FACT SHEET

PCBs IN SURFACE SOILS

NASA AMES RESEARCH CENTER
MOFFETT FIELD, CALIFORNIA

INTRODUCTION

The National Aeronautics and Space Administration (NASA) Ames Research Center (Ames) is conducting an ongoing investigation to determine the presence of polychlorinated biphenyl compounds (PCBs) in site soils. This investigation was initiated primarily to identify potential surficial sources of PCBs to the stormwater system on the west side of Ames, and thence, to Site 25. Navy Site 25 includes the Eastern Diked Marsh area, into which stormwater drains after passing through the Stormwater Settling Basin.

The Navy has proposed to excavate contaminated soil and sediment in the Stormwater Retention Pond and the Eastern Diked Marsh (Navy Site 25), located further North of the Stormwater Settling Basin. Contaminated sediments in Site 25 were primarily transported by stormwater from upland sources. Sources of PCBs detected in Site 25, Aroclors 1260 and 1268, have been identified, respectively, in select upland areas and as a component in the Hangar 1 surface coating.

INVESTIGATION PHASES

The initial phase of the PCB in site soils investigation began with a PCB Source Identification Study. The study area boundary is shown on Figure 1. The goal of the study was to compile a complete record of all available PCB data for the study area, enter that data into a database, summarize the data on maps, review the data to identify potential sources of PCB contamination, and identify gaps in existing data. Areas of concern identified in the PCB Source Identification Study, as shown on Figure 2, included:

- Substation N221C and nearby areas
- Substation N227D and Building N218
- AOI 5, Substation N225B and vicinity
- Navy Site 8 North
- Current and former transformer locations
- Former Soil Fill Area, Site 25

A Sampling and Analysis Plan (SAP) was subsequently prepared to investigate soils in these identified areas potentially contaminated with PCBs. Site visits were completed to each potential source area to best locate sample collection locations. Transformer sites, both on the Ames Campus and the former Naval Air Station Moffett Field, were inspected for leaks, staining on concrete footings or pads, and staining on the ground surface. If a transformer was known to have leaked in the past, sampling was also proposed if there were unpaved surfaces within the area that would be affected by runoff.

Analytical results of the first phase of sample collections, as shown in Table 1, indicated the presence of PCBs in surface soils at a number of investigation areas. Areas of concern included:

- Substation N221C and nearby boring locations SB4-2 and SB4-4 (AOI-4)
- Substation N227D and Building N218
- Building N207 electrical transformer
- Electrical substation at N225A
- Navy Site 8
- Current and former transformer locations
- Former Soil Fill Area, Site 25

A Phase II surface soil SAP has been prepared to further characterize the lateral and vertical extent of PCBs within areas located on the Ames Campus. The Ames Phase II surface soil SAP area with associated sample locations are shown on Figure 3.

PCBs in soils at electrical Substation N221C were remediated during the summer of 2004 under a voluntary cleanup agreement with the California Department of Toxic Substances (DTSC). The electrical substation located at N227D is currently scheduled to be remediated during the summer of 2005 under a similar cleanup agreement with the DTSC.

Areas containing PCBs in surface soils located on either the former Naval Air Station Moffett Field or the current Navy IRP Site 8 have been referred to the Navy for further investigation.

