

N60508.AR.000952
NAS WHITING FIELD
5090.3a

JANUARY 5, 1999 RAB MEETING NAS WHITING FIELD FL
1/5/1999
NAS WHITING FIELD

**NAS Whiting Field RAB Meeting
January 5, 1999**

*RIs at Sites 11, 13, and 31
Eric Blomberg
Harding Lawson Associates*

NAS Whiting Field

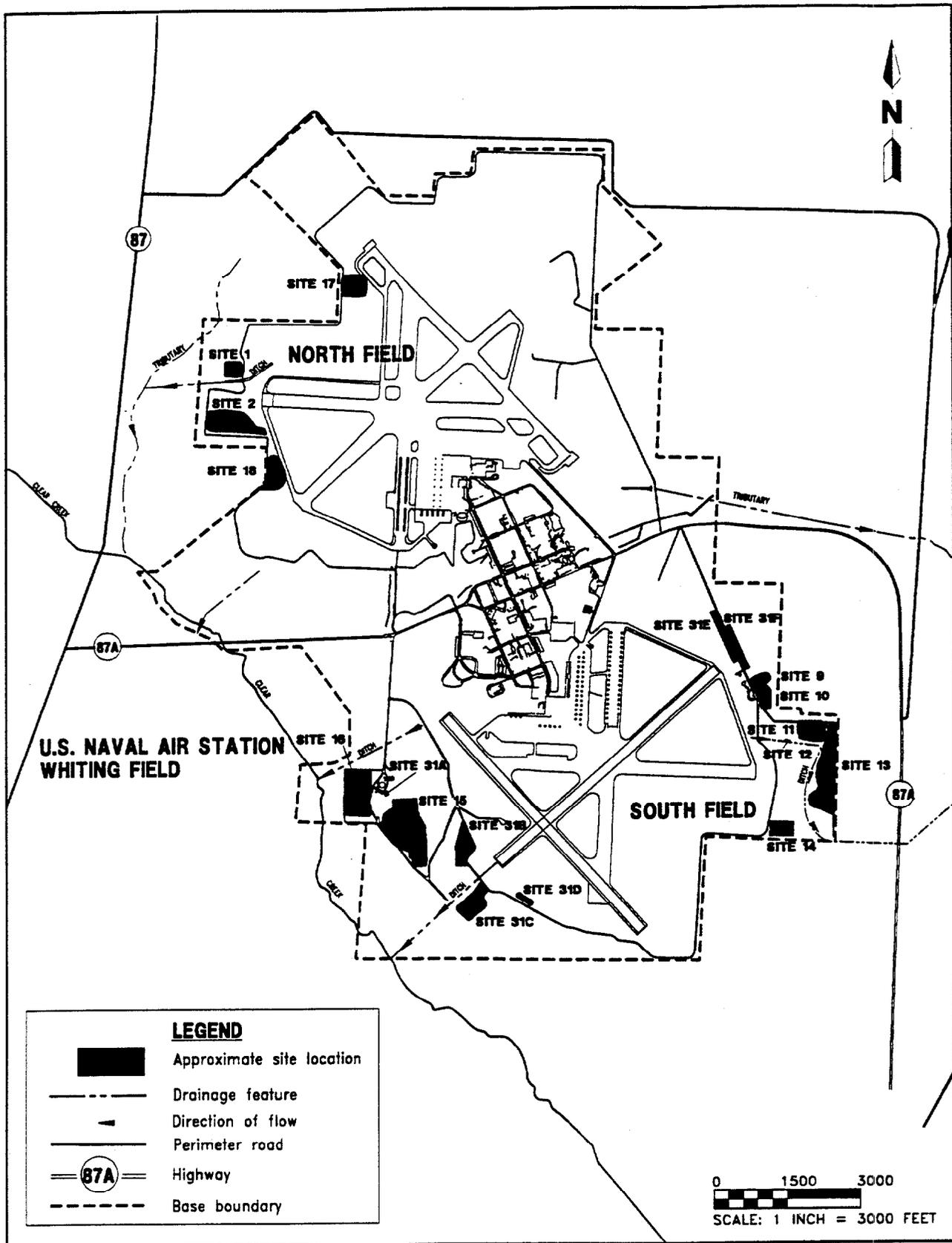


Site Description

- Site 11, Southeast Open Disposal Area (B) Landfill
- Site 13, Sanitary Landfill
- Site 31, Sludge Drying Beds and Disposal Area

