Record of Decision for the Fire Demonstration Area Area of Concern at the Former Griffiss Air Force Base Rome, New York

September 1999

Prepared for:

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List of Acronyms

AFBCA	Air Force Base Conversion Agency
AFB	Air Force Base
AOC	Area of Concern
ATSDR	Agency for Toxic Substances and Disease Registry
BGS	below ground surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CRP	Community Relations Plan
DoD	Department of Defense
EPA	United States Environmental Protection Agency
FFA	Federal Facility Agreement
FDA	Fire Demonstration Area
FS	feasibility study
IRP	Installation Restoration Program
NCP	National Oil and Hazardous Substance Pollution Contingency Plan
NEADS	North East Air Defense Sector
NYANG	New York Air National Guard
NYSDEC	New York State Department of Environmental Conservation
PQL	Practical Quantitation Limit
PCB	polychlorinated biphenyl
QAPjP	Quality Assurance Project Plan
RI	remedial investigation
ROD	Record of Decision
SAC	Strategic Air Command
SAP	Sampling and Analysis Plan
SARA	Superfund Amendment and Reauthorization Act
SVOC	semivolatile organic compound
TBC	to be considered
USAF	United States Air Force
VOC	volatile organic compound

1 Declaration

1.1 Site Name and Location

The Fire Demonstration Area (FDA) Area of Concern (AOC) is located at the former Griffiss Air Force Base (AFB) in Rome, Oneida County, New York.

1.2 Statement of Basis and Purpose

This Record of Decision (ROD) presents the no further remedial action alternative with land use restricted to industrial land use as the selected remedial action for the FDA AOC at the former Griffiss AFB. This alternative has been chosen in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended by the Superfund Amendment and Reauthorization Act (SARA), and the National Oil and Hazardous Substance Pollution Contingency Plan (NCP). The Air Force Base Conversion Agency (AFBCA), the United States Environmental Protection Agency (EPA), and the New York State Department of Environmental Conservation (NYSDEC) have adopted this ROD through a joint agreement. This decision is based on the administrative record file for this site.

1.3 Description of Selected Remedy

The selected remedy for the FDA AOC is no further remedial action, with land use restrictions for industrial land use. The agencies will perform joint five-year reviews to ensure that future land use is in compliance with the transfer documents (deed) and consistent with the baseline risk assessment for industrial land use

1.4 Declaration Statement

The AFBCA, EPA, and NYSDEC have determined that no further remedial action, with land use restrictions, is warranted for the FDA AOC because the baseline risk assessment for

industrial land use demonstrates that the site contaminants in the soil and groundwater pose no current or future threat to public health or the environment. Future landowners will be notified, through transfer documents (deed), that the land use is restricted to industrial use.

1.5 Signature of Adoption of the Remedy

On the basis of the remedial investigations (RIs) performed at the FDA AOC and the baseline risk assessment for industrial land use, there is no evidence that previous operations at this site have resulted in environmental contamination that poses a current or future potential threat to human health or the environment if the land is restricted to industrial use. Future landowners will be notified, through transfer documents (deed), that the current and future land use is restricted to industrial use. The New York State Department of Environmental Conservation has concurred with the selected remedial action presented in this Record of Decision.

Albert F. Lowas, Jr.
Director
Air Force Base Conversion Agency

September 15, 1999
Date

Jeanne M. Fox
Regional Administrator
United States Environmental Protection Agency, Region 2

9/30/99
Date

2 Decision Summary

This section provides an overview of the site-specific factors and analysis that lead to the no further action with land use restrictions decision for the FDA AOC.

2.1 Site Name, Location, and Description

Regional Site Description

The former Griffiss AFB covers approximately 3,552 contiguous acres in the lowlands of the Mohawk River Valley in Rome, Oneida County, New York. Topography within the valley is relatively flat, with elevations on the former Griffiss AFB ranging from 435 to 595 feet above mean sea level. Threemile Creek, Sixmile Creek (both of which drain into the New York State Barge Canal), and several state-designated wetlands are located on the former Griffiss AFB, which is bordered by the Mohawk River on the west. Because of its flat topography, sandy soil, and high average precipitation, the former Griffiss AFB is considered a groundwater recharge zone.

Fire Demonstration Area AOC

The FDA AOC is located between Taxiways 17, 15, and 13 and Apron 3 in the north-central part of the base (see Figures 2-1 and 2-2). The area is a flat lawn of short grass surrounded by stormwater catch basins. The FDA was used from 1974 through 1992 for demonstrations on how to extinguish aircraft fuel fires.

Surface water runoff from the FDA is collected in the base storm drain system, which discharges to the Mohawk River. Groundwater flows in a westerly direction and was encountered from 15 to 16.5 feet below ground surface (BGS) at this AOC in August 1994. Surface soils were characterized in the RI as 2 feet of medium sandy silt with variable quantities

of gravel. Subsurface soils in the area were characterized as medium- to coarse-grained sand with variable quantities of silt and gravel.

