Integrated Pipeline Solutions CNS Arabia Continuous Nitrogen Supply	Health & Safety Manual CONTINUOUS NITROGEN SUPPLY
	Revision #: 01

HEALTH & SAFETY MANAGEMENT SYSTEM

Health & Safety Manual

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MANAGEMENT COMMITMENT AND PLANNING

HEALTH & SAFETY POLICY

Continuous Nitrogen Supply is committed to providing a safe working Environment to promote the prevention of damage, injury or loss to all personnel, materials, equipment and property.

To achieve this goal, we shall:

- Provide adequate control of the health and safety risk arising from our work activity.
- Consult with our employees on matter effecting their health and Safety.
- Provide and maintain safe plant and equipment.
- Ensure safe handling and use of substance.
- Ensure all employees are competent to do their tasks, and to give them adequate training.
- Prevent accident and cause of work-related ill health.
- Review and revise this policy as necessary at regular intervals.

DESIGNATED SAFETY COORDINATOR

Continuous Nitrogen Supply has designated Safety Engineer to coordinate, implement, and administer the Health and safety system.

Responsibilities include:

1. Understand potential job hazards and how to eliminate them.
2. Conduct or assist with Job Safety Analysis.
3. Assure compliance with **CNS** Health and safety standard requirements.
4. Conduct regular job site health and safety inspections.
5. Establish health and safety procedures.
6. Coordinate regular health and safety training.
7. Conduct or assist with Tool Box Talks or Five Minute Safety Talks.
8. Maintain documentation of training, inspections, injuries and illnesses, and other safety records.
9. Participate in accident investigations and implementation of corrective actions.
10. Involve employees in the implementation of the HSMS.
11. Create statistical reports that compare severity and frequency rates against prior records.

SUPERVISOR'S RESPONSIBILITY

Our supervisors' play an important part in creating and maintaining safe and healthful work practices, policies, and procedures. It is the supervisor's responsibility to identify potential hazards, identify methods to control or eliminate the hazards, ensure employees engage in safe and healthful work practices, and ensure employees receive Health and safety training to do their work. Health and safety performance will be part of our supervisors' evaluations.

HEALTH AND SAFETY COMMITTEE

Our management will take an active role on the Health and safety committee. At least annually the health and safety committee will develop written health and safety goals and track monthly progress. These goals will be communicated to all employees. Our committee will be comprised of management and hourly employees.

RESPONDING TO HEALTH AND SAFETY ISSUES

Our management will take prompt consistent action when responding to health and safety issues. They will demonstrate our management commitment to addressing health and safety concerns and encourage employee participation. Management will respond to employees' reports of hazards or potential hazards.

Immediate supervisors will review, investigate, and take any necessary and appropriate action on all employee reports of hazards or potential hazards. The employee reporting the hazard or potential hazard will be notified of the outcome. Reporting of hazards or potential hazards will be without fear of reprimand.

EMPLOYEE INVOLVEMENT

HEALTH AND SAFETY COMMITTEE

The purpose of our health and safety committee is to participate in the implementation of the health and safety system.

Our committee will be comprised of management and employee representatives. Our committee will meet monthly.

The committee will:

- Have defined goals and objectives.
- Address health and safety issues.
- Record and post minutes of the meetings.
- Involve employees in problem solving.
- Document action taken and post on the bulletin boards for all employees to read and-or comment.
- Have a formal agenda.

SAFETY INSPECTIONS

Our employees will participate in regular health and safety inspections weekly to help identify potentially hazardous conditions and unsafe actions and initiate corrections. Findings will be presented to Safety Engineer and Health Committee for review. Corrective action will be implemented under the direction of Safety Engineer in a timely manner.

SUGGESTION SYSTEM

Our employees are encouraged to make health and safety suggestions to help improve a process, prevent an accident, or to make any improvement in the health and safety system. The suggestion system will be implemented by Safety Engineer who will be responsible for determining priority and the proper means of implementation. Safety suggestions will be shared with the health and safety committee for input.

EMPLOYEE PARTICIPATION

Our employees will be given an opportunity to provide input regarding recommendations on health and safety products, procedures, and training as it pertains to daily work operations. For example, employees may be given some responsibility to test out products or conduct research to substantiate recommendations. Employee input may be provided through the suggestion system, report of hazard, or through actions the health and safety committee initiates. Employees may participate in a variety of ways such as; a trainer, inspector, or problem solver.

