

**MINUTES OF SECOND RESTORATION ADVISORY BOARD (RAB)
MEETING
OF
2 OCTOBER 1996**

The following individuals were in attendance:

CDR Robert Filler (NASJRB)
(Co-Chairperson) (Executive Officer)
(215) 443-6051

Col. Richard Moss (913 AW/CC)
Commander Air Force Reserve
(215) 443-1100

LCDR Eric Milner (NASJRB)
Public Works Officer
(215) 443-6221

LtCol: Kay Long (913 SPTG/CC)
(215) 443-1900

Mr. Jim Edmond (NASJRB)
(215) 443-6939

Capt. Doug Kinneard (AW/PAO)
(215) 443-1062

CWO3 John Hunter (NASJRB)
Assistant Public Works Officer
(215) 443-6222

Mr. Hal Dusen (913 SPTG/CEV)
(215) 443-1108

LT Kendra Kewak (NASJRB)
Public Affairs Officer
(215) 443-1776

Mr. Charanjit Gill (913 SPTG/CEV)
(215) 443-1105

CWO3 Ted Segida (NASJRB)
(215) 443-62222

Mr. Robert Rovinsky (913 SPTG/SCPB)
(215) 443-1147

Ms. Eileen Dobrowolsky (NASJRB)
(215) 443-6930

Capt Richard Frattarelli (111 FW/EM)
(215) 443-1433

Mr. Jim Colter (Northern Division)
(610) 595-0567 (X-163)

Mr. Jack Dunleavy (Northern Division)
(610) 595-0567 (X-152)

Mr. Drew Lausch (US-EPA)
(215) 566-3359

Mr. David Kennedy (PADEP)
(610) 832-6199

Mr. Eric White (Public Spirit/
Montgomery Newspapers)
(215) 542-0200

Mr. Dan McCaffrey
(Horsham Chamber of Commerce)

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Mr. Tom Friedman
(Horsham Square Pharmacy)

[Redacted]

Mr. John Lubows (Community)

[Redacted]

P. Miller (Former NAWC Employee)

[Redacted]

Ms. Amanda Thompson
(Record Newspaper)
(215) 957-8166

Ms. Liz Gemmell (Community)

[Redacted]

Ms. Alix Rauschman (Community)

[Redacted]

Mr. Michael Bruno (Community)

[Redacted]

Mr. Eric Lindhult (Community)

[Redacted]

Mr. John Dagostino (Community)

[Redacted]

Mr. Robert Williams (Community)

[Redacted]

Mr. Cliff Mars (Community)

[Redacted]

Mr. Mike McGee (Community)

[Redacted]

Mr. Jim Vetrini (Community)

[Redacted]

Mr. Thomas Hibbs (Community)

[Redacted]

HIGHLIGHTS OF RESTORATION ADVISORY BOARD (RAB) MEETING

Mr. Edmond, Environmental Coordinator at NASJRB Willow Grove, opened the meeting by introducing Col. Moss, Air Reserve Station Commander, who welcomed everyone and thanked them for coming. Col. Moss stated that these meetings are designed to solicit ideas regarding the cleanup of the air station. Mr Edmond then introduced the NASJRB Willow Grove Executive Officer and RAB co-chairperson, CDR Filler.

CDR Filler stated that there were two goals for the meeting. First was to select 6 to 8 interested individuals from the community to become board members. Second was to select a civilian co-chairperson to ensure that the communities interests are represented at the meetings and all decisions made are mutually beneficial to all parties involved. He emphasized that the RAB is open to the general public and not just the RAB Board members.

Mr. Edmond briefly reviewed the function, responsibilities, duties and purpose of a RAB. He emphasized the need to have involvement in the cleanup process from the first stakeholders around the air station by providing input regarding their concerns. He also noted that although the board considers the communities input, the actual decisions will be made by working with the EPA and PADEP to get a consensus and try to do what the community wants. The purpose of the meeting was to (1) identify stakeholders, (2) determine stakeholder needs and interests, (3) organize a selection panel, (4) recommend candidates, (5) accept nominations of the selection panel and; (6) train RAB members. Mr. Edmond then briefly went over some ground rules for conducting the RAB and for being a member. He indicated that he had already received six or seven applications from individuals wishing to be a board member and received several more from those in attendance.

