DECISION DOCUMENT FOR INTERIM REMEDIAL ACTION AT
PUMP HOUSES #1, #2, AND #6
HUNTER ARMY AIRFIELD, GEORGIA

PURPOSE OF INTERIM REMEDIAL ACTION

This decision document describes the selected interim remedial action for Pump Houses #1, #2, and #6 (HAA-13) at Hunter Army Airfield, Georgia.

Pump Houses #1, #2, and #6 are located on the north side of Hunter Army Airfield and were used until 1970 as storage facilities for Aviation Gas, which was used to fuel aircraft from the 1950s to the early 1970s.

A separate Corrective Action Plan (CAP)-Part A has been prepared for each Pumphouse and indicates varying levels of soil and groundwater contamination. At Pumphouse #1, concentrations of some volatile and semivolatile hydrocarbons in the soil exceed soil threshold levels listed in State of Georgia Underground Storage Tank (GUST) Rule 391-3-15-.09. Concentrations of benzene in groundwater samples exceed both State Instream Water Quality Standards (IWQS) and Maximum Contaminant Levels (MCLs). Surface water samples contained volatile hydrocarbons at concentrations below State IWQS. Sediment samples exceeded the soil threshold levels for Polynuclear Aromatic Hydrocarbons (PAHs). At Pumphouse #2, free product was found to exist in one permanent monitoring well. In addition, soil contamination was found to be confined to the Pumphouse #2 area and concentrations of organic contaminants in groundwater samples exceed State regulatory action levels. At Pumphouse #6, concentrations of volatiles and semivolatiles did not exceed soil threshold limits, and the concentrations of organic contaminants in the groundwater and surface water samples did not exceed State IWQS.

The field work for the individual CAP-Part Bs has been completed and final reports are pending publication at the time of this document. Based on the overall findings of the investigations, an interim remedial action is required and necessary as outlined in this decision document.

In addition, under the December 22, 1997 UST upgrade or removal requirements, the Installation views the interim remedial action as a positive step in furthering partnering with the Georgia Environmental Protection Division (GA EPD). Although, these USTs are technically deferred from the upgrade/removal requirements of 40 CFR 280 due to the fact that they were part of an airport fuel hydrant system, fabricated on-site, and taken out of service prior to January 1971, the Installation is required to remediate the sites since contamination has been confirmed.

The interim remedial action involves excavation and removal of 16 USTs (10 each 50,000 gallon USTs at Pumphouse #6, 2 each 25,000 gallon USTs at Pumphouse #1, 2 each 25,000 gallon USTs at Pumphouse #2, and two 50,000 gallon defuel USTs located along the flightline); removing a limited quantity of contaminated soil from the source areas (i.e., minimal soil removal required at each Pumphouse to physically excavate the USTs); closure in-place of the associated pipelines; and disposing of contaminated soil utilizing a recycling process. Also, further groundwater monitoring and investigation will be conducted for a minimum period of two (2) years to determine if further actions are required to address groundwater contamination.

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

SUMMARY OF SITE RISK

A quantitative risk evaluation has not been completed for the site(s), however, the analytical results from the CAP-Part A and Part B investigations have 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. The highest concentrations of benzene contamination at each Pumphouse, per individual sampling media, are listed below:

Pumphouse #1:	Benzene in Groundwater: 1100 ppb
	Total BTEX in groundwater: 33,400 ppb
	Benzene in soil 1 ppm
	Benzene in surface water 19 ppb
	Benzene in sediment <0.62 ppm
Pumphouse #2:	Benzene in Groundwater: 2400 ppb
	Total BTEX in groundwater: 6710 ppb
	Benzene in soil 5.2 ppm
	Benzene in surface water 27.8 ppb
	Benzene in sediment : All samples BDL
	Free product in one monitoring well
Pumphouse #6:	Benzene in Groundwater: 3.6 ppb
	Total BTEX in groundwater: 380.6 ppb
	Benzene in soil <4.9 ppm
	Benzene in surface water 1.1 ppb
	Benzene in sediment: All samples BDL

Therefore, under State of Georgia regulations, the site must be remediated to the following standards in accordance with GUST Rules, Chapter 391-3-15: 0.008 mg/kg benzene in the soil and State IWQS for groundwater, as approved by GA EPD (i.e., GA EPD has approved IWQS as the ARAR for groundwater remediation in lieu

of the standard MCL ARAR). The remedial design has been prepared to achieve removal of the potential sources of contamination and meet the December 22, 1998 UST upgrade/removal requirements in 40 CFR 280. The design was prepared to minimize soil excavation (i.e., remove only the soil volume required to excavate the USTs) and confirm benzene concentrations two feet below each UST with a confirmatory soil sample. Based on the investigations conducted to date, this approach will allow the soil threshold level for benzene to be achieved at Pumphouse #6. The groundwater contamination at these sites is not addressed under this specific interim remedial action, but will be addressed at a later date.

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 remaining USTs and Dispose of USTs and contaminated soil offsite/Close in-place feedline	$1,600,000

Alternative number 1 does not satisfy the requirements of 40 CFR 280, nor does it address the fact that unused USTs remain in the ground. This alternative would not remove the source of contamination (i.e., the USTs). Instead, the potential for further impact on the groundwater at the site is increased if the source(s) 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 16 remaining USTs at the three pump houses, removal of contaminated soil in the vicinity of the USTs (no overexcavation will be conducted), and close in-place the pipeline to each of the pump-houses. This alternative eliminates the source of future releases, removes additional contaminated soil, and closes the pipeline which was used to supply fuel to the three pump houses. Alternative #2 would provide the best balance of reducing the potential for contamination migration and additional exposure, and ultimately minimize costs and future 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 $1,600,000.

DECLARATION

The selected remedy is protective of human health and the environment, attains the substantive 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 the groundwater contamination at this site.