WORKSITE ANALYSIS

We will conduct a worksite analysis, through systematic actions that provide information as needed to recognize and understand the hazards and potential hazards of our workplace. Listed below are types of worksite analysis actions that can assist with making an inventory of potential hazards in our workplace:

1. Job safety analysis.
2. Comprehensive hazard surveys.
3. Hazard analysis of changes in the workplace (new equipment, new processes).

4. Regular site health and safety inspections (employee and management).
5. Employee report of hazards or potential hazards.
6. Accident and incident investigations with corrective actions and follow-up.
7. Injury and illness trend analysis.
8. Personal protective equipment assessment.
9. Ergonomic analysis.
10. Specific identification of confined spaces.
11. Identification of energy sources for specific machines.
12. Copies of written inspections and surveys by: fire department, in-house as required by health and safety standards (e.g., overhead crane inspections, powered industrial truck daily inspection, etc).

NEW EQUIPMENT, PROCESSES, AND FACILITY HAZARD ANALYSIS

We will analyze new facilities, equipment, processes, and materials for hazards and potential hazards. Findings will be documented and plans developed to minimize or design out the hazards.

JOB SAFETY ANALYSIS

We will utilize job safety analysis to determine potential hazards and identify methods to reduce exposure to the hazards.

Job Safety Analysis (JSA) is a method of planning for health and safety. There are three parts to the JSA.

1. The first component of a JSA is breaking down a job or task into the specific steps it takes to complete the job. Although this can be done in small detail, typically only the major steps are listed. This often results in five to ten steps. The steps are listed in chronological order, listing the first thing that must be done, and then what comes next, and so on.
2. The second component of a JSA is to list all the hazards that are involved in each step. There may be many hazards that get listed next to some steps and may not be any associated with some steps.
3. The third step is to write down how each hazard will be eliminated or controlled. In other words, describe what needs to be done in order to perform that task safely.

EMPLOYEE REPORT OF HAZARDS

Our employees play a key role in identifying, controlling, and reporting hazards that may occur or already exist in the workplace. Employee reports of potential hazards can be an effective tool to trigger a closer look at a piece of equipment, operation, or how work is being performed. Reports of potential hazards can also provide suggestions to eliminate a hazard.

ACCIDENT/INCIDENT INVESTIGATION

We will conduct an investigation for all accidents/incidents and near misses. Our primary goal of conducting an investigation is to determine the "root cause" to prevent the risk of a future occurrence. Investigation reports can help determine injury and illness trends over time, so that patterns with common causes can be identified and prevented. Investigations are not intended to place blame.

Accidents and "near-miss" incidents will be investigated by H&S Manager. The reports will be reviewed by Safety Committee within 3 Days of an accident/incident.

HAZARD PREVENTION AND CONTROL

Our management will develop systems to prevent and control hazards. These include the establishment of controls through engineering, work practice, personal protective equipment, and/or administrative actions, systems to track hazard correction, preventive maintenance systems, emergency preparation, and medical program.

Our written system will be implemented to assure guards, housekeeping, and personal protective equipment are provided and being used.

JOB SITE INSPECTIONS

We will conduct daily job site inspections. Hazards will be documented, reviewed, and corrections will be made in a timely manner. More detailed, written inspections will be conducted by supervisor on a Daily basis. The Safety Coordinator or other designated safety person will tour each job site and observe potential safety/health hazards, and develop a plan for safeguarding this company's workers which may include the following:

1. Removing the hazard.
2. Guarding against the hazard.
3. Providing personal protective equipment and enforcing its use.
4. Training workers in safe work practices.
5. Coordinating protection of workers through other contractors.

A record of all safety inspections and correctional steps will be kept.

ACCIDENT INVESTIGATION

All accidents resulting in injury or property damage will be investigated. The purpose of the investigation is NOT to find fault, but to find the cause of the accident so similar incidents can be prevented in the future.

1. All accidents, no matter how minor must be reported to the Supervisor immediately.
2. Supervisor must report all accidents to the Safety Engineer as soon as possible.
3. Supervisor must complete an initial written accident investigation the day of the accident, if possible.
4. All workers involved in the accident or who witnessed the accident must complete a written statement describing the incident.
5. The Safety Engineer will complete a thorough accident investigation to determine root causes and corrective actions.
6. Near misses (situations where an accident almost happened) should be reported. Corrective action must be taken to prevent the same situation from occurring again with the potential for serious injury.

