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Morenci Safe Production Standard	Standard # 5.1.1	
	OHSAS 18001:2007	4.4.6
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	Document Owner	Industrial Hygiene
Approvals:		
<i>Manager, Health & Safety: 8/31/2012</i>	<i>General Manager, Administration: 9/6/2012</i>	

1.0 PURPOSE:

1.1 Hazard Communication (HazCom) is intended to communicate information about the hazards associated with the handling, use, and storage of substances which are deemed to be hazardous because of their chemical and/or physical properties. The means by which the hazards are communicated include training, labeling, and Material Safety Data Sheets (MSDS). It is expected that a current inventory be maintained in order to track those hazardous substances.

This program has been established to ensure that all hazardous materials are evaluated and that safe use and handling information is provided to all individuals that may be potentially exposed to hazardous chemicals including employees, contractors, and visitors.

This program is aligned with the Corporate Safety and Health Policy Statement and the Occupational Safety and Health Administration (OSHA) and Mine Safety and Health Administration (MSHA) regulations.

2.0 SCOPE:

2.1 This program applies to all FMI Morenci Operations areas, employees, contractors, and visitors that use or produce hazardous chemicals to which an individual can be exposed under normal conditions of use or in a foreseeable emergency.

3.0 TERMS, DEFINITIONS AND ABBREVIATIONS

Approver is a designated individual who has been authorized to approve new products to be used on FMI Morenci Operations property either from the Industrial Hygiene or Environmental Services departments.

Hazardous Material is any substance that has the capability of causing harm to an individual or environment.

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Material Safety Data Sheet (MSDS) is a document provided by the manufacturer of a chemical or product that dictates specific properties and guidelines for the manufactured product.

Mine Safety and Health Administration (MSHA) is a government agency dedicated to developing and regulating health and safety standards to protect miners.

Personal Protective Equipment (PPE) is equipment that is intended to protect an individual from a specific safety or health hazard.

Requestor is an individual who is requesting a new product to be used on FMI Morenci Operations property.

4.0 RESPONSIBILITIES:

The senior management of FMI Morenci Operations has ultimate responsibility for the Hazard Communication Program; however all employees are responsible and accountable for the protection of their personal health and safety as related to hazardous materials.

4.1 FMI Morenci Operations Management

- Has ultimate responsibility for FMI Morenci Hazard Communication Program
- Make available adequate resources to effectively implement the Hazard Communication Program to include but not limited to engineering controls, training, monitoring equipment, etc.

4.2 Supervisors and Managers

- Identify hazardous materials in their work areas;
- Ensure individuals receive adequate training prior to handling hazardous materials;
- Provide and update MSDSs for employee use and reference at all times;
- Ensure hazardous materials containers are properly stored and labeled;
- Notify program administrators of intended modifications to the work conditions or process which may increase chemical exposure potential;
- Submit approval forms and manufacturer MSDS to product approvers and receive approval prior to introducing new products to work environments, to include vendors, visitors and contractors;
- Provide adequate personal protective equipment in the work areas and to exposed employees;

4.3 Industrial Hygiene

- Maintain knowledge regarding all aspects of this program such that accurate implementation and maintenance will be ensured;
- Evaluate chemicals brought to or produced by FMI Morenci Operations in accordance with applicable regulatory agencies and certifications;
- Develop strategies and conduct monitoring of individuals potentially exposed to hazardous materials and make recommendations for preventative actions based on results;

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- Evaluate and recommend appropriate controls (i.e. PPE, work practices, engineering) to protect individuals from harmful exposure to hazardous materials;
- Assist
- Participate in the development of Hazard Communication training to include technical details or explanations to better inform the trainees of the hazards encountered.

4.4 Environmental Services

- Maintain knowledge regarding all aspects of this program such that accurate implementation and maintenance will be ensured;
- Evaluate chemicals brought to or produced by FMI Morenci Operations in accordance with applicable regulatory agencies and certifications;
- Audit the effectiveness of the FMI Morenci Operations Hazard Communication Program on a continual basis to identify deficiencies which will be corrected and /or incorporated into a revised program;
- Maintain documents
- Participate in the development of Hazard Communication training to include technical details or explanations to better inform the trainees of the hazards encountered.

4.5 Purchasing/Contracts Administration

- Shall ensure that contractors receive hazard information about chemicals they may encounter while contracted with FMI;
- Ensure that contractors have implemented their own Hazard Communication Program and communicate information to the FMI work areas in which work will be performed involving hazardous materials;
- Ensure contractors understand the requirements for approval of all chemicals prior to bringing any amount onto FMI property;

4.6 Employees

- Select, use and maintain personal protective equipment in accordance with the training provided;
- Review applicable MSDSs prior to the use of hazardous materials;
- Follow procedures necessary to be protected from adverse exposures to hazardous materials;
- Notify supervisor of any known or suspected exposures or the occurrence of signs and symptoms of exposure relating to those substances;
- Refrain from introducing any hazardous materials onto FMI property without first obtaining approval to do so;
- Notify supervisor of any damaged or illegible labels and any event such as spill or release involving hazardous materials.

