SECTION 4

SITE SAFETY PLAN 2 JANUARY - 30 MAY 1994

- 4.1 References.
- (A) Title 10, Code of Federal Regulations, Parts 19, 20, 30 and 40.
- (B) Title 29, Code of Federal Regulations, Parts 1910.96 and 1910.120.
 - (C) AR 385-11, Ionizing Radiation Protection.
 - (D) USAEHA 385-1, Safety and Occupational Health Program.
 - (E) Fort Ord.
- 4.2 Key personnel/organization and responsibilities:
- (A) Harris Edge Industrial Health Physics Branch, HPD, USAEHA.
 - (B) CPT Christopher Clayton, Nuclear Medical Science Officer, Industrial Health Physics Branch, HPD, USAEHA.
- (C) SFC Oscar James, Health Physics Specialist, Industrial Health Physics Branch, HPD, USAEHA.
- (D) SGT Scott Bradley, Health Physics Specialist, Industrial Health Physics Branch, HPD, USAEHA.
 - (E) SGT David Hays, Health Physics Specialist, Medical Health Physics Branch, HPD, USAEHA.
 - (F) Patrick Moscato, Physical Science Technician, Industrial Health Physics Branch, HPD, USAEHA.
- (G) John Cleary, Team Supervisor, Seneca Army Depot Radiological Assistance Team.
- (H) Tom Reynolds, Radiation Team Supervisor, Seneca Army Depot Radiological Assistance Team.
 - (I) Joe Daniels, Radiation Protection Officer, Fort Ord.

4.3 Work Plan.

- 4.3.1 <u>Purpose</u>. To address potential radiological health hazards associated with the use of NRC licensed radioactive commodities. Survey nuclear facilities for unrestricted use to the general public.
- 4.3.2 <u>Project Description</u>. There are approximately 202 buildings that used, stored or maintained radioactive commodities at Fort Ord. In addition, four outdoor sites were identified as potentially affected by operations involving the use of radioactive materials. The project will require that USAEHA perform appropriate radiological surveys to meet the NRC's surveying standards.
- 4.3.3 <u>Personnel</u>. The project team initially consists of 11 personnel from Seneca Army Depot (three man teams), one individual from the CECOM Mobile Radiological laboratory, one Health Physicist Consultant, the Fort Ord RPO and Safety Officer. All personnel will be required to follow Fort Ord's Health and Safety SOP.
- 4.3.3.1 The surveying personnel will become familiar with the location and magnitude of any contamination to which personnel may be exposed during the course of the work.
- 4.3.4 Medical Surveillance Program. All surveying personnel who may be exposed to contamination levels exceeding unrestricted area limits will be enrolled in a medical surveillance program which includes a pre-employment screening, and annual medical examinations which are appropriate for handling radiological materials. Personnel will be approved as necessary to wear appropriate personnel protective equipment including a respirator.
- 4.3.4.1 If personnel are known or suspected to have been exposed to a potentially harmful substance during this project, all appropriate medical and health officials, safety officials and environmental staffers will be notified immediately.
- 4.4 Notification. A safety briefing for all surveying personnel is scheduled for 10-15 January 1994. This briefing will consist of a presentation provided by the Fort Ord Radiation Protection Officer and Safety Officer. All surveying personnel have been provided radiation safety training for similar working environments, however, all personnel will be required to be familiar with Fort Ord's safety regulations and key personnel.