PERSONAL PROTECTIVE EQUIPMENT

1. Hard hats will be worn on job sites at all times.
2. Eye protection will be worn when there are potentials of hazards from flying objects or particles, chemicals, arcing, glare, or dust.
3. Leather work boots shall be worn to protect from falling objects, chemicals, or stepping on sharp objects.
4. Protective gloves or clothing shall be worn when required to protect against a hazard.

POLICIES, PROCEDURES, HEALTH AND SAFETY RULES

Our management is responsible for implementing major decisions, policies and health and safety procedures. Specific health and safety procedures that are required by **Continuous Nitrogen Supply** will be put in writing such as: lockout, right to know, fall protection, confined space, respiratory program, etc.

Our will inform and enforce the following safety rules:

All of our safety rules must be obeyed. Failure to do so will result in strict disciplinary action.

1. Wear appropriate clothing and use sun block to prevent sunburn.
2. Watch where you are walking. Do not run. Keep your mind on your work at all times.
3. The use of illegal drugs or alcohol or being under the influence during working hours shall be cause for termination. Inform your supervisor if taking strong prescription drugs that warn against driving or using machinery.
4. Do not distract the attention of fellow workers or engage in horseplay. Do not engage in any act which would endanger another employee.
5. Keep your working area free from rubbish and debris. A clean job is the start of a safe job.

6. Do not use a compressor to blow dust or dirt from your clothes, hair, or hands.
7. Report any fear of walking at heights to your supervisor.
8. Know where fire extinguishers are located and how to use them.
9. Keep back at least 10’ from all power lines, further if high voltage.
10. Nobody but the operator shall be allowed to ride on equipment unless the equipment is designed to carry a passenger.
11. Do not use power tools and equipment until you have been properly instructed in the safe work methods and become authorized to use them.
12. Do not remove, displace, damage, or destroy any safety device or safeguard on equipment or machinery.
13. Barricade danger areas. Guard rails or perimeter cables may be required. Do not enter an area which has been barricaded.
14. If you must work around power shovels, trucks, rough-terrain fork-lifts, dozers, or other heavy equipment, make sure operators can always see you.
    - Never walk within the swing radius of equipment counterweights.
    - Never stand next to trucks when load straps are being released.
    - Barricades are required for cranes.
    - High visibility vests may be used to increase your visibility.
15. Never oil, lubricates, or fuel equipment while it is running or in motion.
16. Before servicing, repairing, or adjusting any powered tool or piece of equipment, disconnect it, lock out the source of power, and tag it out.
17. Use ground fault circuit interrupters at all times with any temporary power supply. Use only extension cords of the three-prong type.
18. Never throw anything "overboard." Someone passing below may be seriously injured.

19. Open fires are prohibited.
20. Know what emergency procedures have been established for your job site. (Location of emergency phone, first aid kit, stretcher location, fire extinguisher locations, evacuation plan, etc.).

SAFETY DISCIPLINE

We have implemented the following four step disciplinary system when safety rules are not followed or other unsafe actions endanger workers.

First violation: Oral warning; notation for personnel file.

Second violation: Written warning; copy for file or Personnel Office.

Third violation: Written warning; one day suspension without pay.

Fourth violation: Written warning and one-week suspension, or termination if warranted.

Zero-tolerance Violations: Some safety violations are of such serious nature that there will be no warnings and termination may result.

Both the employee and the supervisor allowing these unsafe acts may be terminated.

A record will be maintained of all disciplinary actions.

EMERGENCY PROCEDURES

In case of an emergency on site the following procedures will be instituted at each site.

1. Method of communication will be determined at each site: telephone, radio, etc.
2. Post the following emergency telephone numbers:
   - Police,
   - Fire,
   - Medical Response Team.
3. Post the job site address near the communication station.
4. Post names of first aid responders on site. First responders should obtain all required First Aid/CPR and Bloodborne Exposure training.
5. Designate person to direct emergency crews to site of emergency.
6. Instruct each employee if known harmful plants, reptiles, animals, insects, or other environmental hazards are present, including:
   - The potential hazards,
   - How to avoid injury,
   - Applicable first aid procedures to be used in the event of injury.

LOCKOUT / TAGOUT

Lockout / Tagout assures that employees are protected from unintended machine motion or unintended release of energy which could cause injury. This includes electricity, water, steam, hydraulic, gravity, and many other sources of stored energy.