Mr. Edmond requested nominations or volunteers for co-chairperson from the community sector. Liz Gemmell and Alix Rauschman were nominated for the position. A short break was taken to allow the board members to discuss the nominations and vote on the position. Liz Gemmell was selected as the community's co-chairperson for the RAB Board.

The next issue of business was to determine at what time the RAB meetings should be held and where. After a short discussion, it was decided that the meetings would continue to be held in the evenings, and the next meeting would again be held at NASJRB Willow Grove. It was also noted that copies of the meeting minutes would be sent to all members and a copy put on record in the Information Repository located at the Horsham Municipal Building on Horsham Road. Copies of all the decision making documents from the preliminary investigations up to and including the Phase II Remedial Investigation Work Plan are also available at the repository.

Mr. Gill of the Air Force Reserve gave a presentation of their remediation efforts. He provided an overview presentation (enclosure (1)) on the seven identified sites requiring remediation from the original survey. Six of the seven sites, with additional study, have since been labeled "no further action necessary." The seventh site is the result of undocumented and documented JP-4 spills from the POL site in 1979. The POL site now has secondary containment which will prevent any future contamination. During 1992, free floating JP-4 was found on the ground surface and in surface water. In June 1993 a Soil Vapor Extraction system, consisting of eight extraction wells, was installed and is being operated on a periodic basis. In July 1994, six of the eight wells showed samples of free JP-4, October 1995 showed only one well with samples of free JP-4. Based on this data it is noted that the plume of contamination is receding. The Air Force is in the process of contracting for the reassessment of the site through additional soil sampling as well as sampling from the 25 monitoring wells during the Fall of 1996. This will determine if any further extraction will be necessary or only well monitoring will be required.

Jim Colter, Remediation Program Manager for Northern Division, was introduced and gave a brief description of Northern Division's relationship and history of the Navy's involvement. A site investigation of potential concern sites was held during 1990. Thirteen sites were identified and sampled and four sites which were confirmed to contain contamination were retained. In 1992 a contract was awarded to determine the nature and extent of the contamination. The report dated February 1993 showed that the Navy had a good handle on most of the areas of contamination, but some additional data was required and recommended that further studies be performed. The Navy is currently working on a "draft" work plan (dated April 1996), which will detail a plan of action on how to fill the data gaps of previous studies. A copy of the draft will be sent to the RAB members for their comments and an additional copy is available in the Information Repository (Horsham Municipal Bldg.) for review by the general public. Based on comments received, the plan will be finalized and put into action by next Spring. The former Technical Review Committee already reviewed a copy of the draft plan. Their comments will be included with the copy of the draft being sent to the board members.

Mr. Colter introduced Russ Turner (project manager) and Kevin Kilmartin (geologist) of Brown & Root Environmental Corporation who are the Environmental consultants for the environmental work being done at NASJRB Willow Grove. Their office is located in Wayne, PA.

Mr. Edmond asked that if anyone has a question about the RAB and cannot contact Mr. Colter, please feel free to give him a call. Business cards were provided.

Kevin Kilmartin provided an overview presentation (enclosure (2)) of the previous investigations and what will be performed during the Phase II investigations. He briefly reviewed each of the four contaminated sites (Privit Road Compound Waste Transfer Station 1967-1975, 9th Street Landfill 1960-1967, Fire Fighting Training

Area 1942-1975, and Antenna Field Landfill 1948-1960) identifying the results of the previous investigations and the work planned during the upcoming investigation. The object of the Phase II remedial investigation is to compile sufficient data to conduct a feasibility study, which will evaluate the remedial options and alternatives for each site.

