
**DATA QUALITY OBJECTIVES
RUNWAY STOCKPILES
CHARACTERIZATION
HAMILTON ARMY AIRFIELD
NOVATO, CALIFORNIA**

Final Submittal

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1.0 INTRODUCTION

To generate data that will meet the project objectives, it is necessary to define the decisions that will be made, identify the intended use of the data, and design a data collection program. Data Quality Objectives (DQOs) are an integrated set of thought processes, which define data quality requirements based on the intended use of the data. This includes any type of information utilized to form the sampling strategy or achieve the objective, not just analytical data. The DQO process will assist in determining the appropriate sampling design, detection and quantitation limits, analytical methods, and sample handling procedures.

This sampling effort is designed to provide the RWQCB with the data necessary to determine if soil in the existing stockpiles at Hamilton Army Airfield must be removed from the site, if the soils may be used on-site with restrictions, or if the soil in each stockpile may be used unrestricted in the future wetlands area. Historical data from these stockpiles exists and will be used to determine what additional analyses must be performed. In particular, the vast majority of stockpiles have not been analyzed for metals and organochlorine pesticides.

2.0 DQO Steps

The seven steps of the DQO process are presented below.

2.1 State the Problem

Stockpiles of soil from previous remedial activities at HAAF remain throughout the inboard area. Much of the inboard area is planned for a future wetland and any soil remaining at this location must be protective of species anticipated to occupy the wetland. The construction of the wetland will require more soil than exists in-situ in the inboard area and the future owner may wish to use soil from these stockpiles to help make up part of the soil requirement needed to construct the wetlands. However, the available data from these stockpiles is not sufficient to determine if the soil may pose a risk to the wetland species if used unrestricted on-site. The data may also be used for waste characterization purposes for off-site disposal.

2.2 Identify the Decision

The primary decision is to determine if the soil from the stockpiles may be left on-site and reused in the wetlands construction or if it must be removed from the site. A secondary consideration is to determine if the soil from individual stockpiles that can be reused on-site will require cover.

2.3 Identify the Inputs to the Decision

The following information will be used to make the decision regarding the need for off-site disposal.

Information Required	Location of Information	Activity to Provide Information
Historical stockpile data, locations, and sources	HAAF Soil Stockpile Disposition Report (IT 1999) and EKI report (EKI 2003)	None
Action goals for inboard area	HAAF Final ROD/RAP (CH2MHill 2003)	None
Regulatory Guidance for sample quantity	RWQCB Guidance (RWQCB 2002)	None
Metals and organochlorine pesticides not available in historical dataset	To be collected as part of this sampling effort	Collect soil samples representative of stockpiles and analyze for metals and organochlorine pesticides
Constituent concentrations applicable to source of stockpile for piles without data	To be collected as part of this sampling effort	Collect soil samples representative of stockpiles without data and analyze for appropriate constituents
Current concentrations of various other constituents (TPH-E, TPH-P, PNAs, TCE and breakdown products) to verify degradation and/or volatilization	To be collected as part of this sampling effort	Collect soil samples from isolated stockpiles representative of previous concentration ranges for constituents previously above action goals, but likely to have undergone degradation and/or volatilization

2.4 Define the Boundaries

Spatial Boundaries: The physical boundary of the sampling area is the inboard area. The approximate boundary of each stockpile is depicted in Figure 1-2 of the Work Plan.

Temporal Boundaries: The majority of the sampling must take place before the end of Fiscal Year (FY) 2003 due to expiring funds.

2.5 Develop Decision Rule(s)

The RWQCB will be using these data to determine the disposition of the stockpiles. In this process it is anticipated that the RWQCB will use the Record of Decision/Remedial Action Plan (ROD/RAP) Inboard Area Action Goals (CH2MHill) as a reference.

2.6 Consequences of Decision Errors

The decision errors inherent in selecting sampling locations and analyzing chemicals consist of potential errors in sample design, location, heterogeneity, and sample analysis. Any decision errors due to analytical non-conformance will be evaluated during the data review, evaluation and validation process. Data found outside of acceptance criteria during validation will be qualified as estimated or rejected, as appropriate. The nature of the deficiency and the proximity to the associated action level and other quality control measures, such as field duplicates, will be used to assess the usability of the data. Adherence to quality control protocols should reduce the probability of decision errors.

Sample quantity was calculated using the Regional Water Quality Control Board document *Characterization & Reuse of Petroleum Hydrocarbon Impacted Soil as Inert Waste, June 2003 Final*. Composite samples will provide the most representative data for the stockpile(s) for the following reasons: 1) many of these stockpiles have been moved from the original stockpiled areas (near the excavations) and consolidated, thereby increasing the homogeneity of the constituents throughout the stockpile and 2) hotspots are not a concern because any hotspots that may remain in a stockpile currently will be eliminated during the movement, spreading, and consolidation of the soil. Stockpile sets for each composite sample were selected based upon previous data, physical location, and quantity of soil in each stockpile. Once these stockpile sets were determined, each actual sample location within the stockpiles is selected randomly; however, sample depth was selected as 2 feet below the surface of the pile to ensure that surface soil, which may have undergone changes due to exposure to the atmosphere, is not considered representative of the stockpile. Samples will be collected just above the base of the stockpile for those that are not 2 feet high. For all samples, the assumption is that the sampling locations and numbers of samples will be sufficient to meet the objective.

Null Hypothesis: There are no constituents greater than the criteria.

False Rejection Error and Consequences: The data indicate that at least one constituent is greater than the associated criteria (high bias). Restrictions may be placed on the use of the stockpile(s) or they may be required to be transported off-site, at unnecessary cost.

False Acceptance Error and Consequences: The data indicate that no constituents exceed the criteria (false negative or low bias) and the stockpile would remain onsite for future use. Contamination would be left in the future wetland area and could adversely affect the species that inhabit the wetland area. The tolerance for the false acceptance error is extremely low, so any potential for false negatives would be scrutinized during data validation.

2.7 Optimize the Sampling Design

The sampling designs for the stockpile sampling are listed below along with the applicable parameters. More detailed information regarding each stockpile can be found in the attached tables, entitled “Hamilton Army Airfield BRAC and GSA Stockpiled Soil Summary, Composite Sample Stockpile Sets.” Anticipated accuracy and precision parameters and compound-specific quantitation limits (QLs) are listed in the Quality Assurance Project Plan (QAPP).

<u>Stockpile Set</u>	<u>Estimated Volume (cy)</u>	<u>Sampling Design</u>	<u>Number of Samples</u>	<u>Constituents/ Analytical Method(s)</u>	<u>Rationale</u>
1	17,000 cubic yards (cy)	4-point composite sampling at least 2 feet beneath surface of pile, if possible	11	Organochlorine Pesticides/SW8081A Metals/SW6010B, SW7471	All BRAC A5 stockpiles. Data gap for constituents detected at Stockpiles C3. All historical data are below action goals except the following: Stockpile A5-12 with at least 1 sample with PNAs, barium, and lead above action goals. See A5-4 and A5-12 resampling below.
2	13,000	4-point composite sampling at least 2 feet beneath surface of pile, if possible	11	Organochlorine Pesticides/SW8081A Metals/SW6010B, SW7471	All BRAC A-5 washrack and A-6 stockpiles. Data gap for constituents detected at Stockpiles C3. All historical data are below action goals except PNAs at BRAC -2. See BRAC-2 resampling below.
3	400	4-point composite sampling at least 2 feet beneath surface of pile, if possible	1	Organochlorine Pesticides/SW8081A, PNAs/SW8270C, TPH-E/SW8015B	On-site Fuel Line from hangar segment. Data gap for pesticides detected at Stockpiles C3. Metals already analyzed. All historical data are below action goals except motor oil and PNAs. Resample for these constituents to monitor biodegradation.
4	4,400	4-point composite sampling at least 2 feet beneath surface of pile, if possible	4	Organochlorine Pesticides/SW8081A Metals/SW6010B, SW7471	All from Group A3. Data gap for constituents detected at Stockpiles C3. All historical data are below action goals except one low-level petroleum hydrocarbon result.

<u>Stockpile Set</u>	<u>Estimated Volume (cy)</u>	<u>Sampling Design</u>	<u>Number of Samples</u>	<u>Constituents/ Analytical Method(s)</u>	<u>Rationale</u>
5	500	4-point composite sampling at least 2 feet beneath surface of pile, if possible	1	Organochlorine Pesticides/SW8081A Metals/SW6010B, SW7471	All from Group D3. Data gaps for constituents detected at Stockpiles C3. All historical data are below action goals except TPH-P and TPH-E. See D3 resampling below.
6	2,000	4-point composite sampling at least 2 feet beneath surface of pile, if possible	2	Organochlorine Pesticides/SW8081A Metals/SW6010B, SW7471	All from Group E3. Data gaps for constituents detected at Stockpiles C3. All historical data are below action goals.
7	6,000	4-point composite sampling at least 2 feet beneath surface of pile, if possible; discrete samples for TPH-P analysis at least 2 feet beneath surface of pile, if possible.	6	Organochlorine Pesticides/SW8081A Metals/SW6010B, SW7471, TPH-P/8015B, TPH-E/SW8015B, PNAs/ SW8270C	Groups F3, G3, and H3. No historical data found. Analyze for all chemicals of concern.
8	4,000	4-point composite sampling at least 2 feet beneath surface of pile, if possible.	3	Organochlorine Pesticides/SW8081A Metals/SW6010B, SW7471	Consolidated biocells. Fill data gaps for constituents detected at Stockpiles C3. All historical data are below action goals, except 1 sample for TPH-E.
9	9,500	4-point composite sampling at least 2 feet beneath surface of pile, if possible	9	Organochlorine Pesticides/SW8081A Metals/SW6010B, SW7471	Miscellaneous GSA stockpiles. Fill data gaps for constituents detected at Stockpiles C3. All historical data are below action goals except 4 piles with TPH-P and 1 pile with TPH-E above action goals. See R29C1, RCI R1C1, and RCI R1C2 resampling below.
10	3,000	4-point composite sampling at least 2 feet beneath surface of pile, if possible	2	Organochlorine Pesticides/SW8081A Metals/SW6010B, SW7471	Group C1. Fill data gaps for constituents detected at Stockpiles C3. All historical data are below action goals.
11	5,500	4-point composite sampling at least 2 feet beneath surface of pile, if possible	5	Organochlorine Pesticides/SW8081A Metals/SW6010B, SW7471	Group D1. Fill data gaps for constituents detected at Stockpiles C3. Historical data are below action goals except 1 pile for TPH-E and PAHs and 1 separate pile for TPH-P. See Group D1 and C12P15 resampling below.