5.0 STANDARDS OF PERFORMANCE

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5.1 Hazardous Materials

Hazardous materials can be present in any operation or operating area. The materials may be a product of a process, consumed by the process, or secondary to the process. The materials may be present in small or large quantities and present possible adverse effects to the user, others or environment.

The hazard may be an inherent property of the substance (such as fuel or process chemicals), may become hazardous during use (such as fumes generated by welding rods) or become hazardous as a consequence of a foreseeable event (such as combustion from a fire).

Hazardous materials may include, but not limited to the following:

- Solvents
- Acids
- Welding Rods
- Gasses
- Fuels
- Paints
- Wood
- Insulation
- Cutting/cooling oils
- Glues/adhesives

All hazardous materials must be approved prior to introducing the new material to Freeport McMoRan Morenci Operations through the Industrial Hygiene and Environmental Services departments (refer to Appendix A New Product Approval Procedure).

5.2 Chemical Inventory

Every department and contractor will keep an updated list of chemicals used in the department as well as a book of material safety data sheets which should always remain available to the employees. This inventory should keep track of where chemicals are stored, who used them, and how much is used.

A product must be approved before it is added to a department's chemical inventory and if a product is no longer in use then it must be deleted from the chemical inventory. When adding and deleting chemicals from a chemical inventory the department coordinator shall notify the Environmental Services department and submit a current copy of their chemical inventory.

If a product has been conditionally approved, it has specific restrictions that apply to that product, for example the product may only be approved for one department or to be purchased from a certain supplier or manufacturer.

A physical chemical inventory must be done annually for each area/department/division. A copy of the chemical inventory form can be obtained through the Industrial Hygiene or Environmental Services SharePoint site.

5.3 New Product Approvals

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All hazardous materials must be approved through the Environmental and Safety departments for use on FMI Morenci property. The steps and procedure for approving new chemicals is outlined in Appendix A New Product Approval Procedure. The requesting department or contractor must submit the MSDS for the product as well as the New Product Approval/Disapproval form. The form and MSDS then is submitted to the Industrial Hygiene and Environmental Services department for approval. Once a decision has been made and the product has been approved or conditionally approved then it can be purchased or brought on property. If the product was not approved then other products should be researched and the requested product will not be allowed on property.

Any new products must be checked in at the warehouse prior to delivery to any area on the property. All departments are responsible for maintaining all MSDS's and approval/disapproval forms together for products used in their work area. More information can be found on the Environmental Best Management Practice No. 800 Material Safety Data Sheet (MSDS) & Product Approval / Disapproval Process.

5.4 Hazard Identification and Control

After chemicals have been approved by the Industrial Hygiene and Environmental Services departments Hazard Identification should be performed, where applicable, for the process in which the product is intended to be used. Job tasks using the new product should be updated to reflect the new product and be reevaluated accordingly using the Hazard Identification Risk Assessment.

Recommendations from the product approver and manufacturer should be used as a resource in controlling and preventing unexpected exposures to hazardous materials. The hierarchy of controls shall always be used in controlling any health, safety or environmental hazard. The hierarchy of controls includes:

- Elimination or exclusion of the hazardous material whenever and wherever possible;
- Substitution of the product with a less hazardous material;
- Engineering controls such as enclosures and ventilation;
- Administrative controls such as work practices, training and rotations;
- Personal Protective Equipment (PPE) such as respirators, face shield, lab coats, etc.

5.5 Chemical Exposure or Spill

Non-routine or emergency events may occur at any time. A spill of a hazardous material may present an opportunity for exposure. Non-routine events often involve higher levels of exposures due to the activities or the need to disengage normal controls or the uncontrolled nature of the event.

In the event of emergency situation regarding the unplanned spill or release of a hazardous material the Safety and Environmental Services Department should be contacted immediately. Based on the material's physical properties and exposure potential, non-routine emergency management of a hazardous material may require:

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- The number of potentially exposed personnel be kept to a minimum;
- The proper use of PPE which is impervious to the substance;
- All efforts be taken to minimize any unprotected contact with the substance including inhalation, ingestion and skin contact;
- Decontamination process will be followed at the conclusion of the event which specifically addresses:
 - Proper cleaning and decontamination of surfaces that have contacted the material;
 - Measures to prevent the transfer or movement of the substance from the immediate vicinity of the event;
 - Proper disposal of any items used in the management of the event that cannot be effectively decontaminated and returned to service.