A question was asked as to how widespread were the VOC's (Volatile Organic Compound) off site? Mr. Kilmartin stated that the determination of off site contamination was part of the upcoming investigation and will be discussed by Jim Colter.

A question was asked if there was only one site found with background levels of Dieldrin (a pesticide). Mr. Kilmartin clarified his statement that the amount of Dieldrin found at the 9th Street site was not significantly more than anywhere else on the base. Mr. Dave Kennedy of PADEP confirmed that there is a Dieldrin problem to some extent throughout Montgomery County due to agricultural usage.

Mr. Colter stated that the RAB meetings have been successful in that input from the community has been received regarding concern about the condition of fresh water drawn from the shallow wells located off site. Many residents are still using private wells for domestic use. He presented a chart which showed Horsham Water Authority supply wells located in the area of concern and stated that the water authority would detect any problems and treat the water accordingly. These are all deep aquifer wells and pose no problem.

The concern is for the residential wells that are hand dug and in-depth 25' to 30', many of which do not show up on township records. These are quite numerous and pose a problem for gathering data. An effort was made to locate these wells by knocking on doors and using records provided by the Sewer Authority. These wells, once located, will be used to determine which way the groundwater from the station flows. To the best of Mr. Colter's knowledge, there is a westerly flow. The golf course has recently put in monitoring wells to do groundwater quality testing. This data will be obtained from them and incorporated with the station's study. A plan will then be developed to sample first of the private shallow wells to determine if a problem exists off site. At this time it is believed that the "avenues" area of Horsham Township should not be affected since the groundwater does not flow in that direction. Sampling of the wells will be done to confirm it. Mr. Colter hopes to have the preliminary data in time for the next RAB meeting.

Question: What is the rate of flow from the station's production wells and is it clean?

Mr. Edmond added that there are elevated amounts of TCE in the water however, all water received from the wells is sent through an air stripper which keeps the levels well under the limits allowed by the state and is checked on a bi-weekly basis. The wells draw water from a depth of approximately 375 feet. It was noted that there are two production wells on the Navy base and one on the Air Force base. All have air strippers however, the Air Force well is currently not in operation.

Question: With all the testing going on, is this an indication that the base may close?

Answer: Mr. Edmond responded "No." The testing and sampling is nothing more than the Navy and Air Force cleaning up as prescribed by law. This is not a BRAC issue, we're just trying to be good neighbors.

Question: Mr. Thomas Hibbs (concerned citizen) asked what kind of landfills have been identified on site?

Answer: Mr. Edmond stated that all landfills are from the 40's, 50's and 60's containing the same type of waste that the communities sent to public landfills (i.e. construction materials, general trash, half full cans of paint, etc.). Two of the sites were just backfilled and one was capped. Part of the study will be to determine what the landfill was capped with and how well it is holding up. Phase I determined what was placed into the landfills. Documents from the study (dated February 1986) showed the composition (approximate amounts and weights) of the landfills are on file at the Information Repository at the Horsham Municipal Bldg. at 1025 Horsham Road. The antenna field site has a clay cap.

Question: What is the overburden and how far down is the bedrock for the aquifer?

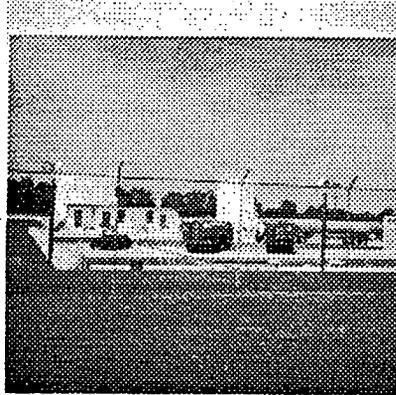
Answer: The overburden is the same as found throughout Bucks County. Below that is a very highly fractured bedrock of basically sedimentary rock, sandstone and shale extending to a depth of about 80 feet. Below that the clays and shale become more abundant.

