EPA Superfund Record of Decision:

PLATTSBURGH AIR FORCE BASE EPA ID: NY4571924774 OU 09 PLATTSBURGH, NY 03/31/1995

DECLARATION FOR THE RECORD OF DECISION

SITE NAME AND LOCATION

Plattsburgh Air Force Base (AFB) Pesticide Storage Tank, ST-020 Plattsburgh AFB, New York

STATEMENT OF BASIS AND PURPOSE

This Record of Decision (ROD) presents the final remedial decision, no-f Pesticide Storage Tank, Site ST-020, on Plattsburgh AFB in Plattsburgh, was developed pursuant to the Comprehensive Environmental Response, Comp Liability Act of 1980 (CERCLA) as amended by the Superfund Amendments an Act (SARA) of 1986, and the National Contingency Plan. This decision is Administrative Record for this site which is available for review at Pla

This decision has been selected by the United States Air Force in conjun States Environmental Protection Agency (USEPA) with the concurrence of t Department of Environmental Conservation (NYSDEC) pursuant to the Federa Agreement (FFA), Docket Number II-CERCLA-FFA-10201, which Plattsburgh AF with the USEPA and NYSDEC under Section 120 of CERCLA.

DESCRIPTION OF DECISION

Site ST-020 was a 1,000-gallon storage tank that was used to store waste pesticides. In November 1992, Plattsburgh AFB conducted a removal actio contents, the tank itself, and the surrounding soils were removed. Plat soils and the tank to West Sand Lake Landfill in West Sand Lake, New Yor (wastewater) were taken to CIBRO's wastewater treatment facility in Alba completion of the removal action, Plattsburgh AFB collected confirmatory this sampling indicate that the removal action was fully effective in achealth and the environment..

DECLARATION

This no-further-action decision is consistent with the National Continge additional risk to public health or the environment from hazardous subst

JEANNE M. FOX Regional Admaustditor, USEPA Region H	
ALAN K. OLSEN Director Air Force Rase Conversion Agency	

3.0 SITE NAME, LO DESCRIPTION:

This Record of Decision (ROD) documents Plattsburgh AFB's final decision, no-further-action, for the Pesticide Storage Tank, Site ST-020, at Plattsburgh Air Force Base
(AFB) in Plattsburgh, New York. This is the
United States Air Force's final remedial
South of the Canad ST-020, at Plattsburgh Air Force Base action since no site contaminants remain at Site ST-020.

Plattsburgh AFB is County in northeas (Figure 1), border of Plattsburgh and north of Albany.

This ROD is being published in accordance with Section 117(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Its purpose is to summarize the results and conclusions of previous studies and summarize the information that Plattsburgh AFB used in the no-further-action decision. This decision has been selected by the United States Air Force in conjunction with the United States Environmental Protection Agency (USEPA) with the concurrence of the New York State Department of Environmental Conservation (NYSDEC).

2.0 STATEMENT OF BASIS AND PURPOSE:

This decision document states the basis for the Plattsburgh AFB decision to end all additional remedial actions, including investigations, at ST-020, the Pesticide Storage Tank Site. ST-020 is listed as an area of environmental concern in Attachment II of the Federal Facilities Agreement (FFA), Docket Number II-CERCLA-FFA-10201, which Plattsburgh AFB entered into with the Site ST-020, the P USEPA and NYSDEC under CERCLA Section 120. This decision was made in accordance with CERCLA as amended by the Superfund Amendments and Reauthorization Act (SARA) and Section 300.430 of the National Contingency Plan (NCP).

located in an indu Engineering buildi fenced area on Pla east and hydrologi ST-020 site are si Shop, SS-019 CES P Building 508 Open Approximately 600

Pesticide Storage Tank Site is Lake Champlain.

Champlain.

The storage tank was a standard 1,000gallon, below-grade, concrete storage tank
by cleaning the eq
pesticides and by
used to store the that received wastewater from the pesticides and by Entomology Shop (that worked out of an used to store the office located in the basement of Building this staff member,

malathion, and sev discharged to the

426) through a floor drain and sink. According to the design drawing, the tank walls were two and one-half inches thick and the floor and ceiling were four inches thick. The tank was accessed through a top manhole and had no other outlets. The bottom of the tank was almost nine feet below ground surface. (The design drawing is included in the Removal Action Memorandum which provided the basis for removal of the tank in November 1992.)

