



Fact Sheet

May 2001

Voluntary Investigative Report, December 2000 and Supplemental Investigation Work Plan, November 2000

**Former Sylvania Electric Products Incorporated Facility
70, 100, and 140 Cantiague Rock Road, Hicksville
Voluntary Cleanup Program Site No. V00089-1
Town of Oyster Bay, Nassau County**

PUBLIC MEETING ANNOUNCEMENT

The New York State Department of Environmental Conservation (NYSDEC), working cooperatively with the New York State Department of Health (NYSDOH) and the Nassau County Department of Health (NCDOH), invites interested citizens to attend a public meeting to discuss the results of the voluntary investigation and the proposed supplemental voluntary investigation at the Former Sylvania Electric Products Incorporated Facility site located at 70, 100, and 140 Cantiague Rock Road in Hicksville.

Public Meeting: May 9, 2001, 7:00 PM

Meeting Location:

Woodland Elementary School
85 Ketcham Road
Hicksville, NY 11803

Directions to Meeting Location:

Long Island Expressway to Exit 43 South
Go south 0.9 miles on South Oyster Bay Road
Turn right on Woodbury Road
Turn right on Ketcham Road

Document Repositories:

- 1) Hicksville Public Library
169 Jerusalem Avenue
Hicksville, NY
Phone: (516) 931-1417
Hours: Mon-Thurs 9am-9pm, Fri 9am-7pm,
Sat 9am-5pm, Sun 1pm-5pm
- 2) NYSDEC - Region 1 Office
SUNY Campus, Bldg. 40
Stony Brook, NY 11790-2356
Phone: (631) 444-0244
Hours: Mon-Fri 8:30am to 4:45pm

For Additional Information:

- 1) Robert Stewart, NYSDEC Project Manager
SUNY Campus, Bldg. 40
Stony Brook, NY 11790-2356
NYSDEC - Region 1 Office
Phone: (631) 444-0244
- 2) For Radiation Issues:
John Kadlecek
NYSDEC - Central Office
50 Wolf Road - Room 402
Albany, NY 12233-7255
Phone: (518) 457-2225
- 3) For Citizen Participation Issues:
Mark Lowery, Citizen Participation Specialist
NYSDEC - Region 1 Office
SUNY Campus, Bldg. 40
Stony Brook, New York 11790-2356
Phone: (631) 444-0350
- 4) For Health Related Issues:
Geoffrey Laccetti
NYSDOH
547 River Street - Room 300
Troy, NY 12180-2216
Phone: (800) 458-1158 ext. 27880

SITE INTRODUCTION

The Former Sylvania Electric Products Incorporated Facility (FSEPIF) site was primarily utilized for the manufacture of atomic fuel elements for reactors used in research and electric power generation between 1952 and 1967. Uranium was the primary element used for these fuel elements. However, thorium was also used in the manufacture of some reactor parts. Process wastes were reportedly discharged to four on-site recharge basins and to two industrial leaching pools. Some remedial measures were reportedly undertaken at closure in 1966 and 1967. All the original buildings except for one were demolished at closure. The remaining building was decontaminated in 1967 to remove radiological contamination.

The FSEPIF site now consists of three separate parcels of land located at 70, 100, and 140 Cantiague Rock Road in Hicksville. A site location map (Figure 1-1) and a current site map showing these three parcels (Figure 2-2) are attached to this fact sheet. Number 70 Cantiague Rock Road, the south parcel, is currently operated by Air Techniques. The center parcel (#100) is operated by Magazine Distributors. The north parcel was last operated by Gilbert Displays. However, this company moved to a new location in November, 2000 and this parcel is currently unoccupied. Each of these parcels is fenced, thereby essentially limiting access to these properties to site workers. The site is bordered on the north by the Nassau County Department of Public Works facility, on the west by Cantiague Rock Road, on the south by the Inactive Hazardous Waste Disposal Site known as General Instruments, and on the east by a golf driving range for Cantiague Park, a Nassau County park. Groundwater, which occurs at approximately 70 feet below land surface, flows towards the south.