NAS Whiting Field





PERIMETER ROAD SITE LOCATIONS

**NAS Whiting Field RAB Meeting
January 5, 1999**

RI Overview

- Field efforts
- Background and findings
 - ◆ Site 11
 - ◆ Site 13
 - ◆ Site 31
- Human health and ecological risks
- Recommendations

NAS Whiting Field



Completed RI Field Work

- Soil gas surveys
- Surface and subsurface soil sampling
- Well installation and groundwater sampling
- Hydrogeologic assessments
- Geophysical assessments
(Sites 11 and 13)
- Test pitting (Site 11)

NAS Whiting Field



**NAS Whiting Field RAB Meeting
January 5, 1999**

Field Work Findings: Groundwater

- Hydrogeologic data collected at all sites, including
 - ◆ depth to water table
 - ◆ rate and volume of groundwater movement
 - ◆ rate of infiltration from surface
- Analytical findings on site contaminants being integrated into detailed basewide groundwater RI and risk assessment (Site 40)

NAS Whiting Field

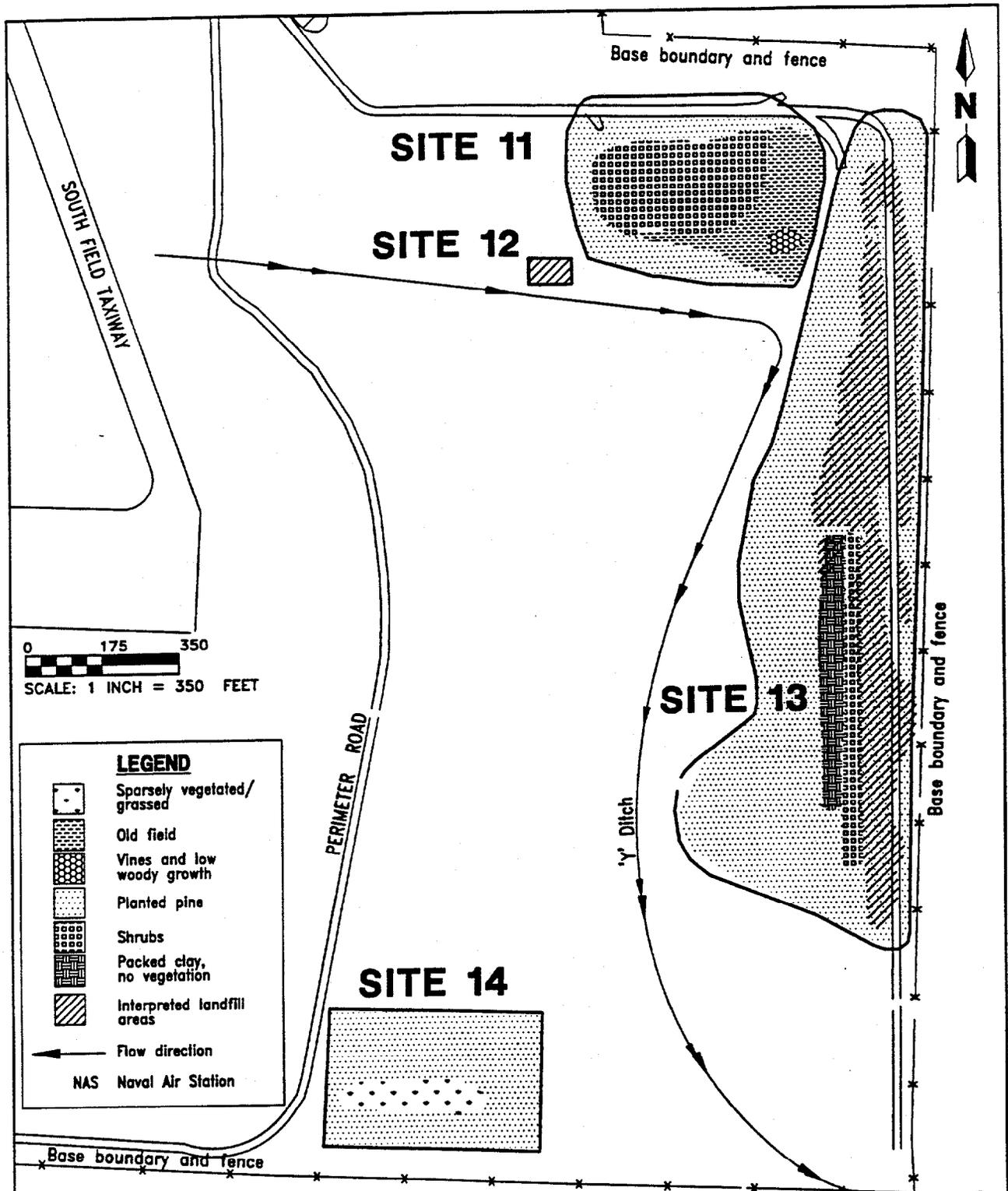


Site 11 Background

- Southeast Open Disposal Area
- 3-acre site along eastern boundary of NAS Whiting Field
- An old "borrow pit"
- Used for open disposal from 1943 to 1970 (approximate)

