

## **POLICY**

E & B Oilfield Services Inc. has implemented this policy to prevent or minimize the consequences of catastrophic releases of toxic, reactive, flammable, or explosive chemicals and to ensure no employee is exposed to toxic or hazardous material at levels above the permissible exposure limits (PEL).

## **REFERENCES**

- §1910.119 – Process Safety Management of Highly Hazardous Chemicals
- §1910.1200 – Hazard Communication Standard

## **RESPONSIBILITIES**

### **Employer Responsibilities**

- Developing a written plan of action to implement employee participation required by process safety management (PSM)
- Consulting with employees and their representatives on the conduct and development of the process hazard analysis (PHA) and the development of the other elements of process management
- Training each employee in the necessary work practices to perform their job duties
- Responding quickly to eliminate workplace hazards
- Ensuring all equipment is kept in good repair
- Ensuring employees follow safe job procedures
- Reviewing PHA whenever there is a significant change to any element of the job or there has been an injury or illness
- Teach employees about the hazards of their jobs, specifically any: Potential fire, explosions, or toxic release

### **Safety Committee Responsibilities**

- Assist in PHA as necessary
- Assist in training employees to recognize and control workplace hazards
- Monitor the workplace for hazards
- Encourage employees to report hazards
- Implement appropriate controls
- Ensure corrective action is taken promptly

### **Employee Responsibilities**

- Assist in PHA
- Follow safe job procedures
- Report hazards to a supervisor immediately

## **TRAINING**

Employees will be told that the purpose of PSM is to prevent or minimize the consequences of catastrophic releases of toxic, reactive, flammable, or explosive chemicals in various industries such as refineries, etc. Each employee will be trained in the overview of the process and its operating procedures for every process they are involved in or newly assigned to. The training will emphasize the process's specific safety and health hazards, emergency operations, shutdown and other applicable safe work practices.

E & B Oilfield Services Inc. will document the identity of the employee (permanent or contract), the date of training and the means used to verify that the employee understood the training.

Hazard communication will cover known workplace hazards, including how to avoid and abate them. E & B Oilfield Services Inc. employees are required to abide by all company safety policies, procedures and their supervisor's instruction. Contract employees will be advised of all hazards to which they may be exposed in the workplace.

## **PROCEDURES**

### **Process Safety Information**

Kirk Duncan will compile all written process safety information before conducting any PHA. The compilation will be completed under the same schedule required for the PHA. The PHA will include information on the hazards of the chemicals used or produced by the process; the technology of the process; the equipment in the process.

Safety data sheets (SDS) meeting the Hazard Communication Standard requirements may be used to comply with information on the hazards requirement to the extent they contain the required information.

### **Process Hazard Analysis**

Before starting work, Kirk Duncan will perform a PHA of the worksite. Immediately upon completion of the hazard assessment, Kirk Duncan will make their customer, employer, or owner of the host facility or job site aware of any identified and unique hazards presented by work performed by E & B Oilfield Services Inc..

The PHA will focus on equipment, instrumentation, utilities, human actions (routine and non-routine) and external factors that might impact the process. The PHA team will determine and document the priority order for conducting PHA that includes such considerations as the extent of the process hazards, the number of potentially affected employees, the age of the process and the operating history of the process.

### **Standard Operating Practices (SOP)**

Operating procedures describe tasks to be performed, data to be recorded, operating conditions to be maintained, samples to be collected and safety and health precautions to be taken. The procedures will be accurate, understandable to employees and will be reviewed as often as necessary to ensure that they reflect current operating practices, including changes that result from changes in process chemicals, technology and equipment and changes to facilities. The employer will certify annually that these operating procedures are current and accurate. Kirk Duncan will use the process safety information package as a resource to better ensure that the operating procedures and practices are consistent with the known hazards of the chemicals in the process and that the operating parameters are accurate.

SOP will be written so that an experienced operator unfamiliar with a particular process unit will run the unit with minimal supervision or help from other operators, or the least experienced operator released for unsupervised work will run the unit.

E & B Oilfield Services Inc. employees will abide by the employer's safety work practices during operations such as lockout/tagout, confined space entry, opening process equipment or piping and controls over entrance to facility.

### **Pre-Start-Up Safety Review**

The initial start-up procedures and normal operating procedures need to be fully evaluated by Kirk Duncan and the work team as part of the pre-start-up review to ensure a safe transfer into the normal operating mode for meeting the process parameters. Piping and instrument diagrams (P&ID) are to be completed along with having the operating procedures in place and the operating staff trained to run the process before start-up. Any incident investigation recommendations, compliance audits, or PHA recommendations need to be reviewed as well to see what impacts they may have on the process before beginning the start-up.

### **Mechanical Integrity Program**

Kirk Duncan will establish and implement written procedures to maintain the ongoing integrity of process equipment. Elements of a mechanical integrity program include the identification and categorization of equipment and instrumentation, inspections and tests, testing and inspection frequencies, development of maintenance procedures, training of maintenance employees, the establishment of criteria for acceptable test results, documentation of test and inspection results and documentation of manufacturer recommendations as to meantime to failure for equipment and instrumentation.

### **Hot Work Permit**

A permit will be issued by Kirk Duncan for hot work operations conducted on or near a covered process. Contractors will not perform hot work until a hot work permit is obtained from the hiring client. The permit will document that the fire prevention and protection rules for welding, cutting and brazing have been implemented before beginning the hot work operations. It will also indicate the authorized dates and identify the object to be worked on. The permit will be kept on file until completion of the hot work operations.