2.2 Site History and Investigation Activities

The Former Griffiss AFB Operational History

The mission of the former Griffiss AFB varied during its operational history. The former Griffiss AFB was activated on February 1, 1942, as the Rome Air Depot, with the mission of storage, maintenance, and shipment of material for the U.S Army Air Corps Upon creation of the U.S. Air Force (USAF) in 1947, the depot was renamed Griffiss AFB. The base became an electronics center in 1950 with the transfer of the Watson Laboratory Complex (later Rome Laboratory). The 49th Fighter Interceptor Squadron was also added during that year. In June 1951, the Rome Air Development Center was established with the mission of accomplishing applied research, development, and testing of electronic air-ground systems. The Headquarters of the Ground Electronics Engineering Installations Agency was added in June 1958 to engineer and install ground communications equipment throughout the world. On July 1, 1970, the 416th Bombardment Wing of the Strategic Air Command (SAC) was activated with the mission of maintenance and implementation of both effective air refueling operations and long-range bombardment capability. The former Griffiss AFB was designated for realignment under the Base Realignment and Closure Acts of 1993 and 1995, resulting in deactivation of the 416th Bombardment Wing in September 1995. Rome Laboratory and the North East Air Defense Sector (NEADS) will continue to operate at their current locations. The New York Air National Guard (NYANG) operated the runway for the 10th Mountain Division deployments until October 1998 when they were relocated to Fort Drum and Defense Finance and Accounting Services established an operating location at the former Griffiss AFB.

Environmental Background

As a result of the various national defense missions carried out at the former Griffiss AFB since 1942, hazardous substances and hazardous wastes were used, stored, or disposed of at various sites on the installation. The defense missions involved the storage, maintenance, and shipping of war material; research and development; and aircraft operations and maintenance, among others.

Numerous studies and investigations under the U.S. Department of Defense (DoD) Installation Restoration Program (IRP) have been carried out to detect, locate, and quantify

contamination of areas by these substances and wastes. These studies and investigations included a records search in 1981 involving interviews with base personnel, a field inspection, compilation of an inventory of wastes, evaluation of disposal practices, and an assessment of the potential for site contamination; problem confirmation and quantification studies in 1982 and 1985; soil and groundwater analyses in 1986; a public health assessment in 1988 conducted by the U.S. Public Health Service, Agency for Toxic Substances and Disease Registry (ATSDR); base-specific hydrology investigations in 1989 and 1990; and a groundwater investigation in 1991. ATSDR issued a Public Health Assessment for Griffiss AFB dated October 23, 1995, and an addendum to the assessment report dated September 9, 1996.

Pursuant to Section 105 of CERCLA, the former Griffiss AFB was included on the National Priorities List (NPL) on July 15, 1987. On August 21, 1990, USAF, EPA, and NYSDEC entered into a Federal Facility Agreement (FFA) under Section 120 of CERCLA. Under the terms of the agreement, USAF is required to prepare and submit numerous reports to EPA and NYSDEC for review and comment. These reports include identification of environmental AOCs on base; a scope of work for an RI; a work plan for the RI, including a sampling and analysis plan (SAP) and a quality assurance project plan (QAPjP); a baseline risk assessment; a community relations plan (CRP); and the RI report. AFBCA delivered a draft-final RI report covering 31 AOCs to EPA and NYSDEC on December 20, 1996, that incorporated or addressed EPA and NYSDEC comments.

During the RI, a site-specific baseline risk assessment for industrial land use was conducted (using appropriate toxicological and exposure assumptions to evaluate cancer risks and non-cancer health hazards) in order to evaluate the risks posed by detected site contaminants to the reasonable maximally exposed individual. In addition, the RI report compared detected site contaminants to available standards and guidance values using federal and state environmental and public health laws that were identified as potentially applicable or relevant and appropriate requirements (ARARs) at the site. Chemical-specific ARARs are usually health- or risk-based numerical values or methodologies that result in a numerical value when applied to site-specific conditions. Currently, there are no chemical-specific ARARs for soil (other than for PCBs), sediments, or air. Therefore, other non-promulgated federal and state advisories and guidance values, referred to as to-be-considereds (TBCs), or background levels of the contaminants in the absence of TBCs, were considered. No further action, with land use restrictions, is proposed when the levels of contaminants at the site, in comparison to the baseline risk assessment for industrial use and the applicable standards or guidance values, indicate the site poses no threat to public health or the environment.

Proposed Remedy

Based on the results of the draft RI, AFBCA has proposed that no further remedial action, with land use restrictions for industrial use, be implemented at the FDA AOC. The land use restriction proposal was based on the contaminant levels found at the FDA AOC and the site-specific risk assessment for industrial use The determination for industrial land use was based on the redevelopment plan for Griffiss AFB provided by the Griffiss Local Development Corporation (GLDC).

