

5354

**REMOVAL SITE EVALUATION RAILROAD
REPAIRS REF: 5353**

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REMOVAL SITE EVALUATION
RAILROAD REPAIRS

INTRODUCTION

The Railroad Repairs project will provide repairs to the various site railroad lines and spurs (Attachment 1). Repairs also will be made to the bridge over Paddy's Run Creek (Attachment 2). These repairs include replacing deteriorated railroad ties, broken tie plates, and rail bolts.

The waste to be generated by these repairs consists of approximately 100 cubic feet of metal and 20,000 cubic feet of wood ties.

This Removal Site Evaluation (RSE) has been completed by the Department of Energy (DOE) 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 Control Contingency Plan (NCP). This RSE addresses the existing conditions and the activities proposed to repair the railroad. This RSE has been completed to support the decision as to whether these conditions warrant a removal action. Controls implemented to support this construction activity are also presented in this RSE to demonstrate that the proposed construction will not cause deterioration of the existing site conditions.

SOURCE TERM

Consistent with 40 CFR 300.410(a), this RSE includes a removal preliminary assessment, which is based upon readily available information as described in 40 CFR 300.410(c).

Radiological surveys and samples taken from the tracks west of Building 61 at the FEMP have indicated all results below the Minimum Detectable Activity (MDA) as noted in the attached survey (Attachment 3). Previous samples and surveys from other projects at the FEMP have indicated that low levels (slightly above background) of radioactive contamination may be present. 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.

Based on initial sampling results for Material Evaluation Form # 2209 - *Site Railroad Ties* and from HWMU projects such as the HF Tank Car, RCRA regulated metals and organics have not been detected above regulatory limits near the railroad repair project sites. These limits were established to be protective of human health, safety and the environment. Based on this information and process knowledge, the threat from RCRA regulated metals and organics is negligible. Regardless, all soil will be handled in accordance with Removal Action 17, "Improved Storage of Soil and Debris."

EVALUATION OF THE MAGNITUDE OF THE POTENTIAL THREAT

To manage the hazards and prevent the spread of radioactive contamination that may be present, this project will be controlled by Site Standard Operating Procedure SSOP-0044 *Management of Soil, Debris, and Waste From a Project* developed from the approved work plan for Removal Action 17 *Improved Storage of Soil and Debris*. The following controls, among others, will be implemented during repairs to the rail line.

- Excess soil from this project will be stockpiled according to Removal Action 17 criteria. Soil containing greater than 100 pCi/g total uranium will be separated from the less contaminated soils and placed in an appropriate stockpile. Segregation will be confirmed by radiological monitoring. 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.

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 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.

As discussed earlier, the threat from and potential of a release or migration of uranium from this project site is low. Thus, while the above criteria can be applied to the Railroad Repairs 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 maintenance activity 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.