NAS Whiting Field





LEGEND

-  Sparsely vegetated/grassed
-  Old field
-  Vines and low woody growth
-  Planted pine
-  Shrubs
-  Packed clay, no vegetation
-  Interpreted landfill areas
-  Flow direction
- NAS Naval Air Station

FIGURE 7-1
SITES 11, 12, 13, AND 14
VEGETATIVE COVER MAP



REMEDIAL INVESTIGATION REPORT
SITE 13, SANITARY LANDFILL

NAS WHITING FIELD
MILTON, FLORIDA

**NAS Whiting Field RAB Meeting
January 5, 1999**

Current View of Site 11



NAS Whiting Field



Site 11 - What Was Disposed Of?

- General trash and construction debris
- Tree clippings
- Furniture
- Waste solvents and paints
- Transformer oil and hydraulic fluid
- Other waste oil

NAS Whiting Field



**NAS Whiting Field RAB Meeting
January 5, 1999**

Site 11 - General Findings

- Evidence of a single, well defined landfill
- Evidence of metals at three other isolated areas
- Groundwater moves southeast across the site and likely discharges at Big Coldwater Creek
- Soil gas (mostly methane) at 2 of 46 survey points

NAS Whiting Field



Site 11 - Soil Findings

- Standards for industrial and residential sites are applied
- Two petroleum compounds, one pesticide compound, and five metals in surface soil above acceptable levels
- Four metals in subsurface soil above acceptable levels

NAS Whiting Field



**NAS Whiting Field RAB Meeting
January 5, 1999**

Site 13 Background

- Sanitary landfill
- 14-acre site along eastern boundary of NAS Whiting Field
- Primary sanitary landfill from 1979 to 1984