Summary of Site Activities

From 1987 to 1992, a metal trough in FDA AOC was filled with fuel and various flammable materials, ignited, and extinguished during the demonstrations. From 1974 to 1987, the fuels and flammable materials were ignited and extinguished on the ground surface.

In the RI, the nature and extent of environmental contamination from historical releases at this AOC were investigated to determine whether any remedial action is necessary to prevent potential threats to human health and the environment that might result from exposure to site conditions. Previous activities at the FDA AOC include a removal action and several sampling efforts, including a soil gas/groundwater survey, soils investigation, and groundwater investigation. The metal trough used for fuel fire demonstrations was removed from the AOC in 1992.

Soil and groundwater sampling was conducted at the FDA AOC in 1986. Three boreholes were drilled, one of which was developed as monitoring well. The locations of the other two boreholes are unknown because this information was not provided in the original investigation report; the estimated location is a 200-foot-by-100-foot area west of the FDA metal trough. Soil samples were analyzed for oil and grease, metals, polychlorinated biphenyls (PCBs), and 1,1,1-trichloroethane. Analytical results indicated the presence of petroleum hydrocarbons, zinc, and lead in soils; and cadmium, chromium, lead, nickel, and zinc in groundwater, all at concentrations below the available standards and guidance values.

A soil gas/groundwater survey was performed as part of the RI in May 1994 on a 100-foot grid established at the AOC. Soil gas samples were collected at 13 grid locations between 3 and 4 feet BGS. Grab groundwater samples were collected at six grid locations at the depth of encountered groundwater (18 to 19 feet BGS). The samples were analyzed for the presence of various halogenated and aromatic volatile organic compounds. VOC concentrations were not reported above the detection limit in any of the soil gas samples.

Soil investigations at the AOC during summer 1994 and spring 1995 included the drilling of four soil borings and the collection and analysis of 32 subsurface soil screening samples and 18 confirmatory samples. The boring locations included two in the downgradient direction, one in the upgradient direction, and one drilled in the former location of the metal trough. Analytical results of the subsurface soil samples revealed the presence of six VOCs, 18 semivolatile organic compounds, 12 pesticides, two PCB compounds, three dioxin compounds, 21 metals, cyanide, and total recoverable petroleum hydrocarbons. Some of the analytical results for eight of these chemicals exceeded the guidance values (see Table 2-1).

One grab groundwater sample was collected from a temporary monitoring well installed in a soil boring located in the area of the former metal trough as part of the 1994 investigation Sampling was not performed on the existing monitoring well (FDAMW-1) because the structural integrity of the well was questionable. The purpose of collecting the grab groundwater sample was to determine whether historical releases of fuels and organic solvents had impacted the groundwater quality. Therefore, the sample was analyzed for VOCs, dioxins, pesticides, and PCBs. Relatively low concentrations of four pesticides were detected in the sample. The only detected pesticide that exceeded standards or guidance values was alpha-BHC (see Table 2-2). There is no known source of alpha-BHC at the FDA, but agricultural areas are located nearby. As a follow-up to the RI and at the request of the regulators, an inspection of monitoring well FDAMW-1 was performed in August 1997 during the Supplemental Investigation This inspection did not reveal the presence of any free product.

2.3 Highlights of Community Participation

A proposed plan for the FDA AOC indicating no further action as the selected remedial action was released to the public on February 18, 1998. The document was made available to the public in both the administrative record and an information repository maintained at the Jervis Public Library. The notice announcing the availability of this document was published in the *Rome Sentinel* on February 18, 1998. In addition, a public meeting was held on March 10, 1998. At this meeting, representatives from AFBCA, EPA, and NYSDEC answered questions about issues at the AOC and the no further action proposal under consideration. A response to the comments received during this period is included in the Responsiveness Summary, which is part of this Record of Decision (see Section 3).

The agencies have determined the land use restrictions that will be placed on the FDA AOC. This determination is based on the transfer and future reuse of the site indicated in the redevelopment plan for Griffiss AFB, which was provided by the GLDC.

This decision document presents the selected remedial action for the FDA AOC at the former Griffiss AFB, chosen in accordance with CERCLA, as amended by SARA and, to the extent practicable, the NCP. The decision for this AOC is based on the administrative record.

2.4 Scope and Role of Site Response Action

The scope of the no further remedial action with land use restrictions response for the FDA AOC addresses the soils and groundwater at the site. Based on to the baseline risk assessment for industrial land use, there is no evidence that the previous operations conducted at this site have resulted in environmental contamination that poses a current or potential threat to human health or the environment.