<u>Stockpile Set</u>	<u>Estimated Volume (cy)</u>	<u>Sampling Design</u>	<u>Number of Samples</u>	<u>Constituents/ Analytical Method(s)</u>	<u>Rationale</u>
12	1,500	4-point composite sampling at least 2 feet beneath surface of pile, if possible	1	Organochlorine Pesticides/SW8081A Metals/SW6010B, SW7471,	GSA C4P5 from under Building 345. Fill data gaps for constituents detected at Stockpiles C3. Historical data are below action goals except TPH-P and TPH-E. See below for C4P5 resampling.
13	7,000	4-point composite sampling at least 2 feet beneath surface of pile, if possible	7	Organochlorine Pesticides/SW8081A Metals/SW6010B, SW7471	GSA piles A2, B2, C2, and D2. Fill data gaps for constituents detected at Stockpiles C3. Historical data are below action goals. Three of the 4 piles contained TCE and breakdown products.
14	14,000	4-point composite sampling at least 2 feet beneath surface of pile, if possible	12	Organochlorine Pesticides/SW8081A Metals/SW6010B, SW7471	GSA miscellaneous piles. Fill data gaps for constituents detected at Stockpiles C3. Historical data are below action goals except 2 piles with PAHs, 3 piles with TPH-E, 1 pile with TPH-P above action goals. See Rows 5&6 and Rows 12&13 resampling below. 7 piles contained TCE and/or breakdown products.
15	1,500	4-point composite sampling at least 2 feet beneath surface of pile, if possible	1	Organochlorine Pesticides/SW8081A Metals/SW6010B, SW7471	LTTD and Building 99 piles. Fill data gaps for constituents detected at Stockpiles C3. Historical data are below action goals. LTTD soil had low level 1,2-DCE, assumed volatilized since sampled in 1996.
TOTAL VOLUME	90,800	TOTAL NUMBER COMPOSITE SAMPLES	78		
REANALYSES FOR INDIVIDUAL PILES					
D3	500	1 discrete sample at least 2 feet beneath surface of pile, if possible	1	TPH-P/SW8015B	Resample to monitor biodegradation of TPH-P concentration for all stockpiles with previous concentrations between action goal and 50 mg/kg in 1995.
RCI R1C2	500	1 discrete sample at least 2 feet beneath surface of pile, if possible	1	TPH-P/SW8015B	Resample to monitor biodegradation of TPH-P concentration for all stockpiles with previous concentrations between action goal and 50 mg/kg in 1995.

<u>Stockpile Set</u>	<u>Estimated Volume (cy)</u>	<u>Sampling Design</u>	<u>Number of Samples</u>	<u>Constituents/ Analytical Method(s)</u>	<u>Rationale</u>
RCI R1C1	300	1 discrete sample at least 2 feet beneath surface of pile, if possible	1	TPH-P/SW8015B	Resample to monitor biodegradation of TPH-P concentration for all stockpiles with previous concentrations between 50 mg/kg and 500 mg/kg in 1997.
C12P15	500	1 discrete sample at least 2 feet beneath surface of pile, if possible	1	TPH-P/SW8015B	Resample to monitor biodegradation of TPH-P concentration for all stockpiles with previous concentrations greater than 500 mg/kg in 1996.
C4P5	1,500	1 discrete sample/ 500 cy at least 2 feet beneath surface of pile, if possible	3	TPH-P/SW8015B	Resample to monitor biodegradation of TPH-P concentration for all stockpiles with previous concentrations greater than 500 mg/kg in 1996.
A5-4	1,000	1 composite sample/ 500 cy at least 2 feet beneath surface of pile, if possible	2	TPH-E/SW8015B	Resample pile to monitor biodegradation of TPH-E concentration for all stockpiles with previous concentrations between action goal and 500 mg/kg in 1997.
R29C1-5, - 27	300	1 composite sample/ 500 cy at least 2 feet beneath surface of pile, if possible	1	TPH-E/SW8015B	Resample pile to monitor biodegradation of TPH-E concentration for all stockpiles with previous concentrations between 500 mg/kg and 1,000 mg/kg in 1995.
A5-12	2,500	1 composite sample/ 500 cy at least 2 feet beneath surface of pile, if possible	5	PNAs/SW8270C	Resample pile to monitor biodegradation of sum of PNA concentrations above action goal.
BRAC-2	1,000	1 composite sample/ 500 cy at least 2 feet beneath surface of pile, if possible	2	PNAs/SW8270C	Resample pile to monitor biodegradation of sum of PNA concentrations above action goal.
Group D1	4,000	1 composite sample/ 500 cy at least 2 feet beneath surface of pile, if possible	8	PNAs/SW8270C	Resample pile to monitor biodegradation of sum of PNA concentrations above action goal.
Rows 5 & 6	1,000	1 composite sample/ 500 cy at least 2 feet beneath surface of pile, if possible	2	PNAs/SW8270C	Resample pile to monitor biodegradation of sum of PNA concentrations above action goal.
Rows 12 & 13	1,000	1 composite sample/ 500 cy at least 2 feet beneath surface of pile, if possible	2	PNAs/SW8270C	Resample pile to monitor biodegradation of sum of PNA concentrations above action goal.

<u>Stockpile Set</u>	<u>Estimated Volume (cy)</u>	<u>Sampling Design</u>	<u>Number of Samples</u>	<u>Constituents/ Analytical Method(s)</u>	<u>Rationale</u>
B99 overburden	788	1 composite sample (discrete for TPH-P) at least 2 feet beneath surface of pile, if possible	1	TPH-P/SW8015B TPH-E/SW8015B PNAs/SW8270C	Sample for these constituents because pile never sampled before
Rows 40/41/42 Group C4	2,000	1 discrete sample/ 500 cy at least 2 feet beneath surface of pile, if possible	4	TCE and breakdown products/SW8260B	Resample pile to monitor degradation/volatilization of TCE and breakdown products
Row 45/46, Group D4	1,000	1 discrete sample/ 500 cy at least 2 feet beneath surface of pile, if possible	2	TCE and breakdown products/SW8260B	Resample pile to monitor degradation/volatilization of TCE and breakdown products
Group A2, Rows 7,10,11	1,500	1 discrete sample/ 500 cy at least 2 feet beneath surface of pile, if possible	3	TCE and breakdown products/SW8260B	Resample pile to monitor degradation/volatilization of TCE and breakdown products
Group B2, Rows 14-16	1,000	1 discrete sample/ 500 cy at least 2 feet beneath surface of pile, if possible	2	TCE and breakdown products/SW8260B	Resample pile to monitor degradation/volatilization of TCE and breakdown products
Group D2, Rows 37-39	1,500	1 discrete sample/ 500 cy at least 2 feet beneath surface of pile, if possible	3	TCE and breakdown products/SW8260B	Resample pile to monitor degradation/volatilization of TCE and breakdown products
Row 32	500	1 discrete sample/ 500 cy at least 2 feet beneath surface of pile, if possible	1	TCE and breakdown products/SW8260B	Resample pile to monitor degradation/volatilization of TCE and breakdown products
Row 34	500	1 discrete sample/ 500 cy at least 2 feet beneath surface of pile, if possible	1	TCE and breakdown products/SW8260B	Resample pile to monitor degradation/volatilization of TCE and breakdown products
Rows 35&36	1,000	1 discrete sample/ 500 cy at least 2 feet beneath surface of pile, if possible	2	TCE and breakdown products/SW8260B	Resample pile to monitor degradation/volatilization of TCE and breakdown products
Rows 43&44	1,000	1 discrete sample/ 500 cy at least 2 feet beneath surface of pile, if possible	2	TCE and breakdown products/SW8260B	Resample pile to monitor degradation/volatilization of TCE and breakdown products
Rows 47&48	1,000	1 discrete sample/ 500 cy at least 2 feet beneath surface of pile, if possible	2	TCE and breakdown products/SW8260B	Resample pile to monitor degradation/volatilization of TCE and breakdown products

<u>Stockpile Set</u>	<u>Estimated Volume (cy)</u>	<u>Sampling Design</u>	<u>Number of Samples</u>	<u>Constituents/ Analytical Method(s)</u>	<u>Rationale</u>
Rows 49&50	1,000	1 discrete sample/ 500 cy at least 2 feet beneath surface of pile, if possible	2	TCE and breakdown products/SW8260B	Resample pile to monitor degradation/volatilization of TCE and breakdown products
Rows 56&57	1,000	1 discrete sample/ 500 cy at least 2 feet beneath surface of pile, if possible	2	TCE and breakdown products/SW8260B	Resample pile to monitor degradation/volatilization of TCE and breakdown products
LTTD1	500	1 discrete sample/ 500 cy at least 2 feet beneath surface of pile, if possible	1	TCE and breakdown products/SW8260B	Resample pile to monitor degradation/volatilization of TCE and breakdown products
TOTAL NUMBER OF INDIVIDUAL STOCKPILE SAMPLES			57		

