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WP 04-CA2001

Revision 2

Underground Diesel Generated Compressed Air

Abnormal Operations Procedure

EFFECTIVE DATE: 12/13/10

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APPROVED FOR USE

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CHANGE HISTORY SUMMARY

REVISION NUMBER	DATE ISSUED	DESCRIPTION OF CHANGES
2	12/13/10	Editorial revision to correct ID number on generator and added JHAs identified for this procedure.

INTRODUCTION

This procedure provides instructions for operating underground Compressed Air System during unavailability of surface generated compressed air at the Waste Isolation Pilot Plant (WIPP).

REFERENCES

BASELINE DOCUMENTS

- 30 CFR Part 57, Subpart L
- Drawing 53-P-001-W1, Underground and Shafts Compressed Air System Piping and Instrument Diagram
- Drawing 53-P-001-W2, Underground and Shafts Compressed Air System Piping and Instrument Diagram
- Drawing 53-P-001-W3, Underground and Shafts Compressed Air System Piping and Instrument Diagram

EQUIPMENT

- Ladder **OR** scissor lift
- Whip check

PRECAUTIONS AND LIMITATIONS

- Compressed air hoses 3/4-inch or larger inside diameter (ID) require whip checks.
- Job Hazard Analysis identified for this procedure are PROD 91, Air Line, Installation/Removal; PROD 272, Use of Compressed Air; and PROD 257, Getman Lift Truck.

PREREQUISITE ACTIONS

1.0 Obtain Waste Shaft Bottom Lander's permission to enter area.

2.0 Locate diesel compressor.

PERFORMANCE

1.0 ISOLATION OF UNDERGROUND FROM SURFACE COMPRESSED AIR

1.1 Close valve PA-534-V-139 behind Waste Shaft.

1.2 Close valve PA-534-V-121 at E140/S400.

1.3 Close valve PA-534-V-020 in N215/W500.

NOTE
In Step 1.4, compressed air hoses require whip checks.

1.4 Connect Diesel Compressor 74-G-089 or 74-G-147 to a drop designated by Underground Facility engineer (UFE).

1.5 Perform the following preoperational checks on Diesel Compressor 74-G-089 and/or 74-G-147:

1.5.1 Visually verify fuel level > ½.

1.5.2 Verify oil level between upper and lower dipstick marks.

NOTE
Tag for check in Step 1.5.3 is mounted on dry chemical tank.

1.5.3 Verify fire suppression system within current monthly check.

1.5.4 Open manual blowdown valve to release residual air.

1.5.5 Close manual blowdown valve.

1.5.6 Verify receiver discharge valve is closed.

1.5.7 Verify motor stop handle is pushed in.

1.6 Verify oil is visible in compressor sight glass.

1.7 Start compressor by performing the following:

1.7.1 Press and hold BYPASS button.

1.7.2 Press and hold START button until diesel engine starts

1.7.3 **WHEN** system pressure reaches 40 psi,
THEN release BYPASS button.

1.8 **WHEN** system pressure reaches 100 psi,
THEN open receiver discharge valve.

1.9 Open main air valve on plant system connecting air supply to diesel compressor.

2.0 RESTORATION OF SITE AIR SYSTEM SUPPLY

2.1 Open valve PA-534-V-139 behind Waste Shaft.

2.2 Open valve PA-534-V-121 at E140/S400.

2.3 Open valve PA-534-V-020 at N215/W500.

2.4 Close main air valve on plant system connecting air supply to diesel compressor.

2.5 Pull STOP handle until diesel engine stops.

2.6 Open manual blowdown valve.

2.7 **WHEN** receiver is drained of pressure,
THEN perform the following:

2.7.1 Close receiver discharge valve.

2.7.2 Close manual blowdown valve.