In December 1986, buried drums were discovered on the southern most parcel, which was operated by Air Techniques. These drums contained waste solvents which were attributed to former operations involving the manufacture of reactor fuel elements. Approximately 57 drums and 80 to 90 cubic yards of contaminated soils were removed in 1987. Subsequently, a Phase I, a Phase II, and a Supplemental Phase II Investigation were completed for this parcel. Groundwater contamination by tetrachloroethene and trichloroethene, both common industrial solvents used for degreasing of metal parts, was detected in upgradient and downgradient wells for this parcel. Further investigation was needed to determine the actual sources of this groundwater contamination.

THE VOLUNTARY INVESTIGATION

GTE Operations Support Inc., a corporate successor to the facilities which manufactured reactor parts from 1952 to

1967, entered into a voluntary cleanup agreement with the NYSDEC on April 7, 1999 to investigate the entire property which had been used for these purposes. One of the principal names used by the site during these years was the Sylvania Electric Products Facility. An Investigation Work Plan dated May 1998 was prepared to investigate the Air Techniques parcel and the two parcels immediate to the north. These three parcels comprised the original FSEPIF site. A copy of this work plan has been placed into the document repositories listed on the front page of this Fact Sheet. The public is encouraged to read all the site documents in the public repositories.

The results of the Voluntary Investigation have been documented in the Voluntary Investigative Report, December 2000. A copy of this report has also been placed into the document repositories.

The results of the investigation indicate that there are several different areas of the site which contain above background concentrations of radiation. Uranium and thorium are the primary radioactive elements which have been detected in the site soils.

Almost the entire site is paved. Most of the radiological contamination is beneath the paved areas in the eastern portion of the site. This pavement prevents potential exposure to these soils. Only a very small area along the eastern property border for the northern and middle parcels has exposed surface soils which have above background concentrations of radiation.

To a lesser extent, the off-site surface soils immediately adjacent to this area are impacted. For a short distance along the property line between the site and golf driving range, small amounts of radioactive material have been found at the surface. The concentrations are low and are limited to a narrow strip along the fence in an area which is not accessible to the general public.

Additionally, there has been some radiological contamination detected in the underlying groundwater at two locations towards the middle and northeastern portions of the site. However, the groundwater samples collected along the downgradient property border were not impacted by radiological contamination. Further investigation is needed to determine whether the radiological contamination in groundwater is contained within the site borders.

Besides the radiological contamination, tetrachloroethene and, to a lesser extent, trichloroethene have been detected in the subsurface soils at several locations in the center and north parcels. These two compounds have also been detected in the underlying groundwater. This groundwater contamination extends to the adjacent property to the

south. Further investigation is necessary to determine the actual extent of this groundwater plume.

Some non-radioactive heavy metals such as nickel, copper, and chromium have also been detected at elevated concentrations above typical background concentrations for these metals in the voluntary investigation. The nickel contamination appears to be the most significant. Nickel was detected in one groundwater sample collected near the middle of the site at concentrations above groundwater standards.

SUPPLEMENTAL INVESTIGATION

Although a large number of soil samples were collected from over 100 soil borings in the initial investigation, more soil samples are needed to completely determine the extent of the soil contamination. A Supplemental Investigation Work Plan dated November, 2000 has been developed for this purpose. A copy of this work plan has been placed into the public repositories. The soil sampling and air sampling portions of this investigation have already been performed. A report on this portion of the supplemental investigation should be available in June, 2001.

The proposed supplemental investigation also includes an additional on-site groundwater investigation. The current network of monitoring wells will be expanded to determine the extent of the on-site groundwater contamination. An addendum to the Supplemental Investigation Work Plan will be available soon giving more complete details on this portion of the supplemental investigation. The approved work plan addendum will be placed into the public repositories, when available. The field work is planned to commence in July, 2001.

As can be seen, the investigative work at this site is being done in stages. The project has been organized in this fashion to allow for more timely implementation of remedial measures. This staged approach also allows for the data retrieved from the previous stages to be used in determining the sampling locations in the subsequent stages.

After the extent of the on-site groundwater contamination has been defined, the next stage in the investigation of this site will be to define the vertical and horizontal extent of the off-site groundwater plume. This work will be performed in a subsequent investigation which will be detailed in a separate work plan.

