

M-32

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NRC HEADQUARTERS

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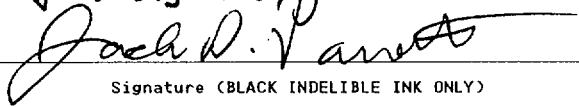
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COPY#	PROC ID	REV#	FC#	DATE	PROCEDURE TITLE
136	EMIP-105	4	3	11/03/1999	PERSONNEL PROTECTION ALARM RESPONSE

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WVDP EMERGENCY MANAGEMENT IMPLEMENTING  
PROCEDURES  
WVDP-139 VOL I  
INDEX

PAGE: 1

<u>PROC ID</u>	<u>REV</u>	<u>EC</u>	<u>PROCEDURE TITLE</u>	<u>STATUS</u>	<u>ISSUE DATE</u>	<u>COGNIZANT MANAGER</u>
PREFACE	2		PREFACE	ACTIVE	02/17/1999	LOFTON,M,.
EMIP-101	3		GENERAL INSTRUCTIONS	ACTIVE	02/05/1999	LOFTON,M,.
EMIP-101	3	1	GENERAL INSTRUCTIONS	ACTIVE	06/18/1999	LOFTON,M,.
EMIP-102	4		EMERGENCY FIELD RESPONSE	ACTIVE	09/16/1999	LOFTON,M,.
EMIP-103	8		EMERGENCY OPERATIONS MANAGEMENT	ACTIVE	09/03/1999	LOFTON,M,.
EMIP-104	2		RECOVERY	ACTIVE	06/23/1998	LOFTON,M,.
EMIP-104	2	1	RECOVERY	ACTIVE	06/18/1999	LOFTON,M,.
EMIP-105	4		PERSONNEL PROTECTION ALARM RESPONSE	ACTIVE	07/13/1998	LOFTON,M,.
EMIP-105	4	1	PERSONNEL PROTECTION ALARM RESPONSE	ACTIVE	10/05/1998	LOFTON,M,.
EMIP-105	4	2	PERSONNEL PROTECTION ALARM RESPONSE	ACTIVE	11/17/1998	LOFTON,M,.
EMIP-105	4	3	PERSONNEL PROTECTION ALARM RESPONSE	ACTIVE	11/03/1999	LOFTON,M,.
EMIP-106	0		MERCY FLIGHT UTILIZATION	ACTIVE	05/13/1998	LOFTON,M,.
EMIP-106	0	1	MERCY FLIGHT UTILIZATION	ACTIVE	10/05/1998	LOFTON,M,.
EMIP-106	0	2	MERCY FLIGHT UTILIZATION	ACTIVE	07/30/1999	LOFTON,M,.

## WVNS RECORD OF REVISION CONTINUATION FORM

<u>Rev. No.</u>	<u>Description of Changes</u>	<u>Revision On Page(s)</u>	<u>Dated</u>
	Deleted assembly of personnel in OGIR & HVAC securing Added bullet for sheltering and medical and/or radiological monitoring	14	
PC1	Changed location of 64-AE/AI-8200 from Trailer Z04 to Trailer VH-05 and 64-AE/AI-8202 from Trailer B to Main Guardhouse due to elimination of Trailer City. Corrected monitor designation numbers.	4 4 & 5	10-10-97
4	Minor Change Revision	3, 5, 6, 9, 10, & 13	07/13/98
PC1	Revised Notification section in Attachment D	10	10/05/98
PC2	1.0 - Added "This procedure ... is being corrected."  5.2 - Added "If the source ... with Step 5.8."  5.8, 5.8.1, 5.8.2 and 5.8.3 - Added steps	1  3 3, 4	11/17/98
PC3	4.7 - Added word "or" and deleted "CO" reference; Attachment C - Added word "or" and deleted "CO" reference; Attachment C - Deleted "CO or."	2 7 8	11/03/99

EMIP-105 Personnel Protection Alarm Response

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PC2> 1.0 PURPOSE

This procedure establishes communications protocol between Main Plant Operations (MPO), Security, and Vitrification Operations (Vit Ops.) upon receipt of personnel protection alarms and provides guidance on implementation of personnel protective actions in response to these alarms. This procedure also provides directions for the Main Plant Operations Shift Supervisor (MPOSS) to forego protective actions in those situations where the source for an alarm activation has been identified and is being corrected.

2.0 SCOPE

This procedure provides general guidelines for initial response to fire, smoke, heat, carbon monoxide (CO) or ammonia (NH<sub>3</sub>) alarms received at the Main Gatehouse Alarm Monitoring Station (AMS), or NH<sub>3</sub>, Nitrous Oxides (NO<sub>x</sub>), or CO alarms received at the Vitrification Process Control Room (VPCR) and defines the expected protective actions and notifications to be performed by MPO and WVDP Security personnel. Additionally, this procedure provides supplemental information for personnel in the Vitrification Facility, 01-14 Building, Cold Chemical Building, and Load-in/Load-out Facility.

3.0 REQUIREMENTS AND REFERENCES

3.1 Requirements

None.