ATTACHMENT

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Source Location	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanation	Disposition - Comments
Stockpile Set 1: BRAC A5					Metals and Organochlorine Pesticides	
A5-1	Outparcel A5	4,700	TPH, PNAs, VOCs, BTEX	Jun. 24 & Oct. 23, '97	Below Action Goals	Stockpiled on north runway, west of Nina's Lake. Soil from Outparcel A5 excavation. 8 discrete and 6 composite PNA, TPH-E, TPH-MO, and VOC samples collected. All PNAs ND or < comparators. The highest DL was 0.058. All TPH ND or < comparator. All VOC ND. HB-4803 to -4807, HB-4809, HB-5360 to -5367.
A5-2	A5	2,750	TPH, PNAs, VOCs, BTEX	Jun. 25 & Oct 24, '97	Below Action Goals except MO MO = 610 MO = 210	Stockpiled mid runway on south edge west of Nina's Lake. Soil from Outparcel A5 excavation. 8 discrete and 3 composite PNA, TPH-E, TPH-MO, and VOC samples collected. All PNAs ND or < comparators. The highest DL was 0.038. All TPH ND or < comparator except two MO > 144 ppm . All VOC ND. HB-4810 to -4812, HB-5368 to -5375.
A5-3	A5	4,800	TPH, PNAs, VOCs, BTEX	Jun. 26 & Oct 27, '97	Below Action Goals	Stockpiled perpendicular to upper middle runway. Located near west corner of Nina's Lake. Soil from Outparcel A5 excavation. 7 discrete and 6 composite PNA, TPH-E, TPH-MO, and VOC samples collected. All PNAs ND or < comparators. The highest DL was 0.051. All TPH ND or < comparator. All VOC ND. HB-4813, -4815, -4819, HB-5376, -5377, HB-5379 to -5383.
A5-4	A5	936	TPH, PNAs, VOCs, BTEX	Jun. 26 & Oct 27, '97	Below Action Goals except MO MO = 300, 270, 210, 330	Stockpiled on upper mid runway at intersection of old and new runways. Soil from Outparcel A5 excavation. 8 discrete and 1 composite PNA, TPH-E, TPH-MO, and VOC samples collected. All PNAs ND or < comparators. The highest DL was 0.044. All TPH ND or < comparator except four MO > 144 ppm . All VOC ND. HB-4820, HB-5384 to -5391.
A5-5 In two stockpiles	A5	1,960	TPH, PNAs, VOCs, BTEX	Jun. 27 & Oct 28, '97	Below Action Goals	Stockpiled on upper mid runway at intersection of old and new runways. Soil from Outparcel A5 excavation. 8 discrete and 2 composite PNA, TPH-E, TPH-MO, and VOC samples collected. All PNAs ND or < comparators. The highest DL was 0.05. All

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Source Location	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanation	Disposition - Comments
						TPH ND or < comparator. All VOC ND. HB-5392, HB-5394 to -5400, HB-4822, -4823.
A5-6	A5	370	TPH, PNAs, VOCs, BTEX	Jun. 27 & Oct 28, '97	Below Action Goals	Located at upper south apron east from former Bldg. 86. Soil from Outparcel A5 excavation. 2 PNA, TPH-E, TPH-MO, and VOC samples and one 4-point composite sample collected. PNAs ND or < comparators. The highest DL was 0.042. All TPH ND or < comparator. All VOC ND. HB-5358, HB-5359.
A5-7	A5	130	TPH, PNAs, VOCs, BTEX	Jun. 27 & Oct 28, '97	Below Action Goals	Located at mid south apron east from former Bldg. 86. Soil from Outparcel A5 excavation. 2 PNA, TPH-E, TPH-MO, and VOC samples and one 4-point composite sample collected. PNAs ND or < comparators. The highest DL was 0.037. All TPH ND or < comparator. All VOC ND. HB-5401, HB-5402.
A5-8	A5	400	TPH, PNAs, VOCs, BTEX	Jun. 27 & Oct 28, '97	Below Action Goals	Located adjacent to north end of Group C3 west stockpile, on south apron Soil from Outparcel A5 excavation. 2 PNA, TPH-E, TPH-MO, and VOC samples and one 4-point composite sample collected. PNAs ND or < comparators. The highest DL was 0.039. All TPH ND. All VOC ND. HB-4824, HB-5403 to -5404.
A5-10	A5	120	TPH, PNAs, VOCs, BTEX	Jun. 27 & Oct 28, '97	Below Action Goals	Located at upper south apron, northwest of Group C3 west stockpile. Soil from Outparcel A5 excavation. 2 PNA, TPH-E, TPH-MO, and VOC samples and one 4-point composite sample collected. PNAs ND or < comparators. The highest DL was 0.036. All TPH ND All VOC ND. HB-5405 to -5406.
A5-12	A5	670	TPH, PNAs, VOCs, BTEX, METALS	Jun. 27 & Oct 29, '97	All below action goals except PNAs, barium, and lead 3PNAs = 11.1 mg/kg Barium 202 to 1,610 mg/kg Lead 50.4 mg/kg	Located at upper south apron, north of Group C3 west stockpile. Soil from Outparcel A5 excavation. 9 PNA, TPH-E, TPH-MO, and VOC samples collected. PNAs ND or < comparators except sample HB-5409 . All TPH ND or < 144 ppm. All VOC ND. All metals < comparators except for 5 detections of barium above comparators, and one detection of lead . HB-4825, HB-5409 to -5416.

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Source Location	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanation	Disposition - Comments
					(action goal 46.7)	
A5-Bins	A-5	80	TPH, PNAs, VOCs, Pesticides, Metals	Apr. '96	<p>All Below Action Goals except TPH-gas</p> <p>Previous data may or may not pertain to the soil remaining on-site, so composite with other piles from A-5.</p>	<p>Located at lower south apron, northeast of Bldg. 82. Soil from Outparcel A5 excavation. See Technical Memoranda 08, 09, 12, 14, & 16 for analytical results and disposition. 1 - 4-point composite sample collected from each bin. All PNAs ND. TPH-g detected at 18 mg/kg. All metals < comparators. Technical Memorandum (TM) #09 includes analytical data from composite samples that have TPH-G and TPH-D values that range from 2.8 to 3,400 mg/kg TPH-G and from 63 to 1,800 mg/kg for TPH-D. Presumably, some of these values were included in bins that were removed from the facility for class II disposal. However, the composite samples that were subsequently collected from 39 discrete bins were analyzed for PCBs and Pesticides only and did not have TPH analyses. The TM No. 12 indicates the plan was to dump the bins that had no PCBs or pesticides onto the "Below Cleanup Goal" (BCG) stockpile. The 16 bins to be dumped would have contained approximately 590 tons or approximately 450 cy of soil. Although there are only 80 cy, this pile may need sampling.</p>
54-inch Storm Drain Pile	54-inch Storm Drain Pile	440	TPH	NA	Associated data indicate TPH – assume biodegradation since 90s	<p>Located near to the original excavation. At mid runway, northwest end just southeast of Group C1. Text of the stockpile disposition report mentions the excavations then provides no apparent backup documentation regarding characterization. The Figure 5-75 View F in the CRIR confirmation samples from pothole samples near the excavation indicates UPH ranging from ND to 220 mg/kg and TPH-Diesel ranging from ND to 330 mg/kg. Lead detections above the comparators also are indicated in the CRIR. This pile may need to be sampled or correct sample labels identified in report.</p>
TOTAL BRAC A-5 VOLUME		17,356	NO. COMPOSITES PROPOSED		11	

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Source Location	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanation	Disposition - Comments
STOCKPILE SET 2: BRAC A5&A6					Metals, Organochlorine Pesticides	
BRAC-2	A5, WASH RACK	875	TPH, PNAs, VOCs, BTEX	Jun. 30, 1997	Below Action Goals except PNAs. 3PNAs = 10.956 mg/kg	Located on runway at southwest side of Nina's Lake, Soil from Outparcel A5 wash rack excavation. 1 PNA, TPH-E, TPH-MO, and VOC sample collected. Some PNAs ND, other detections > comparators . All TPH-E ND or < the comparator -144 mg/kg. All VOC ND. HB-4829.
BRAC-3	A5, WASH RACK	143	TPH, PNAs, VOCs, BTEX	Jun. 30, 1997	Below Action Goals	Located south of Nina's Lake, Soil from Outparcel A5 wash rack excavation. 1 PNA, TPH-E, TPH-MO, and VOC sample collected. PNAs ND or < comparators. The DL was 0.037. All TPH ND. All VOC ND. HB-4830.
BRAC-4	A5, WASH RACK	460	TPH, PNAs, VOCs, BTEX	Jun. 30, 1997	Below Action Goals	Located south of Nina's Lake, Soil from Outparcel A5 wash rack excavation. 1 PNA, TPH-E, TPH-MO, and VOC sample collected. All PNAs ND. The DL was 0.036. All TPH ND or < 144 mg/kg. All VOC ND. HB-4831.
GROUP A4	A6-6 to A6-7	448	TPH-E, TPH-P, PNAs, VOCs, BTEX	Jul. 1, '97	Below Action Goals	Stockpiled on apron northeast of Bldg. 82. Soil from Outparcel A6 excavation. 2 PNA, TPH-E, TPH-P, BTEX, and VOC samples collected. All PNAs ND or < comparators. The higher DL was 0.038 mg/kg. All TPH ND. All BTEX ND but J flagged for sample A6-6. All VOC ND. HB-4848, HB-4849.
ROWS 26/27, GROUP B4	A6-8 to A6-9	1,187	TPH-E, TPH-P, PNAs, VOCs, BTEX	Jul. 1, '97	Below Action Goals	Stockpiled on-site northeast of the Hangars at upper mid apron. Soil from Outparcel A6 excavation. 2 PNA, TPH-E, TPH-P, BTEX, and VOC samples collected. PNAs ND. The higher DL was 0.053 mg/kg. All TPH ND but A6-9 results J flagged. All BTEX ND but A6-8 results J flagged. All VOC ND but A6-9 results J flagged. HB-4850, HB-4851.