4.0 SITE HISTORY:

A Records Search, conducted by E. C. Jordan, reported that in October 1986, this and toxaphene. Th tank was found to be leaking (Reference 1). identified 4 parts According to this report, the tank was methoxychlor in th installed in 1972 and received rinse water, which typically contained dursban, bendiocarb, bleach, ammonia, thoric acid, and chlordane. The rinse water discharged to
the underground storage tank through a floor
drain inside the shop. The floor drain was
closed off in 1987. (According to the asbuilt, the tank was installed in 1982 as

the underground storage tank through a floor
graph of the shop. The floor drain was
closed off in 1987. (According to the asbuilt, the tank was installed in 1982 as
graph of the shop built, the tank was installed in 1982 as opposed to 1972, as reported by E. C. Jordan. Plattsburgh AFB believes that the at this site. The 1982 date is accurate.)

According to a pesticide program staff member, rinse water containing dursban, bendiocarb, pyrethin, bygon, boric acid,

temporarily store arrangements could however, the fluid point that the tan pesticide shop sto or 1986, and the s same time.

On 27 April 1992, Plattsburgh AFB In Program (IRP) obta contents of the pe sample was analyze (7) pesticides: h endrin, heptachlor This was the only contents of the ta

for conducting a t the action memoran AFB to properly di the tank itself, a soil surrounding t

TABLE 1 SUMMARY OF ANALYTES DETECTED IN WASTEWATER ST-020 SITE - RECORD OF DECISION

DETECTION	
Chlordane 8080 ND	
Endrin 8080 ND	
Heptachlor 8080 ND	
Lindane 8080 ND	
Methoxychlor 8080 1/1	
Toxaphene 8080 ND	
Heptachlor Epoxide 8080 ND	
Bendocarb 632 ND	
Dursban 8080 1/1	

Results are reported in ug/L (ppb) ND - Not Detected

- * Sampled 27 April 1992
- ** Sampled 17 Nov 1992

5.0 REMOVAL ACTION:

In November 1992, Plattsburgh AFB conducted the removal work at this site. The tank contents, the tank itself, and the surrounding soils were removed. Plattsburgh AFB transported the soils and the tank to West Sand Lake Landfill in West Sand Lake, New York. The tank contents (wastewater) was taken to CIBRO's wastewater treatment facility in Albany, New York.

After the completion of the removal action, Plattsburgh AFB collected five soil samples from the bottom of the open excavation, approximately three feet beneath the former location of the tank floor, and backfilled the open excavation with clean soils. Four of the samples were analyzed for eighteen (18) pesticides and seven (7) PCBs (Table 2). All five soil samples were analyzed for dursban and bendiocarb. The sample results did not identify any of these constituents except for dursban at a concentration of 134 parts per billion (ppb) in one sample out of five.

In addition to samples collected by Plattsburgh AFB, the contractor, Jo-Ja Construction, collected samples prior to disposing of the tank and the tank contents. Jo-Ja collected five samples from soils remaining in the open excavation approximately three feet beneath the former location of the tank floor, one sample from the tank contents (liquid), and one sample from the soils that had been excavated. Toxicity Characteristic Leachate Procedure (TCLP) analyses were conducted on all six soil samples. The analyses for pesticides conducted on the six soil samples included the seven pesticides initially tested for in the sample taken from the tank contents by Plattsburgh AFB staff in 1992. The tank contents sample collected by Jo-Ja was analyzed for dursban and bendiocarb. The only contaminant identified in the seven samples taken by Jo-Ja was dursban, at a concentration of 0.7 ppb, from the liquid tank contents sample.

Plattsburgh AFB doe need to install mon groundwater samples contamination was n underlying the tank and because dursban Plattsburgh AFB bel contaminant migrate approximately 15 to would also be detec to the groundwater. groundwater downgra (Figure 3) was inve Site Investigation Engineering Paint S performed at the Bu Area (SS-028), and Investigation (RI) Hobby Shop Site (Si Target Compound Lis were detected in gr the monitoring well

6.0 RISK ASSESSME

Dursban was the on the removal action one of the five so collected from the (concentration 134 detected in the li collected by the c concentration of 0

TABLE 2

SUMMARY OF ANALYTES DETECTED IN SOIL ST-020 SITE - RECORD OF DECISION

ANALYTE	EPA METHODOLOGY	FREQUENCY OF
		DETECTION
Arsenic	7060	4/6
Aldrin	8080	0/5
Barium	7080	6/6

