

# Document Modification Request

25. DMR No. 96-DMR-ERM-0037

Printer Type all information (except signatures). Process procedures in accordance with 1-A01-PROC DEV-400, Procedure Process.

1. Name/Phone/Pager/Location <u>Edward C Mast / 5757 / T893A</u>			2. Date <u>8-1-96</u>		
3. Existing Document Number and Revision <u>RFIER-96-0016</u>			4. Document Type: <input type="checkbox"/> Procedure <input type="checkbox"/> Plan <input type="checkbox"/> Other		
5. Document Title <u>Addendum #2 to RMRS Health and Safety Plan for the 1996 WARP</u>					
6. Item	7. Page	8. Step	9. Proposed Modification		
			<u>Revised Table 9-1 Figure 6-1 - Project Organization Chart Revised Table 5-1 Revised Appendix A Addendum to Table 5-3 Revised Figure 2-1</u>		
10. Item					
10a. Justification (reason for modification, EJO #, TP #, etc.) <u>Addendum is specific to the Planned Intrusive Activities During July-August, 1996 within the Mound Area</u>					

Originator's Edward C Mast School 7/30/96

11. <input type="checkbox"/> Process <input type="checkbox"/> Do not Process (state reason in Block 10)					
12. <input type="checkbox"/> Process (Complete Blocks 13-2) <input type="checkbox"/> Do not Process (state reason in Block 10)					
13. New Document/ Rev. No. (if new or changed)					
Complete either Section 14a. or 14b., as applicable. For procedures, attach completed Procedure Modification Worksheet from 1-A01-PROC DEV-400.					
14a. Type of Complete Modification		14b. Changes: (check all that apply.)		Additional Attributes:	
<input type="checkbox"/> New <input type="checkbox"/> One-Time-Use <input checked="" type="checkbox"/> Revisor <input type="checkbox"/> Cancellation		<input type="checkbox"/> Intent Change <input type="checkbox"/> Editorial Correction <input checked="" type="checkbox"/> Nonintent Change <input type="checkbox"/> Regular <input type="checkbox"/> Interim Approval Requested - Needed for Immediate U (14-day limit for obtaining final approval)		<input type="checkbox"/> Temporary <input type="checkbox"/> One-Time-Use <input type="checkbox"/> Limited Distribut	
15. ERM Change Control Board Required <input type="checkbox"/> Yes <input type="checkbox"/> No (Applicable only to new procedures, revisions, and intent change)					
List the reviewing disciplines in Block 16. After concurrence has been obtained (in accordance with 1-A01-PROC DEV-400), enter the name of the reviewer followed by /s/ If the reviewer indicates No comments, the review signature constitutes concurrence. Enter the date concurrence is obtained in Block 18.					
16. Organizer	17. Reviewer/Concurr	18. Date	16a. Organizer	17a. Reviewer/Concurr	18a. Date
SWAG	Diane P. Craft	7/30/96	RMRS-SWAG		
SWAG	Annette Primrose	7/30/96	RMRS-SWAG		
SWAG	Peggy Schreckengast	8/1/96	RMRS-SWAG		
	Peggy Schreckengast				
19. Assigned SME/Phone/Pager/Location <u>Peggy Schreckengast / 6790 / 3059</u>					
20. Cost Center		21. Charge Number		22. Requested Completion Date	
23. Prescreen/Screens/USOD Number					
24. Independent Safety Review Meeting and Date					
26. After obtaining ALL required signatures: Responsible Manager's Approval (print/sign/date) (Not required for New procedures or Revisions)					27. Effective Date
					28. Expiration Date (if applicable)

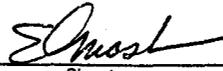
ADMIN RECORD

DOCUMENT CLASSIFICATION REVIEW WAIVER  
PER R.B. HOFFMAN, CLASSIFIED

JUNE 11, 1991 A-SW-002052

**Health and Safety Plan Addendum #2  
PLANNED INTRUSIVE ACTIVITIES DURING JULY-AUGUST, 1996  
WITHIN THE MOUND AREA**

(Addendum to Health and Safety Plan for the 1996 WARP, April 1996, RF/ER-96-0016)

