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| **(Miami Smelter)**  **WORK INSTRUCTION**  ALL EMPLOYEES | **OWNER:** | Electrical/Instrumentation Department |
| **DEMOLITION POLICY AND PROCEDURE** | **Original Issue:** | April 10, 2015 |
| **Revisions Date:**  **TBD** | **Review Date:** | *March 13, 2017* |

**INTRODUCTION:**

To establish a process with requirements for Demolition/Deconstruction activities to eliminate and/or minimize the risk for injuries, equipment damage and harm to the Environment while executing this work. A **PERMIT** and steps of this Policy is required before work can commence. This policy does not apply to Facility reoccurring tasks supported by SOP’s or disassembly of equipment per Manufacture Specification. This work instruction applies to all FCX Project Managers, Employees and Contractors working at FCX Operation sites.

The manner of preparing for Demolition work will require three key steps that are required for a successful demolition. It is the responsibility of Management, Project Managers, Construction Managers, Engineer or any Facilities Authorized Employee to perform demolition work to insure all four documents supported in this procedure, before work can commence.

**SAFETY:**

FCX Safety Policies and Procedures in conjunction with this Work Instruction expectation is to safely manage all hazards and mitigate all risk associated with the demolition or deconstruction of equipment.

**ENVIRONMENTAL:**

*N/A*

**Demolition Work Plan**:

Prior to any demolition work, a plan of all activities is required to support all of the initial steps of the demolition process. The work plan will provide initial steps in the planning of the detailed description of the work performed and includes, Execution Plan that will provides all of the necessary details for approval. The Contractor Execution Plan or “SOW” Scope of Work can supplement the Execution Plan.

**Demolition Plan Map:**

A work sheet is used to prepare a layout of the affected area(s) for the Demolition work that identifies energy sources within the deconstruction that must be addressed and managed. This work sheet can be used to identify materials in the Environmental management portion of the plan.

**Demolition Checklist:**

Documentation of all the work activities, inspections, verifications, surveys and reviews required to ensure all hazards are identified and the proper measures have been taken to eliminate or mitigate the risk. This checklist is the preparation work of the Demolition Procedure and is the next step of activities that must occur to meet the requirements for approval. The Checklist must have all listed Subject Matter Experts “SME” signatures of approval and verification completed prior to issuance of the Demolition Permit.

**Demolition Permit:**

Project Manager, Construction Manager, Engineer or Facility authorized employee will complete the last step in preparation for the demolition work. This form is submitted for approval to the Facility Manager and Safety along with presenting the Demolition Work Plan, Demolition Plan Map and Demolition Checklist as evidence that all the required steps for approval have been adequa**t**ely completed. A final walk through with the Facility Manager and Safety is required prior to their signatures of approval and authorization. The Demolition Permit shall be posted at the work site during all deconstruction work activities.

**Tagging/Identification:**

Cable/ Conductor Demo:

A red tag will be applied to a cable or conductor that is identified for demo but is currently *not* air gapped. The cable or conductor tag shall have a unique and identical cable or conductor identification on both the source side and the load side for each cable or conductor to be demoed.

A yellow tag will be applied to a cable or conductor that *is* air gapped and ready to demo. The cable or conductor tag shall have a unique and identical cable or conductor identification on both the source side and the load side for each cable or conductor to be demoed.

**Tags will contain the following information:**

Unique Circuit Identification Number

Name and Contact information of Person Identifying Cable

Location the Circuit Source

Location of the Circuit Destination

Date and Time the tag was placed

Circuit Identification and tag placement documented on a spreadsheet

See Appendix A for spreadsheet and tag examples

**Conduit/ Raceway Demo:**

For conduits and raceways identified for demo but currently *are not* air gapped: A red stripe will be painted on the conduit or raceway identified to be demoed at each 10-foot increment of conduit or conductor raceway. Where this is not practicable, the previous red stripe must be in sight of the last. The conduit or raceway must be identified from source to load with the painted red stripe.

For conduits and raceways identified for demo that *are,* air gapped: A yellow stripe will be painted on the conduit or raceway identified to be demoed at each 10-foot increment of conduit or conductor raceway. Where this is not practicable, the previous yellow stripe must be in sight of the last. The conduit must be identified with the yellow painted stripe from source to load. Where conduits or raceways have been transitioned from a red paint stripe (unsafe) to a yellow paint stripe (safe), each previous red paint stripe shall be significantly covered over by the yellow paint stripe to indicate safe to demo.

**Definitions:**

Air Gap: A physical separation between the energy or power source supply and the receiving network, building or structure. To be an air gap approved by the department, an identifiable separation of potential power source or supply must be accomplished. Air Gapping is preparation to Demolition/Deconstruction work.

***Authorized Employee:***

An employee designated or assigned by supervision/management to perform demolition work.

***Communication System:***

A network for communication that has a power source to support the system network and communication activities such as radio, telephone, Gaitronics, computer, fiber or satellite.

**Demolition/Deconstruction:**

The tearing down, destruction, breakup, razing or removal of the whole or part of a building or structure, or of free standing machinery or equipment that is directly related to the function of the structure.

**Energy Source:**

Any source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal, human behavior or other energy.

**Hazardous Material Abatement:**

Procedures to control hazardous materials in a building/structure or to remove them entirely, including removal, encapsulation, repair, enclosure, encasement, and operations and maintenance programs.

**Job Safety Analysis (JSA):**

A written document analyzing job tasks, hazards related to the tasks and controls in place to reduce the risk associated with the hazards.

**NESHAP:**

Acronym for National Emission Standards for Hazardous Air Pollutants is a permit required prior to commencement of any demolition activities.

**Subject Matter Expert (SME):**

Is a person who is an authority in a particular area or topic?

**Additional Requirements:**

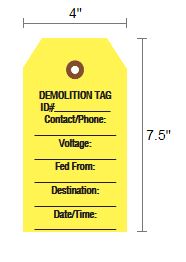
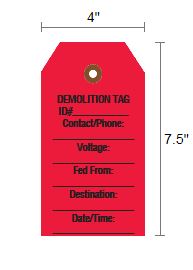
It shall be the responsibility of SME has to determine the need to seek and contract a Third Party when professional assessment of a particular discipline is required.

**APPENDIX A**

**Circuit Tracking Spreadsheet**

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**TAGS**

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