There were no further questions and the meeting was adjourned.

The next RAB meeting will be held on 15 January 1997 from 6:00 to 8:00 PM at the Willow Grove Air Station in the Air Force Commander's Room.

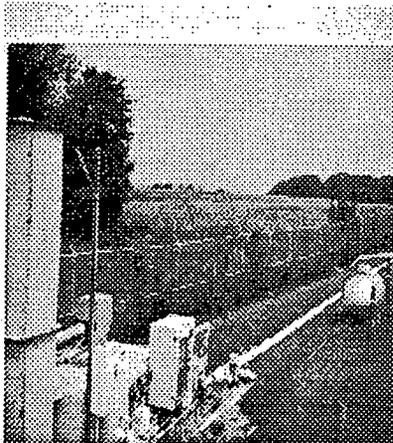
POL AREA, SITE ST-01 HISTORY

- **Before 1979 :**
Undocumented JP-4
spills 5,000-30,000
gallons.
- **In 1979:**
a 9,000 gallon JP-4
spill.



POL AREA, SITE ST-01 Remediation

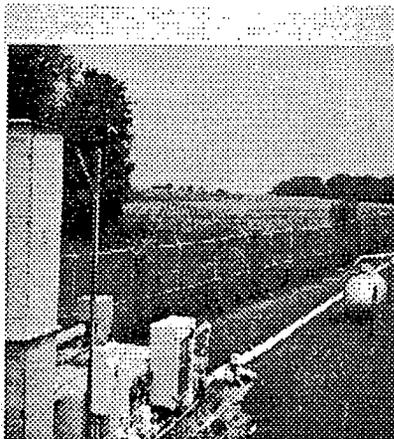
- **SOIL VAPOR**
EXTRACTION (SVE)
SYSTEM OPERATED
SINCE JUNE 1993.
- **CURRENTLY THE**
SYSTEM IS BEING
OPERATED ON A
PERIODIC BASIS
- **SITE WILL BE**
REASSESSED IN THE
FALL OF 1996.



POL AREA, SITE ST-01

Soil Vapor Extraction System

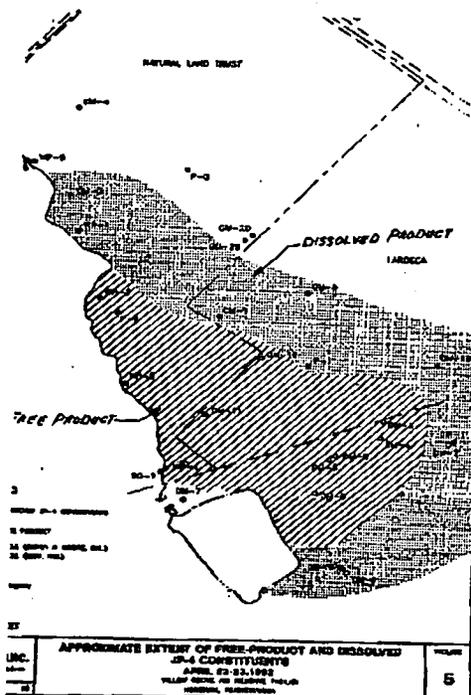
- **Eight (8) extraction wells**
- **Extracts vapors from the soil & the free product**
- **Circulates air through soil for bio-remediation**
- **Raises temperature from ambient to 1400 degrees Fahrenheit**
- **Gases retained in chamber for 1.0 second, twice the EPA recommended .5 seconds to ensure maximum destruction efficiency**



