

WP 04-VU1610

Revision 2

Reentry

Technical Procedure

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APPROVED FOR USE

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INTRODUCTION

This procedure provides instructions for reentry to the underground (U/G) by the Reentry Team. Actions by the Reentry Team may include:

- Checking air quality and restoring/realigning U/G Ventilation.
- Verifying active storage panel conditions, as applicable.
- Restoring/realigning electrical power, as required.

Reentry is required to the U/G when there are uncertainties about the air quality and/or radiological conditions. Air quality is questionable when mechanically induced ventilation has been lost for greater than 2 hours. Radiological conditions are questionable when there has been a loss of U/G Continuous Air Monitors (CAMs) or their indication to the Central Monitoring System (CMS).

Reentry Team consists of the following:

- U/G Facility Engineer
- U/G Roving Watch
- Radiological Control Technician (RCT) when applicable
- Hoisting Bottom Lander
- Other personnel as conditions warrant

No quality records are generated by performance of this procedure.

REFERENCES

BASELINE DOCUMENTS

- 30 CFR Part 57, "Safety and Health Standards - Underground Metal and Nonmetal Mines"
- WP 12-IS.01, Industrial Safety Program - Structure and Management

REFERENCED DOCUMENT

- WP 12-ER4903, Radiological Event Response

PRECAUTIONS AND LIMITATIONS

- U/G Facility Engineer and/or U/G Roving Watch must be currently qualified on qualification card OPS-08.
- If at least one room exit Alpha CAM is not in service (I/S), or if its operating status cannot be determined for the CMS, an air sample should be analyzed from Station A and the results reported to the Facility Shift Manager (FSM) prior to Reentry Team entering the U/G.

- If all Air Monitoring Skids at Station A are Out of Service (OOS), an air sample from Station D (U/G) may be analyzed with FSM and Radiological Control Manager (RCM) concurrence.
- Personnel may be released to go U/G prior to an Alpha CAM being restored provided they do not enter the Exhaust Drift. U/G Reentry Team must make a determination that normal conditions exist (electrical power restored and a mechanically induced ventilation mode established) prior to "Normal Access" to the U/G.
- Any conditions that exist which are not covered by this procedure must be evaluated by the FSM prior to reentry.

PREREQUISITE ACTIONS

- 1.0 FSM, direct Reentry Team to check air quality U/G if ventilation was lost for greater than 2 hours.
- 2.0 Reentry Team, verify restoration of mechanically induced ventilation (after 2-hour shutdown) for minimum of 30 minutes. Filtration Mode is considered to be mechanically induced ventilation.

PERFORMANCE

1.0 LOSS OF U/G VENTILATION FOR GREATER THAN 2 HOURS

NOTE

Mechanically induced ventilation should be I/S for 30 minutes prior to U/G Reentry Team accessing the U/G. Filtration Mode is considered to be mechanically induced ventilation.

NOTE

At a minimum, the Reentry Team will consist of:

- U/G Facility Engineer
 - U/G Roving Watch
 - Hoisting Bottom Lander
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- 1.1 Reentry Team, proceed to the U/G and use a gas monitor to verify the air quality in working areas is within the permissible limits of Table 1, Action Limits, and report the conditions to the FSM.
- 1.2 When the air quality has been determined to be acceptable, FSM, instruct the Central Monitoring Room Operator (CMRO) to make the announcement "NORMAL ACCESS HAS BEEN RESTORED TO THE U/G."

2.0 LOSS OF U/G CAM INDICATIONS

NOTE

Mechanically induced ventilation should be I/S for 30 minutes prior to U/G Reentry Team accessing the U/G. Filtration Mode is considered to be mechanically induced ventilation.

NOTE

At a minimum, the Reentry Team will consist of:

- U/G Facility Engineer
 - U/G Roving Watch
 - RCT to inspect the waste stack
 - Hoisting Bottom Lander
-

NOTE

If any air sample results indicate an actual or potential release of TRU airborne contamination, WP 12-ER4903 must be used.

- 2.1 RCT, analyze filters at Station "A" and inform the FSM of the results.
- 2.2 If the filter results are acceptable, Reentry Team, proceed to the U/G.
- 2.3 RCT and U/G Roving Watch/Facility Engineer, proceed to the active panel area to inspect for abnormal conditions (i.e., fire, roof fall, or dropped/breached containers) and report the conditions found to the FSM.
- 2.4 After the Reentry Team has entered the U/G, FSM, instruct the CMRO to make the announcement "LIMITED ACCESS HAS BEEN RESTORED TO THE U/G, PERSONNEL REMAIN CLEAR OF THE PANEL AREA AND EXHAUST DRIFT UNTIL FURTHER NOTICE."
- 2.5 When RCT and U/G Roving Watch/Facility Engineer have reported to the FSM that the radiological conditions are satisfactory, FSM, instruct the CMRO to make the announcement "NORMAL ACCESS HAS BEEN RESTORED TO THE U/G."

3.0 LOSS OF U/G VENTILATION AND CAM INDICATIONS

NOTE

Mechanically induced ventilation should be I/S for 30 minutes prior to U/G Reentry Team accessing the U/G. Filtration Mode is considered to be mechanically induced ventilation.

NOTE

At a minimum, the Reentry Team will consist of:

- U/G Facility Engineer
 - U/G Roving Watch
 - RCT to inspect the waste stack
 - Hoisting Bottom Lander
-

NOTE

If any air sample results indicate an actual or potential release of TRU airborne contamination, WP 12-ER4903 must be used.

- 3.1 RCT, analyze filters at Station "A" and inform the FSM of the results.
- 3.2 If the filter results are acceptable, Reentry Team, proceed to the U/G and perform the following:
 - Use a gas monitor to verify the air quality in working areas is within the permissible limits of Table 1, and report the conditions to the FSM.
 - RCT and U/G Roving Watch/Facility Engineer proceed to the active panel area to inspect for abnormal conditions (i.e., fire, roof fall, or dropped/ breached containers) and report the conditions found to the FSM.
- 3.3 After the Reentry Team has entered the U/G, FSM, instruct the CMRO to make the announcement "LIMITED ACCESS HAS BEEN RESTORED TO THE U/G, PERSONNEL REMAIN CLEAR OF THE PANEL AREA AND EXHAUST DRIFT UNTIL FURTHER NOTICE."
- 3.4 When RCT and U/G Roving Watch have reported to the FSM that the radiological conditions are satisfactory, FSM, instruct the CMRO to make the announcement "NORMAL ACCESS HAS BEEN RESTORED TO THE U/G."

Table 1 - Action Limits

GASES MONITORED	
● Carbon	< 25 ppm
● Methane	< 5% of LEL
● Oxygen	> 19.5%
LOCATIONS	
●	Entry Shaft Station
●	O/E and N/1400
●	E/140 and N/300 Shop
●	Room 1, Active Panel Area
●	S/2520 and W/30
●	Active mining area
●	W/170 and S/90