Prepared by: Edward C Mast /  / Project Manager / 07/24/95  
Name Signature Title Date

**Introduction**

This HASP addendum covers planned subsurface soil gas, soil and groundwater sampling activities to be performed in the Mound Area from July 29 through August 30, 1996. Previous characterization activities at this site encountered elevated levels of volatile organic compounds (VOAs) in boreholes numbered 14295 and 174 (see attached Figure 3.2.2-1 from the Sampling and Analysis Plan for the Pre-Remediation Investigation of the Mound, 903 Pad and Trench T-1{SAP} for locations). Attached Table 1.2-1 from the SAP presents the analytical data for this area of concern. This Addendum is only for the work to be conducted in the Mound Area. The soil gas and soil core recovery program proposed per the SAP is designed to define the areal extent of VOC contamination at the Mound Area. The scope of this proposed activity is limited to sample collection by the Geoprobe method. All sample analysis and interpretation will be the responsibility of RMRS. All activities described in this addendum will be conducted in accordance with this addendum, and the HSP for the 1996 WARP. The activities are substantially similar in scope and potential hazard as those described in the geotechnical boring subtask described in the WARP HSP. Soil sample data specific to the area of investigation (Table 1.2-1), a site map (Figure 3.2.2-1), and a revised personnel responsibility diagram (Figure 6-1 from the SAP) are included in the attachment. All activities described in this addendum will be performed by or at the direction of Sitewide Actions personnel.

**Description of Planned Intrusive Activities**

A van mounted Geoprobe sampling rig will be driven into the Mound Area. The rig will be used to collect approximately seventeen one inch diameter soil cores up to a depth of approximately 20 feet. The equipment will be operated in accordance with procedure 4-S64-ER-OPS-GT.39 Push Subsurface Soil Sample. The direct push method employed by the rig will not generate waste cuttings or airborne dust. The soil samples will be enclosed in liners contained within the sampling assembly. The material within the liners will be containerized and preserved in accordance to the SAP. The containers can be transported directly to the analytical laboratories after screening for surface contamination, minimizing operator contact with potentially contaminated soils. The limited time (approximately 20 minutes), the boreholes will be open during sampling operations should preclude the retrieval of free water with the soil samples.

**Hazard Assessment**

**Wildlife**

No wildlife hazards in addition to those addressed in the WARP HSP are anticipated as a result of the planned intrusive activities.

**Chemical**

No chemical hazards in addition to those addressed in the WARP HSP are anticipated as a result of the planned intrusive activities. Site specific data provided in the attachment indicates no significant potential for hazardous levels of metal contamination in the subsurface soils to be sampled in the construction area.

**Physical**

Heat stress preventative guidelines detailed in the WARP HSP will be followed. The Geoprobe van wheels will be blocked during sampling operations and only the operator and helper will be allowed in the immediate vicinity of the vehicle. Borehole locations will be investigated for the presence of overhead and underground utility lines prior to the commencement of intrusive activities.

Radiological

No dust emissions should be generated during direct push sampling activities. Any excessively dry soils brought to the surface will be wetted by a portable sprayer to minimize dust emission. Dust generation not controllable by wetting the area will result in a halt of activity and re-evaluation of procedures. Elevated levels of radionuclide contamination are not expected in the majority of the subsoil samples. Monitoring of the sampling tools during withdrawal shall ensure against exposure of personnel to radiological contamination. ~~Monitoring procedures shall be in accordance with the WARP HSP (page A-3 of Appendix A), although particulate monitoring and hydrocarbon monitoring will not be necessary based on the results obtained from sampling at the construction site (results presented in attachment to addendum). If the HSS or RGT determines that the observed levels of contamination on the sampling tools constitute an immediate hazard to personnel, sampling activities will halt and the procedures and PPE levels will be re-evaluated. Use of airborne particulate monitoring instrumentation is not anticipated.~~

*Shush* 7/29/96  
MRS.

