



WAGNER-MEINERT LLC
Engineers – Contractors

Process Safety Management Program (Section 24)

PURPOSE:

Wagner-Meinert, LLC in accordance with OSHA 1910.119, is implementing this Employee Participation Guideline. This guideline outlines Wagner-Meinert, LLC plan to implement and maintain a successful (safe) Process Safety Management Program. The purpose of employee participation is improved safety for all employees. Process Safety Management (PSM) will not be effective without the involvement of the employees, contract employees and/or their representatives.

SCOPE:

All employees affected or potentially affected by the ammonia refrigeration process shall be aware of the PSM program being implemented in the facility. Those employees directly involved with operation and maintenance of the ammonia refrigeration system shall be intimately involved with the development and execution of the PSM program and shall have input as procedures and policies are established. All employees shall have ready access to all PSM files and documents upon request at all the facilities that require them to have a PSM program.

REFERENCES:

29 CFR 1910.119 Process Safety Management of Highly Hazardous Chemicals, Explosives and Blasting Agents, paragraph (C).

PROCEDURES:

The employee participation procedures fall into the following basic areas:

- 1) Employee awareness
- 2) Employee involvement/participation
- 3) Employee access to information

1.0 EMPLOYEE AWARENESS

- 1.1 New employees will be made aware of ammonia refrigeration PSM as a part of the initial orientation process, in conjunction with hazards communication required by 29 CFR 1910.1200. New employees may wish to view the IIAR video "Ammonia, Refrigerant of the Future" to help them understand why ammonia is used in the facility. A document entitled "Ammonia Refrigeration Process Safety" (Appendix A) will be reviewed with each new employee. They must acknowledge their awareness of PSM by signing the document. A copy of this signed document will be filed with the employee permanent record.
- 1.2 The Safety Committee shall be responsible for an annual update on PSM. The Site Safety Coordinator shall provide the Committee with update information, such as an annual PSM status report.
- 1.3 Any major ammonia refrigeration events such as incidents, near misses, major expansions or system modifications shall be communicated to the employees. This will be done via the posting of Management of Change Forms and company safety meetings.

2.0 EMPLOYEE INVOLVEMENT

- 2.1 An employee directly involved in the operation or maintenance of the ammonia refrigeration system shall be represented in all meetings and/or formal discussions concerning ammonia refrigeration PSM policies and procedures.
- 2.2 The Process Hazard Analysis team shall include several maintenance employees, Site Maintenance Supervisor/

Regional Engineer, Site Safety Coordinator, and a refrigeration contractor representative.

2.3 PSM procedures affecting employees shall be reviewed by the Safety Committee or the PHA team:

2.3.1 *Employee Participation Program*: participatory workplace and a flow of information between employees and management concerning process safety. The employee participation section of the PSM program requires three actions:

2.3.1.1 Consultation with employees and their designated representatives in developing process hazard analyses and other elements of the PSM program.

2.3.1.2 Access to process hazard analyses and all other information required by the standard;

2.3.1.3 Implementation of a written plan of action explaining each of the elements of the standard. Contract employees who perform the same duties as direct-hire employees must receive the same opportunities to participate in process safety. For example, the employer must consult with a contract employee who operates an PSM covered process just as it would a direct-hire employee.

2.3.2 *Process Safety Information*: requires employers to compile certain information concerning the process. Its primary purpose is to enable employers and employees to identify and understand the hazards posed by [the process]. The information serves as a resource for the Process Hazard Analysis team and other employees and may be used for many purposes, such as developing procedures and training programs. The process safety information must include chemical data, material safety data sheets, process technology information such as maximum chemical inventory levels and operating limits, reference drawings such as process flow diagrams and P&IDs, and process equipment design and maintenance materials.

2.3.3 *Standard Operating Procedures*: Employers must develop and implement written operating procedures providing clear instructions for different phases of process operations. Written operating procedures serve several purposes. First, established procedures ensure that jobs are carried out consistently and correctly by operators. Second, written procedures allow the employer to communicate to the employee the proper way to perform a certain task. Finally, operators have quick access to materials allowing them to respond to particular process conditions.

2.3.4 *Hot Work Permit/Safe Work Practices*: Section 1910.119(k) of the Process Safety Management Standard requires the employer to issue Hot Work Permits and take other precautions when hot work such as welding or cutting is being performed on or near a process.

2.3.5 *Training*: Employers are required to give employees operating in PSM covered process an overview of the process and to train them in the operating procedures. The purpose of training operators is to enable them to safely operate the process, increase employee awareness of potential hazards, and provide an understanding of the causes of process problems.

2.3.6 *Contractor Qualifications*: The Process Safety Management Standard requires employers using contract employers to evaluate the contract employer's safety performance and programs, maintain a contract employee injury and illness log, inform contract employers of potential known fire, explosion and toxic release hazards and the applicable provisions of the emergency action plan, and control the entrance and exit of contract employees into the facility and the process area. The contract employer provision has four general purposes.

First, by reviewing the contract employer's safety performance and programs, the employer gains some measure of assurance that the contract employer can safely perform work around a process containing highly hazardous chemicals.

Second, the employer's obligation to periodically evaluate the contract employer's safety performance provides an opportunity for the employer to request improvements or to develop more stringent safe work practices for contract employers.

Third, the requirement that the employer and contract employer communicate concerning potential chemical hazards, the emergency action plan, and hazards posed by the contract employer's work or discovered by contract employees ensures that both parties are aware of the potential hazards of the process. Finally, the provision allocates responsibilities for process safety between the employer and the contract employer and thus establishes a clear understanding of each party's duties with regard to issues such as training.