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Source Location	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanation	Disposition - Comments
ROWS 40/41/42, GROUP C4	A6-12 to A6-14	2,050	TPH-E, TPH-P, PNA's, VOCs, BTEX	Jul. 1, '97	Below Action Goals except TCE TCE > SQRT in 1 sample Resample for VOCs.	Stockpiled on-site northeast of the Hangars at lower mid apron. Soil from Outparcel A6 excavation. 3 PNA, TPH-E, TPH-P, BTEX, and VOC samples collected. PNA's ND or < comparators. The highest DL was 0.053 mg/kg.. All TPH ND or less than comparators. All BTEX ND. All VOC ND except A6-12 and A6-14 trichloroethene results at 0.017 J- and 0.45. VOC ND results J flagged on samples A6-12 & A6-13. HB-4854 to -4856.
ROW 45/46, GROUP D4	A6-15, A6-16	1,283	TPH-E, TPH-P, PNA's, VOCs, BTEX	Jul. 1, '97	Below Action Goals except TCE TCE > SQRT 1 location Resample for VOCs.	Stockpiled on apron east of Outparcel A4, Soil from Outparcel A-6 excavation. 3 PNA, TPH-E, TPH-P, BTEX, and VOC samples collected. All PNA's ND. The highest DL was 0.051 mg/kg. All TPH ND but TPH-P results J flagged. All BTEX ND. All VOC ND except trichloroethene results of 0.012 J-, 0.096 J- and 0.56 mg/kg for A6-15, A6-16 and A6-16 dup respectively. HB-4857 to -4859.
ROW 51-55, GROUP E4	A6-17 to A6-21	2,913	TPH -E, TPH-P, PNA's, VOCs, BTEX	Jul. 1, '97	Below Action Goals	Stockpiled on apron east of Outparcel A4. Soil from Outparcel A-6 excavation. 5 PNA, TPH-E, TPH-P, BTEX, and VOC samples collected. All PNA's ND. The highest DL was 0.055 mg/kg. All TPH ND or < comparators, and TPH-P results J flagged. All BTEX and all VOC ND, but A6-19 & A6-20 VOC results J flagged. HB-4860 to -4864.
A6-1	A6-1	490	TPH -E, TPH-P, PNA's, VOCs, BTEX	Jul. 1, '97	Below Action Goals	Stockpiled on runway at intersection of old and new runways. Soil from Outparcel A-6 excavation. 1 PNA, TPH-E, TPH-P, BTEX, and VOC sample collected. All PNA's ND. The DL was 0.046 mg/kg. All TPH ND. All BTEX ND. All VOC ND, but VOC results J flagged. HB-4842.

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Source Location	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanation	Disposition - Comments
A6-2	A6-2	580	TPH-E, TPH-P, PNA, VOCs, BTEX	Jul. 1, '97	Below Action Goals	Stockpiled on runway at intersection of old and new runways. Soil from Outparcel A6 excavation. 1 PNA, TPH-E, TPH-P, BTEX, and VOC sample collected. All PNAs ND except the following: dibenz(A,H)anthracene, fluoranthene, pyrene. Σ PNAs Below Action Goals. The DL was 0.036 mg/kg. All TPH ND. All BTEX ND. All VOC ND. HB-4843.
A6-3	A6-3	147	TPH-E, TPH-P, PNA, VOCs, BTEX	Jul. 1, '97	Below Action Goals	Stockpiled on apron north of Bldg. 82. Soil from Outparcel A-6 excavation. 1 PNA, TPH-E, TPH-P, BTEX, and VOC sample collected. All PNAs ND. The DL was 0.043 mg/kg. All TPH ND or < comparators. All BTEX ND. All VOC ND, but J flagged. HB-4844.
A6-4	A6-4	149	TPH-E, TPH-P, PNA, VOCs, BTEX	Jul. 1, '97	Below Action Goals	Stockpiled on apron north of Bldg. 82. Soil from Outparcel A-6 excavation. 1 PNA, TPH-E, TPH-P, BTEX, and VOC sample collected. All PNAs ND with benzo(K)fluoranthene result J flagged. The DL was 0.04 mg/kg. All TPH, All BTEX, and All VOC ND, but J flagged. HB-4845.
A6-5	A6-5	439	TPH-E, TPH-P, PNA, VOCs, BTEX	Jul. 1, '97	Below Action Goals	Stockpiled on apron north of Bldg. 82. Soil from Outparcel A-6 excavation. 1 PNA, TPH-E, TPH-P, BTEX, and VOC sample collected. All PNAs ND with dibenz(A,H)anthracene result J flagged. The DL was 0.049 mg/kg. All TPH ND. All BTEX ND. All VOC ND. HB-4846, HB-4847.
A6-10, ROW 29	A6-10	542	TPH-E, TPH-P, PNA, VOCs, BTEX	Jul. 1, '97	Below Action Goals	Stockpiled on apron east of Hangars. Soil from storm drains and excavation. 1 PNA, TPH-E, TPH-P, BTEX, and VOC sample collected. All PNAs ND with benzo(K)fluoranthene result J flagged. The DL was 0.054 mg/kg. All TPH ND. All BTEX ND. All VOCs ND but J flagged. HB-4852.

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Source Location	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanation	Disposition - Comments
A6-11, ROW 33	A6-11	598	TPH-E, TPH-P, PNAs, VOCs, BTEX	Jul. 1, '97	Below Action Goals, including TCE < SQRT	Stockpiled on apron east of Hangars. Soil from storm drains and excavation. 1 PNA, TPH-E, TPH-P, BTEX, and VOC sample collected. All PNAs ND. The DL was 0.059 mg/kg. All TPH ND. All BTEX ND. All VOCs ND except trichloroethene result at 0.0081 J- and all VOC results J flagged. HB-4853.
A6-22	A6-22	109	TPH-E, TPH-P, PNAs, VOCs, BTEX	Jul. 1, '97	Below Action Goals	Stockpiled on apron northeast of Bldg. 82. Soil from storm drains and excavation. 1 PNA, TPH-E, TPH-P, BTEX, and VOC sample collected. All PNAs ND with benzo(K)fluoranthene result J flagged. The DL was 0.035 mg/kg. All TPH ND. All BTEX ND. All VOCs ND. HB-4865.
A6-24	A6-24	805	TPH-E, TPH-P, PNAs, VOCs, BTEX	Jul. 1, '97	Below Action Goals	Located northeast of Bldg. 82 at upper south runway. Soil from storm drains and excavation Outparcel A6. 1 PNA, TPH-E, TPH-P, BTEX, and VOC sample collected. All PNAs ND with benzo(A)anthracene and benzo(B)fluoranthene results J flagged. The DL was 0.036 mg/kg. All TPH ND. All BTEX ND. All VOCs ND. HB-4867.
TOTAL BRAC A5 and A6 VOLUME		13,218	NO. COMPOSITES PROPOSED		11	

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Source Location	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanation	Disposition – Comments
Stockpile Set 3: OSFL					DDTs	
OSFL – 1	OSFL from Hangar Segment	371	TPH-E, BTEX, PNAs, METALS	Oct. 29, '97	Below Action Goals except Σ PNAs Σ PNAs = 41.15 (HB-5417) Σ PNAs = 7.424 (HB-5420)	Stockpiled on runway east of intersection between old and new runways. 4 PNA, TPH-E, BTEX, VOCs, and METALS samples were collected. All PNAs in two samples were ND. Two other samples had reported values within two orders of magnitude of the comparators. The highest DL was 0.045 mg/kg. All TPH ND except one value for motor oil at 260 ppm in sample HB-5418. All BTEX ND. All VOCs ND. All metals < comparators except antimony with detection limits above the comparator value. OSFL – HB-5417-5420, Table D-2c.
TOTAL OSFL VOLUME		371	NUMBER OF COMPOSITES PROPOSED:		1	

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Source Location	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanations	Disposition – Comments
STOCKPILE SET 4: A-3, GSA-1					Metals, Organochlorine Pesticides	Group A3 located at apron at south end of runway. Consolidated from 15 stockpiles.
R7C1-08, 10, 14, 19, 4, 1 Group A3	06, 07	675	UEH, UPH,PNA	Aug. 7, '95	Below Action Goals	Group A3 located at apron at south end of runway. Soil from storm drains and excavation. 5 PNA, TPH-E, TPH-P samples collected. All PNAs ND. The highest DL was 0.15 mg/kg. All TPH ND or < comparator. HG-0443 to HG-0447.
R8C1 –11 Group A3	02	256	UEH, UPH,PNA	Aug. 7, '95	Below Action Goals	Group A3 located at apron at south end of runway. Soil from storm drains and excavation. 1PNA, TPH-E, TPH-P sample collected. All PNAs ND. The DL was 0.11 & 0.43 mg/kg. All TPH ND. HG-0451.
R8C2 –13 Group A3	19	257	UEH, UPH, PNA	Aug. 7, '95	Below Action Goals except UPH	Group A3 located at apron at south end of runway. Soil from storm drains and excavation. 1 PNA, TPH-E, TPH-P sample collected. All PNAs ND. The DL was 0.051, 0.16, & 0.62 mg/kg. All TPH ND or < comparators except UPH at 23 mg/kg. HG-0449.
R9C1 -4, -8, -11, -16 Group A3	02	245	UEH, UPH, PNA	Aug. 7, '95	Below Action Goals	Group A3 located at apron at south end of runway. Soil from storm drains and excavation. 4 PNA, TPH-E, TPH-P samples collected. All PNAs ND. The highest DLs were 0.17 & 0.67 mg/kg. All TPH ND. HG-0452 to -0455.
R10C2 -2, -6, -14 Group A3	07, 30	165	UEH, UPH, PNA	Aug. 7, '95	Below Action Goals	Group A3 located at apron at south end of runway. Soil from storm drains and excavation. 3 PNA, TPH-E, TPH-P samples collected. All PNAs ND. The highest DLs were 0.17 & 0.67 mg/kg. All TPH ND or < comparators. HG-0457 to -0459.