~~Personal Protective Equipment (PPE)~~

~~It is anticipated that the PPE described in the WARP HSP (i.e. modified Level D) will be sufficient to perform the planned intrusive activities. Upgrade of PPE, if necessary, will be performed at the direction of the Site Safety Officer or designate. Use of respirators is not anticipated. If conditions requiring upgrade to Level C are encountered, activities will be halted and procedures will be re-evaluated.~~

*Shush* 7/29/96  
MRS.

Radiological Contamination Monitoring / Decontamination Equipment

Equipment performing intrusive activities will be decontaminated to the extent possible within the work area (brushing off loose dirt, soap/water brush, water rinse). Radiological contamination monitoring will then be performed for total fixed plus removable and removable alpha and beta/gamma contamination. If contamination levels are below the allowable limits for unrestricted release, the equipment may then be released to the 891 Yard by the Health and Safety Specialist (HSS). If further decontamination is deemed necessary, the equipment will be transferred to the Main Decontamination Facility for decontamination and further monitoring. It is not anticipated that the equipment to be used will require near term release off plant site.

Personnel

Personnel monitoring and decontamination procedures as described in the WARP HSP remain in effect.

Approved by: J. Anderson / [Signature] / Rad Engineer / 7/24/96  
Name Signature Title Date

Approved by: M.D. Schreckengast / [Signature] / H+S Supervisor / 7-30-96  
Name Signature Title Date

Approved by: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
Name Signature Title Date

Approved by: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
Name Signature Title Date

I have read the contents of this HSP addendum and agree to comply with the contents stated within.

\_\_\_\_\_  
Name Signature Title Date

Health and Safety Plan Addendum #2

PLANNED INTRUSIVE ACTIVITIES DURING JULY- AUGUST, 1996  
WITHIN THE MOUND AREA

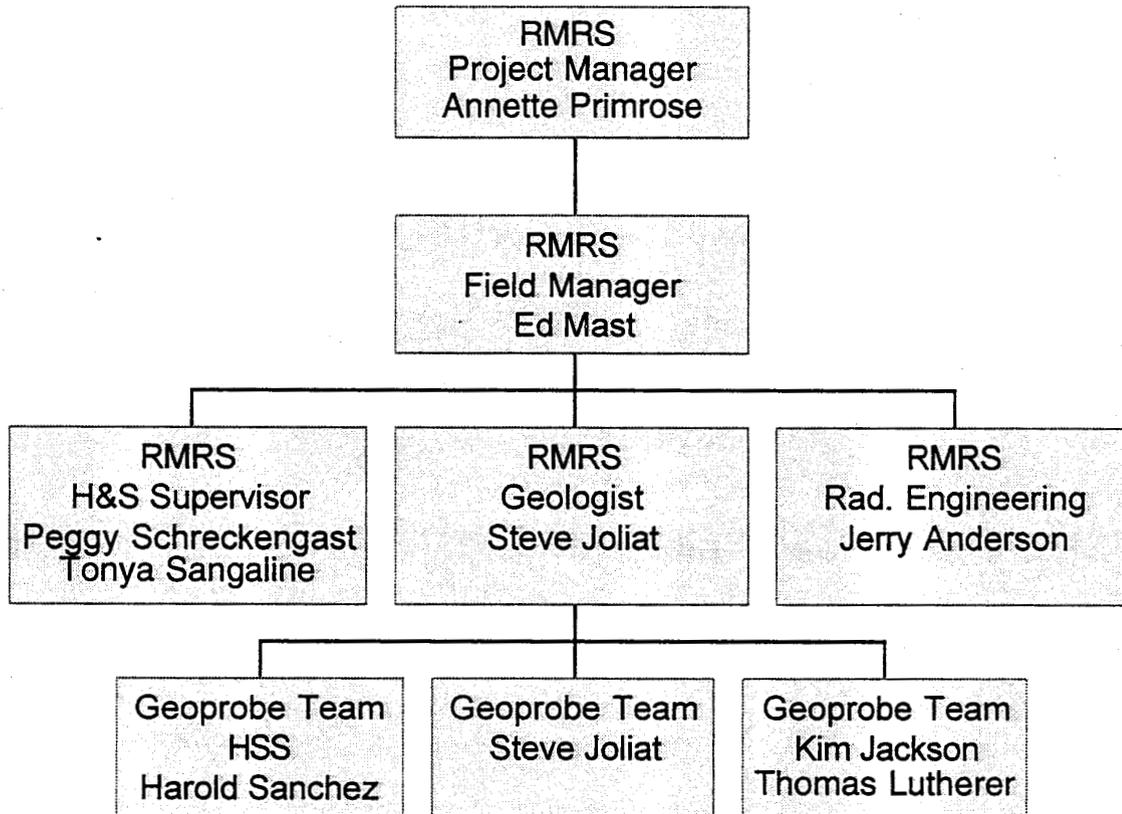
Table 9-1 Revised Emergency Contact Telephone and Pager Numbers