NAS Whiting Field



Current Views of Site 13



NAS Whiting Field



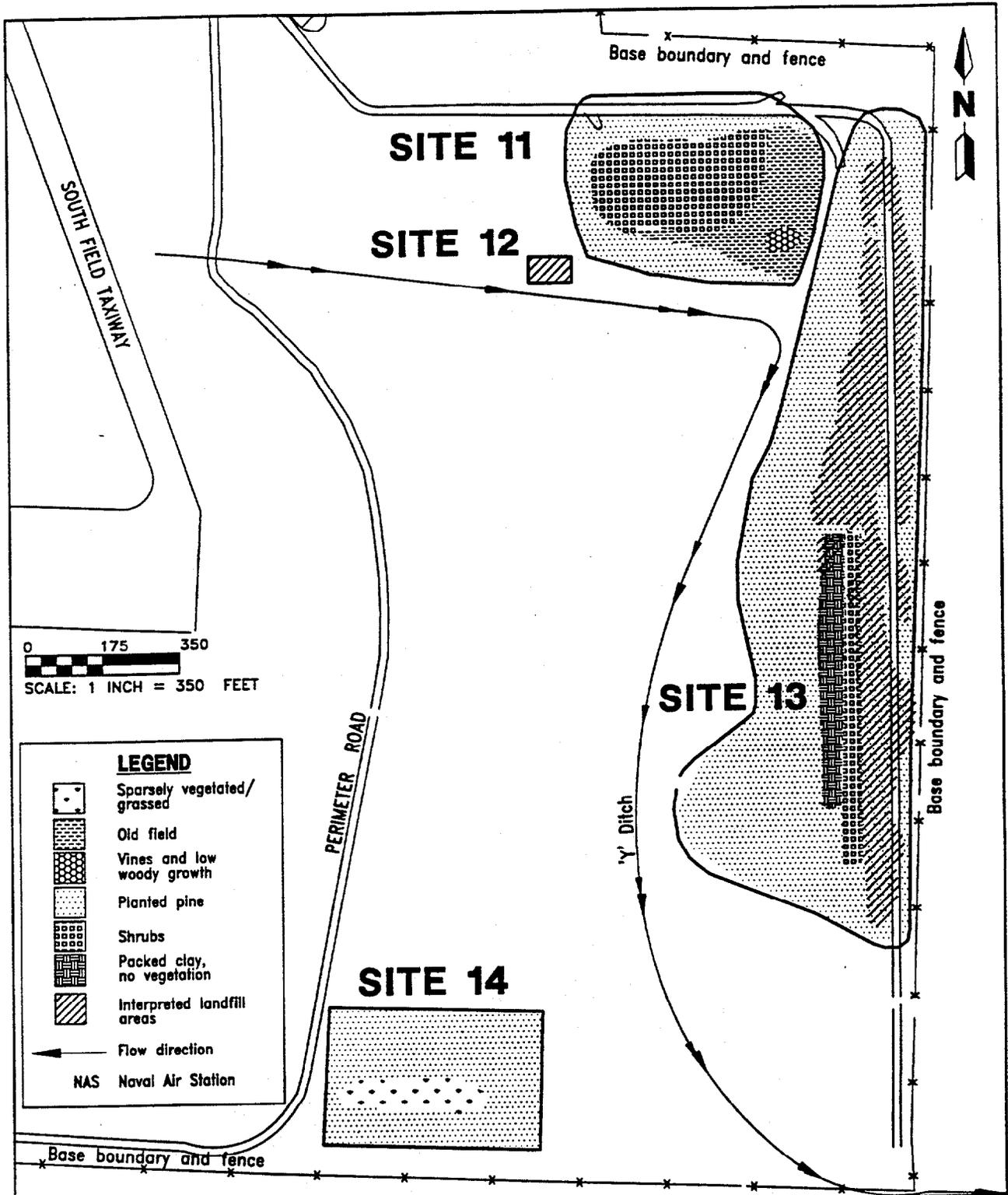


FIGURE 7-1
SITES 11, 12, 13, AND 14
VEGETATIVE COVER MAP



REMEDIAL INVESTIGATION REPORT
SITE 13, SANITARY LANDFILL

NAS WHITING FIELD
MILTON, FLORIDA

**NAS Whiting Field RAB Meeting
January 5, 1999**

Site 13 - What Was Disposed Of?

- Waste solvents (1979 only)
- Paint-stripping residue (1979 only)
- General trash and nonhazardous waste

NAS Whiting Field



Site 13 - General Findings

- Soil is generally sand, silt, and clay
- Landfill consists of three trenches totaling approximately 10 acres
- Water table is approximately 40 to 65 feet below land surface
- Groundwater moves southeast across the site

NAS Whiting Field



**NAS Whiting Field RAB Meeting
January 5, 1999**

Site 13 - Soil Findings

- Standards for industrial and residential sites are applied
- Four metals in surface soil above acceptable levels
- Arsenic in subsurface soil above acceptable level