2.5 Summary of Site Risks

Site risks were analyzed based on the extent of contamination at the FDA AOC. As part of the RI, a baseline risk assessment for industrial land use was performed to estimate current and future potential risks to human health and the environment associated with the contaminants found in soils and groundwater at the site. The results of the risk assessment were considered when formulating this no further action proposal.

Human Health Risk Assessment

A baseline human health risk assessment was conducted during the RI phase to determine whether chemicals detected at the FDA AOC could pose health risks to individuals under current and proposed future land use. As part of the baseline risk assessment, the following four-step process was used for assessing site-related human health risks for a reasonable maximum exposure scenario:

- Hazard Identification--identifies the contaminants of concern at the site based on several factors such as toxicity, frequency of occurrence, and concentration;
- Exposure Assessment--estimates the magnitude of actual and/or potential human exposures, the frequency and duration of these exposures, and the pathway (e.g., ingesting contaminated soils) by which humans are potentially exposed;
- Toxicity Assessment--determines the types of adverse health effects associated with chemical exposures and the relationship between magnitude of exposure (dose) and severity of adverse effects (response); and

- Risk Characterization—summarizes and combines outputs of the exposure and toxicity assessments to provide a quantitative (e.g., *one-in-a-million excess cancer risk* and *non-cancer Hazard Index* value) assessment of site-related risks.

Chemicals of potential concern were selected for use in the risk assessment based on the analytical results and data quality evaluation. All contaminants detected in the soil and groundwater samples collected at the AOC were considered chemicals of potential concern with the exception of inorganics in soils detected at concentrations less than twice the mean background concentrations; iron, magnesium, calcium, potassium, and sodium, which are essential human nutrients; and compounds detected in less than 5% of the total samples (unless they were Class A carcinogens) Petroleum hydrocarbons were not included as a chemical of concern; rather the detected constituents (e.g., benzene, toluene, ethylbenzene) were evaluated. The chemicals of potential concern for the groundwater included four pesticides: carbaryl, carbofuran, alpha BHC, and endrin.

Routes of exposure and occupational receptors were selected based on current and proposed future land use of the FDA AOC. The current land use designation of the FDA AOC is industrial. Following base realignment, the FDA and immediate vicinity are anticipated to remain industrial because the airfield is planned to remain active.

Contaminant sources at the FDA are attributed to spills of fuels and other flammable substances used for fire demonstration activities. These released fuels infiltrated and percolated into the subsurface soil and groundwater. Potentially exposed populations at the FDA and airfield under current use are landscape workers performing lawncare maintenance. Potentially exposed populations under the proposed future land use assumptions are landscape workers, construction workers, and/or utility workers exposed to soils if the site undergoes future development; and industrial workers who might be exposed to groundwater at the site if groundwater is used as a potable water supply. Potential routes of exposure to surface and subsurface soils included incidental ingestion, dermal absorption, and inhalation of volatiles and fugitive dusts. Potential routes of exposure to groundwater included ingestion and dermal contact.

Quantitative estimates of carcinogenic and noncarcinogenic risks were calculated for the FDA AOC as part of a risk characterization. The risk characterization evaluates potential health risks based on estimated exposure intakes and toxicity values. For carcinogens, risks are estimated as the incremental probability of an individual developing cancer over a lifetime as a result of exposure to the potential carcinogen. The risks of the individual chemicals are summed for each pathway to develop a total risk estimate. The range of acceptable risk is 1 in 10,000

(1 x 10^{-4}) to 1 in 1,000,000 (1 x 10^{-6}) of an individual developing cancer over a 70-year lifetime from exposure to the contaminant(s) under specific exposure assumptions. A computed risk greater than 1 in 10,000 (1 x 10^{-4}) is considered unacceptable by EPA.

To assess the overall noncarcinogenic effects posed by more than one contaminant, EPA has developed the Hazard Quotient (HQ) and Hazard Index (HI). The HQ is the ratio of the chronic daily intake of a chemical to the reference dose for the chemical. The reference dose is an estimate (with uncertainty spanning perhaps an order of magnitude or greater) of a daily exposure level for the human population, including sensitive subpopulations, that is likely to be without an appreciable risk of deleterious effects during a portion of a lifetime. The HQs are summed for all contaminants within an exposure pathway (e.g., ingestion of soils) and pathways to determine the HI. When the HI exceeds 1, there may be concern for potential noncarcinogenic health effects if the contaminants in question are believed to cause a similar toxic effect. EPA bases its decision to conduct site remediation on the risk to human health and the environment. Cleanup actions may be taken when EPA determines that risk at a site exceeds the cancer risk level of 1 in 10,000 or if the noncarcinogenic HI exceeds a level of 1. Once either of these thresholds have been exceeded, remedial action alternatives are evaluated to reduce the risk levels to within EPA's acceptable risk range of 1 in 10,000 to 1 in 1,000,000 and an HI of 1 or less.

