WORK PLAN
RUNWAY STOCKPILES CHARACTERIZATION

HAMILTON ARMY AIRFIELD

NOVATO, CALIFORNIA

Final Submittal

Prepared by:

US Army Corps of Engineers ®

Sacramento District
Environmental Design Section

September 2003

DEPARTMENT OF THE ARMY
BASE REALIGNMENT AND CLOSURE
ATLANTA FIELD OFFICE
BRAC ENVIRONMENTAL COORDINATOR
HAMILTON ARMY AIRFIELD
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NOVATO, CALIFORNIA 94949

October 7, 2003

DAIM-BO-A-HA

Subject: Forwarding the *Work Plan Runway Stockpiles Characterization,* for the Main Airfield Parcel; Hamilton Army Airfield, Novato, CA.

Ms. Naomi Feger
Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

Dear Ms. Feger,

The Army is pleased to provide the *Work Plan Runway Stockpiles Characterization*, for the Main Airfield Parcel; Hamilton Army Airfield, Novato, CA for your files.

If you have any questions, please contact me at (415) 883-6386.

Sincerely,

Edward Keller, P.E.
BRAC Environmental Coordinator
Hamilton Army Airfield

Enclosure

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Work Plan Runway Stockpiles
Hamilton Army Airfield, Novato, CA 94949
September, 2003

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ACRONYMS

DTSC	Department Of Toxic Substances Control
EDS	Environmental Design Section
EKI	Erler and Kalinowski, Incorporated
FSP	Field Sampling Plan
HAAF	Hamilton Army Airfield
mg/kg	milligram/kilogram
OC	Organochlorine
PNA	Polynuclear Aromatic Hydrocarbons
QAPP	Quality Assurance Project Plan
SFBRWQCB	San Francisco Bay Area Regional Water Quality Control Board
SSHP	Site Safety and Health Plan
TPH	Total Petroleum Hydrocarbons
USACE	U.S. Army Corps of Engineers
WP	Work Plan

WORK PLAN
STOCKPILE CHARACTERIZATION
HAMILTON ARMY AIRFIELD

1.0 INTRODUCTION

1.1 SCOPE OF WORK

This Work Plan (WP) presents the project scope, regulatory authorities, site background, and project objectives for the Stockpile Characterization at the Hamilton Army Airfield (HAAF) in Novato, California. The stockpile characterization is designed to collect the data necessary to determine if the stockpiles at HAAF must be removed from the site because of chemicals of concern within the piles.

The US Army Corps of Engineers (USACE), Sacramento District will perform the work.

This WP includes a Field Sampling Plan (FSP), a Quality Assurance Project Plan (QAPP), and a Site Specific Health and Safety Plan (SSHP). The FSP presents detailed field procedures to be followed in performance of the stockpile characterization, sampling strategy and rationale, sampling locations, sample collection methods, and sampling handling procedures. The QAPP presents procedures to ensure data quality objectives are met, including field and laboratory procedures and details of the analytical protocols. The SSHP presents measures to ensure the safety of all field personnel.

1.2 REGULATORY AUTHORITIES

The San Francisco Bay Area Regional Water Quality Control Board (SFBRWQCB) shall administer regulatory oversight.

1.3 SITE BACKGROUND

HAAF is located in Novato, CA. HAAF is a former Air Force Base and Army Airfield. The location of HAAF is shown in Figure 1-1.

1.4 CHEMICALS OF CONCERN

The chemicals of concern for this stockpile characterization are metals, organochlorine (OC) pesticides, polynuclear aromatic hydrocarbons (PNAs), total petroleum hydrocarbons (TPH), and trichloroethene (TCE) and its breakdown products.