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Source Location	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanations	Disposition – Comments
R19C1 -1, -9, -11 Group A3	25, 30	289	UEH, UPH, PNA	Aug. 8, '95	Below Action Goals	Group A3 located at apron at south end of runway. Soil from storm drains and excavation. 3 R19C1 -1, -9, -11 PNA, TPH-E, TPH-P samples collected. All PNAs ND. The highest DLs were 0.15 & 0.61 mg/kg. All TPH ND. HG-0507, HG-0508, HG-0510.
R23C1 -2, -11, -23, -25 Group A3	07, 19, 30	436	UEH, UPH, PNA	Aug. 11, '95 Aug. 10, '95	Below Action Goals	Group A3 located at apron at south end of runway. Soil from storm drains and excavation. 4 PNA, TPH-E, TPH-P samples collected. All PNAs ND. The highest DLs were 0.17 & 0.7 mg/kg. All TPH ND or < comparators. HG-0471, HG-0499, HG-0501, HG-0502.
R35C1 Group A3	No data found	229	UEH, UPH, PNA	NA	Can't separate out this pile/area from A3 stockpile. Assume similar concentrations because from same sources	Group A3 located at apron at south end of runway. Soil from storm drains and excavation. Consolidated in A3.
R36C1-3 Group A3	08	187	UEH, UPH, PNA	Aug. 8, '95	Below Action Goals	Group A3 located at apron at south end of runway. Soil from storm drains and excavation. 1 PNA, TPH-E, TPH-P sample collected. All PNAs ND. The DLs were 0.16 & 0.65 mg/kg. All TPH ND or < comparators. HG-0469.
R37C1 Group A3	No data found	303	UEH, UPH, PNA	NA	Can't separate out this pile/area from A3 stockpile. Assume similar concentrations because from same sources	Group A3 located at apron at south end of runway. Soil from storm drains and excavation. Consolidated in A3

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Source Location	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanations	Disposition – Comments
R38C1-17, -35 Group A3	20	379	UEH, UPH, PNA	Aug. 8, '95	Below Action Goals	Group A3 located at apron at south end of runway. Soil from storm drains and excavation. 2 PNA, TPH-E, TPH-P samples collected. All PNAs ND. The highest DLs were 0.18 & 0.71 mg/kg. All TPH ND. HG-0515, HG-0516.
R38C2-4 Group A3	20	124	UEH, UPH, PNA	Aug. 8, '95	Below Action Goals	Group A3 located at apron at south end of runway. Soil from storm drains and excavation. 1 PNA, TPH-E, TPH-P samples collected. All PNAs ND. The DLs were 0.14 & 0.54 mg/kg. All TPH ND or < comparators. HG-0514.
R39C1-13, -19, -47 Group A3	20	444	UEH, UPH, PNA	Aug. 8, '95	Below Action Goals	Group A3 located at apron at south end of runway. Soil from storm drains and excavation. 3 PNA, TPH-E, TPH-P samples collected. All PNAs ND. The highest DLs were 0.16 & 0.66 mg/kg. All TPH ND or < comparators. HG-0517 to -0519.
R41C1-5 Group A3	20	213	UEH, UPH, PNA	Aug. 8, '95	Below Action Goals	Group A3 located at apron at south end of runway. Soil from storm drains and excavation. 1 PNA, TPH-E, TPH-P sample collected. All PNAs ND. The highest DLs were 0.16 & 0.63 mg/kg. All TPH ND. HG-0525.
R42C1-15 Group A3	08	214	UEH, UPH, PNA	Aug. 16, '95	Below Action Goals	Group A3 located at apron at south end of runway. Soil from storm drains and excavation. 1 PNA, TPH-E, TPH-P sample collected. All PNAs ND. The highest DLs were 0.13 & 0.54 mg/kg. All TPH ND or < comparators. HG-0541.
Total Volume A-3, GSA-1		4,416	NO. COMPOSITES PROPOSED		4	

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Population	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanations	Disposition – Comments
STOCKPILE SET 5: D3, GSA-1					Metals, Organochlorine Pesticides	Consolidated – R2C3, R2C4
R2C3-2, -6 Group D3	01	150	UEH, UPH, PNA	Aug. 4, '95	Below Action Goals except TPH	Consolidated into Group D3 pile located at upper south apron, northeast of Group C3 west pile. Source: Lot 1 – Jet Engine Test Facility, Lots 1 & 2 – Fuel Distribution Lines, Lot 3 – Hangar Ave. Fuel Lines. 2 PNA, TPH-E, TPH-P samples collected. All PNAs ND The highest DLs were 0.16 & 0.62 mg/kg. All TPH ND except TPH-G at 20 mg/kg and TPH-D at 160 mg/kg in sample -2. R2C3-2, -6, HG-0431, -0432.
R2C4-2, -4, -9 Group D3	01	350	UEH, UPH, PNA	Aug. 4, '95	Below Action Goals	Consolidated into Group D3 pile, Soil from excavation see above sources. 3 PNA, TPH-E, TPH-P samples collected. All PNAs ND. The highest DLs were 0.16 & 0.65 mg/kg. All TPH ND or < comparators. R2C4-2, -4, -9. HG-0428 to -0430
TOTAL VOLUME D-3, GSA-1		500	NO. COMPOSITES PROPOSED		1	

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Population	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanations	Disposition – Comments
STOCKPILE SET 6: E-3, GSA-1					Metals, Organochlorine Pesticides	Consolidated west of Nina's Lake in two stockpiles – BCG Pile 1, R64C1,
R64C1-30 Group E3	16	1,200	UEH, UPH, PNA	Aug. 1, '95	Below Action Goals	Former BCG Pile 1. Consolidated into Group E3 pile, Soil from excavations at Lot 3 & Lot 8. 1 PNA, TPH-E, TPH-P sample collected. All PNAs ND. The DLs were 0.18 & 0.72 mg/kg. All TPH ND. R64C1-30. HG-0322
R16C2-19	07	339	UEH, UPH, PNA	Aug. 8, '95	Below Action Goals	Located on south apron northeast of Bldg. 82. Stockpile was associated with the Lots 3 & 8. 1 PNA, TPH-E, TPH-P sample collected. All PNAs ND. The highest DLs were 0.14 & 0.57 mg/kg. All TPH ND or# comparators. Sample HG-0513
R64C1-31 Group E3	29	330	UEH, UPH, PNA	Aug. 2, '95	Below Action Goals	Consolidated into Group E3 pile, Soil from excavations at Lot 3 & Lot 8. 1 PNA, TPH-E, TPH-P sample collected. All PNAs ND except fluorene at 0.16mg/kg. The DL was 0.08 mg/kg. All TPH ND or < comparators. R64C1-31. HG-0324
TOTAL VOLUME E-3, GSA-1		1,869	NO. COMPOSITES PROPOSED		2	

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Population	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanations	Disposition – Comments
STOCKPILE SET 7: F3, G3, H3, GSA-1					TPH-P, TPH-E, Organochlorine Pesticides, Metals, PNAs	
GROUP F3 2 piles	GSA -I	2,526	Unknown	NA	No information	Former BCG Pile 2 Located at mid runway at intersection of runways. Source unclear, data unknown.
GROUP G3	GSA -I	2,613	Unknown	NA	No information	Located west of Nina's Lake parallel to Stockpile A5-1 composed of Row -67, Cell-1, Source: Lot 3, Hangar Ave Fuel Lines. Data Not Found (DNF)
GROUP H3	GSA -I	912	Unknown	NA	No information	Located on mid runway west of Nina's Lake - DNF
TOTAL VOLUME F3, G3, H3, GSA-1		6,051	NO. COMPOSITES PROPOSED		4	

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Population	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanations	Disposition – Comments
STOCKPILE SET 8: BIOCELL, GSA-1					Metals, Organochlorine Pesticides	Consolidated from 3 piles near east corner of runway according to map. 12 Confirmation samples.
	Area 1	485	UEH, UPH	May 8, '97	Below Action Goals	All TPH-G &D and UPH, UEH were non detect or < comparators except HG-3453 with UEH at 240 J+ mg/kg. HG-3452 to -3454.
	Area 2	2,250	UEH, UPH	May 8, '97	Below Action Goals	All TPH-G &D and UPH, UEH were non detect or < comparators. HG-3447 to -3451.
	Area 3	1,325	UEH, UPH	May 8, '97	Below Action Goals	All TPH-G &D and UPH, UEH were non detect or < comparators. HG-3442 to -3446.
TOTAL VOLUME BIOCELL, GSA-1		4,060	NO. COMPOSITES PROPOSED		3	

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Population	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanations	Disposition – Comments
STOCKPILE SET 9: Miscellaneous Rows, GSA-1					Metals, Organochlorine Pesticides	
R3C2-7, -8, -9, -13, -25	06, 25, 32	291	UEH, UPH, PNA	Aug. 4, '95	Below Action Goals	Located on Apron north of Group C3 west pile. Source: Lot 3 – Hangar Ave. Fuel Lines; Lot-8 – Plan Location 5. 5 UEH, UPH, PNA samples collected. All PNAs ND. The highest DLs were 0.17 & 0.67 mg/kg. All TPH ND or# comparators. HG-0434 to-0439.
R6C2-1	01	350	UEH, UPH, PNA	Aug. 7, '95	Below Action Goals	Located on south apron northeast of former Bldg. 86. Lots 1&2 Fuel Distribution Lines. 1 PNA, TPH-E, TPH-P sample collected. All PNAs ND. The highest DLs were 0.17 & 0.69 mg/kg. All TPH ND or < comparators. Sample HG-0442.
R11C1-3, -20	25	337	UEH, UPH, PNA	Aug. 7, '95	Below Action Goals	Located on south apron north of Bldg. 82. Lot 3 – Hangar Ave. Fuel Lines; Lot-8 – Plan Location 5. 2 PNA, TPH-E, TPH-P sample collected. All PNAs ND. The highest DLs were 0.14 & 0.57 mg/kg. All TPH ND or < comparators. Sample HG-0460, -0462

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Population	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanations	Disposition – Comments
R12C1	Data Not Found	323	UEH, UPH, PNA	NA	Assume data similar to R6-C2, R3C2, R11C1, all Below Action Goals, from same sources	Located on south apron east of former Bldg. 86. Lots 1&2 Fuel Distribution Lines. Lot 3 – Hangar Ave. Fuel Lines. Stockpile was associated with the Lots 1 & 2 Fuel Distribution Lines and Lot 3 Hangar Ave Fuel distribution lines. Uncertain if PNA, TPH-E, TPH-P sample collected.
R13C1-16, -30	07	363	UEH, UPH, PNA	Aug. 7,'95	Below Action Goals	Located on south apron north of Bldg. 82. 2 PNA, TPH-E, TPH-P samples collected. All PNAs ND. The highest DLs were 0.17 & 0.67 mg/kg. All TPH ND. HG-0463, -0465
R28C1-35, -37	08, 26	446	UEH, UPH, PNA	Aug. 10,'95	Below Action Goals	Located on south apron north of Bldg. 82 & north of Group C3 west pile. 2 PNA, TPH-E, TPH-P samples collected. All PNAs ND or < comparators. The higher DL was 0.049 mg/kg. All TPH ND or < comparators. Sample HG-0463, -0465
R29C1-5, -27	20	294	UEH, UPH, PNA	Aug. 10,'95	Below Action Goals except UEH	See Group B3 above. Located on apron north of former Bldg. 86. Source: Lot 8 Battery Shop. 2 PNA, TPH-E, TPH-P samples collected. All PNAs ND or < comparators. The higher DL was 0.24 mg/kg. All TPH ND or < comparators except UEH at 670 J mg/kg . Samples HG-0481, -0482.

