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**REMOVAL SITE EVALUATION SOUTHWEST
OFFICE TRAILER DRAINAGE SEPTEMBER 1993**

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RSE

REMOVAL SITE EVALUATION

SOUTHWEST OFFICE TRAILER DRAINAGE

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

U. S. DEPARTMENT OF ENERGY

September 1993

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REMOVAL SITE EVALUATION
SOUTHWEST OFFICE TRAILER DRAINAGE

1.0 INTRODUCTION

The Southwest Office Trailer Drainage project will provide drainage improvements to the area surrounding Trailers T-76, T-77, T-80 and T-81.

Currently, when moderate to heavy rains occur, the rainwater pools around and under the trailers that make up the Southwest Trailer Complex (T-76, 77, 80 & 81). This situation will shorten the useful life of these trailers. Excess rainwater enters the sanitary sewage lift station located in the area and overloads it. Also rainwater collects around the substation shortening their life and creating a potentially dangerous situation. This project will provide gutters and downspouts to these trailers to collect the runoff. A drain system with ten catch basins will collect the runoff and will tie into the existing 30" storm drain just north of trailers T-78 & T-79. In addition, the areas surrounding the trailers will be graded to improve the drainage. A sketch in attachment I shows the approximate work location.

This RSE has been completed by the Department of Energy under authorities delegated by Executive Order 12580 under Section 104 of CERCLA and is consistent with Section 300.410 of the National Oil and Hazardous Substance Pollution Contingency Plan (NCP). This RSE addresses the improvements to the drainage system near the Southwest Office Trailer Complex. This RSE has been completed to support the decision as to whether the project conditions warrant a removal Action.

2.0 SOURCE TERM

Previous surveys (attachment I) and samples from this area of the FEMP have indicated that low levels (slightly above background) of radioactive contamination may be present at the Southwest Office Trailer 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 SSOP-0044 which was written 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.

3.0 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 Southwest Office Trailers Drainage.

- 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, 50 pCi/g Thorium, or 5 pCi/g Radon as specified in Removal Action 17.
- Physical barriers will be positioned around the work area to prevent unauthorized access.
- Protective clothing and respiratory protection will be provided for workers, as required.
- Plastic tarpaulins and bags and appropriate containers will be readily available to contain radiologically contaminated materials, as required.
- Runoff controls will be established, as required.

While these controls will be implemented as required, no contaminated 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.

4.0 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.

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5.6 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.

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Attachment I

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