INTERIM REMEDIAL MEASURES

As mentioned above, the portion of the Supplemental Investigation involving the collection of additional on-site soil samples and indoor air sampling has already been performed. A report should be available this June. With

these new data, it will now be possible to address the on-site soil contamination. This remedial work will probably be performed under an Interim Remedial Measure (IRM). An IRM is a discrete set of activities which can be carried out without extensive investigation and evaluation, to prevent, mitigate, or remedy environmental damage attributable to a site. In this case, the IRM will probably be only one part of the eventual remedy for the site. However, the performance of the IRM is expected to provide immediate risk reduction by timely remediating the source areas in the site soils. It is expected that the IRM will consist of excavation and off-site disposal of the impacted soils. Some pre-treatment of the impacted soils may be necessary before the soils can be shipped off-site.

If the volunteer and the NYSDEC agree to perform an IRM at this site, an IRM Work Plan will be developed and placed into the public repositories. If it is determined that the IRM will be a major portion of the final remedy for the site, the NYSDEC will hold a public meeting to present the proposed remedy to the public. Public input on the proposed remedy will be requested.

OFF-SITE GROUNDWATER

The groundwater in the vicinity of the site is flowing in a southerly direction. The on-site groundwater is impacted with chlorinated solvents. The groundwater contamination by chlorinated solvents extends beyond the borders of the property. Although the groundwater plume has not been completely delineated at this time, there has been groundwater sampling in this area which has provided partial delineation of the groundwater contamination. This groundwater sampling was performed as part of the investigation of the Inactive Hazardous Waste Site known as General Instruments (GI) which is immediately south and downgradient of the FSEPIF site.

As it turns out, discharges of chlorinated solvents at the GI site have also impacted the groundwater. Based on the available data, it is expected that the plumes originating at each site may commingle to some extent. At this time, the contribution from each site has not been established. However, it is known that significant concentrations of tetrachloroethene (PCE), trichloroethene (TCE), and 1,2-dichloroethene (1,2-DCE), and vinyl chloride (VC) have been detected in the groundwater downgradient of both sites. TCE, 1,2-DCE, and VC are breakdown products of PCE. Based on the results of soil sampling, PCE and TCE were discharged at both the GI and FSEPIF sites.

As mentioned earlier, the off-site groundwater contamination attributable to the FSEPIF site will be studied in a subsequent investigation to be performed after the completion of the on-site groundwater investigation planned for this July.

EXPOSURE ASSESSMENT

There are no known users of the contaminated groundwater close to the site. However, there are five active public drinking water supply wells which are located slightly more than one mile from the site and could potentially be downgradient of the site, as follows:

- 1) Hicksville Water District wells N7561 and N9212 are approximately 7,000' south of the FSEPIF site.
- 2) Hicksville Water District well N8526 is located approximately 9,000' southeast of the site.
- 3) Bowling Green Water District wells N8956 and N8957 are approximately 6,000' southwest of the site.

Each of these drinking water wells is impacted by PCE and TCE. However, the water from these wells which is used for public supply is treated to remove these contaminants prior to distribution to the public. These treated drinking water supplies are routinely sampled to ensure that they meet stringent state and federal drinking water standards.

At this time, it has not been established whether this site is contributing to the contamination which has been detected in any of these supply wells. There are other potential sources of chlorinated solvents in the surrounding industrial area.

Air samples were collected in the former Gilbert Displays building and analyzed for the two contaminants found in the highest levels in soil gas samples, tetrachloroethene and trichloroethene. Neither compound was detected above the method detection limit used for analysis. Additional samples will be collected and analyzed with lower detection limits.

Surface soil samples were collected on the FSEPIF site in the limited area on-site where soils are present. The majority of the site is covered by buildings or pavement. The results of these soil samples found no organic or inorganic compounds at levels that represent a public health concern.

The majority of the contaminated portions of the property are inaccessible to both on-site workers and members of the public. Thus, exposure to radioactive materials is minimal.

Since the contaminated soils are buried in an overgrown area near the golf driving range fence, or on presently unoccupied private property, there is no direct contact with the affected areas. Thus, the only pathways to human exposure would be ingestion of contaminated soil or water and inhalation due to resuspension of material from a small portion of the site (where surface soils contain radionuclides).