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Population	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanations	Disposition – Comments
R43C1-24	08	350	UEH, UPH, PNA	Jul. 26,'95	Below Action Goals	Located on apron north of former Bldg. 86. Source: Lot 8 Battery Shop and Lot3 Hangar Ave. fuel lines. 1 PNA, TPH-E, TPH-P sample collected. All PNAs ND. The highest DLs were 0.14 & 0.56 mg/kg. All TPH ND or < comparators. Sample HG-0197.
R54C4-5, -51, -71, -77	11	300	UEH, UPH, PNA	Jul.31,'95	Below Action Goals	Located mid runway at intersection of old and new runways. Source: Lot 8 Plan Location 6/10 and Lot 3 Hangar Ave. fuel lines. 4 PNA, TPH-E, TPH-P samples collected. All PNAs ND. The highest DL was 0.57 mg/kg. All TPH ND or < comparators. Samples HG-0277, -0279, -0280, -0283. The last 3 samples were for soil used in NHP levee construction. Sample –5 was all ND.
R54C6-6, -27, -54	14, 29	359	UEH, UPH, PNA	Jul. 27,'95	Below Action Goals	Located mid runway south and east of runway intersections. Source: Lot 8, Plan Location 5 and Lot 3 Hangar Ave. fuel lines. 3 PNA, TPH-E, TPH-P samples collected. All PNAs ND or < comparators. The highest DL was 0.077 mg/kg. All TPH ND or < comparators. Samples HG-0226, -0227, -0229.
R56C2-45	12	437	UEH, UPH, PNA	Jul.31,'95	Below Action Goals	Located mid runway west of Nina's Lake. Source: Lot 3 Hangar Ave. fuel lines. 1 PNA, TPH-E, TPH-P sample collected. All PNAs ND. The DL was 0.059 mg/kg. All TPH ND or < comparators. Sample HG-0272

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Population	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanations	Disposition – Comments
R57C2	Data not found	434	UEH, UPH, PNA	NA	Assume similar to R58C9, -13, -44, -65, -85 due to same source	Did not find data. Located mid runway south of Nina's Lake. Source: Lot 3 Hangar Ave. fuel lines.
R58C9-13, -44, -65, -85 2 piles	14, 34	577	UEH, UPH, PNA	Jul.27,'95	Below Action Goals	Located mid runway south of Nina's Lake. Source: Lot 3 Hangar Ave. fuel lines. 4 PNA, TPH-E, TPH-P samples collected. All PNAs ND or <comparators The highest DL was 0.18 mg/kg. All TPH ND or < comparators. Sample HG-0210 to –0214
R60C1-16, -31, -42, -71, -95	15, 36	545	UEH, UPH, PNA	Aug.02,'95 Aug.03,'95	Below Action Goals except UGH slightly above AG.	Located mid runway west of Nina's Lake. Source: Lot 3 Hangar Ave. fuel lines, Lot 8 Plan Location 6/10, Lot 8 Battery Shop. 5 PNA, TPH-E, TPH-P samples collected. All PNAs ND or <comparators. The highest DL was 0.051 mg/kg. All TPH ND or < comparators except sample HG-0351 with UGH at 13 J mg/kg. Sample HG-0349 to –0352 and -0354
R62C2-19, -21, -33	29, 36	312	UEH, UPH, PNA	Jul.25,'95	Below Action Goals	Located mid runway southeast of Nina's Lake on west side of intersection of runways. Source: Lot 8 Plan Location 6/10, Lot 8 Battery Shop, Lot 8 Plan Location 5. 3 PNA, TPH-E, TPH-P samples collected. All PNAs ND. The highest DL was 0.07 mg/kg. All TPH ND or < comparators. Sample HG-0129, -0130- 0131

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Population	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanations	Disposition – Comments
R63C3-1, -6, -8, -14, -25, -28, -40, -47, -52, -54	4	409	UEH, UPH, PNA	Aug.16,'95 Aug.17,'95	Below Action Goals	Located mid runway southeast of Nina's Lake at the intersection of runways. Source: Lots 1 and 2 – Fuel distribution lines. 10 PNA, TPH-E, TPH-P samples collected. All PNAs ND or < comparators. The highest DL was 0.14 mg/kg. All TPH ND or < comparators. Sample HG-0529 to – 0537 & -0539.
R63C3-03, -09, -30, -51, -72, -91, -92	18	285	UEH, UPH, PNA	Jul. 25,'95 Aug.11,'95	Below Action Goals	Located mid runway southeast of Nina's Lake on east side of intersection of runways. Source: Lots 1 and 2 – Fuel distribution lines. 7 PNA, TPH-E, TPH-P samples collected. All PNAs ND or < comparators. The highest DL was 0.15 mg/kg. All TPH ND or < comparators. Sample HG-0121 to - 0123 & -0125 to –0128
R64C3-18, -23, -24, -43, -45	16, 36	503	Diesel/JP-4	Jul.24,'95	Below Action Goals	Located mid runway southeast of Nina's Lake on east side of intersection of runways. Source: Lot 3 Hangar Ave. fuel lines, Lot 8 Battery Shop. 5 PNA, TPH-E, TPH-P samples collected. All PNAs ND. The highest DL was 0.17 mg/kg. All TPH ND or < comparators. Sample HG-0094 to –0096, -0101 & -0102

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Population	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanations	Disposition – Comments
R65C2-6, -8, -22, -22, -33, -36, -42	05	260	UEH, UPH, PNA	Jul.26,'95 Aug.10,'95 Aug.16,'95	Below Action Goals except UGH.	Located mid runway west of Nina's Lake and west of stockpile A5-1 with UTB group of stockpiles. Source: Lots 1 and 2 – Fuel distribution lines. Lot 3 Hangar Ave. fuel lines. 7 PNA, TPH-E, TPH-P samples collected. All PNAs ND or < comparators The highest DL was 0.15 mg/kg. All TPH ND or < comparators except HG-0540 with 14 J mg/kg UPH . Sample HG-0155 to -0159 and -0161, also HG-0540
RCI R1C1-2, -13, -28, -46, -50, -62, -79, -89, -101	38, 42	~300	UEH, UPH, PNA	07/07/97	Below Action Goals except UGH Resample this pile for TPH-P to verify biodegradation	Located mid runway southeast of Nina's Lake on east side of intersection of runways. Source: Lot 3 Hangar Ave. fuel lines, Lot 8 Plan Location 6/10 (2 nd St.). 9 PNA, TPH-E, TPH-P samples collected. All PNAs ND or < comparators. The highest DL was 0.18 mg/kg. All TPH ND or < comparators except HG-0545 with UGH at 280 J mg/kg and HG-0564 with 36 J mg/kg . Sample HG-0545 to -0547 & -058 to -0560, -0562 to -0564.
RCI R1C2-41, -61, -98, -111	42	400	UEH, UPH, PNA	Aug.17,'95	Below Action Goals	Located upper runway at southeast end. Source: Lot 3 Hangar Ave. fuel lines, Lot 8 Plan Location 6/10 (2 nd St.). 4 PNA, TPH-E, TPH-P samples collected. All PNAs ND or < comparators. The highest DL was 0.19 mg/kg. All TPH ND or < comparators. Sample HG-0565 to -0567, -0569

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Population	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanations	Disposition – Comments
RCI R1C2-11, -12, -30, -44, -60, -74, -126, -139, -150	38, 39	420	UEH, UPH, PNA	Jul.27,'95	Below Action Goals except UPH	Located upper runway at southeast end. Source: Lot 3 Hangar Ave. fuel lines, Lot 8 Plan Location 6/10 (2 nd St.). 9 PNA, TPH-E, TPH-P samples collected. All PNAs ND or < comparators. The highest DL was 0.21 mg/kg. All TPH ND or < comparators except HG-0222 with UPH at 42 mg/kg. Sample HG-0215 to -0219, -0221 to -0224
RCI R1C3-10, -26, -36, -41, -55, 72 In 3 piles	39, 43	371	UEH, UPH, PNA	Aug.11,'95 Aug.18,'95	Below Action Goals	Located upper runway at southeast end. Source: Lot 3 Hangar Ave. fuel lines, Lot 8 Plan Location 6/10 (2 nd St.). 6 PNA, TPH-E, TPH-P samples collected. All PNAs ND or < comparators. The highest DL was 0.2 mg/kg. All TPH ND or < comparators. Sample HG-0194, -0195, -0571, -0573, HG-0575, -0576
RCI R5C1-4, -19, -23	41	360	UEH, UPH, PNA	Aug.01,'95	Below Action Goals	Located mid runway west of Nina's Lake near Group E3. Source: Resample Lot 3 Hangar Ave. fuel lines, Lot 8 Plan Location 6/10 (2 nd St.). 3 PNA, TPH-E, TPH-P samples collected. All PNAs ND. The highest DLs were 0.16 and 0.65 mg/kg for Naphthalene. All TPH ND or < comparators. Sample HG -0316, -0318, -0319
TOTAL VOLUME MISCELLANEOUS ROWS, GSA-I		9,365	NO. COMPOSITES PROPOSED		9	