Results of the risk assessment indicate that chemicals detected in the soil and groundwater at the FDA AOC do not pose a current or potential threat to occupational workers. The cumulative carcinogenic risk to landscape workers, construction workers, and utility workers due to exposure to the chemicals of potential concern in soils at the FDA AOC were calculated as 7 in 1,000,000 (7 x 10^{-6}), 1 in 1,000,000 (1 x 10^{-6}), and 2 in 1,000,000 (2 x 10^{-6}), respectively. These results are below the target level of 1 in 10,000 (1 x 10^{-4}), indicating that potential adverse carcinogenic health effects to occupational workers are not expected to occur from exposure to chemical concentrations in the soil. For chemicals with concentrations greater than the most stringent soil guidance values, the contaminant-specific risk calculations were well below the acceptable EPA risk levels. The cumulative carcinogenic risk to industrial workers from exposure to contaminants in the groundwater was calculated as 4 in 100,000,000 (4 x 10^{-8}) which is below EPA's target risk range.

Cumulative hazard indices for landscape workers, construction workers, and utility workers due to exposure to the chemicals of potential concern in soils at the FDA AOC were calculated as 0.04, 0.2, and 0.01, respectively. The cumulative hazard index for industrial workers exposed to groundwater was 0.0007. These results are below the target hazard index of 1.0, which indicates that potential adverse noncarcinogenic health effects to occupational

workers are not expected to occur from exposure to chemical concentrations in the soil or groundwater at the FDA AOC.

Toxicity values were not available for two compounds detected in the soil, phenanthrene and benzo(g,h,i)perylene, and a quantitative risk assessment could not be performed. Therefore, a qualitative assessment was performed by comparing the concentrations of these two compounds to the soil guidance values Phenanthrene was detected at a frequency of 2 in 16 samples at concentrations of 0.05 mg/kg and 0.15 mg/kg, which are below the guidance value of 50 mg/kg. Benzo(g,h,i)perylene was detected at a frequency of 3 in 16 samples at concentrations ranging from 0 057 mg/kg to 1.3 mg/kg, which are also below the guidance value of 50 mg/kg. Therefore, the concentrations of these two compounds in the soil are not expected to pose unacceptable risks to occupational workers.

Uncertainties exist in many areas of the human health assessment process. However, use of conservative variables in intake calculations and conservative assumptions throughout the entire risk assessment process results in an assessment that is protective of human health and the environment. Examples of uncertainties associated with the risk assessment for the FDA include: (1) In quantifying exposure, it was assumed that chemicals are uniformly distributed over a defined area. At this AOC, chemical samples were collected from the suspected source of contamination rather than through random sampling--this can result in a potential overestimate of risk; (2) The risk assessment was quantified based on analysis of a relatively small number of soil samples and only one grab groundwater sample, which can contribute to uncertainty in the risk calculations; (3) HIs associated with dermal contact with soil were not quantified for the majority of the chemicals of potential concern due to the lack of dermal absorption factors necessary for the calculation, which may result in a potential underestimate of risk from the dermal pathway; (4) When assessing the dermal pathway, it was assumed that workers would come into contact with the soil, although the use of protective clothing is more likely. This assumption would result in a potential overestimate of risk; (5) It was assumed that for the proposed future use scenario, construction would occur over a one-year period, though it will probably require less time to complete due to the small size of this AOC. This assumption would result in a potential overestimate of risk; and (6) It was assumed that groundwater would be used for industrial purposes in the future which is very unlikely due to the availability of existing water supplies at the base and in the City of Rome. This assumption would result in a potential overestimate of risk.

The property at the FDA AOC contains levels of contamination suitable for industrial/commercial usage but not necessarily suitable for residential or similar use. The

transfer documents will contain the following restrictions to ensure that the reuse of the site is consistent with the risk assessment:

- The property will be industrial use unless permission is obtained EPA, NYSDEC, and the New York State Department of Health; and
- The owner or occupant of the property shall not extract, utilize, consume, or permit to be extracted any water from the aquifer below the ground surface within the boundary of the property unless such owner or occupant obtains prior written approval from the New York State Department of Health

Ecological Risk Assessment

The current and proposed future land use for this AOC is industrial, which, by its very nature, minimizes the number of ecological receptors. In addition, during the RI, it was determined that threatened and/or endangered plant and animal species are not a concern at the FDA AOC. Although certain state endangered plants and animals have been observed on or in the vicinity of the base, no threatened and/or endangered species have been identified at this site. Plant species protected by the State of New York were not identified in the vicinity of the base.