Bendiocarb	639	0/5
Benzene	8240	0/6
a BHC	8080	0/5
b BHC	8080	0/5
g BHC	8080	0/5
y BHC	8080	0/5
Cadmium	7130	0/6
Carbon Tetrachloride	8240	0/6
Chlordane	8080	0/11
Chlorobenzene	8240	0/6
Chloroform	8240	0/6
Chromium	7190	0/6
Total Cresols	8270	0/6
2,4-D	8150	0/6
1,4-Dichlorobenzene	8240	0/6
1,2-Dichloroethane	8240	0/6
1,1 Dichloroethylene	8240	0/6
2,4-Dinitrotoluene	8270	0/6
DDD	8080	0/5
DDE	8080	0/5
Dieldrin	8080	0/5
DDT	8080	0/5
Dursban	8140	1/5
Endosulfan I	8080	0/5
Endosulfan II	8080	0/5
Endosulfan Sulfate	8080	0/5
Endrin	8080	0/11
Endrin Aldehyde	8080	0/5
Heptachlor	8080	0/11
Heptachlor Epoxide	8080	0/11
Hexachlorobenzene	8270	0/6
Hexachlorobutadiene	8270	0/6
Hexachloroethane	8270	0/6
Lead	7420	2/6
Lindane	8080	0/6
Mercury	7470	0/6

Results are reporteo in mg/kg (ppm) ND - Not Detected

TABLE 2 (CONTINUED)

SUMMARY OF ANALYTES DETECTED IN SOIL ST-020 SITE - RECORD OF DECISION

ANALYTE	EPA METHODOLOGY	FREQUENCY OF DETECTION
Methoxychlor	8080	0/6
Methyl Ethyl Ketone	8240	0/6
Nitrobenzene	8270	0/6
Pentachlorophenol	8270	0/6
Pyridine	8270	0/6
PCB-1016	8080	0/5
PCB-1221	8080	0/5
PCB-1232	8080	0/5
PCB-1242	8080	0/5
PCB-1248	8080	0/5
PCB-1254	8080	0/5

PCB-1260	8080	0/5
Selenium	7740	6/6
Silver	7760	4/6
Tetrachloroethylene	8240	0/6
Toxaphene	8080	0/11
Trichloroethylene	8240	0/6
2,4,5-Trichlorophenol	8270	0/6
2,4,6-Trichlorophenol	8040	0/6
2,4,5-TP	8150	0/6
Vinyl Chloride	8010	0/6

Results are reported in mg/kg (ppm) ND - Not Detected

The active ingredient in Dursban, known as chlorpyrifos, is not a known or suspected human carcinogen. The only known effect from inhaling or ingesting chlorpyrifos is temporary reduced cholinesterase levels in plasma, red blood cells, and nerve endings. The National Academy of Science has recommended a 24-hour exposure guideline for inhalation of chlorpyrifos of 10 micrograms per cubic meter of air for an adult. This is equivalent to 200 micrograms per day based on an average adult inhalation rate of 20 cubic meters of air per day. Published data with respect to No-Observable-Effect Levels (NOELs) for ingestion of chlorpyrifos were not available. The level that dursban was detected at in the remaining soils, however, is not expected to have any significant adverse impact on human health or the environment. The entire excavation has been backfilled and is protected by clean soil.

7.0 SITE STATUS:

Plattburgh AFB was proposed for the National Priorities List in July 1989 and was promulgated on 21 November 1989. On 12 September 1991, Plattsburgh AFB entered into the FFA with the USEPA and NYSDEC pursuant to Section 120(e)(1) and (2) of CERCLA; 42 U.S.C. Section 9620(e)(2), Sections 3004(u) and (v), 3008(h) and 6001 of RCRA, 42 U.S.C. Sections 6924(u) and (v), 6928(h) and 6961, Executive Order 12589, the National Environmental Policy Act, 42 U.S.C. Section 4321; and the Defense Environmental Restoration Program (DERP) 10 U.S.C. Section 2701.

020 is one of many under the FFA. Ot reported upon sepa

8.0 STATUTORY DETERMINATIONS:

The lead agency, P determined that th decision is consis of the National Oi Substances Polluti (NCP). The remova to be protective o environment, compl state action, chem requirements that relevant and approaction (ARARs), an

The chosen remedia Further Action. T from the decision Plan.