3.2 References

- WVDP-106, "Conduct of Operations Manual"
- WVDP-022, "WVDP Emergency Plan"
- WVDP-139, "WVDP Emergency Implementing Procedures"
- WVDP-193, "Emergency Action Derivation and Guidance Manual"
- WVDP-273, "WVDP Hazards Survey"
- SOP-61-03, "Scale Vitrification System - SVS Off-Gas System Operations"
- SOP-64-05, "Receipt of Bulk Anhydrous Ammonia"
- WVNS-SD-64, "Vitrification Ex-Cell Off Gas System Description"

4.0 RESPONSIBILITIES

- 4.1 All Employees - including subcontractor personnel and visitors are responsible for performing all protective actions described in this procedure upon notification of the need for response via alarm, signal, or verbal communication.
- 4.2 HazMat Team - under the direction of the Main Plant Operations Shift Supervisor (MPOSS), is responsible for controlling activities at the scene of a hazardous materials release.
- 4.3 Industrial Hygiene and Safety (IH&S) - is responsible for determining the required personal protective equipment (PPE) for each alarm condition, providing guidance on re-entry to the 01-14 building following activation of the general alarm, and for conducting surveys of hazardous material as requested by MPO.
- 4.4 Main Plant Operations Shift Supervisor (MPOSS) - is responsible for investigating alarm conditions, implementing personnel protective actions, consulting with IH&S on PPE and re-entry requirements if necessary and consulting with the Site Operations Manager regarding activation of the Emergency Operation Center (EOC). The MPOSS will provide overall direction for response activities and assume the duties of the Incident Commander (IC).
- 4.5 Plant Security (Security) - is responsible for immediately reporting all personnel protection alarms received at the Security Main Gatehouse AMS to the MPOSS and maintaining a perimeter as directed by the MPOSS. Security shall respond to alarm scenes only upon authorization by the MPOSS, and only in proper PPE.
- 4.6 Site Operations Manager - is responsible for verification of implementation of personnel protective actions and for determining the need to activate the EOC.
- PC3> 4.7 Vitrification Operations Shift Supervisor (VOSS) or designee - is responsible for notification to the MPOSS of the location and concentration associated with NH<sub>3</sub> or NO<sub>x</sub> alarms received within the 01-14 building or at Tank 64-D-004 and for providing assistance to the MPOSS during response to alarms affecting Vitrification.

5.0 PROCEDURE

<p><b>WARNING:</b> Personnel shall not enter the scene of the alarm without proper PPE, as determined by IH&amp;S.</p>
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- 5.1 Immediately upon alarm receipt at the AMS or at the VPCR, Security or Vit. Ops., as appropriate, shall notify the MPOSS of the location, concentration level, and type of alarm received.

01-14 Building Alarms

ACTIONS	NH <sub>3</sub> OR NO <sub>x</sub> ALARMS
PPE REQUIREMENTS	Per IH&S depending on type of chemical causing alarm condition (NO <sub>x</sub> or NH <sub>3</sub> )
NOTIFICATION	VOSS or designee shall notify MPOSS and Security of alarm type, location, and level received.
PROTECTIVE ACTION	<p>MPOSS shall verify evacuation of 01-14, CSS, and LWTS.</p> <p>MPOSS shall direct Security to conduct accountability of evacuated personnel.</p> <p>MPOSS shall consult with IH&amp;S for re-entry requirements, including PPE and additional monitoring equipment.</p> <p>MPOSS shall dispatch the VOSS or designee to investigate alarm cause.</p>
AVAILABLE EMERGENCY EQUIPMENT	Emergency Van, HazMat Trailer, IH&S portable monitors.
<p>01-14 BUILDING ALARM SILENCE/RESET SWITCH LOCATED AT THE NW EXTERIOR CORNER OF THE NO<sub>x</sub> MCC ROOM.</p>	<p>30 seconds after a high concentration of NO<sub>x</sub> or NH<sub>3</sub> is detected inside the building or a fault occurs on any one of the monitors, the horns will sound and the lights will come on. The "ALARM ARMED" light on the West Wall of the Building near Key Switch SS1 will go off.</p> <p>When the operator places Key Switch SS1 to the "SILENCE" position, all HORNS will go off and the lights inside the building will also shut off. The light outside the door to 01-14 will remain on and the "ALARM ARMED" light will remain off.</p> <p>If an attempt is made to reset the system through the keyswitch before the fault has cleared, the horns will immediately come back on and will once again have to be silenced.</p> <p>If the reset is made after the fault had cleared, the light outside the door will go off and the "ALARM ARMED" light will come on.</p>

PC3&gt;

Attachment C

**01-14 Access Briefing and Postings**

The 01-14 building contains the equipment required for Vitrification Off-Gas Treatment to reduce the nitrous oxides (NO<sub>x</sub>) given off by the melter. NO<sub>x</sub> reduction requires the use of ammonia (NH<sub>3</sub>) stored in a 1000 gallon tank outside of the 01-14 building. Ammonia is colorless and nonflammable. You can smell ammonia at very low concentrations (5 ppm). At 25 ppm, exposure for one hour would result in only transient effects. At 200 ppm, personnel exposed for one hour should not experience serious health effects.

For your protection, building sensors are located within 01-14 to detect NH<sub>3</sub>, as well as NO<sub>x</sub>. Sensors to detect ammonia only are located around the storage tank (Tank 64-D-004 Sensors), above Tank 64-D-004, and on the SW corner of the Main Plant Office Building and along the east face of the Trailer City Complex. The set points for these sensors are low to assure personnel exposure to ammonia is minimized. The set points are at 35 ppm for sensors within the 01-14 Building and at 25 ppm and 200 ppm for sensors external to 01-14. These sensors initiate activation of personnel protection alarms for which you are required to take specific actions.

The attached instructions (Attachments D and F) are provided to assist personnel in the 01-14 Building in taking the proper actions in the event the sensors within or outside the 01-14 building initiate an alarm condition.