External exposure to radioactive emissions from these contaminants is effectively reduced due to shielding from overlying soil and blacktop. Workers, in direct contact with the contaminated areas and soils during sampling, reported no excess exposure on their personal monitoring devices.

The only other potential pathway of exposure for the radiological contamination would be through the drinking water. It is expected that most of the homes in the affected area are connected to Hicksville Water District public drinking water supply wells. The drinking water supplied by the District is monitored for, among other things, radioactive contaminants. The test involves measuring gross alpha radiological activities. Recently, each of the District's wells was tested for both gross alpha and gross beta activities. Results from this water testing (completed in April 2001) indicated that gross alpha and gross beta values are below the drinking water standard. Water samples were taken from monitoring wells at the FSEPIF site at a depth ranging from 70-85 feet. The Hicksville public supply wells which are potentially downgradient of the site are located at a depth of at least 400 feet and are 7,000 feet or more from the site. Consequently, it is unlikely that any contamination found at the on-site monitoring wells would be found at the public water supply wells.

CITIZEN PARTICIPATION

Two public meetings are planned for this site. The first meeting will be held on May 9, 2001 at 7:00 PM at the Woodland Elementary School to discuss the results of the completed Voluntary Investigation and the scope of work for the Supplemental Voluntary Investigation. Please see the cover page for further information on this meeting.

A second meeting will be held after the proposed remedial plan for this site has been developed. Public input will be requested at that time and will be carefully considered before the final remedy for the site is determined.

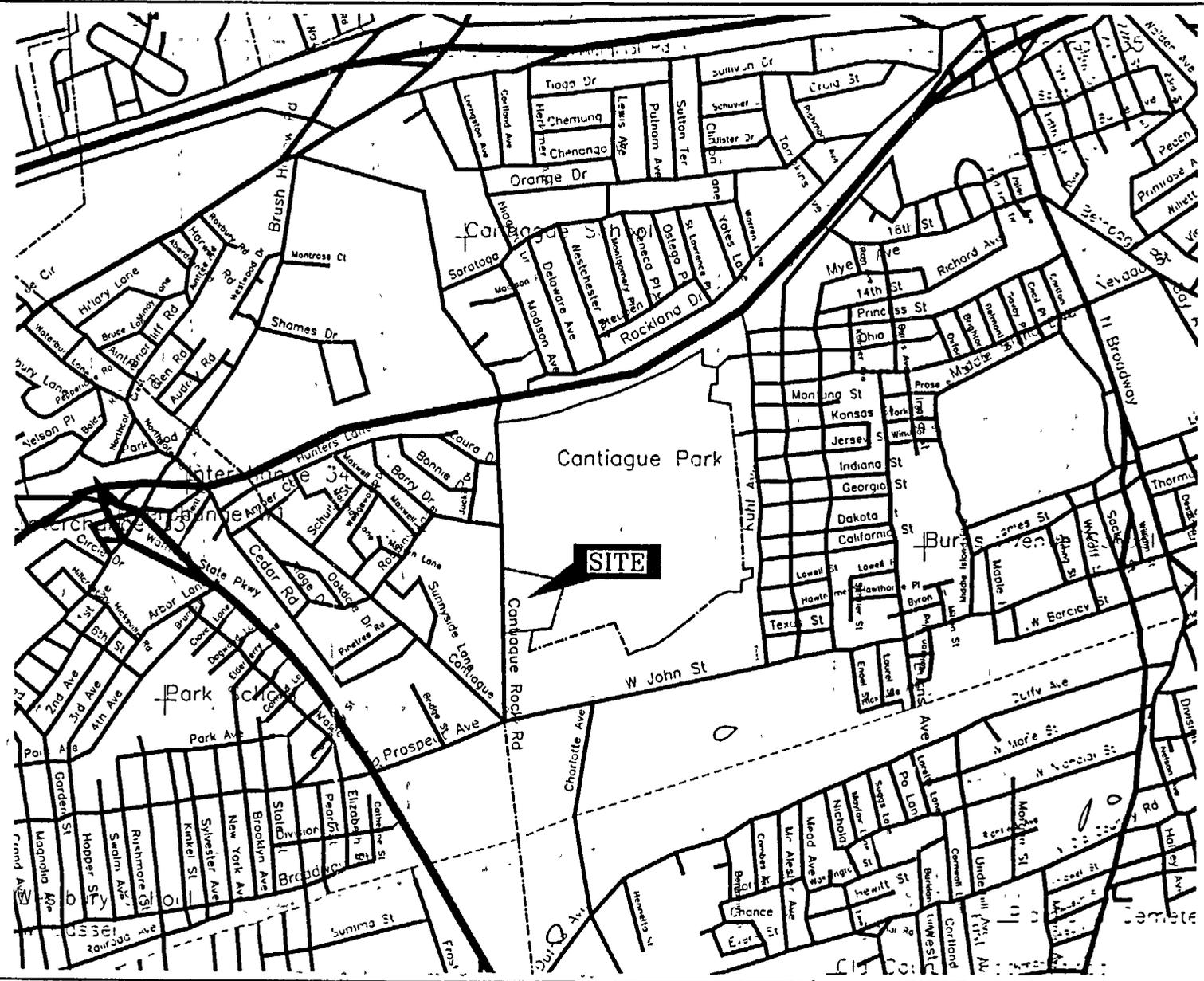
A public contact list which includes nearby property owners, elected officials, community groups, and local media has been developed for this site by the NYSDEC. Using fact sheets which will be distributed to the public contact list, the NYSDEC will continue to periodically update the public about the ongoing investigation and remediation at the FSEPIF site.