A risk assessment for animals was conducted during the RI. Potential exposure to contamination at the FDA AOC is limited to surface soil. Ecological risks were assessed for raccoons and short-tailed shrews and ingestion was the only exposure route considered. A risk characterization was performed for the terrestrial wildlife using methods similar to those used to quantify human risks. Potential adverse health effects to the indicator species may occur when a computed hazard quotient is greater than 1.0. Hazard quotients were calculated to be less than 1.0 for each chemical of concern in both indicator species. The greatest values were 0.00076 for a raccoon and 0.75 for a short-tailed shrew. Overall, this AOC is not considered to pose a current or potential threat to terrestrial wildlife.

2.6 Description of the No Further Action With Land Use Restrictions Alternative

No further remedial action with land use restrictions is proposed for the FDA AOC. The majority of the chemicals detected at the FDA do not exceed standards and guidance values, and there is no known source of these contaminants at the site. In addition, the baseline risk assessment for industrial use indicates that the levels of contaminants present in the soils and groundwater are within or below EPA's acceptable carcinogenic risk range and pose no unacceptable noncarcinogenic risk to the occupational worker. Therefore, the concentrations of

chemicals in the soil and groundwater and the baseline risk assessment demonstrate that site contaminants pose no current or potential threat to public health or the environment.

2.7 Significant Changes

The proposed plan for the FDA AOC was released for public comment on February 18, 1998. The proposed plan identified no further action as the preferred alternative. The agencies have reviewed all written and verbal comments submitted during the public comment period Following the review of these comments, it was determined that the remedy should be amended to clarify no further remedial action, with land use restrictions, at the FDA AOC.

Table 2-1

COMPOUNDS EXCEEDING GUIDANCE VALUES
SUBSURFACE SOIL SAMPLES

Compound	Range of Detected Concentrations	Frequency of Detection Above Most Stringent Criterion	Most Stringent Criterion
SVOCs (µg/kg)			
Benzo(a)pyrene	64 J - 450 J	3/16	61[a]
Phenol	39 J - 360	3/16	30[a]
Dieldrin	0.36 J - 324	4/16	40[b]
Metals (mg/kg)			
Arsenic	2 J - 10 2	7/16	4.9[c]
Beryllium	0.112 J - 0 86	1/16	0 65[c]
Total chromium	10 9 - 90 9	4/16	22.6[c]
Copper	16 9 - 67 2	2/16	43[c]
Silver	05 J - 1 43 J	2/16	1.1[c]

a
b NYS soil cleanup objective.
c Proposed RCRA corrective action levels
Background screening concentration

Key

J = Estimated concentration.

Table 2-2

COMPOUNDS EXCEEDING GROUNDWATER STANDARDS
GRAB GROUNDWATER SAMPLES

Compound	Range of Detected Concentrations		Frequency of Detection Above Most Stringent Criterion	Most Stringent Criterion
Pesticides (μg/L)				
Alpha-BHC	0.002	J	1	ND[a]

[a] NYSDEC Class GA groundwater standard

Key:

J = Estimated
ND = Nondetect

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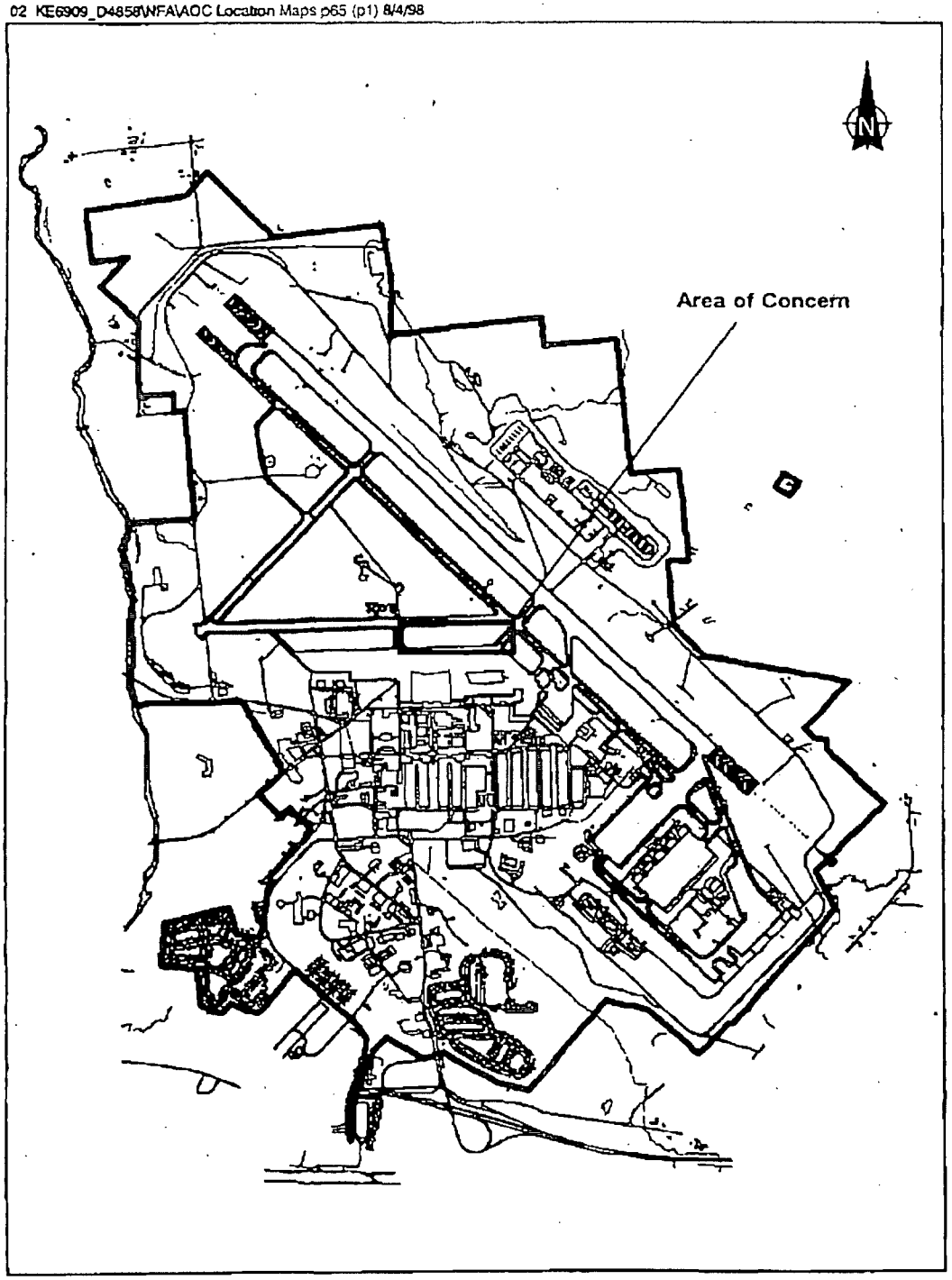