### **Management of Change (MOC)**

Kirk Duncan will prepare written procedures to manage changes (except for "replacements in kind") to process chemicals, technology, equipment, operating procedures and facilities that affect a covered process. Revisions in documents, such as P&ID, raw materials, operating procedures, mechanical integrity programs, electrical classifications, etc. will be recorded and kept in an accessible location. This will ensure that design changes are permanently available to operations when drawings and procedure manuals are updated. Provide copies to process employees as well as to PHA team members when PHA is being done or updated.

Employees involved in operating a process and maintenance whose job tasks will be affected by a change in the process will be informed of, and trained in, the change before the start-up of the process or affected part of the process.

The following items will be included in the MOC proposal:

- Technical basis for the change
- Impact of change on health and safety
- Modifications to operating procedures

- Necessary time period for the change
- Authorization requirements for the proposed change

### **Incident Investigation**

Incident investigation is the process of identifying the underlying causes of incidents and implementing steps to prevent similar events from occurring. The intent of an incident investigation is for employers to learn from past experiences and thus avoid repeating past mistakes. The incidents for which OSHA expects employers to become aware and to investigate are the types that result in or will reasonably have resulted in a catastrophic release. Some of the events are sometimes referred to as “near misses”, meaning that a §1910.119 – consequence did not occur but could have.

Incidents that have resulted in or will reasonably have resulted in a catastrophic release of highly hazardous chemicals in the workplace will be investigated within 48 hours of the incident.

All employees are required to report incidents and near misses to their supervisors. All incidents and near misses will also be immediately reported to the host employer.

A report will be prepared after the investigation which includes at a minimum:

- Date of incident
- Date investigation began
- A description of the incident
- The factors that contributed to the incident
- Any recommendations resulting from the investigation

The employer will establish a system to promptly address and resolve the incident report findings and recommendations. Resolutions and corrective actions will be documented. The report will be reviewed with all affected employee and retained for five (5) years.

### **Emergency Planning and Response**

Address what actions employees will take when there is an unwanted release of highly hazardous chemicals. Kirk Duncan will select how many different emergency preparedness procedures or lines of defense are needed. Develop the necessary plans and procedures, appropriately train employees in their emergency duties and responsibilities and implement these lines of defense.

The employer will establish and implement an emergency action plan for the entire plant in accordance with the provisions of 29 CFR 1910.38. In addition, the emergency action plan will include procedures for handling small releases. Employers covered under this standard may also be subject to the hazardous waste and emergency response provisions contained in 29 CFR 1910.120 (a), (p) and (q).

### COMPLIANCE AUDIT

Kirk Duncan or an assembled trained team of people will audit the PSM system and program. Employers will certify that they have evaluated compliance with the provisions of this section at least every three (3) years to verify that the procedures and practices developed under the standard are adequate and are being followed.

A small process or plant may need at least one (1) knowledgeable person to conduct an audit. The audit is to include an evaluation of the design and effectiveness of the PSM system and a field inspection of the safety and health conditions and practices to verify that the employer's systems are effectively implemented. The audit will be conducted or lead by a person knowledgeable in audit techniques and impartial toward the facility or area being audited. A report of the findings of the audit will be developed. The employer will promptly determine and document an appropriate response to each of the findings of the compliance audit and document that deficiencies have been corrected.

Employers will retain the two (2) most recent compliance audit reports.

The essential elements of an audit program include planning, staffing, conducting the audit, evaluation and corrective action, follow-up and documentation.

### TRADE SECRETS

E & B Oilfield Services Inc. employees are instructed in the confidentiality of trade secret information and the disciplinary action which will be a consequence of violation of confidentiality.

### CONTRACTORS

When E & B Oilfield Services Inc. is the contractor:

- E & B Oilfield Services Inc. employees will abide by the employer's safety work practices during operations such as lockout/tagout, confined space entry, opening process equipment or piping and controls over the entrance to the facility.
- E & B Oilfield Services Inc. employees will not perform hot work until a hot work permit is obtained from E & B Oilfield Services Inc.'s employer and/or the owner of the host facility or job site. The permit will document that provisions of §1910.252(a) have been met.
- E & B Oilfield Services Inc. will respect the confidentiality of trade secret information when the process safety information is released to them.
- E & B Oilfield Services Inc. will tell the employer of any hazards it found or created in the course of the work.

E & B Oilfield Services Inc. will develop a written procedure for managing contractors that perform maintenance or repair, turnaround, major renovation, or specialty work on or adjacent to a covered process. Such procedures will not apply to contractors providing incidental services that do not influence process safety, such as janitorial, food and drink, laundry, delivery, or other supply services. Ensure that each contract employee is trained in the work practices necessary to safely perform his or her job.

Kirk Duncan will ensure each contract employee is instructed in the known potential fire, explosion, or toxic release hazards related to his or her job and the process and the applicable provisions of the emergency action plan.

### EXPLOSIVE ATMOSPHERE SAFETY / RISK MANAGEMENT

E & B Oilfield Services Inc. will ensure that a periodic risk assessment is taken of all operations and procedures involving potentially dangerous substances. Dangerous substances are any substances used or present at work that will, if not properly controlled, cause harm to people as a result of a fire or

explosion. Potentially dangerous substances will be identified and control measures put in place to remove or control the risks.

E & B Oilfield Services Inc. will implement a process for hazardous area classification. Specifically, management will identify and classify areas of the workplace where explosive atmospheres may occur and avoid ignition sources (e.g., unprotected equipment) in those areas.

Training will be conducted on an annual basis and whenever procedures materially change for employees that work in potentially explosive atmospheres. Employees will be properly informed about and trained to control or deal with the risks from dangerous substances. E & B Oilfield Services Inc. will ensure that plans and arrangements are in place to deal with accidents, incidents and emergencies involving dangerous substances.



