

MINOS Near Detector Installation ES&H Procedures and Guidelines for Collaborators

Version 1.1
April 2004

Purpose of this Document :

The purpose of this document is to inform members of the MINOS Collaboration of the ES&H procedures and requirements that must be adhered to while installing and commissioning the MINOS Near Detector in the MINOS Near Detector Hall at Fermilab.

Note :

Each collaborator is required to read this document and sign the last page, indicating that he/she has done so, prior to working in the underground enclosure. Signature pages may be deposited into the box labeled "Procedure and JHA Signatures" located at either the MINOS Service building (@ the MINOS Desk) or in the WH12W MINOS Control Room.

Introduction :

The MINOS Near Detector is being installed in the MINOS Near Detector Hall which is the final enclosure of the NuMI Tunnels and Halls Facility. The experimental hall is located at an underground depth of 350 feet and is normally accessed from the elevator located in the MINOS Service Building.

Two persons have been assigned special responsibility during the MINOS Detector Installation and commissioning phase. These are the Installation Supervisor and the Shift Leader. The Installation Supervisor is a person who is reachable 24/7 via phone or pager. The Installation Supervisor sets the general direction of the day's activities and approves the daily work plan. The Shift Leader is responsible for a specific set of daily tasks (agreed to at the daily planning meeting). The Installation Supervisor and the Shift Leader will guide and oversee workers in regard to both technical and safety issues. They will determine if written Job Hazard analyses are required prior to

commencing new tasks and they will discuss with the other workers means and methods for carrying out the daily task in a safe manner. They will advise workers in the use of Personal Protective Equipment (PPE), and have the authority to require workers to use PPE as they deem necessary.

In addition to being trained and aware of environmental, safety and health procedures required for working in an experimental hall, such an underground environment requires an added level of vigilance and awareness on the part of each worker. It is important for each worker to understand that written documents and procedures do not replace the use of common sense and vigilance. It is also important that each person is empowered to be in control of their own safety and if at any time they feel that the actions or negligence of a co-worker puts them or others in the area at risk, that they have the authority to request that the work be stopped until the situation can be corrected. If an individual feels uncomfortable making such a request they should contact the job supervisor immediately so that corrective action can be taken. (The daily job supervisor and his/her contact number) is posted on the white board at the MINOS Desk in the MINOS Service Building.

General Requirements

1. All persons working in the underground enclosure must have completed the training session entitled : NuMI Installation Underground Safety Training.
2. In any emergency the number to dial is 3131. Tell the operator that you are at the MINOS Experimental Hall. Specifically indicate if you are underground. (Note that cell phones do NOT work underground.)
3. Access to the enclosure requires wearing an access badge (located next to the elevator on the upper level.) The access badge must be replaced on the board by the worker's Fermilab ID. (Don't forget to retrieve the ID and replace the badge when leaving the building.)
4. Workers must follow a two-person rule when working underground. Note that you can go underground (i.e ride the elevator) alone, provided there are colleagues underground whom you are joining. The corollary to this requirement is that you may not leave an individual underground working alone.

5. Workers **MUST** remember to close the elevator door and landing gate when exiting the elevator, either at the bottom or the top. Failure to do so will prevent the elevator from operating and could result in workers being trapped underground. (Necessitating calling X3131)
6. Workers should insure that the external doors to the building are locked if they are leaving after normal (7 am – 3:30 pm) working hours. Additionally, when working on weekends or when no floor managers or task managers are in the service building, workers should check that the external doors to the service building are locked, before proceeding underground.
7. Each worker must have in their possession a hard hat and safety glasses to enter the MINOS Service building; these are required to be with the person when they go underground.
8. Workers must wear “over-the-ankle” sturdy work boots.
9. **Workers must attend the daily MINOS installation planning meeting (12:30 PM, WH12W MINOS Control Room) if they plan to access the MINOS enclosure for Detector Installation work any time in the following 24 hours.) Any exception to this rule, or changes in work schedules must be communicated to and approved by the Installation Supervisor.** (Note that the Friday meeting will cover the list of work which will be done on Saturday and Sunday.)
10. Workers will develop, or review, a Job Hazard Analysis (JHA) for the specific jobs that they are working on. Examples of existing JHA’s include :
 - a. Near Detector Plane Cabling
 - b. Electronics Rack Installation and Commission
 - c. PMT High Voltage Work

A corollary to this requirement is that workers will not undertake jobs for which written JHA’s exist without reviewing and signing them. An index of existing JHA’s and copies of each can be found on the Near Detector Installation Home Page :

http://www-numi.fnal.gov/minwork/neardet/near_safety.html

11. Workers must be cognizant of other work which may be going on in the service building or experimental hall. These may include but not be limited to rigging of heavy equipment with the overhead crane and welding. Worker should observe signage and use PPE such as hard hats and safety goggles as appropriate.
12. No unattended operation of custom electronics may be operated in an unattended mode without an approved Operational Readiness Clearance.
13. Workers will use proper equipment such as manlifts, ladders or step stools to reach items that are not within their reach when standing on the ground.
14. Workers will not operate specialized equipment such as manlifts and overhead cranes without specific training and authorization.

Signature Page

I have read the document entitled **MINOS Near Detector Installation ES&H Procedures and Guidelines for Collaborators, Version 1.1**, and agree to abide by these procedures while working on the Near Detector Installation.

Name

Date