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**REMOVAL SITE EVALUATION TEMPORARY
PARKING LOT EXPANSION**

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RESEARCH**

REMOVAL SITE EVALUATION

TEMPORARY PARKING LOT EXPANSION

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

U. S. DEPARTMENT OF ENERGY

March, 1993

REMOVAL SITE EVALUATION TEMPORARY PARKING LOT EXPANSION

INTRODUCTION

The Temporary Parking Lot Expansion will be used to provide additional parking for construction vehicles and overflow from the paved parking lot. The Temporary Parking Lot Expansion is to be located in the uncontrolled area of the site, south of Building 68 and west of the TACOS trailers.

On any given day at the FEMP, approximately 350 cars are parked illegally in the site parking lots. Additional parking space is necessary to relieve this unsafe condition. The Temporary Parking Lot Expansion, in conjunction with the movement of people off site, will relieve the situation for a time. However, the Temporary Parking Lot Expansion is only Phase I of the solution. Increases in construction subcontractors and FERMCO employees in the future will again require additional parking areas. The temporary parking lot will be used primarily for construction vehicles and will provide the minimum requirements. The parking lot will be made of gravel and will use existing drainage and lighting in the area. Clearance will be provided for semi-trucks to travel through the lot to Building 51 during construction of the Advanced Waste Water Treatment facility.

This Removal Site Evaluation (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 construction of the temporary parking lot which requires leveling the area and placing approximately 6 inches of gravel. This RSE has been completed to support the decision as to whether the project conditions warrant a removal action.

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 temporary parking lot 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 do not reveal any known use of hazardous chemicals within the project area.

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 new parking lot.

- 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.
- 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 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.

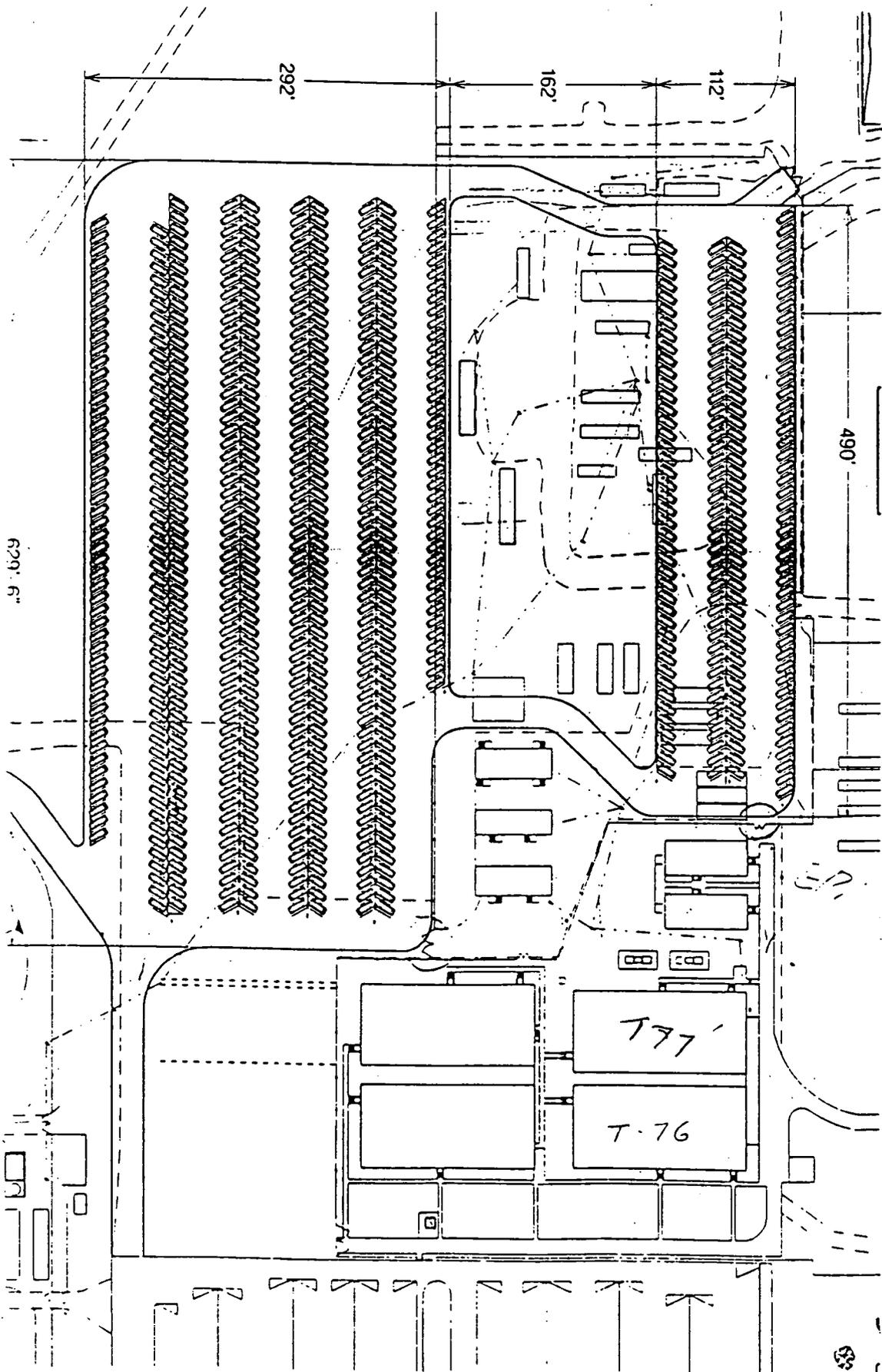
Phase I of Removal Action 17 requires placement on and covering of contaminated soils with a heavy, nonpermeable tarpaulin. The tarpaulins will prevent the spread or release of contamination and resultant exposure to humans, animals or the food chain.

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.

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629' 6"

490'

292'

162'

112'

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