NAS Whiting Field

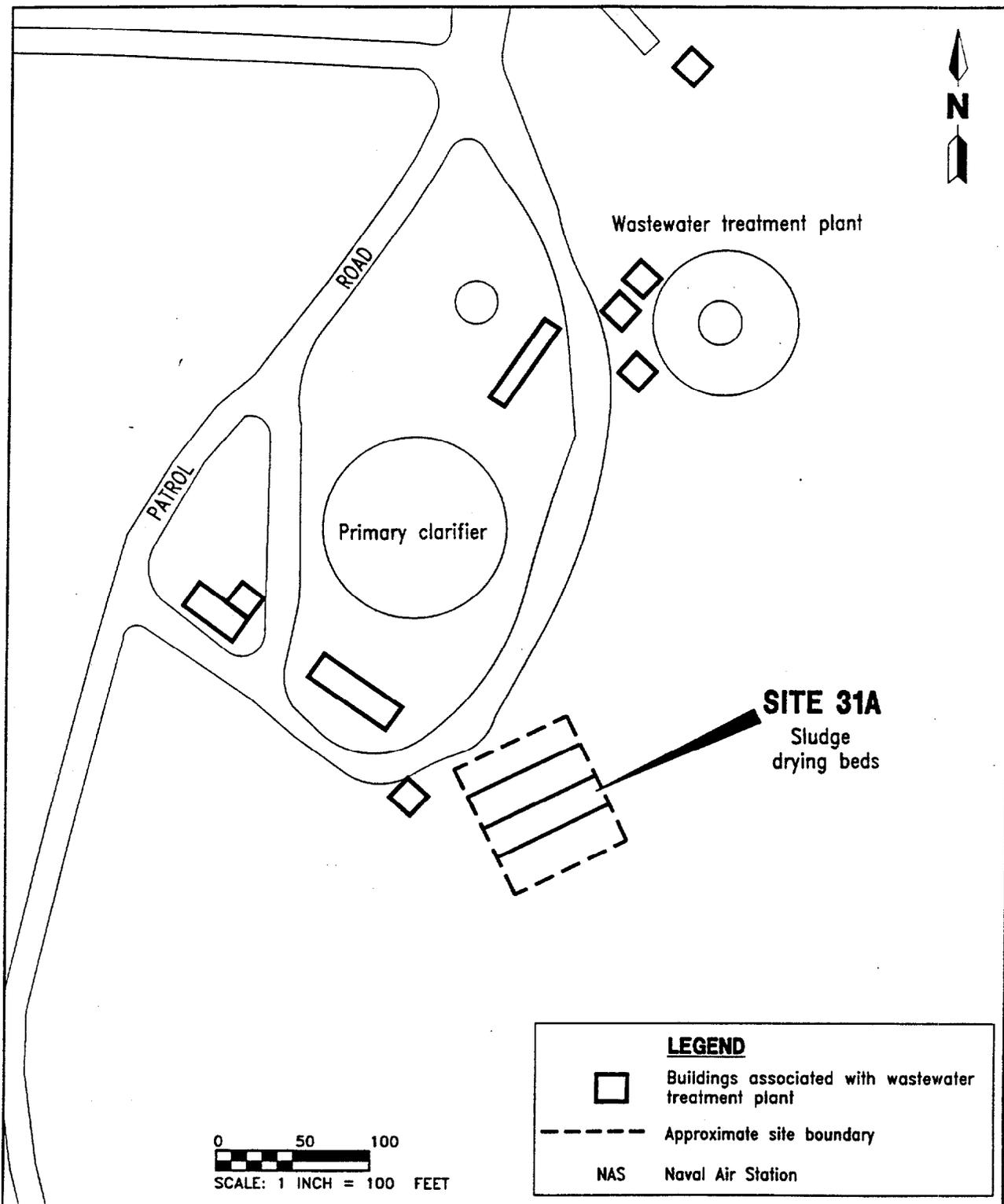


Site 31 Background

- Sludge Drying Beds and Disposal Areas (six separate locations)
- Used for sludge drying and disposal from base wastewater treatment plant
- Sludge drying from 1940s to 1990
- Interim sludge removal completed