FIGURE 2
PCB SOURCE ID STUDY
AREAS OF CONCERN

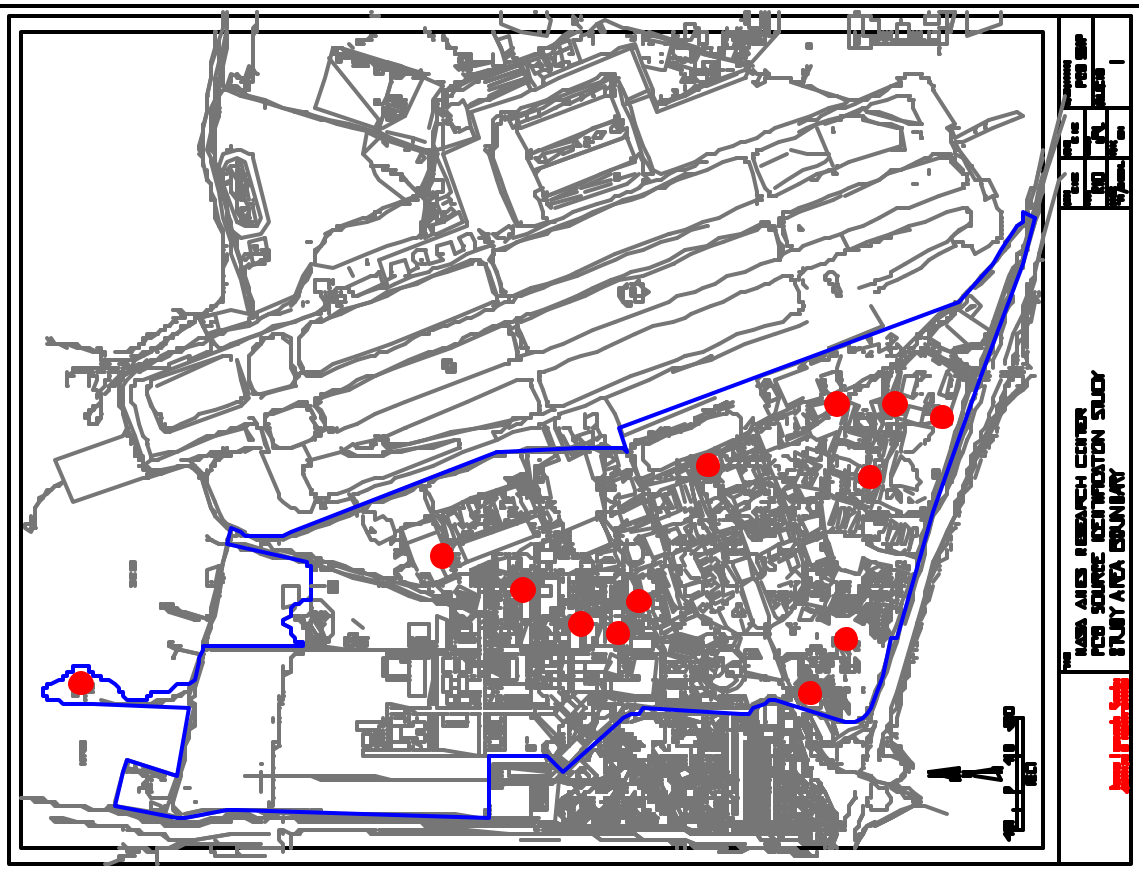

FIGURE 1
PCB SOURCE IDENTIFICATION
STUDY AREA

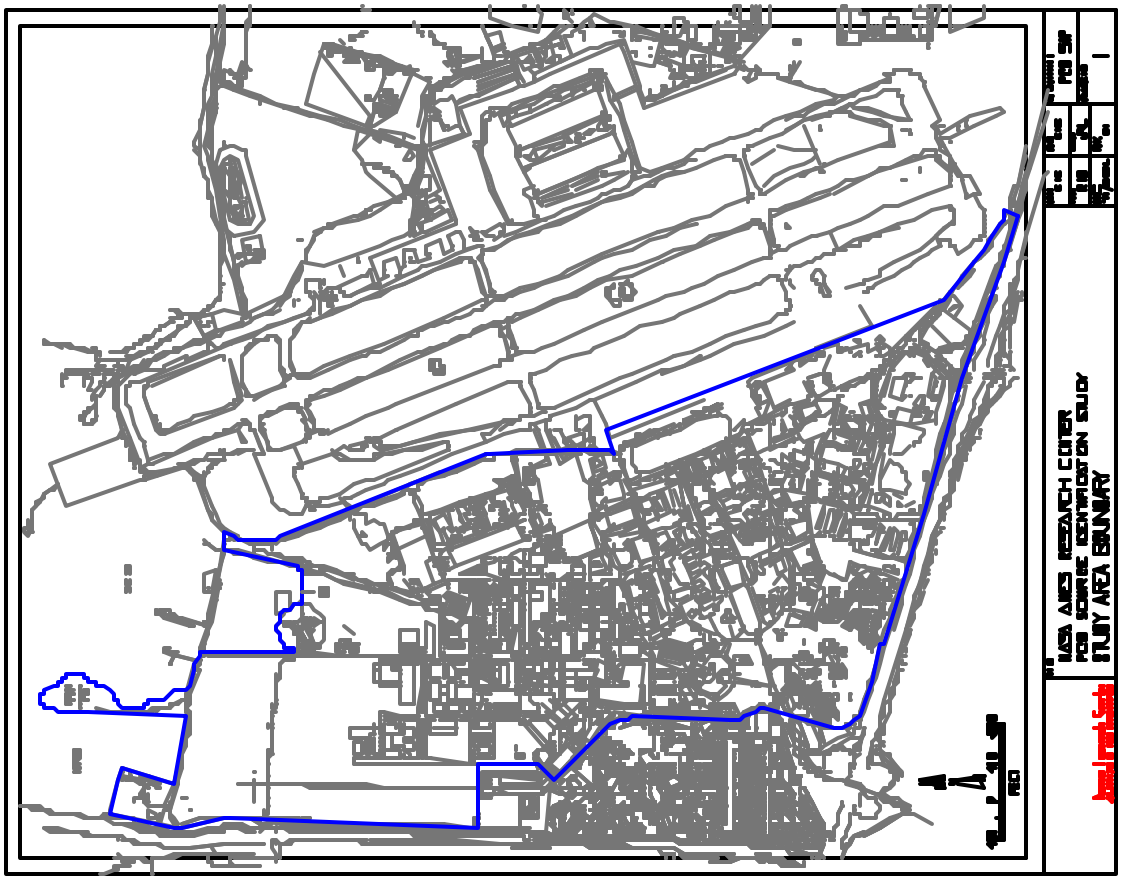

FIGURE 3
PHASE II INVESTIGATION
SAMPLE SITE LOCATIONS

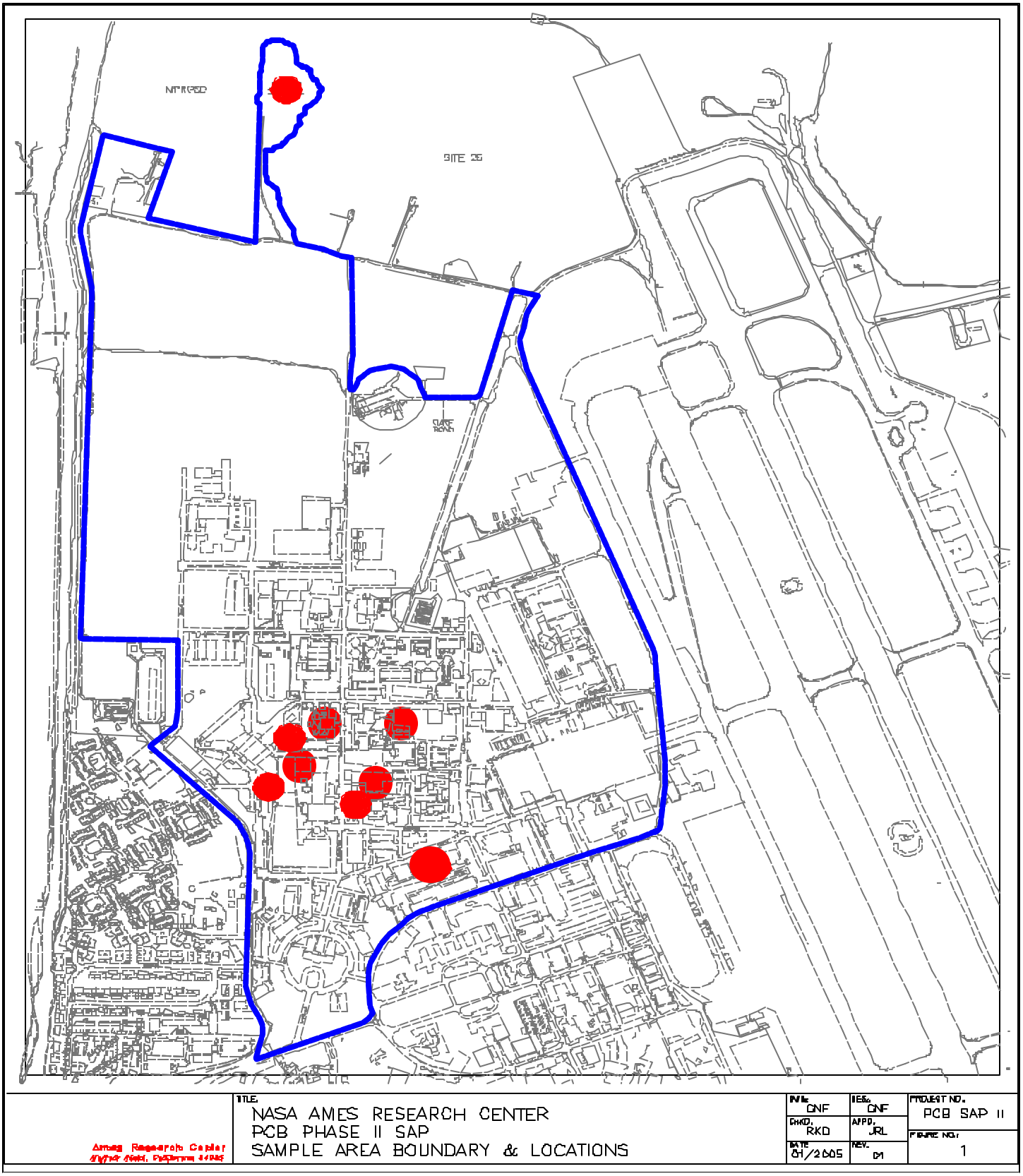

TABLE 1

Sample Location	Aroclor 1260 Concentration (ug/Kg)
Vicinity of SB4-2	7,100
Vicinity of SB4-4	150 to 1,100
Substation N227D	21 to 480,000
Building 218	37 to 13,000
Substation N225A	<20 to 3,400
Navy Site 8 North	390 to 28,000
TRANSFORMERS	
Building 26	140 to 1,800
Building 45	200 to 1,300
Building 525	430 to 1,900
Building 583C	440 to 1,900
Building 951	1,100 to 1,300
FORMER SOIL FILL AREA	
(North of OARF Road)	700 to 5,000

ug/Kg = Micrograms per Kilograms (equivalent to parts per billion [ppb])

PCB in site soils Action Limits:

South of OARF Road = 1000 ug/Kg (1000 ppb) = 1 mg/kg (1ppm)

North of OARF Road = 470 ug/kg = 470 ppb (0.47 mg/Kg = 0.47 ppm)

CONTACT INFORMATION

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PUBLIC REVIEW

The following documents are available for public review:

Report of PCB Source Identification Study
PCB Sampling and Analysis Plan Phase I
Draft Report of Findings, PCB in Site Soils
Draft PCB Sampling and Analysis Plan Phase II

Mountain View Public Library
Reference Desk
585 Franklin Street
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