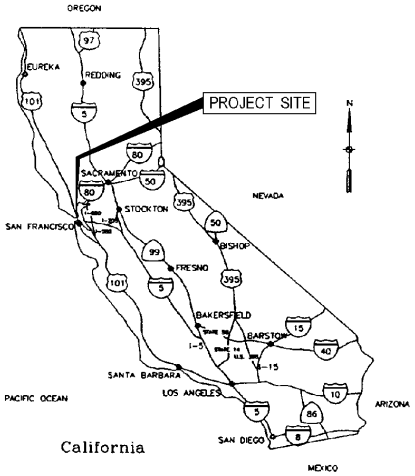

Figure 1-1: Project Location Map

1.5 SAMPLING STRATEGY ISSUES

The following information will be used to determine what stockpiles may be combined or grouped to constitute Stockpile Sets for sampling.

1) Source – Stockpiles from similar sources may be grouped together.

2) Physical location – Stockpiles located near one another may be grouped together.

3) Size of pile – Very small piles will be grouped with others so that each composite sample represents a similar volume.

4) Recent sampling – EKI data removes Group C3 piles from this sampling effort.

Individual stockpiles may be analyzed for specific constituents for the following reasons.

1) No historical data exists.

2) Current concentrations of TPH or PNAs are unknown following degradation, although previous concentrations were above current action goals.

3) Current concentrations of TCE and its breakdown products are unknown following volatilization and degradation, although they were detected previously.

1.6 CONSTITUENT SELECTION

The following information will be used to determine what constituents each Stockpile Set or individual stockpile will be analyzed for.

1) All Stockpile Sets will be analyzed for OC pesticides and metals, unless previously analyzed for the constituent.

2) Representative piles will be resampled and analyzed for TPH-Purgeable (including gasoline range organics) in historical concentration ranges from the ROD/RAP action goal (12 mg/kg) to 50 mg/kg, from 50 mg/kg to 500 mg/kg, and greater than 500 mg/kg. The results will indicate the concentration decrease for all piles with previous data in each concentration range.

3) Representative piles will be resampled and analyzed for TPH-Extractable (including diesel and motor oil range organics) in historical concentration ranges from the ROD/RAP action goal (144 mg/kg) to 500 mg/kg, from 500 mg/kg to 1,000 mg/kg, and greater than 1,000 mg/kg. The results will indicate the degree of degradation for all piles with previous data in each concentration range.

4) The six samples with historical PNA data above the ROD/RAP action goal will be reanalyzed for PNAs to assess degradation since the previous data was collected.

5) Stockpile sets with no previous data will be analyzed for all constituents of concern, including the OC pesticides and metals.

6) All stockpiles with historical detections of VOCs will be reanalyzed for those VOCs, limited to TCE and TCE breakdown products.

1.7 STOCKPILE LOCATIONS

Figure 1-2 shows the locations of the stockpiles.