2.3.7 *Process Hazard Analysis*: The Process Safety Management Standard requires employers to perform a process hazard analysis (PHA) for each covered process. The purpose of performing a PHA is to identify and analyze the significance of potential hazards associated with the process and to provide information to assist employers in making decisions for improving safety and reducing the chances of a catastrophic event

2.3.8 *Management of Change*: The Process Safety Management Standard requires employers to develop written procedures to manage certain changes to the ammonia refrigeration process, such as additions of new equipment or changes in operating, maintenance or other procedures. The purpose of evaluating changes to the process is to assess their potential impact on safety and health, to determine whether the changes should trigger changes to operating procedures or safe work practices, and to ensure that employees are notified of changes and given appropriate training.

2.3.9 *Mechanical Integrity*: The Process Safety Management Standard requires employers to develop a mechanical integrity program to assure the continued integrity of process equipment to minimize the risk of a catastrophic ammonia release. One of the goals of a mechanical integrity program should be to substitute break-down maintenance with preventative maintenance where appropriate to the equipment used in the process.

The mechanical integrity program must include the systematic identification process equipment and instrumentation, the development of written procedures for maintaining equipment, training for maintenance employees, a preventive maintenance program for process equipment, a means of assuring that deficiencies in process equipment that result in operation outside of acceptable limits are corrected, and a quality assurance program.

2.3.10 *Pre-Startup Safety Review*: The Employers must perform a pre-startup safety review (PSSR) in two situations: the construction of a new facility; or the modification to an existing facility that necessitates a change in the process safety information. The purpose of a PSSR is to ensure that certain safety and design issues are considered before hazardous chemicals are introduced into the process.

2.3.11 *Emergency Planning and Response*: The employer must develop and implement an emergency action plan. Depending upon the needs of the facility, the employer may have a minimal plan which focuses on evacuation or a more complicated plan, focusing on response. All contract employees will be trained in the hazards associated with his/her job and the emergency response plan at any facility they work at!

2.3.12 *Incident Investigation*: The Process Safety Management Standard requires employers to investigate each incident which resulted in or could reasonably have resulted in a catastrophic release of a highly hazardous chemical in the workplace. The purpose of the incident investigation provision is “for employers to learn from past experience and thus avoid repeating past mistakes.” The incident

investigation should focus on obtaining facts rather than placing blame.

2.3.13 *Compliance Auditing*: Employers must evaluate their compliance with the PSM Standard at least every three years by performing a compliance audit. The purpose of the provision is to establish a procedure to verify that the employer's PSM practices and procedures are adequate and are being followed. of the PSM program and determine whether the associated procedures and practices are being followed. For example, the audit should evaluate whether operating procedures are being followed, appropriate operator training is being conducted, and Process Safety

2.3.14 *Trade Secrets*: This chapter documents the facilities trade secrets policy to cover process safety management (PSM) information. The trade secrets policy:

- requires employers to make information that is necessary to comply with the standard available to all persons involved in the development and management of the PSM program without regard to possible trade secrets;
- describes the confidentiality agreements which can be used to protect trade secret information; and,
- specifies the rules and procedures which should be followed to allow employees and their representatives access to trade secret information.
- With respect to the confidentiality of the information received. All persons exposed to trade secrets are required to adhere to the confidentiality agreement wherever it applies.

2.4 Any hourly or salaried employee having serious safety related concerns about any aspect of the PSM program for ammonia refrigeration should submit those concerns in writing to the Site Safety Coordinator. Within 30 days the employee should be provided with a written response answering his/her concerns.

- 2.5 Minutes of PSM consultations with employees should be prepared. Minutes should reflect the input and opinions of all employees.

3.0 EMPLOYEE ACCESS TO INFORMATION

- 3.1 The Site Safety Coordinator is responsible for controlling access to PSM information. All employees shall be provided access to ammonia refrigeration PSM files and information but access may be governed by the following limitations:

Approval should be given to remove any documents from the file.

Original copies of documents should not be removed from the file area.

Requests for copies of materials will be honored within 10 working days of the request.

No markings should be made on original documents.

Previously un-filed documents should not be added without proper authorization.

- 3.2 All employees directly involved with operation and maintenance of the ammonia refrigeration system shall be encouraged to periodically review the process safety information and most recent process hazard analysis. Such reviews should be considered to be a training activity and can be conducted on company time.

4.0 AWARENESS TRAINING

- 4.1 Employee awareness training is done annually at the yearly safety training day to refresh personnel that PSM programs exist at all facilities we work with and they have a right to request this information about there program.

DOCUMENT MANAGEMENT:

If after reading this program, you find that improvements can be made, please contact the Safety Director. We encourage all suggestions because we are committed to the success of our PSM Safety Program. We strive for clear understanding, safe behavior, and involvement from every level of the company.

CHANGE CONTROL:

All management system changes are reviewed, approved or disapproved by the Safety Committee.

This program was initially developed on September 22, 2004, replacing the former PSM Safety Program entirely.

Revision No. 1 (September 22, 2004)

Revision No. 2 (October 8, 2004)

Revision or Review No. 3 (January 3, 2006)

Revision or Review No. 4 (June 26, 2006)

Revision or Review No. 5 (September 6, 2007)

Revision or Review No. 6 (October 7, 2011)

PERSONNEL:

The Owners of Wagner-Meinert, LLC have the ultimate responsibility for the PSM Safety Program. They have designated the Safety Director and the Human Resource Director to manage the PSM Safety Program

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