Figure 2-1 FIRE DEMONSTRATION AREA AOC
FORMER GRIFFISS AIR FORCE BASE

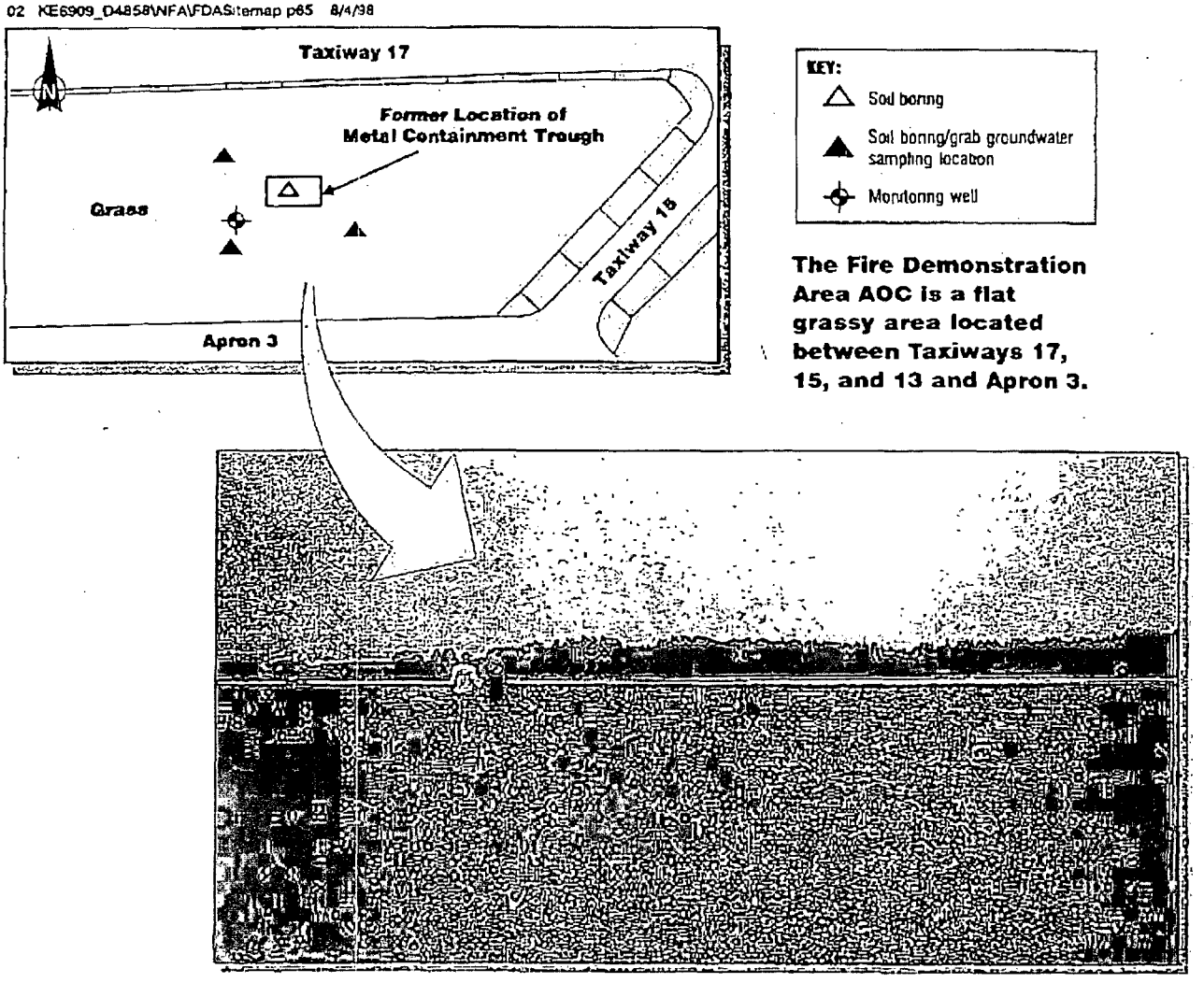

Figure 2-2 SITE MAP OF THE FIRE DEMONSTRATION AREA AOC

3 Responsiveness Summary

On Wednesday February 18, 1998, AFBCA, following consultation with and concurrence of the EPA and NYSDEC, released for public comment the no further action proposed plans at the Building 214, Building 219 Drywell, Building 301 Drywell, T-9 Storage Area, Fire Demonstration Area, and Suspected Fire Training Area Areas of Concern (AOCs) at the former Griffiss Air Force Base. The release of the proposed plans initiated the public comment period, which concluded on March 20, 1998.

During the public comment period, a public meeting was held on Tuesday March 10, 1998, at 5:00 p.m. at the former base chapel located at 525 Kirkland Drive. A court reporter recorded the proceedings of the public meeting. A copy of the transcript and attendance list are included in the Administrative Record. The public comment period and the public meeting were intended to elicit public comment on the proposal to take no further action at these sites.

This document summarizes the verbal comments and provides responses to the comments received at the March 10, 1998, public meeting. No written comments were received during the public comment period, which ran from February 18 through March 20, 1998.

Comment #1

One commentor referred to an article in the Sentinel that indicated that a certain firm involved in computer chips took the Griffiss Park off its list because it is considered a brownfield area. The same commentor also stated, "Last week a state consultant rejected the Griffiss Park's application to be one of the ten potential manufacturing sites around the state. Quoting from the Sentinel article, Dimeo said, 'The fact the park is considered a brownfield because of wastes dumped by the Air Force may have influenced that decision.' I'm wondering if any of these sites are part of that decision, are part of that brownfield?"

Response #1

No. These sites were not selected for consideration as brownfield sites. There is a brownfield site under consideration in Rome, NY; however, such evaluation is independent from the ongoing work at Griffiss.

Comment #2

Two commentors expressed concern that the contaminant levels shown in the tables of the proposed plans are above the stringent regulatory criteria shown in the tables. They requested an answer as to what rationale was used to justify no further action.