NAS Whiting Field





**FIGURE 2-1
SITE 31A, SLUDGE DRYING
BEDS, SITE PLAN MAP**



**REMEDIAL INVESTIGATION REPORT
SITE 31, SLUDGE DRYING BEDS
AND DISPOSAL AREAS**

**NAS WHITING FIELD
MILTON, FLORIDA**

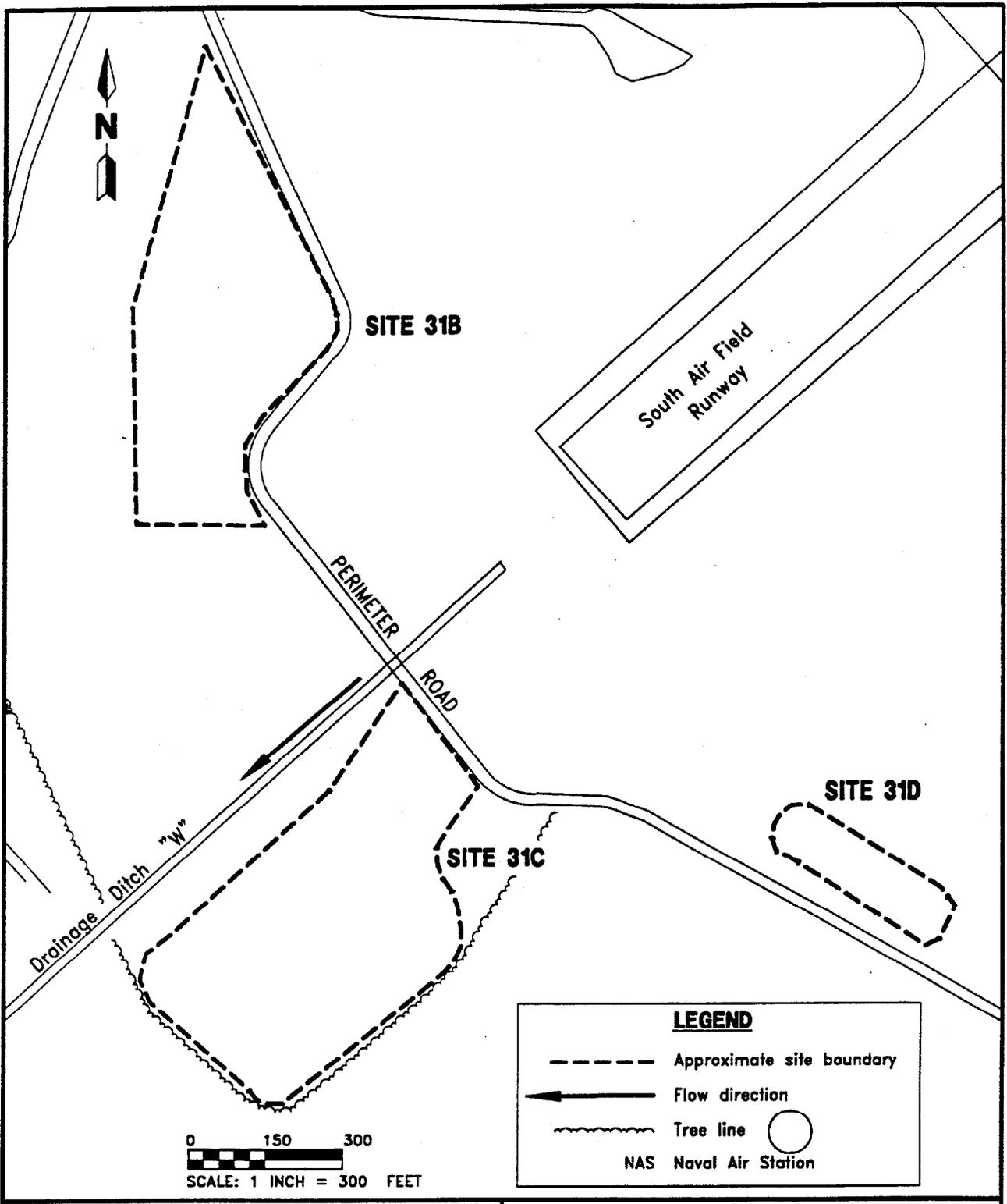


FIGURE 2-2
SITES 31B, 31C, AND
31D, SLUDGE DISPOSAL
AREAS, SITE PLAN MAP



REMEDIAL INVESTIGATION REPORT
SITE 31, SLUDGE DRYING BEDS
AND DISPOSAL AREAS

NAS WHITING FIELD
MILTON, FLORIDA

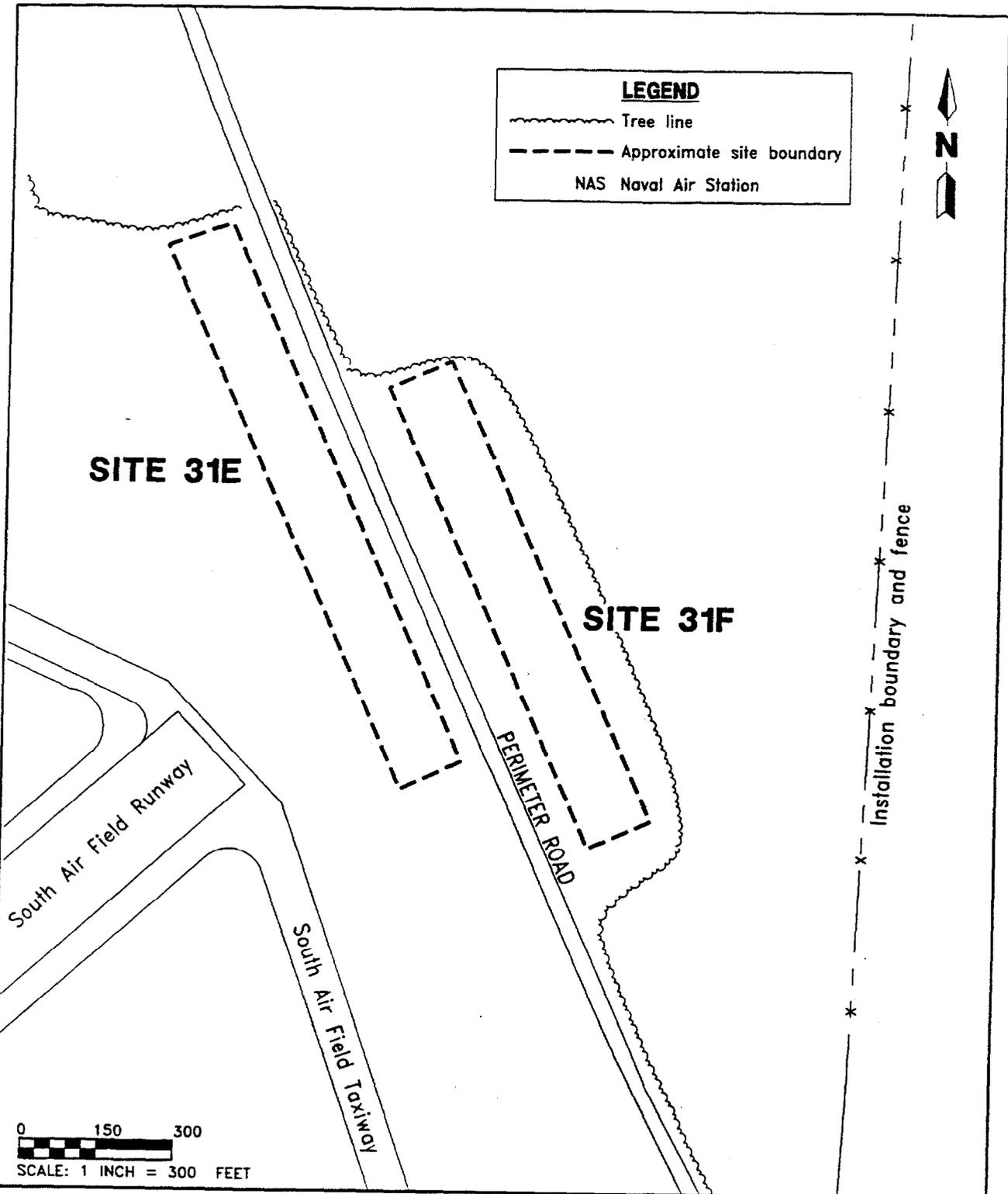


FIGURE 2-3
SITES 31E AND 31F, SLUDGE DISPOSAL
AREAS, SITE PLAN MAP

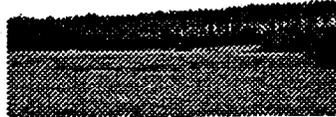


REMEDIAL INVESTIGATION REPORT
SITE 31, SLUDGE DRYING BEDS
AND DISPOSAL AREAS

NAS WHITING FIELD
MILTON, FLORIDA

**NAS Whiting Field RAB Meeting
January 5, 1999**

Current Views of Site 31



NAS Whiting Field

Site 31 - General Findings

- Groundwater moves southeast across Sites 31A through D and likely discharges at Clear Creek
- Groundwater moves east-southeast across Sites 31E and F and likely discharges to Big Coldwater Creek



NAS Whiting Field

**NAS Whiting Field RAB Meeting
January 5, 1999**

Site 31 - Soil Findings

- **Standards for industrial and residential sites applied**
- **Surface soil**
 - ◆ all contaminants detected within acceptable levels at Sites 31A, B, D, E, and F
 - ◆ one pesticide compound and seven metals above acceptable levels at Sites 31C (addressed by interim sludge removal)
- **Subsurface soil**
 - ◆ all contaminants detected within acceptable levels

NAS Whiting Field



What are the Human Health Risks?