9.0 STATE ROLE:

NYSDEC, on behalf York, has reviewed results from the v risk. NYSDEC conc action decision. declaration of con Appendix A.

10.0 RESPONSIVENE SUMMARY:

Plattsburgh AFB he

The purpose of the FFA is to ensure that environmental impacts on public health, welfare, and environment associated with past and present activities at Plattsburgh AFB are thoroughly investigated and appropriate remedial or removal actions are taken as necessary to protect the public health, welfare, and environment. Site ST-

period from 27 Aug September 1993. T public comment per Plattsburgh Press-August 1993. No w the Proposed Plan the 30-day comment

In addition to holding a public comment period on the Proposed Plan, Plattsburgh AFB held a public meeting on this Proposed Plan on 7 September 1993. Representatives from the NYSDEC, USEPA, and Plattsburgh AFB were on hand to answer questions on this Proposed Plan. At the public meeting, one attendee asked why Plattsburgh AFB analyzed the samples for polychlorinated biphenyls (PCBs). Plattsburgh AFB's Project Manager responded by saying that PCBs were part of the pesticide analysis.

SITE ST-020

REFERENCES

- 1.0 Phase II/IV Installation Restoration Program (RI/FS) at Plattsburgh Site Confirmation 5329-07; Prepared by ABB (Formerly E. C. Jordan); Augu
- 2.0 Action Memo SS-020; Prepared by Plattsburgh AFB; 25 September 199
- 3.0 Sample Collected by Plattsburgh AFB; Analyzed by CTM Laboratories, 1992
- 4.0 Samples Collected by Plattsburgh AFB; Analyzed by Endyne, Inc; 17 N
- 5.0 Samples Collected by Jo-Ja Construction; Analyzed by Hudson Environ 17 November 1992.
- 6.0 95 Percent Completion Memo; Prepared by Tom LaBombard; 11 December
- 7.0 Contract Closeout Letter; Prepared by Tom LaBombard; 26 March 1993.
- 8.0 Nonhazardous Waste Manifests for West Sand Lake Landfill and CIBRO; Plattsburgh AFB; 2 March 1993.
- 9.0 Risk Assessment Guidance for Superfund, Volume I, Human Health Eval (Part A); Prepared by USEPA, December 1989. (Available from the USEPA)
- 10.0 Chlorpyrifos Toxicity and Health Hazards and Studies on Human Expo Chlorpyrifos; Prepared by Dow Elanco.
- 11.0 Proposed Plan; Prepared by Plattsburgh AFB; Final August 1993.
- 12.0 News Release Opening Public Comment Period; Prepared by Plattsburg 1993.

- 13.0 Site Investigation Report Attachment II Sites (CES Paint Shop, Sit Malcolm Pirnie, Inc.; Draft Final January 1994.
- 14.0 Remedial Investigation Report Attachment I Sites (Auto Hobby Shop, Prepared by Malcolm Pirnie, Inc.; Draft Final September 1994.
- 15.0 Sample Taken by Plattsburgh AFB (MW 28-002); Analyzed by CTM Labor 7 February 1995.

GLOSSARY

Defense Priority Model

Disposal and Reuse Plan

Defense Reutilization and Marketing Office

DPM

DRP

DRMO

AAFES Army and Air Force Exchange Service AFB Air Force Base AFBCA Air Force Base Conversion Agency AFCEE Air Force Center for Environmental Excellence American Federation of Government Employees AFGE AFOSI Air Force Office of Special Investigation aerospace ground equipment AGE aboveground storage tank AGST Air Mobility Command AMC ANSC area of no suspected contamination AOC Area of Concern ARAR applicable or relevant and appropriate requirements Air Refueling Squadron ARS ARW/CC Air Refueling Wing Commander BRAC Cleanup Plan BCP Base Comprehensive Reuse Plan BCRP BCT BRAC Cleanup Team Base Environmental Coordinator BEC Base Realignment and Closure BRAC Base Realignment and Closure Act BRCA benzene, toluene, ethylbenzene, and xylene BTEX ВХ Base Exchange CAA Clean Air Act CE Civil Engineering Comprehensive Environmental Response, Compensation and Liabil CERCLA CES Civil Engineering Squadron CEV Environmental Management Flight CFR Code of Federal Regulations U.S. Army Corps of Engineers COE Community Relations CR CRP Community Relations Plan Contract Required Quantitation Limit CRQL CWA Clean Water Act DCA 1,1-dichloroethane dichlorobenzene DCB dichloroethene DCE DD Decision Document DDD dichlorodiphenyldichloroethane DDE dichlorodiphenyldichloroethylene dichlorodiphenyltrichloroethane DDT Defense Environmental Restoration Account DERA Department of Defense DOD