Response #2

It is assumed that this comment was directed at the T-9 Storage Area proposed plan since several compounds exceeded guidance values for surface soils at that site. Upon further review, it was decided to temporarily postpone the issuance of a ROD for the T-9 Storage Area until an interim removal action is completed. A revised proposed plan for the T-9 Storage Area will be issued. It will include the results of the confirmatory samples taken after the interim removal action is completed.

For this site, as explained in the Environmental Background section of the proposed plans:

The no further action proposal is based on an evaluation of two investigation criteria. First, a site-specific baseline risk assessment for industrial land use, using appropriate toxicological and exposure assumptions, was conducted to evaluate the risks posed by detected site contaminants. Second, the levels of contaminants found were compared to available standards and guidance values (e.g., industrial reuse) for each potential contaminant. The standards and guidance values were determined by using federal and state environmental and public health laws that were identified as potentially applicable or relevant and appropriate requirements (ARARs) at the site. Chemical-specific ARARs are usually health- or risk-based numerical values or methodologies which result in a numerical value when applied to site-specific conditions. Currently, there are no chemical-specific ARARs for soil, sediment, or air. In addition, groundwater and drinking water standards have not been promulgated for all potential contaminants. Therefore, other nonpromulgated federal and state advisories and guidance values, referred to as "TBCs," or background values of the contaminants in the absence of TBCs, were considered. Environmental sampling results were compared to the most stringent of these standards or guidance values during the remedial investigation for the AOC.

Although no further remedial action is proposed for this AOC, land use restrictions are required because the baseline risk assessment was limited to industrial/nonresidential reuse. However; the comparison of the levels of contamination to the applicable standards and guidance values (e.g., industrial reuse) indicate that this site poses no significant threat to public health or the environment if use is restricted.