Department/Individual	Telephone Number
Fire	(303) 966-2911
Ambulance	(303) 966-2911
Poison Center	(303) 629-1123
Security	(303) 966-2911
Police	(303) 966-2911
Occupational Health General Information	(303) 966-2594
<b>NEAREST TELEPHONE IS AT T891E</b>	
<b>NEAREST EMERGENCY MEDICAL SERVICES ARE LOCATED AT:</b>	BUILDING 122
Vice President - Environmental Restoration - Ann Tyson	x4829/d1101
H&S Manager - Ken Jenkins	x5374/d7455
Project Manager - Annette Primrose	x4385/d4675
Field Manager - Ed Mast	x5757/d4672
Site Geologist - Steve Joliat	x4401/5470
H&S Supervisor - Peggy Schreckengast	x6790/3059
H&S Supervisor - Tonya Sangaline	x5392/3052
HSS - Harold Sanchez	x4953
HAZMAT Emergency Response	x2911
Note: d = digital page, the digital page system can be activated on plantsite by dialing 4000, then following instructions.	

## 6. PROJECT ORGANIZATION

For the purpose of this investigation, the work breakdown structure shown in Figure 6-1 shall be implemented.

FIGURE 6-1 - PROJECT ORGANIZATION CHART



Revised Table 5-1 Activite Hazard Analysis - FY96 WARP  
for Health and Safety Addendum #2  
PLANNED INTRUSIVE ACTIVITIES DURING JULY-AUGUST, 1996  
within the Mound Area

Step	Hazard	Controls
(1) Geotechnical (geoprobe) borings, soil gas, soil and groundwater sampling	Slips, trips and falls	Personnel will follow procedures in Section 5.3.6
	Exposure to airborne radioactive and chemical contaminants	Real-time and integrated sampling per subsection 6.0 and 7.0
	Dermal contact with radioactivity and chemically contaminated soil and water	Personnel will use PPE given in Section 8.0
	Mechanical and hydraulic hazards	Heavy equipment procedures per section 5.3.1
	Noise Exposure	<del>Noise monitoring will be conducted and hearing protection provided as needed per Section 5.3.4. The geoprobe boring equipment has been characterized and the noise exposure is below 85 decibels on the A-weighted scale. Hearing protection will not be required.</del> <i>Hearing protection is required during hammer operations.</i>
	Vehicular and pedestrian traffic	Site controls will be maintained per Section 6.0
	Electrical	Clearances will be maintained per Section 5.3.2
	Underground and aboveground utilities	Utility clearance will be performed per Section 5.3
	Manual material handling	Personnel will follow safe lifting practices per section 5.3.5
	Falling objects	Hard hats, steel-toed boots, and safety glasses will be worn per Section 8.0
	Heat Stress	Heat stress monitoring per Section 5.7
Cold Stress	<del>Cold stress monitoring per Section 5.7</del>	
(2) Equipment Decontamination	Contact with potentially contaminated rinse water	Personnel will use PPE as required by Section 8.0
	Additional hazards as listed in Step 1	Controls as provided in Step 1 above
	Radioactive contamination	Screening for release per Section 6.0
	High pressure steam cleaning	Personnel will use PPE as required in Section 8.0

