DECISION DOCUMENT FOR INTERIM REMEDIAL ACTION AT SWMU FST 13, THE FIRE TRAINING AREA, FORT STEWART, GA

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DOCUMENT 4

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PURPOSE OF INTERIM REMEDIAL ACTION

This decision document describes the selected interim remedial action for the Fire Training Area (FST-13) at Fort Stewart, Georgia.

The Fire Training Area is located on the northwestern side of Wright Army Airfield and was used until 1991 to train firefighters in a live fire situation. Training sessions took place approximately eight times per year, and fuel for the training fires was supplied from an aboveground storage tank. Approximately 300 to 500 gallons of waste oil, solvents, and waste fuels (AVGAS and JP-4) were used per session. The fire training area consists of a 5,000 square foot concrete pad, bermed on all sides. The concrete pad contains POL contaminated soil, and soil on the south side of the pit is visibly stained from overflow resulting from training activities. The concrete pad is cracked in several locations which has resulted in soil contamination beneath the pad. Reports completed in 1990, 1993, and 1995, indicate that the training area has been impacted by past activities. The reports concluded that the soil at the site poses a risk to human health through inhalation and/or ingestion. Based on these findings, an interim remedial action is required and necessary as outlined in this decision document.

The interim remedial action involves excavation and removal of contaminated soil from the source area and disposing of this soil in an approved State disposal facility. Specifically, the contaminated soil will be taken to an asphalt plant where the soil will be incinerated and reused in the asphalt process. Also, further groundwater monitoring and investigation will be conducted for a period of five (5) years to determine if further actions are required to address possible groundwater contamination.

This decision document was developed by the Department of Pubic Works at Fort Stewart, with support form the U.S. Army Corps of Engineers.

SUMMARY OF SITE RISK

A quantitative risk evaluation has not been completed for the site, however, the analytical results from the three investigations has been reviewed and a qualitative risk evaluation completed. Potential risks to human health and the environment do exist, based on the constituents detected during investigation activities, for both soil and groundwater. The risk of exposure to subsurface soils is dependent upon the disturbance and contact with those soils. Metals (lead, barium,

chromium, arsenic, and selenium, methylene chloride, and toluene were detected at significant concentrations in on-site soils. Metals(barium, chromium, arsenic, and selenium), naphthalene, benzene, ethylbenzene, and xylene were detected in the groundwater samples. Under the installation's RCRA Part B permit, this site must be remediated to maximum contaminant levels (MCLs) or site specific background levels, which ever are higher. Therefore, under State of Georgia regulations, the site must be remediated to 5 ppm of benzene in the soil. The remedial design has been prepared to meet all State of Georgia requirements.

SUMMARY OF REMEDIAL ALTERNATIVES

Based on the previous studies, to include field work conducted for development of the removal design, the options considered for interim remedial action alternatives for the treatment of the soil and clean-up of the source area are as follows:

	DESCRIPTION	COST
1.	No action	$0
2.	Source Removal-Excavate and Offsite Disposal	$400,000

Alternative number 1 does not satisfy the requirements of corrective action under the installation's Subpart B permit. This alternative would not remove the source of contamination and would not allow for the site to be remediated to 5 mg/kg of benzene in the soil. Instead, the potential for further impact on the groundwater at the site is increased if the source is not removed. In addition, the risk to human health and the environment is not considered by this alternative.

Alternative number 2 would entail removal and disposal of the contaminated soil in an approved State disposal facility. This alternative would allow the contaminated soil to be reused once it has been incinerated, and would reduce the risk of future contamination at the site. Alternative #2 would provide the best balance of reducing both the potential of further contamination at the site and/or remediation, and will ultimately minimize costs and liability. Alternative #2 will also significantly reduce the risk of human exposure from soil (ie. ingestion and/or inhalation). The current cost of this alternative is $400,000.

DECLARATION

The selected remedy is protective of human health and the environment, attains Federal and State requirements that are applicable or relevant and appropriate to this interim remedial action, and is cost-effective. This remedy satisfies the statutory preference for remedies that employ treatment to reduce the mobility of toxic material as a principal element.

Due to the fact that the selected course of action is a source removal, and further remedial action may be required to address groundwater contamination, the five-year review will not apply to this interim remedial action. The chosen course of action is consistent with any future remedies needed to address possible groundwater contamination at this site.

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