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Population	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanation	Disposition – Comments
Stockpile Set 10: C1, GSA UTB					Metals, Organochlorine Pesticides	
GROUP C1	C15P19, C16P20	2,952	TPH, PNA, BTEX	Jul.10,'96 Jul.11,'96	Below Action Goals	Located with UTB group north end of runway. Consolidated - C15P19, C16P20. Source: BLDGS. 309 and 410, 8 PNA, TPH-E, TPH-P samples collected. <u>For Bldg. 309</u> All PNAs ND. The highest DLs were 0.17 and 0.67 mg/kg. All TPH ND. <u>For Bldg. 410:</u> All PNAs ND or < comparators. The highest DLs were 0.19 and 0.77 mg/kg. All TPH ND or < comparators. HG-2212 to – 2219 at Bldg. 309 stockpile and HG-2222 to –2224, -2226 to –2229, -2231, 2232, 2234 at Bldg. 410 stockpile.
TOTAL VOLUME C1, GSA UTB		2,952	NO. COMPOSITES PROPOSED		2	

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Population	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanations	Disposition – Comments
STOCKPILE SET 11: D1, GSA UTB					Metals, Organochlorine Pesticides	Located with UTB group north end of runway. D1 north and south consolidated from - C14P17 and C14P18. Source: BLDG. 410, 11 PNA, TPH-E, TPH-P samples collected.
GROUP D1	C14P17	1,959	UEH, UPH, PNA	Jul.8,'96	Below Action Goals	All PNAs ND or < comparators. The highest DLs were 0.17 and 0.68 mg/kg. All TPH ND or < comparators. HG-2175, -2177 to – 2180, 2182 to –2187.
GROUP D1	C14P18	1,959	UEH, UPH, PNA	Jul.10,'96	Below Action Goals except Σ PNAs and UEH Σ PNAs = 8.68 UEH = 460 (HG-2204) Σ PNAs = 26.2 UEH = 150 (HG-2205)	All PNAs ND or < comparators except HG-2204 and –2205 with elevated PNA values. The highest DLs were 0.24 and 0.95 mg/kg. All TPH ND except HG-2204, -2205 with UEH detected at 460 and 150 mg/kg. HG-2197, -2198, –2201 to – 2207, -2209, -2211.
C12P15	C12P15	491	UEH, UPH, PNA	Jul.5,'96	Below Action Goals except TPH-G quite high Analyze this pile for TPH-G to monitor biodegradation since 1996	Located with UTB group north end of runway. Not consolidated C12P15. Source Bldg. 410. 8 PNA, TPH-E, TPH-P samples collected. All PNAs ND or < comparators. The highest DLs were 0.18 and 0.7 mg/kg. All TPH ND or < comparators except HG-2152 with TPH-G at 1,200 mg/kg. HG-2152 to –2159.
C18P22	C18P22	810	UEH, UPH, PNA	Jul.12,'96	Below Action Goals	Located at south corner of Nina's Lake east of BRAC-4 stockpile. From UTB group at north end of

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Population	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanations	Disposition – Comments
						runway. Not consolidated C18P22. Source Bldg. 410. 12 PNA, TPH-E, TPH-P samples collected. All PNAs ND. The highest DLs were 0.16 and 0.64 mg/kg. All TPH ND or < comparators. HG-2236 to -2242, -2244 to -2248.
C13P16	C13P16	280	UEH, UPH, PNA	Jul.12,'96	Below Action Goals	Located with UTB group north end of runway. Not consolidated C13P16. Source Bldg. 309. 8 PNA, TPH-E, TPH-P samples collected. All PNAs ND. The highest DLs were 0.16 and 0.65 mg/kg. All TPH ND or < comparators. HG-2188, -2190 to -2196.
TOTAL VOLUME D1, GSA UTB		5,399	NO. COMPOSITES PROPOSED		5	

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Population	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanations	Disposition – Comments
STOCKPILE SET 12: C4P5 GSA UTB					Metals, Organochlorine Pesticides, TPH-P	
C4P5	C4P5	1,730	UEH, UPH, PNA	Jul.12,'96	Below Action Goals except TPH at very high concentrations Reanalyze TPH-P (gasoline) to verify current concentrations. Assume biodegradation of TPH-D since 1996.	Located with UTB group north end of runway. Not consolidated C4P5. Source Bldg. 345 - located on Parcel A-2. 10 PNA, TPH-E, TPH-P samples collected. All PNAs ND. The highest DLs were 0.17 and 0.67 mg/kg. All TPH ND or < comparators except HG-2043 with TPH-G at 64,000 mg/kg and HG-2044 with TPH-D at 180 mg/kg. HG-2033 to 2035, -2037, -2038, -2041 to -2045.
TOTAL VOLUME C4P5, GSA UTB		1,730	NO. COMPOSITES PROPOSED		1	

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Population	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanations	Disposition – Comments
STOCKPILE SET 13: A2, B2, C2, D2, GSA Lot 7					Metals, Organochlorine Pesticides	
GROUP A2 Rows 7, 10, 11	3, 4	1,598	TPH, VOC, PNA	Jul.10,'96	Below Action Goals except VOCs 3 TCE > SQRT TCE from 0.0096 to 0.15 mg/kg 1,2-DCE from 0.030 to 0.17 mg/kg Resample for VOCs.	Located at north end of apron next to NHP Levee. Source: Bldg. 141/147. 19 PNA, TPH-E, TPH-P, VOC samples collected. All PNAs ND. The highest DLs were 0.19 and 0.76 mg/kg. All TPH ND or < comparators. All VOCs ND except 7 detections of 1,2- DCE and 6 detections of TCE. Samples HG-3032 to -3039 and -3040 to -3054.
GROUP B2 Rows 14-16	2H, 6	1,236	TPH, VOC, PNA	Jul.15,'96	Below Action Goals except VOCs 2 TCE > SQRT TCE from 0.0077 to 0.12 mg/kg 1,2-DCE from 0.012 to 0.24 mg/kg Resample for VOCs.	Located at the middle of the apron next to NHP Levee. Source: Bldg. 141/147. 18 PNA, TPH-E, TPH-P, VOC samples collected. All PNAs ND. The highest DLs were 0.22 and 0.88 mg/kg. All TPH ND or < comparators. All VOCs ND except 4 detections of 1,2-DCE and 3 detections of TCE. Samples HG-3068 to -3082.
GROUP C2 Rows 18-21	7, 8	2,535	TPH, VOC, PNA	Jul.16,'96 Jul.17,'96	Below Action Goals	Located at the middle of the apron next to NHP Levee. Source: Bldg. 141/147. 23 PNA, TPH-E, TPH-P, VOC samples collected. All PNAs ND. The highest DLs were 0.18 and 0.72 mg/kg. All TPH ND or < comparators. All VOCs ND. Samples HG-3102 to -3129.

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Population	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanations	Disposition – Comments
GROUP D2 Rows 37-39	16, 17	1,656	TPH, VOC, PNA	Jul.26, '96	Below Action Goals except VOCs 1,2-DCE from 0.012 to 5.7 mg/kg TCE from 0.010 to 34 mg/kg Resample for VOCs.	Located at the middle of the apron next to NHP Levee. Source: Bldg. 141/147 20 PNA, TPH-E, TPH-P, VOC samples collected. All PNAs ND or < comparators. The highest DLs were 0.19 and 0.77 mg/kg. All TPH ND or < comparators. 10 of the 20 samples had detections of TCE & 10 of the 20 samples had detections of 1,2-DCE. Samples HG-3211 to –3234.
TOTAL VOLUME A2, B2, C2, D2, GSA Lot 7		7,025	NO. COMPOSITES PROPOSED		7	

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Population	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanations	Disposition – Comments
STOCKPILE SET 14: Miscellaneous Rows, GSA Lot 7						
ROWS 3 & 4	1	1,087	TPH, VOC, PNA	Jul.09,'96	Below Action Goals	Located at north end of the apron next to NHP Levee. Source: Bldg. 141/147 11 PNA, TPH-E, TPH-P, VOC samples collected. All PNAs ND. The highest DLs were 0.18 and 0.72 mg/kg. All TPH ND or < comparators. All VOCs ND. Samples HG-3001 to -3002, -3005 to -3013.
ROWS 5 & 6	2	1,121	TPH, VOC, PNA	Jul.10,'96	Below Action Goals except Σ PNAs Σ PNAs = 6.83 mg/kg	Located at the middle of the apron next to NHP Levee. Source: Bldg. 141/147. 12 PNA, TPH-E, TPH-P, VOC samples collected. All PNAs ND or < comparators except HG-3022 . The highest DLs were 0.18 and 0.72 mg/kg. All TPH ND. All VOCs ND. Samples HG-3014 to -3031.
ROWS 12 & 13	5	1,013	UEH, UPH, PNA	Jul.11,'96 Jul.12,'96	Below Action Goals except Σ PNAs and UEH Σ PNAs = 13.54 mg/kg	Located at the upper middle of the apron next to NHP Levee. Source: Bldg. 141/147. 11 PNA, TPH-E, TPH-P, VOC samples collected. All PNAs ND or < comparators except HG-3067 . The highest DLs were 0.19 and 0.76 mg/kg. All TPH ND or < comparators except HG-3056 with 210 mg/kg UEH . All VOCs ND. Samples HG-3055 to -3067
ROW 17	3H	537	UEH, UPH, PNA	Jul.16,'96	Below Action Goals	Located at the middle of the apron next to NHP Levee. Source: Bldg. 141/147 PNA, TPH-E, TPH-P, VOC samples collected. All PNAs ND. The highest DLs were 0.37 and 0.71 mg/kg. All TPH ND or < comparators. All VOCs ND except 1 detection of 1,4-DCB just above the detection limit but less than SQRT. Samples HG-3032 to -3039. Samples HG-3526 to -3528

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Population	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanations	Disposition – Comments
ROWS 22 & 23	9	1,327	UEH, UPH, PNA	Jul.18,'96	Below Action Goals	Located at the middle of the apron next to NHP Levee. Source: Bldg. 141/147. 11 PNA, TPH-E, TPH-P, VOC samples collected. All PNAs ND or < comparators. The highest DLs were 0.17 and 0.69 mg/kg. All TPH ND. All VOCs ND. Samples HG-3130 to -3141.
ROWS 24 & 25	10	1,262	UEH, UPH, PNA	Jul.18,'96	Below Action Goals	Located at the middle of the apron next to NHP Levee. Source: Bldg. 141/147. 12 PNA, TPH-E, TPH-P, VOC samples collected. All PNAs ND. The highest DLs were 0.17 and 0.69 mg/kg. All TPH ND or < comparators. All VOCs ND. Samples HG-3142 to -3144, -3146, -3147, 3150, to -3152, 3154 to 3157.
ROW 28	12	539	UEH, UPH, PNA	Jul.19,'96	Below Action Goals	Located at the middle of the apron next to NHP Levee. Source: Bldg. 141/147. 7 PNA, TPH-E, TPH-P, VOC samples collected. All PNAs ND or < comparators. The highest DLs were 0.17 and 0.66 mg/kg. All TPH ND or < comparators. All VOCs ND except HG-3162, -3163 with 1,2-DCE at 0.066 and 0.02 mg/kg respectively and -3162 with 0.028 mg/kg TCE. Samples HG-3158 to -3167.
ROWS 30 & 31	5H	1,051	UEH, UPH, PNA	Jul.22,'96	Below Action Goals	Located at the middle of the apron next to NHP Levee. Source: Bldg. 141/147 PNA, TPH-E, TPH-P, VOC samples collected. All PNAs ND. The highest DLs were 0.17 and 0.69 mg/kg. All TPH ND or < comparators. All VOCs ND. Samples HG-3032 to -3039.