All sources of energy must be shut off, de-energized at the source, and locked-out prior to any employee beginning work around or on the potential hazard.

CONFINED SPACE ENTRY

No employee shall enter confined spaces without authorization. A confined space is defined as the following:

1. A space that is not designed for continuous employee occupancy.
2. is large enough and so configured that a person can bodily enter into and perform assigned work.
3. Has limited or restricted means for entry or exit.

Confined spaces that may have a HAZARDOUS ATMOSPHERE require special precautions. Hazardous atmospheres are those that may expose employees to the risk of death, incapacitation, and impairment of ability to self rescue caused by:

- Flammable gas,
- Airborne combustible dust,
- Atmospheric oxygen concentration below 19.5 or above 23.5%,
- A toxic atmosphere or substance,
- Danger of engulfment.

WRITTEN HAZARD COMMUNICATION PROGRAM

Hazard communication means ensuring that all workers know about the chemicals that they work with and work around. Often called "Right to Know," the hazard communication program involves the following elements.

1. Written hazard communication program.
2. Training on the chemicals this company uses.
3. **Labeling:** using properly labeled containers.
4. **Safety Data Sheets (SDS):** SDS (formerly known as Material Safety Data Sheets

or MSDS) must be readily available onsite. Workers must know where to find SDS and be able to read and properly utilize an SDS.

5. **Informing other contractors:** If we use chemicals around other contractors, it is our responsibility to inform other contractors of the hazards involved. We will make every effort to keep other contractors safe from the chemicals we use. Typically, the general contractor onsite will need to coordinate all chemical use of all contractors to maintain a safe workplace.

FALL PROTECTION PROGRAM

1. Fall protection is required whenever working at six feet or above.
2. Fall protection will be provided by one or more of the following:

- Guardrails,
- Hole covers,
- Safety nets,
- Personal fall arrest system (harness and lanyard).

ELECTRICAL SAFETY

Electrical safety involves two primary issues:

- Powerlines,
- Temporary and permanent electrical wiring and equipment.

To avoid electrical incidents, several basic safety rules must be followed:

1. Stay at least 10 feet back from power lines, in all directions. Stay further back if voltages are greater than 50,000 volts
2. Do not store materials under powerlines.
3. Mark powerlines on the job site with warning signs below.
4. Use ground fault circuit interrupters (GFCI) whenever plugging into temporary

power or using an extension cord.

5. Extension cords and trailing cords with missing ground prongs must be removed from service.
6. Extension cords and trailing cords with cuts must be removed from service.
7. Do not operate wet power tools.
8. Keep extension cords from being damaged in doorways or being run over.
9. Keep extension cords out of wet areas.
10. Never wire anything yourself or attempt to make electrical repairs. Leave that for an electrician.
11. Do not store any materials within 3 feet of electrical boxes.

HEALTH AND SAFETY TRAINING

We will provide training to assure the requirements of company standards are met and continuously evaluate employee training needs to keep workers safe and healthy on the job.

1. **New Employee Orientation:** New employees will receive training on the company health and safety management system, safe work practices and expectations, and specific health and safety training for the tasks that they will perform.
2. After inspecting a job site, Supervisor will identify and evaluate all potential hazards for potential of serious injuries and probability of an accident. Actions will be taken to minimize the hazards and protect the workers.
3. The Safety Coordinator or other designated site person will appraise the skill and knowledge level of exposed workers, and provide any needed training.
4. Where health and safety training is needed, appropriate training will be provided.

- Hazards will be identified.
- Necessary precautions will be explained.
- Training length and level of detail will be determined by the severity of the hazards and the requirements of **CNS.**

5. Records will be maintained for all training sessions with descriptions of topics covered and names of workers trained.

6. **Toolbox Talks:** Toolbox talks will be conducted regularly (weekly/daily). Topics covered will include:

   - The safe work practices necessary for that day's work.
   - Any safety concerns workers may have.
   - Brief refresher training on relevant safety topics (topics to be provided by the Safety Coordinator).

ENVIRONMENTAL, HEALTH AND SAFETY WORK OBSERVATIONS

Health and safety work observations will be performed periodically by supervisor.

Health and safety work observations ensure:
1) An employee has the knowledge to perform the work as trained.
2) Is actually performing their work task safely. Specific observations or audits are especially critical for lockout/tagout, confined space, or where the risk of exposure is high. Results will be documented and follow-up training will be provided as needed. This process helps assure health and safety training is effective.