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*REMOVAL SITE EVALUATION COMMON CARRIER
STAGING AREA MAY 1993*

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REMOVAL SITE EVALUATION

COMMON CARRIER STAGING AREA

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

U. S. DEPARTMENT OF ENERGY

May, 1993

REMOVAL SITE EVALUATION
COMMON CARRIER STAGING AREA

INTRODUCTION

The Common Carrier Staging Area will be used to provide a semi-trailer staging area outside of the controlled area to spot empty as well as loaded semi-trailers. The location for the staging area is an area along "F" street, east of the main electric power substation, and south of Building 82. Common carrier drivers will deliver and pick up semi-trailers at the designated staging area. FERMCO personnel will shuttle the semi-trailers between the staging area and the controlled area as needed.

Currently, common carrier drivers (and tractors) are required to enter and exit the Radiologically Controlled Area at the Receiving and Incoming Materials Area to drop off empty and pick up loaded semi-trailers. Each entry into and exit from the controlled area requires 2-3 hours of the drivers time. The time required to enter and exit the area exceeds the allowable time permitted by FERMCO 's contract with the carrier and subjects FERMCO to carrier detention charges. FERMCO's ability to ship low level waste is dependent on the number of semi-trailers available to load. Vacant space is severely limited in the controlled area which restricts the number of empty semi-trailers that can be spotted. Spotting semi-trailers in the controlled area increases the amount of traffic in that area which tends to cause traffic congestion.

Drawing 82X-5500G-00055 shows the basic outline and contours of the Common Carrier Staging Area. The area shall be excavated and graded to a level approximately eight inches below finished grade. All soft, wet, or plastic subsoils in the areas of excavation shall be removed. Areas below the subgrade shall be filled with graded bank run and compacted. Eight inches of gravel shall be applied and compacted over the subgrade. The concrete dolly strips shall be located as shown on the drawing.

SOURCE TERM

Previous surveys and samples from this area of the FEMP have indicated that low levels (slightly above background) of radioactive contamination may be present at the common carrier staging area site. Although the anticipated levels of contamination do not pose a significant threat to human health and safety, all excess soil from this project will be placed into the existing controlled stockpiles northeast of the Boiler Plant and managed in accordance with Removal Action 17. The project site will be monitored by Radiological Safety personnel to ensure that construction practices are appropriate for the contamination levels.

RCRA regulated metals and organics have not been detected in samples taken near the project site. Based on this information and the prior use of the area, RCRA regulated metals and organics are not suspected contaminants. Regardless, all soil will be handled in accordance with Removal Action 17, "Improved Storage of Soil and Debris."

Historical records and process knowledge of the work area did not reveal any known use of hazardous chemicals within the project area as indicated in references 1 & 2.

EVALUATION OF THE MAGNITUDE OF THE POTENTIAL THREAT

To manage the hazards and prevent the spread of radioactive contamination that may be present, the following controls, among others, will be implemented during construction of the common carrier staging area.

- o Excess soil from this project will be stockpiled according to Removal Action 17 criteria. Excess soil containing greater-than-background levels of contamination as indicated on a hand-held beta/gamma frisker will be placed in the stockpile for soil containing greater than 100 Pci/g uranium as specified in Removal Action 17.
- o Physical barriers will be positioned around the work area to prevent unauthorized access.
- o Protective clothing and respiratory protection will be provided for workers, as required.
- o Plastic tarpaulins and bags and appropriate containers will be readily available to contain radiologically contaminated materials, as required.
- o Runoff controls will be established, as required.

While these controls will be implemented as required, no waste is expected to be generated from this project. Based on the information presented above, the threat of a release from this project is insignificant.

ASSESSMENT OF THE NEED FOR REMOVAL ACTION

Consistent with Section 40 CFR 300.410 of the NCP, the Department of Energy shall determine the appropriateness of a removal action. Eight factors to be considered in this determination are listed in 40 CFR 300.415 (b)(2). The following factors apply specifically to the this project:

40 CFR 300.415 (b)(2)(i)

Actual or potential exposure to hazardous substances or pollutants or contaminants to nearby populations, animals, or food chain.

40 CFR 300.415 (b)(2)(v)

Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released.

Phase I of Removal Action 17 requires placement on and covering of contaminated soils with a heavy, nonpermeable tarpaulin. The tarpaulins will prevent the spread or release of contamination and resultant exposure to humans, animals or the food chain.

The threat from and potential of a release or migration of uranium from this project site is negligible. Thus, while the above criteria can be applied to this project, it does not constitute the need for a removal action.

APPROPRIATENESS OF A RESPONSE

Based on the evaluation of all the above factors, it has been determined that a removal action will not be necessary and this project should be continued as a best management practice in support of the CERCLA remediation process and waste management. Furthermore, the controls planned in conjunction with this construction activity and management procedures established in accordance with Removal Action 17 are adequate to mitigate any hazards created by contamination at this site and to prevent deterioration of existing site conditions.