- **Soil only**
 - ◆ Sites 11 and 13: increased cancer risk for hypothetical future resident
 - ◆ Site 31C: increased cancer risk for current trespasser, hypothetical future resident, trespasser, and site worker
 - ◆ these risks exceeded Florida target risk limits of 1×10^{-6} (increased risk of cancer for one person in a million)

NAS Whiting Field



**NAS Whiting Field RAB Meeting
January 5, 1999**

What are the Ecological Risks?

- **Soil only**
 - ◆ Site 11: localized nonfatal effects predicted for small mammals and birds; sitewide nonfatal effects predicted for predators
 - ◆ Site 13: nonfatal effects predicted for individual short-tailed shrews
 - ◆ Site 31: potential risks predicted for animals and plants evaluated at 31C; potential risks predicted for some individuals at other Site 31 locations

NAS Whiting Field



***RI Recommendations for Sites 11,
13, and 31***

- **Feasibility studies (FSs) needed due to potential human health risks posed by soil contamination**

NAS Whiting Field



**NAS Whiting Field RAB Meeting
January 5, 1999**

Questions and Comments



NAS Whiting Field



*RAB Evaluation Results -
Pat Durbin and Bill Kollar (HLA)*

NAS Whiting Field



**NAS Whiting Field RAB Meeting
January 5, 1999**

RAB Evaluation Results

- Continue site status reports? yes
- Continue site visits? yes
- Provide equipment and technology demonstrations? generally yes
- Use video presentations? yes
- Review RAB membership and attendance policy? generally no

NAS Whiting Field



RAB Evaluation Results (cont.)

