



EHSS Process Safety Management & Risk Management Plan Program
PSM & RMP Training

Location / Applicability: NAB Concentrates and Distribution Facilities	Originating Department: Process Safety Management Team, NAB EHS
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1 PURPOSE

The purpose of this program is to comply with OSHA 29 CFR 1910.119, Process Safety management and EPA 40 CFR 68, Chemical Accidental Release Prevention Programs. This program provides guidance for developing an effective training program for covered processes for all personnel involved in operating the Process.

2 SCOPE

2.1 Process Safety Management and Risk Management Plan requirements apply to the locations listed below.

2.1.1 North America Business Unit

2.1.1.1 Bartow and Riverview, Dry Products/Granulation

2.1.1.2 New Wales, Dry Products/Granulation and Sulfuric Acid Plants 01 and 02

2.1.1.3 Faustina, Ammonia Plant and Dry Products/Granulation

2.1.2 Distribution Business Unit facilities: Henderson, Hookers Point, and Port Sutton

3 ROLES & RESPONSIBILITIES

The following responsibilities are associated with this Program:

Role	Responsibilities
PSM Team	<ul style="list-style-type: none"> Developing PSM/RMP general awareness training Collaborating with the site teams and training department to ensure training is properly developed, implemented, and tracked
Training Department	<ul style="list-style-type: none"> Facilitating the Learning Management System to track training and associated records
Area Leadership	<ul style="list-style-type: none"> Developing and implementing training for operations and maintenance personnel working in the covered process areas Ensuring applicable hazard training is completed prior to an individual performing job functions pertaining to the covered process Monitoring training completion to ensure compliance



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4 GENERAL REQUIREMENTS

4.1 OSHA and EPA requirements state:

4.1.1 Operations

4.1.1.1 Each employee presently involved in operating a process, and each employee before being involved in operating a newly assigned process, shall be trained in an overview of the process and in the operating procedures as specified in the operating procedures section of the PSM and RMP regulations. The training shall include emphasis on the specific safety and health hazards, emergency operations including shutdown, and safe work practices applicable to the employee's job tasks

4.1.2 Maintenance

4.1.2.1 The employer, owner or operator shall train each employee involved in maintaining the on-going integrity of process equipment in an overview of that process and its hazards and in the procedures applicable to the employee's job tasks to assure that the employee can perform the job tasks in a safe manner.

4.2 To comply with these requirements, Mosaic divides PSM/RMP training into the following categories:

4.2.1 Initial Training

4.2.1.1 PSM 1 - General Awareness – All personnel who work at a PSM/RMP covered facility.

4.2.1.2 PSM 2 – Operations Standard Operating Procedures – Qualified operators, determined by dept and area.

4.2.1.3 PSM 3 – Operations Competency Qualification – Qualified operators, determined by dept and area.

4.2.1.4 PSM 2 – Maintenance Job Plans – Mechanics, E/I/A techs and trainees for all PSM/RMP-covered areas

4.2.1.5 PSM 3 – Maintenance Competency Qualification – Mechanics, E/I/A techs and trainees for all areas in a PSM/RMP covered facility.

4.2.2 Refresher Training

4.2.2.1 PSM Refresher Training – Operations Standard Operating Procedures – Qualified operators, determined by dept and area. Frequency every 3 years.

4.2.3 Visitor Orientation



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5 INITIAL TRAINING

- 5.1 Mosaic provides initial training to its personnel for general awareness and for role-specific requirements.
- 5.2 PSM 1 - General Awareness
 - 5.2.1 General awareness training includes:
 - 5.2.1.1 Introduction to Process Safety Management process
 - 5.2.1.2 List of all PSM covered chemicals handled at the site
 - 5.2.1.3 Process overview of covered chemicals.
 - 5.2.1.4 Hazard communications practices
 - 5.2.1.5 Specific safety and health hazards of covered chemicals.
 - 5.2.1.6 References to Mosaic's Emergency procedures
 - 5.2.1.7 References to Mosaic's Safe work practices
 - 5.2.1.8 End-of-course quiz
- 5.3 PSM 2 - Procedures for Operations Personnel
 - 5.3.1 Review of the PSM operating procedures with operators by operations Supervision. Operations should reference procedure title/number in training documentation.
 - 5.3.2 End-of-course quiz
- 5.4 PSM 3 – Competency qualification for Operations Personnel
 - 5.4.1 Mosaic uses qualification (Qual) cards and operator certifications for documenting training for operators and for capturing skill demonstration under the supervision of qualified operators or area leadership designees.
 - 5.4.2 Skill requirements for PSM/RMP-covered areas include:
 - 5.4.2.1 General safety requirements for working with covered chemical process equipment and associated physical hazards
 - 5.4.2.2 Safe operation of the covered process, each piece of covered process equipment, and location of operating procedures
 - 5.4.2.3 Environmental hazards and reporting requirements
 - 5.4.2.4 Process chemistry and operating parameters
 - 5.4.2.5 Safe work practices and procedures
 - 5.4.2.6 Operating and maintenance systems and process control equipment
 - 5.4.2.6.1 Examples: PI system, OIS, Maximo, Content Server
- 5.5 PSM 2 - Job plans for Maintenance and E/I/A Personnel