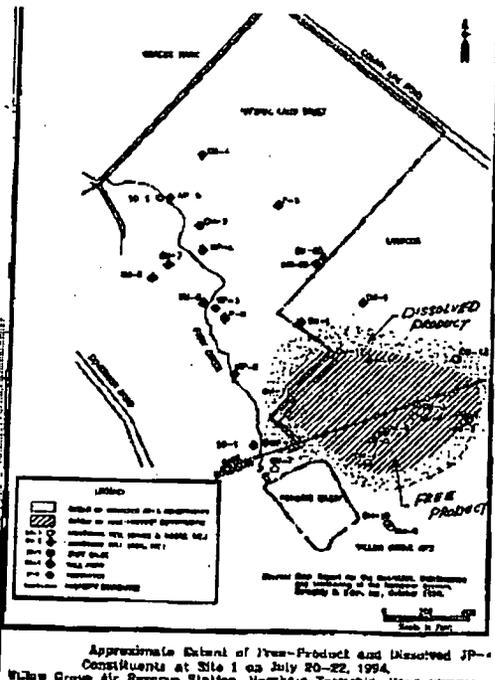
POL AREA, Site ST-01

Remediation Sampling Results

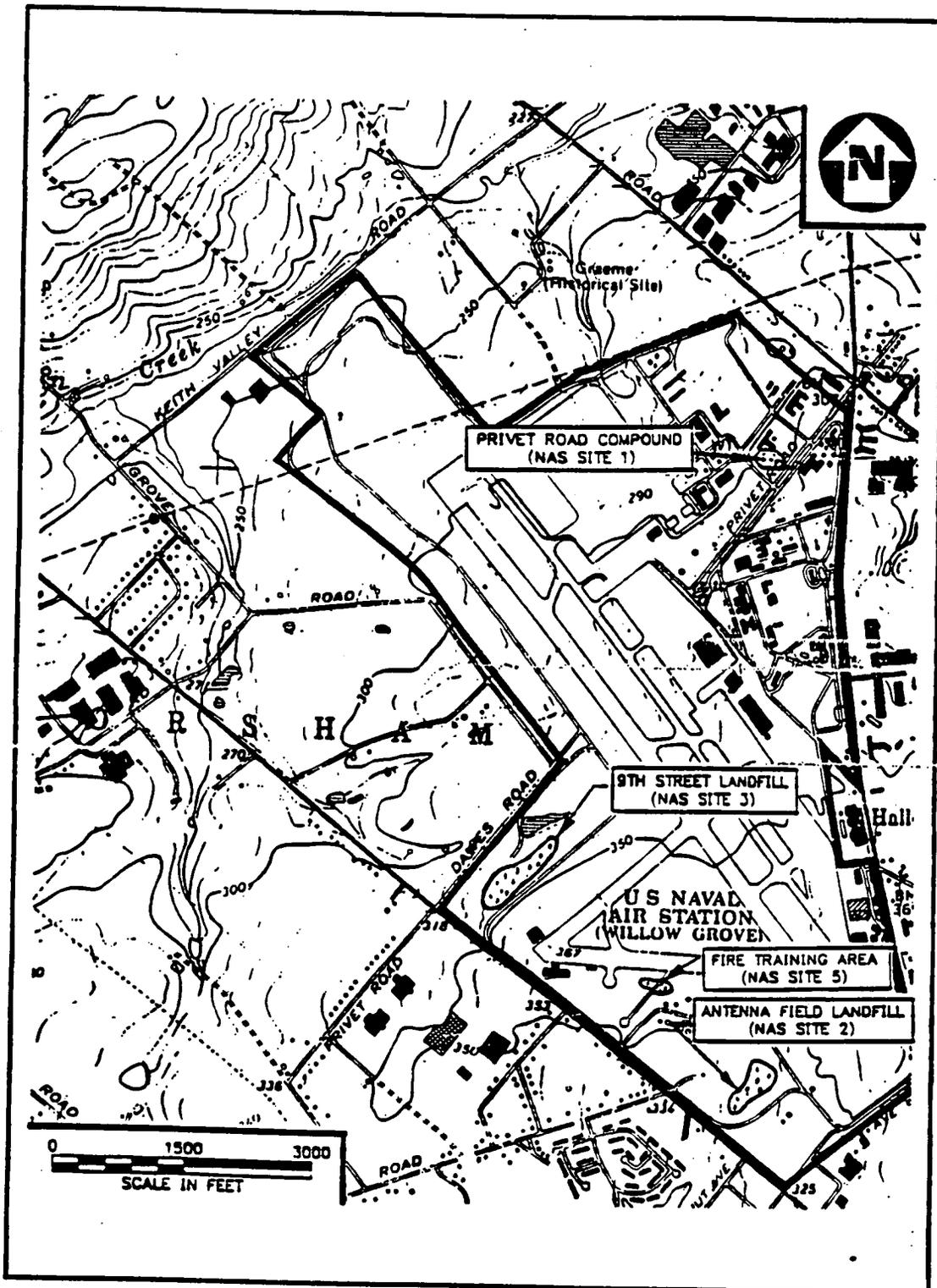
- 1992 free -phase JP-4 floating on ground & surface water
- July 1994 Sampling Results: Six (6) monitoring wells contained free product
- October 1995 Sampling Results: One(1) monitoring well contained free product
- Free product decreased from approximately 900 feet to 380 feet
- Dissolved product decreased in extent from approximately 1,400 feet to 575 feet