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Population	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanations	Disposition – Comments
ROW 32	13	526	Low level TCE	Jul.23,'96	Below Action Goals except VOCs 1 TCE > SQRT, but very low Resample for VOCs.	Located at the middle of the apron next to NHP Levee. Source: Bldg. 141/147. 8 PNA, TPH-E, TPH-P, VOC samples collected. All PNAs ND or < comparators. The highest DLs were 0.18 and 0.71 mg/kg. All TPH ND or < comparators. All VOCs ND except HG-3179 with 0.34 mg/kg 1,2-DCE and 0.032 mg/kg vinyl chloride (VC); HG-3180 with 0.18 mg/kg 1,2-DCE; HG-3188 with 0.073 mg/kg TCE, 2.1 mg/kg 1,2 DCE and 0.011 mg/kg VC. Samples HG-3179, 3180, -3183 to -3185, -3187 to 3189.
ROW 34	6H	498	Low level TCE	Jul.25,'96	Below Action Goals except VOCs 1,2-DCE 0.064 to 0.57 mg/kg TCE 0.0099 to 0.01 mg/kg. VC 0.028 mg/kg All TCE < SQRT Resample for VOCs.	Located at the middle of the apron next to NHP Levee. Source: Bldg. 141/147. 7 PNA, TPH-E, TPH-P, VOC samples collected. All PNAs ND. The highest DLs were 0.18 and 0.71 mg/kg. All TPH ND or < comparators. All VOCs ND except 2 detections of 1,2-DCE, 2 detections of TCE, and 1detection of vinyl chloride. Samples HG-3190 to -3197.
ROWS 35 & 36	15	890	PNA	Jul.25,'96	Below Action Goals except VOCs, UEH 1,2-DCE 0.012 to 0.24 mg/kg TCE 0.010 to 0.084 mg/kg 3TCE > SQRT Resample for VOCs.	Located at the middle of the apron next to NHP Levee. Source: Bldg. 141/147. 11 PNA, TPH-E, TPH-P, VOC samples collected. All PNAs ND or < comparators. The highest DLs were 0.17 and 0.68 mg/kg. All TPH ND or < comparators except HG-3208 with 160 mg/kg UEH. All VOC ND except six of the eleven samples had low concentrations of TCE and seven had low concentrations of 1,2-DCE. Samples HG-3198 to -3201, -3203 to -3209.

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Population	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanations	Disposition – Comments
ROWS 43 & 44	20	918	Low level TCE	Jul.30,'96	Below Action Goals except UPH and VOCs 1,2-DCE 0.18 to 17 mg/kg TCE 0.023 to 260 mg/kg Resample for VOCs.	Located at the south end of the apron next to NHP Levee. Source: Bldg. 141/147. 10 PNA, TPH-E, TPH-P, VOC samples collected. All PNAs ND. The highest DLs were 0.18 and 0.71 mg/kg. All TPH ND or < comparators except HG-3239 with 35 mg/kg UPH . All VOCs ND except 3 of 10 samples had 1,2-DCE and 4 samples had TCE . Samples HG-3235 to –3246.
ROWS 47 & 48	22	1,182	Low level TCE	Jul.30,'96	Below Action Goals except VOCs 1,2-DCE 0.11 to 3.4 mg/kg TCE 0.0073 to 26 mg/kg Resample for VOCs.	Located at the south end of the apron next to NHP Levee. Source: Bldg. 141/147. 16 PNA, TPH-E, TPH-P, VOC samples collected. All PNAs ND. The highest DLs were 0.18 and 0.73 mg/kg. All TPH ND or < comparators. All VOCs ND except 3 detections of 1,2-DCE and 5 detections of TCE . Samples HG-3248, to -3263
ROWS 49 & 50	23	1,233	UEH, UPH, PNA	Jul.31,'96	Below Action Goals except VOCs 1,2-DCE 0.015 to 0.63 mg/kg TCE 0.030 to 0.035 mg/kg (< SQRT) Resample for VOCs.	Located at the south end of the apron next to NHP Levee. Source: Bldg. 141/147. 10 PNA, TPH-E, TPH-P, VOC samples collected. All PNAs ND. The highest DLs were 0.18 and 0.72 mg/kg. All TPH ND or < comparators. All VOCs ND except 3 detections of 1,2-DCE and 2 low detections of TCE . Samples HG-3032 to –3039.

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Population	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanations	Disposition – Comments
ROWS 56 & 57	8H	1,100	UEH, UPH, PNA	Aug.01,'96	Below Action Goals 1,2-DCE 0.035 to 0.11 mg/kg Resample for VOCs.	Located at the lower (south) end of the apron next to NHP. Levee. Source: Bldg. 141/147. 7 PNA, TPH-E, TPH-P, VOC samples collected. All PNAs ND. The highest DLs were 0.19 and 0.76 mg/kg. All TPH ND. All VOCs ND except 2 low detections of 1,2-DCE. Samples HG-3276 to –3282.
TOTAL VOLUME MISCELLANEOUS ROWS, GSA LOT 7		14,284	NO. COMPOSITES PROPOSED		12	

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

Stockpile Designation	Population	Estimated Volume (cy)	Chemicals of Concern	Sampling Date	Analyses and Explanations	Disposition – Comments
STOCKPILE SET 15: B99 & LTTD, BRAC LOT 7					Metals, Organochlorine Pesticides	
LTTD1	LOT 7, A6	238	DCE, TCE, VINYL CHLORIDE	Dec.22,'95- Jan. 22,'96	Below Action Goals Resample for VOCs.	Located on old runway north east of intersection with new runway. Low temperature thermal desorption of VOC – DCE & TCE. See Table 5-5 of Stockpile Disposition Report for chemistry. All PNAs ND or < comparators. All TPH ND. All VOCs ND except several low values of 1,2-DCE See sample-tracking details in LTTD binder. HT-0048A, HT-0053A, HT-0062A, HT-0073A, HT-0079A, HT-0080A, HT-0084A, HT-0085A, HT-0090A, HT-0091A, HT-0092A, HT-0095A.
BLDG 99 SD	BLDG 99	~400	UEH, UPH, PNA	Oct.30,'97	Below Action Goals	Located at south corner of Nina's Lake west of runway intersections. Source: Lot 7 Bldg. 99. (Some Consolidated to C3, Sediment) 9PNA, TPH-E, TPH-P, VOC samples collected. All PNAs ND or < comparators. The highest DL was 0.041 mg/kg. All TPH ND or < comparators. All VOCs ND. Samples HG-3538 to 3546.
BLDG.99 SD OVERBURDEN	BLDG.99	788	Uncharacterized	Not sampled	Assume at least as clean as Bldg 99 SD w/ similar COCs	Presumed clean and below cleanup goals. Sample for TPH-P, TPH-E, PNAs individually.
TOTAL VOLUME B99 & LTTD, BRAC, Lot 7		1,426	NO. COMPOSITES PROPOSED		1	

HAMILTON ARMY AIRFIELD BRAC AND GSA STOCKPILED SOIL SUMMARY COMPOSITE SAMPLE STOCKPILE SETS

All soil in this summary list is stockpiled on the Hamilton Army Airfield runway or taxiway aprons.

BRAC denotes Base Realignment And Closure

TPH denotes total petroleum hydrocarbons, UEH -unidentified extractable hydrocarbons, UPH -unidentified purgeable hydrocarbons

VOC denotes volatile organic compounds

BTEX denotes benzene, toluene, ethyl-benzene, and total xylenes (meta-, ortho-, para-)

A5 denotes BRAC Outparcel Area-5

A6 denotes BRAC Outparcel Area-6

PNA denotes polynuclear aromatic hydrocarbons (PNA)

“GROUP A1”, for example, refers to stockpiles of consolidated soil for characterization and /or treatment

LTTD denotes “Low-Temperature Thermal Desorption” treatment of VOC impacted soil

OSFL denotes the “On-Shore Fuel Lines” particularly soil excavated from under the footprint of the

New Hamilton Partners (NHP) levee

“GSA-I” denotes General Services Administration Phase I Sale Area Sites

“R3C2”, for example, denotes row number 3 and cell number 2 used for identifying soil stockpiles

“SD” denotes storm drain

DCE denotes dichloroethylene; TCE denotes trichloroethylene

Detection Limits (DLs) refer to PNA DLs.

SSDR is the Soil Stockpile Disposition Report, March 1999, IT Corporation

UTB denotes under the buildings

REFERENCES

CH2MHill, 2003, Record of Decision/ Remedial Action Plan, Final.

IT Corporation, 1996, (April), Stockpile Sampling Plan GSA Phase I Sale Area, Martinez, California

IT Corporation, 1997, (August), Stockpile Aeration And Conditioning Work Plan GSA Phase I Sale Area And BRAC Outparcels A-5 And A-6, Hamilton Army Airfield, Novato, California, Revision 3, Martinez, California

IT Corporation, 1999, (March), Soil Stockpile Disposition Report, GSA Phase I Sale Area And BRAC Property, Hamilton Army Airfield, Novato, California, Revision 3, Martinez, California