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- 5.5.1 To provide a comprehensive approach, encompassing established maintenance tasks, Mosaic uses written job plans in Maximo and skill demonstration under the supervision of qualified operators or area leadership designees to document training for maintenance job classifications.
- 5.5.2 To ensure that key covered-process maintenance tasks are emphasized, classroom training for PSM/RMP-covered areas include:
 - 5.5.2.1 Ability to locate and follow maintenance/EIA job plans for their job classification
 - 5.5.2.2 Knowing the location of escape respirators, emergency stops and eye wash stations
 - 5.5.2.3 Knowledge on responsibilities during a shelter-in-place scenario and evacuation scenario
 - 5.5.2.4 Knowledge of compatible materials appropriate for chemicals/service in the covered process
 - 5.5.2.5 Review of commonly performed PSM/RMP related maintenance jobs and tasks
 - 5.5.2.6 End-of-course quiz
- 5.6 PSM 3 – Competency Qualification for Maintenance and E/I/A Personnel
 - 5.6.1 Mosaic confirms competency of maintenance personnel through either the maintenance apprenticeship program, a bench test review, or a structured Q/A walk through of the department. Additional training for safe work practices is provided through initial orientation based on OSHA guidelines and Mosaic programs.
 - 5.6.1.1 Maintenance Apprenticeship Program – Structured program which includes content, training, and demonstration of skills needed to perform work in a PSM/RMP covered area.
 - 5.6.1.2 Bench Test Review - Scenario training for various skills needed in the PSM/RMP covered area. Bench test setups can include but are not limited to: relief valve replacement, gasket replacement, and proper material selection for chemicals/service in the covered process.
 - 5.6.1.3 Structured Q/A walk through – This is recommended only for use in the sulfuric acid area where PSM/RMP covered equipment is too large to be represented in a bench test. The mechanic or E/I/A tech can be escorted through the covered area by a qualified person while reviewing proper covered process procedures.



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5.7 End-of-Course Quizzes

- 5.7.1 If the attendee does not pass the end-of-course quiz with a 90%, the attendee must retake the quiz until there is a passing score. The instructor will review missed questions with the attendee, discuss attendee's understanding, and then retest.

6 REFRESHER TRAINING

- 6.1 OSHA and EPA requirements for refresher training are as follows:
- 6.1.1 Refresher training shall be provided at least every three years, and more often if necessary, to each employee operating a process to ensure that the employee understands and adheres to the current operating procedures of the process. The owner or operator, in consultation with the employees operating the process, shall determine the appropriate frequency of refresher training.
- 6.1.2 The owner or operator shall ensure that operators are trained in any updated or new procedures prior to startup of a process after a major change.
- 6.2 Refresher training is provided for operations personnel, with content centered on operating procedures. Operations should reference procedure title/number in training documentation.
- 6.3 Mosaic does not require formal, documented maintenance refresher training. The maintenance team utilizes job plans to perform work continuously as part of Mosaic's workflow and Asset Integrity process.

7 VISITOR ORIENTATION

- 7.1 All visitors coming onto a site must understand potential site hazards and safeguards, and this is outlined in the Entry Requirements Matrix.
- 7.2  **Reference:** [EHSS-Phos Program – Site Entry](#)
- 7.3 The following table outlines the training required for entry to a site:


Audience	Training Topic	Method
Concentrates Site Visitors	Phosphates Site Entry Program, visitor video	Administered by Security
Terminal Visitors	Visitor Orientation presentation	Administered by Terminal Personnel, EHS, or Security

8 RECORD RETENTION



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- 8.1 Training records shall be maintained by the Learning Management System (LMS) to ensure that records show information on employee identity, date of training, and end-of-course quiz.
- 8.2 Training records shall be maintained as per ***Mosaic Document and Record Control*** policy
- 8.3  **Reference:** [Mosaic Document and Record Control policy folder](#)

9 REFERENCES

References
OSHA 29 CFR 1910.119
EPA 40 CFR 68
Bartow Qualification Cards
New Wales Dry Products Qualification Cards; New Wales Sulfuric Training/Qualification
Riverview Qualification Cards
Faustina Ammonia Plant Operator Certifications
EHSS-Phos Program – Site Entry
Mosaic Document and Record Control Policy

10 REVISION LOG

Rev. No.	Rev. Date	Revised By	Reason for Revision
0			Initial release
01	2018	J. Vincent	Review cycle
02	2021	A. Bugge, L. Blackwelder, N. Ellis, K. Gliebova, E. Victorino, S. Warman	Review cycle
03	2022	N. Ellis	Minor correction
04	2023	N. Ellis	Minor correction