APRIL 1992



JULY 1994



BASE PLAN - RI SITE AREAS
NAS WILLOW GROVE
HORSHAM TOWNSHIP, PA

FIGURE 3-1



Br wn & R t Envir nmental

Privet Road Compound

Served as a waste transfer station from 1967 to 1975

Previous Investigations:

- Soils - generally low levels of PCBs
 - hot-spot in southwest corner of site
- Groundwater - elevated levels of VOCs (PCE, TCE)
 - complex hydrogeology

Privet Road Compound

Planned Investigation - Phase II RI:

Soil sampling

- delineate PCB hot-spot

• Groundwater

- long-term water level study
- install additional monitoring wells
- groundwater sampling and analysis

Surface water and sediment sampling

- additional location downgradient from site
- SVOCs for sediment samples

9th Street Landfill

Served as waste disposal area from 1960 to 1967

Previous Investigations:

Groundwater - elevated levels of VOCs (PCE)
– source has not been determined

Soils - dieldrin and cyanide
– dieldrin levels similar to background
– cyanide detections are very inconsistent

Sediments - elevated levels of PAHs and metals
– highest levels in pond sediments

9th Street Landfill

Planned Investigation - Phase II RI:

Soil sampling

- landfill cap
- source area investigation

Surface water and sediment sampling

- pond
- source area investigation

Monitoring wells and groundwater sampling

- on site and off site
- obtain off-site data prior to any additional drilling

Fire Training Area

- Used for firefighting exercises from 1942 to 1975

Previous Investigations:

Groundwater - elevated levels of VOCs

- lateral and vertical extents not fully defined

Soils - elevated levels of VOCs

- extent of subsurface contamination not defined
- incomplete data regarding surface soils

Fire Training Area

Planned Investigation - Phase II RI:

- Groundwater - additional monitoring wells
 - define vertical and lateral extent of VOCs

Soils

- additional soil borings to define VOC hot-spot
- conduct surface soil sampling program

Surface water and sediments

- collect pond samples

Antenna Field Landfill

- Served as waste disposal area from 1948 to 1960

Previous Investigations:

Groundwater

- limited data (3 shallow bedrock wells)
- VOCs and metals detected inconsistently and at low levels

- Sediments

- limited extent to contamination (center of landfill)
- PAHs and metals detected at elevated levels

Antenna Field Landfill

Planned Investigation - Phase II RI:

Groundwater

- additional monitoring wells to further investigate lateral and vertical groundwater quality, and to obtain additional data upon which to base groundwater flow directions

• Soils

- ~~conduct surface soil sampling program~~
- conduct test pitting program to determine quality of subsurface soils and to investigate nature of buried wastes

Surface water and sediments

- additional samples to delineate the sediment hot-spot

Seeps

- sample seeps, if available