- 4.5 Site Specific Safety Plan.
- 4.5.1 <u>Hazard Analysis</u>. The potential hazards associated with this project are described below. Actions used to mitigate specific hazards are also identified.
- 4.5.1.1 Biological Hazards. None Apparent.
- 4.5.1.2 Chemical Hazards (Toxins). All but two buildings/areas are empty of known Chemical Hazards.
- (a) The two buildings/areas are the existing DRMO and Building 111.
- (b) The survey teams are not to open any containers that may have been overlooked by post safety personnel. Any suspect containers will be reported to the Post Safety Office.
- (c) The buildings listed in 4.5.1.2a above will not be entered by the survey teams until the Post Safety Office has evaluated the potential hazards and given the team leader, written permission to enter the buildings/areas.
- 4.5.1.3 Climatic Hazards/Temperature. This project will be conducted from 1 January 1994 to approximately 1 May 1994. Based on Fort. Ord's geographical location as well as the fact that most of the work will be done indoors, climatic hazards are minimal. Team members will be required to evaluate conditions daily and dress accordingly.
- 4.5.1.4 Electrical/Utility. Team members will not enter wiring boxes or electrical fixtures. Buildings will not be sampled without the team leader evaluating the potential for electrical hazards.
- 4.5.1.5 Flammable/Explosive. None apparent, however, smoking is not permitted during project operations, nor is it permitted in government buildings.
- 4.5.1.6 Infectious. None apparent.
- 4.5.1.7 Oxygen Rich/Deficient. All areas are designed for human occupancy. Buildings that were sealed will be opened and air allowed to mix/enter prior to the survey team entering.

4.5.1.8 Noise. Operations of the post have ceased and the survey equipment poses no noise hazard.

4.5.1.9 Physical

- (a) Tripping. Tripping hazards are minimal since buildings are vacant and most are empty of furnishings.
- (b) Falling. Ladders will be used to reach areas greater than 6 feet in height. They will be placed on solid, horizontal surfaces and not leaned against walls or other vertical surfaces unless specifically designed as such. Ladders will be held by a team member if sampling is to be done above 10 ft.
- (c) Cuts, burns, punctures, and crushing are not normally associated with the survey equipment, or procedures. If building construction material is to be removed, then team members will wear leather gloves, to protect their hands.
- (d) Eye hazards are not associated with the survey equipment however if any building construction material is to be removed team members will wear eye protection.
- 4.5.1.10 Radioactive. Radioactive hazards are minimal. Team members will be issued Dosimeters by Mr. Joe Daniels, RPO, Fort Ord, and contamination control procedures are established.
- 4.5.1.11 Confined Space. Spaces not designed for human occupancy will not be entered by the team members without permission of the post safety officer. For the purpose of this plan, garages, closets, halls, outdoors, and other such areas are for human occupancy. Any space with limited access such as by ladder will not be entered without permission of the post safety officer.
- * areas that are not greater than 3 ft. below ground level.
- 4.5.2 Monitoring. All project personnel will be required to comply with AR 40-14 personnel monitoring requirements which implement 10 CFR, Part 20 and 29 CFR 1910.96.

- 4.5.2.1 Equipment.
 - (A) TLD Monitoring Devices.
 - (B) Appropriate radiation protection survey meters.
- 4.5.2.2 Standards.
 - (A) AR 40-14.
 - (B) 10 CFR, Part 20.
 - (C) 29 CFR, Part 1910.96.
 - (D) AR 385-11.
- 4.5.3 <u>Personnel Protective Equipment</u>. All surveying personnel will be required to wear personnel protective clothes, to include shoes and latex gloves while performing wipe test. Each outdoor site will have a site control area.
- 4.5.4 <u>Decontamination Procedures</u>. Decontamination procedures for personnel and equipment will be performed in accordance with the site plan.
- 4.5.5 <u>Emergency Response Procedures</u>. The Fort Ord Radiation Safety Officer will ensure that all surveying personnel understand local safety procedures prior to the start of the study. The Fort Ord RPO has agreed to assist in staffing this plan through appropriate organizations and safety.
- 4.5.5.1 <u>Emergency Numbers</u>. The following numbers will be used to report emergencies. The surveying personnel will remain in contact with Fort Ord personnel through use of the building telephone.

| (A) | Fire Department Telephone Number: | _ 2-4542 |
|-----|---|----------|
| (B) | Police Department Telephone Number: | 2-7851 |
| (C) | Ambulance Telephone Number: Duty Hours Non-Duty Hou | |
| (D) | Safety Office Telephone Number: | 2-7332 |

4.5.5.2 Injury, minor illnesses and injuries will be referred to the appropriate medical support center.

Prepared by:

Harris Edge, Program 27 Manager 10 Dec 93

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