MDS  
7-30-96

Revised Appendix A for  
 Health and Safety Addendum #2  
 PLANNED INTRUSIVE ACTIVITIES DURING JULY-AUGUST, 1996  
 WITHIN THE MOUND AREA

**Site Location and Description:**

Location: Mound Area, Formerly OU2 at SE Corner of the Protected Area (PA)  
 Description: Geoprobe Borings; collect soil gas, water and soil samples

**Suspect Contaminates:**

MONITORING REQUIREMENTS	ACTION LEVELS IN BZ						
	PEL	Instrument	Range	Level D Modified	Level C	Level B	Notes
Hydrocarbons	---	PID	0-2000 ppm	0 ppm	NA	*	Any sustained reading above background in the BZ * Dust control (mistfing) will be used above 2.5 mg/m <sup>3</sup>
Particulates	10 mg/m <sup>3</sup>	MIE Miniram	1 -100 mg/m <sup>3</sup>	0.2.5 mg/m <sup>3</sup>	* MDS 7-30-96	* MDS 7-30-96	

**Personal Monitoring:**

Contaminant

Monitor for VOAs using personal sampling methods, if necessary, upgrade for respiratory

Analytical Method  
 NIOSH Methods

**Personal Protective Equipment:**

Type of Work	Level D	Level D Modified	Tyvek Coveralls	Saranex Coveralls	Nitrile Gloves	Silvershield Gloves	Latex Gloves	Face Shields	Rubber Apron	Full-Face Respirator
Geoprobe -Soil Gas Sampling (1)	X				X		X			
Geoprobe -Groundwater Sampling (1)	X				X		X			
Geoprobe -Soil Sampling (1)	X				X		X			

(1) If high VOAs reading or free liquids are encountered personal will upgrade to Saranex and Face Shields. Sustained readings of VOCs in the breathing zone will require backing off and allowing samples to vent. If workers must work where VOC readings are sustained in the breathing zone, work will stop and supplied air respiratory protection will be used

