeboard securely fastened. Safe access must be provided for all scaffolds.

All portable rung ladders and extension ladders **shall** be tied off at the top and have non-slip bases. When pitching extension or straight ladders the 1 to 4 ratio shall be followed, i.e., the base of the ladder should be 1' away from the vertical for every 4' height.

Safety belts must be worn and tied off to independent lift lines when working from elevated areas where no protection is available to prevent the worker from falling or when riding work cages hoisted by a crane.

Every person issued a safety belt must be instructed in the proper method of wearing, using, and securing the safety belt.

Every safety belt and lanyard must be inspected upon issue by the wearer before each use.

Barricades

All trenches, ditches, road crossings, and open holes **shall** be adequately roped off or barricaded at all times.



Areas with potential hazards created by falling materials, overhead leaks, spills, missing handrails, beneath scaffolds, overhead lifting operations or equipment or x-rays shall be roped off and kept clear of personnel traffic.

Removal of barricades or roping is limited to the individuals who erected them initially.

Trenches or excavations of five feet or more in depth **shall** be sloped to the proper angle required for by the soil properties and condition and **shall** be appropriately shored to provide adequate protection to personnel or equipment.

All trenches or excavations **shall** be barricaded.

Contractor is required to obtain approval from a PPGPL Representative prior to commencing any soil scraping, excavation, demolition, or concrete removal.

Welding and Hot Work

Contractor must ensure precautionary measures, such as blinding of lines and vessels, covering of sewers, carrying out of safety checks, and securing work permits, are carried out prior to working on equipment and vessels.

Contractor **shall** furnish fire protection equipment and employee(s) for fire watch duty whenever cutting, burning, sparking, or welding is done in or near an area containing flammable materials.

All welders engaged in welding must wear protective equipment including a welding hood, gloves sleeves etc, and their helpers must wear protective dark goggles.



All personnel engaged in brazing or burning must wear protective dark goggles.

Acetylene and oxygen hoses must be turned off at the cylinder valve any time the equipment is not being used.

Welding machines **shall** be fitted with industrial spark arrestors. These machines shall also be shut down any time the job is left unattended.

Gas hoses and welding leads must be removed from the inside of vessels any time they are not being used.

Gas cylinders and/or hydrocarbons must not be stored, kept, or used inside vessels or tanks.

Oxygen and acetylene cylinders must be stored separately in an upright position with protective caps on, and secured in place.

Lifting baskets or cylinder racks must be used when lifting or transporting gas cylinders.

Engine-driven equipment must be shut down and allowed to cool for at least ten minutes before refuelling.

Petroleum products must be stored in safety cans with flame arresters and self-closing spouts. Gasoline, varsol, or carbon tetrachloride **shall** not be used as a cleaning solvent.

Contractor **shall** furnish a minimum of two 30-pound ABC or BC type fire extinguishers for fire watch and fire control. The number and location of the extinguishers **shall** meet PPGPL approval.

PPGPL will periodically inspect and document contractors on site activity and program. Deficiencies observed will be discussed with contractor and a combined plan to eliminate would be developed.



7. Permits

Work Permit

A general safe work permit is required by all contractors when any work is conducted in the plant process area.

Hot Work

A safe work permit indicating "Hot Work" shall be required whenever work activities involves cutting, welding, chipping, use of electrical tools or any heat producing work is performed.

Confined Space Entry

A safe work permit indicating "Confined Space" shall be required before any contract person enters a closed space, such as a tower, tank, pressure vessel or open pit, or any excavation or trench deeper than five feet.

Contractor must provide a standby person (hole watch) outside the closed space, ensure adequate ventilation, and perform a gas check for air suitability prior to allowing any person to enter a vessel or confined space.

Lockout/Tagout

Contractor must establish and adhere to a tag, lockout and try procedure prior to allowing personnel to work on electrical equipment.

Excavation

A written excavation authorization shall be completed and signed by the I & E/Mechanical Superintendents before **ANY** excavation works can proceed.



Vehicle Entry

A safe work permit indicating "Vehicle Entry" shall be required before any vehicle is allowed in the process area.

8. Medical/Emergencies

Contractor must provide local first aid treatment and medical care for all contractor, sub-contractors, visitors, agents, or representatives.

Contractor must submit to the PPGPL Representative the name(s) and phone number(s) of medical institution and/or practitioners where medical treatment may be available for their employees.

Contractor **SHALL** immediately report all incidents, no matter how minor, to the PPGPL Representative.

Contractor must submit written reports of all incidents on PPGPL property involving their employees, subcontractors or their visitors, agents, or representatives. The Contractor must furnish to the PPGPL Representative hours worked by their employees for any month.

Contractor must promptly report to the PPGPL Representative the admittance of a person to the hospital due to an injury or illness alleged to have occurred on PPGPL's premises or alleged to have occurred as a result of working on PPGPL premises.

Contractor must be knowledgeable of plant alarm system and procedures designed to handle emergencies, and must familiarize its employees with the actions to be taken in the event the alarm sounds and/or emergency procedures are activated.

Contractor must receive approval by the PPGPL Representative prior

to restarting work after an alarm or emergency procedure has been activated.

PPGPL will maintain a record log of contract employee injury and illness related to work on this facility.

9. Security

Approval by the PPGPL Representative is required for all contractor vehicles operating on PPGPL property.

Approval by the PPGPL Representative is required prior to bringing cameras on-site or taking photographs.

All employees and visitors will access the site only through the gate(s) designated by PPGPL and only with approval by the PPGPL Representative.

Contractor **shall** provide security for stored materials.

The security officer on duty will issue vehicle entry passes for routine delivery and pick up of items to the warehouse and other non-plant areas after informing the operations coordinator. Delivery to the plant however, requires a vehicle entry permit issued by the operations coordinator.

10. Contractor Receipt

Contractor or contractor employees **shall** sign and return the attached "Receipt of Contractor Safety Handbook" form to the PPGPL Representative.