- Participate in on-base activities? mixed reaction
- Present guest speakers? yes
- Preferred meeting location: PJC, NAS Whiting Field
- Preferred day and time: Tuesday or Thursday, 6 p.m.
- Preferred meeting frequency: generally every other month
- Preferred room set-up: current set-up ok

NAS Whiting Field



**NAS Whiting Field RAB Meeting
January 5, 1999**

RAB Evaluation Results (cont.)

- **Member recommendations**
 - ◆ videos in lieu of site visits
 - ◆ keep members informed of on-base activities appropriate for RAB participation
 - ◆ limit guest speakers to relevant topics, 15 to 20 minutes
 - ◆ contacts with other area RABs (possible joint meeting)
 - ◆ presentation on potential risks by site, refresher on basic environmental program concepts

NAS Whiting Field



***Interim Remedial Actions
Tom Conrad
Bechtel Environmental***

NAS Whiting Field

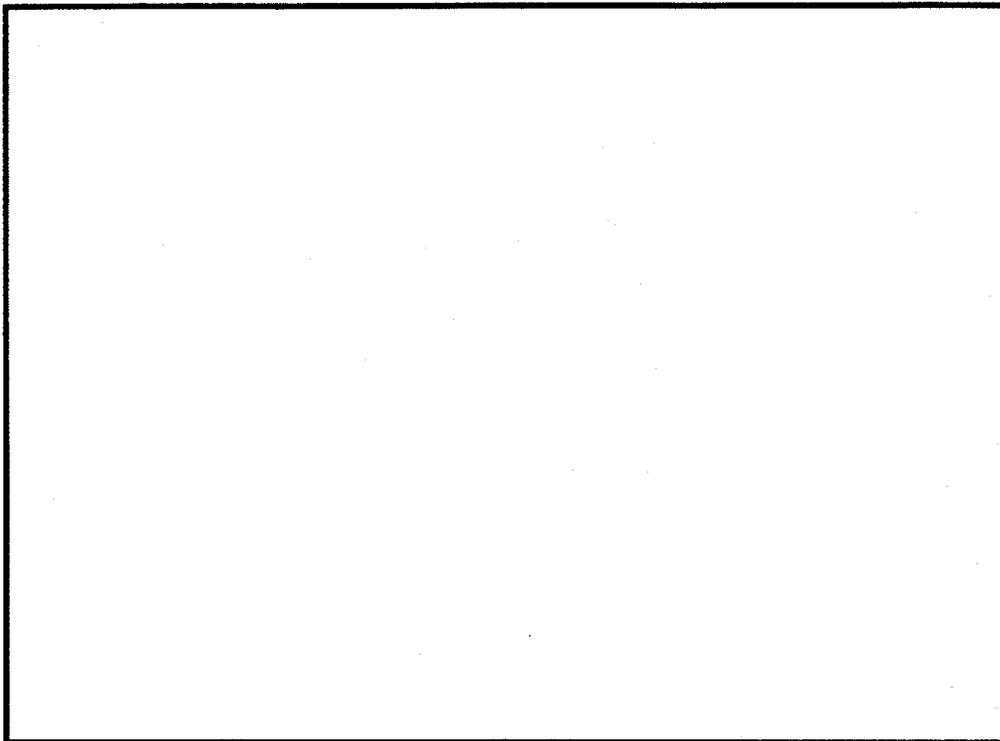


**NAS Whiting Field RAB Meeting
January 5, 1999**

RAB Business

- Location and schedule for next meeting
- Agenda topics and speakers
- Other topics

NAS Whiting Field



Perimeter Road Site Status Summary

Site Number and Name	Remedial Investigation(RI) (field studies/report)	Feasibility Study (FS) (report)	Proposed Plan
1 Northwest Disposal Area	X (F)	X (F)	Land-use controls (F)
2 Northwest Open Disposal Area	X	X (F)	Land-use controls
9 Waste Fuel Disposal Area and 10 Southeast Open Disposal Area (A)	X	X (D)	Hot spot soil cover with land-use controls *
11 Southeast Open Disposal Area (B)	X	In progress	
12 Tetraethyl Lead Disposal Area	X	In progress	Land-use controls *
13 Sanitary Landfill	X	In progress	
14 Short-Term Sanitary Landfill	X		
15 Southwest Landfill	X		
16 Open Disposal and Burning Area	In progress		
17 Crash Crew Training Area	In progress		
18 Crash Crew Training Area	X		
31 Sludge Drying Bed/Disposal Area	X		
Industrial Area Groundwater Report	In progress		

* Based on current knowledge
 F = final
 D = draft