DSMOA Defense-State Memorandum of Agreement

EBS Environmental Baseline Survey ECL Environmental Conservation Law

EE/CA engineering evaluation/cost analysis

EIS Environmental Impact Statement

ENVEST Environmental Cost Engineering Model

EOD explosive ordnance disposal
EPA Environmental Protection Agency
EPC Environmental Protection Committee
FEMA Federal Engineering Management Agency

FFA Federal Facility Agreement
FOSL Finding of Suitability to Lease
FOST Finding of Suitability to Transfer

FS feasibility study

FY fiscal year

HARM Hazards Assessment Ranking Method

HQ Headquarters

ILS instrument landing system IRA interim remedial action

IRP Installation Restoration Program

LTM Long-Term Monitoring LTO long-term operation

IRPIMS Installation Restoration Program Information Management Syste

MCL maximum contaminant level mg/l micrograms per liter MOGAS leaded motor gasoline

NA not applicable

NCP National Oil and Hazardous Substances Pollution Contingency P

NDI nondestructive inspection

NEPA National Environmental Policy Act

NFA no further action

NFRAP No Further Response Action Planned

NOI Notice of Intent NOx nitrous oxide

NPDES National Pollutant Discharge Elimination System

NPL National Priorities List

NRHP National Register of Historic Places

NTU normalized turbidity units

NYCRR New York Codes, Rules, and Regulations

NYSDEC New York State Department of Environmental Conservation

OL Operating Location OU operable unit

OWS oil/water separator
PA preliminary assessment

PAH polynuclear aromatic hydrocarbons
PA/SI preliminary assessment/site inspection

PCB polychlorinated biphenyl PCE tetrachloroethylene pci/l picocuries per liter

PHC petroleum hydrocarbons

PIDC Plattsburgh Intercommunity Development Committee

PID photoionization detector

POI Points of Interest

POL petroleum, oil, and lubricants POTW publicly owned treatment works

PP proposed plan

ppb parts per billion parts per million ppm parts per trillion ppt RA remedial action

RAB Restoration Advisory Board

Resource Conservation and Recovery Act RCRA

remedial design

remedial investigation RI

remedial investigation/feasibility study RI/FS

ROD Record of Decision

RPM Remedial Project Manager Sampling and Analysis Plan SAP

site background SB

Safe Drinking Water Act Support Group Commander State Historic Preservation Officer SDWA SG/CC

SHPO

SI site investigation

Significant Industrial User's Permit SIUP

SOV soil organic vapor

State Pollutant Discharge Elimination System SPDES

SVOC semivolatile organic compound Solid Waste Management Unit SWMU tactical air navigation TACAN

to be determined TBD trichloroethane TCA TCE trichloroethylene

Toxicity Characteristic Leaching Procedure TCLP

Technical Project Manager TPM TRC Technical Review Committee Toxic Substances Control Act TSCA

U.S. Air Force USAF

Volatile Organic Compounds VOC underground storage tank UST

Weapons Storage Area WSA

Work Information Management System-Environmental Subsystem WIMS-ES

ROD FACT SHEET

SITE

Name Plattsburgh Air Force Base Location/State Plattsburgh, New York

EPA Region 2

11/21/89 HRS Score (date) NY4571924774 Site ID #

ROD

Date Signed: 3/31/95

Remedies: tank removal, contents to offsite treatment plant; soil

excavation w/ landfill disposal

Operating Unit Number: OU-9

Capital cost: \$ 330,000 (in 1992 dollars) Construction Completion: November 1992

O & M in 1995:

1996: 0 1997: 0 1998:

Present worth: \$330,000 (in 1992 dollars)

LEAD

Remdial/Enforcement: Remedial

EPA/State/PRP: PRP (Federal Facility)

Primary contact (phone): Robert Morse (212) 637-4331 Secondary contact (phone): Bob Wing (212) 637-4332

Main PRP(s): United States Air Force

PRP Contact (phone): Michael Sorel (518) 563-2871

WASTE

Type (metals, PCB, etc.): Pesticides

Medium (soil, g.w., etc.): Soil, tank contents (liquid)

Origin: washing of storage containers

Est. quantity: 50 gal, 100 cu yd