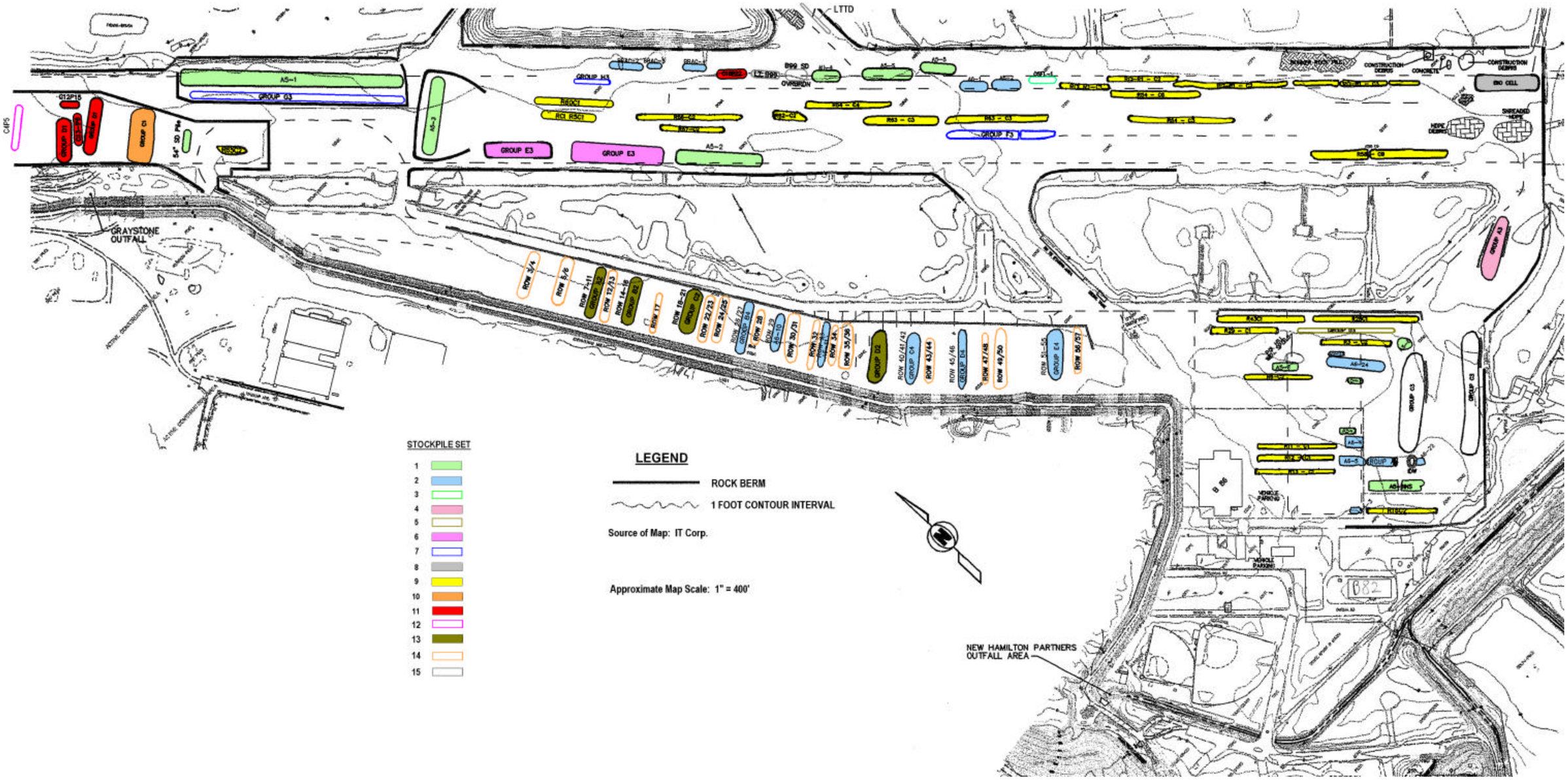

Figure 1-2: Stockpile Locations

2.0 STUDY OBJECTIVES

Stockpiles 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 objective for this Stockpile Characterization is to complete the characterization of the stockpile soils. This information collected will be used to determine if the soil from the stockpiles may be left on-site, with restricted or unrestricted reuse, or must be disposed off-site.

3.0 PROJECT STAFFING AND SCHEDULE

3.1 PROJECT STAFFING

The Environmental Design Section (EDS), Sacramento District, USACE will perform this SCS, under the supervision of Rick Meagher, Section Chief. Key project contacts are:

Person	Responsibility
Chuck Richmond, PE	Environmental Engineer
Kathy Siebenmann	Technical Lead, Chemist
Donna Maxey	Industrial Hygienist

3.2 PROPOSED PROJECT SCHEDULE

The fieldwork for the Stockpile Characterization is scheduled for September 2003. The Field Report will be submitted within 30-days following the receipt and validation of the analytical data.

4.0 REFERENCES

Erler and Kalinowski, Inc., *Results of Investigation of Group 3 Stockpiles, GSA Phase I Sale Area, Former Hamilton Army Airfield, Novato, CA*, 7 August 2003

IT Corporation, *Soil Stockpile Disposition Report for Hamilton Army Airfield, GSA Phase I Sale Area and BRAC Property, Novato, California*, March 1999.

APPENDIX A

DATA QUALITY OBJECTIVES

APPENDIX B

FIELD SAMPLING PLAN

APPENDIX C

QUALITY ASSURANCE PROJECT PLAN

APPENDIX D

SITE SPECIFIC HEALTH AND SAFETY PLAN