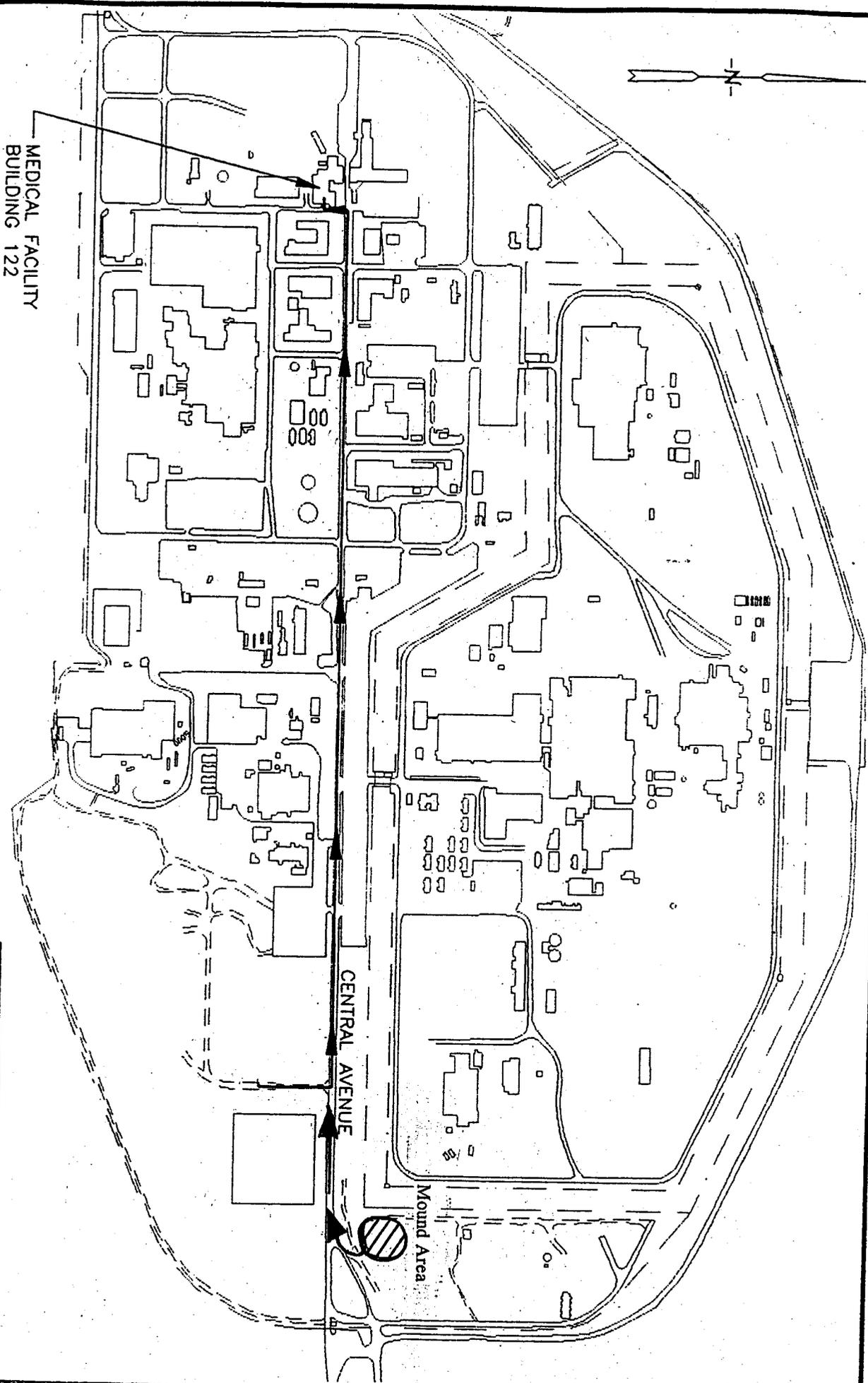
**Notes:**

PEL = Permissible Exposure Limit  
 PID = photoionization detector  
 ppm = parts per million

mg/m<sup>3</sup> = milligrams per cubic meter  
 PPE = personal protective equipment  
 NA = not applicable  
 NIOSH = National Institute for Occupation Safety and Health

Addendum to Table 5-3  
for Health and Safety Addendum #2  
PLANNED INTRUSIVE ACTIVITIES DURING JULY-AUGUST, 1996  
within the Mound Area

Chemical	Matrix	OSHA PEL	ACGIH TLV	NIOSH REL	STEL	CEILING	IDHL	SKIN NOTATION	CORROSIVE IRRITANT	BOILING POINT °F	VAPOR PRESSURE	FLASH POINT	UEL (%)	LEL (%)
1,1-Dichloroethene	s	100 ppm	100 ppm	100 ppm	NA	NA	3,000 ppm		X	89	500	-2	15.5	6.5
Chloroform	s	50 ppm (c)	10 ppm	2 ppm (STEL)	2 ppm	50 ppm	500 ppm			143	160	N.A.	N.A.	N.A.
Mercury	s	0.05 mg/m <sup>3</sup>	0.025 mg/m <sup>3</sup>	0.05 mg/m <sup>2</sup>	NA	0.05 ppm	10 mg/m <sup>3</sup>	X		674	0.0012	N.A.	N.A.	N.A.



MEDICAL FACILITY  
BUILDING 122

CENTRAL AVENUE

Mound Area

ROUTE TO RFETS  
MEDICAL FACILITY (BLDG 122)

Figure 2-1