5.6 Training

Employee training shall be conducted in new miner and annual refresher training on the following issues:

- Hazard Communication Program responsibilities
- Proper use of PPE
- Product approval process
- Chemical inventory and MSDS requirements
- Proper storage of hazardous materials

5.7 Program Auditing

The Environmental Services department has ultimate responsibility for auditing the program and hazardous substance use throughout the property. The audit process is intended to identify areas in which improvements can be made to the program. The evaluation will include, but not limited to, storage, labeling, document control, chemical inventories and Material Safety Data Sheets.

Identified deficiencies from the evaluation will be written and submitted to the appropriate area management. Area management will then have the responsibility to implement improvements to the program.

6.0 REFERENCE DOCUMENTS

6.1 29 CFR 1910.1200 OSHA Occupational Hazard Communication Regulations

6.2 30 CFR Part 47 MSHA Occupational Hazard Communication Regulations

6.3 Freeport McMoRan Copper & Gold Corporate Safety and Health Policy Statement

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6.4 Freeport McMoRan Copper & Gold Industrial Hygiene Field Guide

6.5 Environmental Best Management Practice No. 800 Material Safety Data Sheet & Product Approval/Disapproval Process

6.6 Environmental Best Management Practice No. 801 Chemical Inventory

7.0 RECORDS

Name of the Document	Responsible for Control	Records Retention
Approved copy of this Standard	Health & Safety	Permanent
Product Approval Forms	Environmental Services	Permanent
Material Safety Data Sheets	Applicable Departments	Length of product use on property + 10 years
Program Audits	Environmental Services	Permanent
Occupational Exposure Monitor Results	Industrial Hygiene	Permanent

8.0 APPENDICES

8.1 Appendix A New Product Approval Procedure

9.0 REVIEW AND CHANGE

All changes, modifications and/or revisions must be documented on the table below:

<i>Description of Changes to this Document</i>
06/28/2013 – Updated records table – S. Elias Rev. 01

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Appendix A New Product Approval Procedure

Industrial Hygiene and Environmental Departments are responsible for reviewing and approving all hazardous materials for FMI Morenci Operations. This procedure outlines protocol and steps for new products and updating existing products in the system.

STEP BY STEP PROCEDURE

New Product Requestor

1. Identify new product or chemical. All new product approval forms should be submitted to the Industrial Hygiene or Environmental Services Department at least one month prior to use with an upcoming project.
2. Check to see if it has been approved and is currently in the Dolphin database.
3. Complete a Product Approval form found on the FMI website. The form is posted on in two separate locations. Ensure that form used in the product approval process is the most current revision.
 - Go to <http://fmweb/Pages/default.aspx>, the FMI home page
 - Click on the Morenci tab.
 - Under the Local Links section click on the Environmental link.
 - In the far left column under documents select Environmental Forms.
 - Select the MSDS Product Approval-Disproval Review Form.
 - Print form.
 - Go to <http://fmweb/Pages/default.aspx>, the FMI home page
 - Click on the Morenci tab.
 - Click on the Health & Safety link under the Administration section
 - Click on the Industrial Hygiene Tab.
 - Select the MSDS Product Approval-Disproval Review Form under the Hazard Communication Program section.
 - Print form.
4. Obtain a copy of the manufacturer's Material Safety Data Sheet and attach the completed form to the MSDS.
5. Submit the form and MSDS to Industrial Hygiene or Environmental Services for review. Ensure that the product is not brought on property prior to both the approval of Industrial Hygiene and Environmental Services. When situations arise that require a shorter turnaround time, the approvers can make special accommodations on a case-by-case basis. It is very important that the requester plan ahead on projects to allow adequate time to process the MSDSs.

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Industrial Hygiene or Safety Approver

6. Approver receives the product approval form and MSDS.
7. Based on toxicity, carcinogenicity, product intended use and regulatory guidelines; the product will be approved, conditionally approved or disapproved. The product form will be reviewed and forwarded within five (5) working days.
8. Email the requester indicating the department's decision and that the form has been forwarded to the Environmental Services department.
9. After the review is complete, Industrial Hygiene sends the form to Environmental Services for environmental review.

Environmental Services Approver

10. Approver receives the product approval form and MSDS.
11. Based on current environmental standards the product will be approved, conditionally approved or disapproved. The product form will be reviewed and submitted within five (5) working days.
12. The MSDS, once completed, will be assigned a tracking number in which to cross-reference the product.
13. A hard copy of the product number and approval form will be filed by the Environmental Services Department
14. Environmental Services will scan the MSDS and Product Approvals, after they have been entered and link them to the FMI website, where copies are available to the FMI Branch. The Product Approval Form and MSDS will be entered, scanned, and linked into the MSDS database within fourteen (14) days. This database is used as an index for the MSDS files.
15. Hard copies of the MSDS and approval forms will be filed in the Environmental Services office.
16. A copy of the approval form and the MSDS will be available on the FMI website through the Dolphin System.