Two public document repositories have been established where the public may go to read the available work plans and reports for the site. These repositories are at the reference section of the Hicksville Public Library and at the NYSDEC Region 1 Office. Please see the cover page for the addresses, telephone numbers, and office hours of the repositories. New work plans and reports will be added to the document repositories as they become available.

If you have any questions or comments, the NYSDEC encourages you to call or write to any of the contacts which are listed on the cover page of this fact sheet.

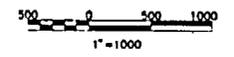
14 DIVERS PROJECTS, 301 6400, 000-001, 000-002

11/97



LEGEND
 - - - - - SITE BOUNDARY

IN CHARGE OF _____
 DESIGNED BY _____ CHECKED BY _____
 DRAWN BY _____



NO. _____ DATE _____ PERSON _____



FORMER SYLVANIA
 ELECTRIC PRODUCTS INCORPORATED FACILITY
 HICKSVILLE, NEW YORK

SITE LOCATION MAP

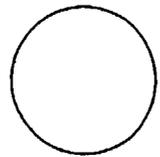
FILE NO.
 5816 009 001
 DATE
 Nov 1997

Source: Investigation Work Plan, March 1998
 (Revised May 1998)

1. 1/16" = 1' (Vertical Scale)

NASSAU COUNTY
DPW

CANTIAGUE PARK
PUBLIC GOLF DRIVING RANGE



GILBERT
DISPLAYS
INC.

MAGAZINE
DISTRIBUTORS
INC

AIR
TECHNIQUES
INC.

GENERAL
INSTRUMENTS
INC.

01 MAY -7 15:31

RECEIVED
REGION

LEGEND

- EXISTING BUILDING OUTLINE
- - - SITE BOUNDARY
- - - FENCE
- EXISTING DRAINS AND DRY WELLS (#140 AND #100 ONLY)
- # DENOTES STREET ADDRESS

#140

#100

#70

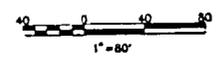
CANTIAGUE ROCK ROAD

IT IS A VIOLATION OF LAW FOR ANY PERSON UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ENGINEER, TO ALTER THIS DRAWING.

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NO.	DATE	REVISION



FORMER SYLVANIA
 ELECTRIC PRODUCTS INCORPORATED FACILITY
 HICKSVILLE, NEW YORK

CURRENT
 SITE MAP

FILE NO.
 5818.009.303
 DATE
 March 1998

2-2

Source: Investigation Work Plan, March 1998 (Revised May 1998)