

Fact Sheet

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Supplemental Voluntary Investigative Report, July 2001, Monitoring Well Work Plan, July 2001, and NYSDOH Radiological Survey Report, July 9, 2001

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

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), has prepared this fact sheet to notify the public of the availability of the Supplemental Voluntary Investigation Report, July 2001, the Monitoring Well Work Plan, July 2001, and the NYSDOH Radiological Survey Report, July 9, 2001 for the Former Sylvania Electric Products Incorporated Facility site located at 70, 100, and 140 Cantiague Rock Road in Hicksville. This fact sheet will also summarize the latest developments at this site.

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: - Barbara Youngberg NYSDEC - Central Office 625 Broadway Albany, NY 12233-7255 Phone: (518) 402-8579
 - 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: William Gilday NYSDOH 547 River Street - Room 300 Troy, NY 12180-2216 Phone: (800) 458-1158 ext. 27880

INTRODUCTION

This fact sheet is part of the NYSDEC's continuing efforts to keep the public aware of the latest developments at the Former Sylvania Electric Products Incorporated Facility (FSEPIF) site located at 70-140 Cantiague Rock Road in Hicksville.

The results of the voluntary investigation report and supplemental investigation work plan were discussed in the first fact sheet dated May 2001 and in a public meeting held on May 9, 2001. This fact sheet will discuss the following:

- 1) The results of supplemental on-site soil sampling performed in November and December 2000.
- 2) The scope of work for the supplemental on-site groundwater investigation.
- 3) The results of NYSDOH's recent radiological soil sampling at vicinity properties.
- 4) The temporary asphalt cover which has been placed over two small areas on the golf driving range for Cantiague Park and over a small portion of an unpaved area in the rear of the 70 Cantiague Park Road property.

SITE BACKGROUND

The FSEPIF site consists of three parcels located at 70, 100, and 140 Cantiague Rock Road. Number 70 is currently occupied by a manufacturer of dental equipment. Number 100 is operated by a distributor of magazines. Number 140 is currently vacant. A site location map is attached.

The FSEPIF site was primarily utilized for the manufacture of nuclear fuel elements for reactors used in research and electric power generation between 1952 and 1967. The radioactive elements uranium and thorium were used to construct these fuel elements.

GTE Operations Support Inc. (the volunteer) entered into a voluntary clean-up agreement with the NYSDEC on April 7, 1999 to investigate the FSEPIF site. The volunteer has already completed a voluntary investigation. That investigation was discussed in more detail in the first fact sheet and in the May public meeting. The most significant findings of that investigation are:

- 1) There are several different areas of the site which contain above background concentrations of radiation. The primary element found in the site soils is uranium. Thorium has also been found in four small areas.
- 2) To a lesser extent, two small, off-site areas which are immediately adjacent to the site along the eastern border contain elevated radiological readings above typical

background. These areas are located along the fence line of the golf driving range for Cantiague Park.

- 3) There has been some radiological contamination detected in the underlying groundwater at two locations towards the middle and northeastern portions of the site.
- 4) Tetrachloroethene (PCE) and, to a lesser extent, trichloroethene TCE), common solvents used for degreasing, have been detected in the subsurface soils at several locations in the center and north parcels and in the underlying groundwater.
- 5) Nickel has been detected at elevated concentrations above typical background concentrations in several areas and in the underlying groundwater at one location.
- 6) The water table occurs at approximately 70 feet below land surface (bls). The shallow groundwater is flowing to the south.

SUPPLEMENTAL INVESTIGATION FOR ON-SITE SOILS

In November 2000, the volunteer performed a supplemental investigation to further define the extent of the contamination. The primary findings of the supplemental investigation are:

- 1) An area with radiological and chlorinated solvent contamination originally detected along the southern portion of the eastern wall of the 140 Cantiague Rock It extends Road building was further defined. approximately 15 to 20 feet under the building. The chlorinated solvent contamination apparently extends to a depth of approximately 13 feet bls. The radiological contamination appears to extend to a depth of 16 feet bls. 2) An area with radiological, chlorinated solvent, and nickel contamination located just south of the central portion of the 100 Cantiague Rock Road building was better defined. This area is just east of the loading docks. The nickel contamination appears to extend to 20 feet bls. The radiological contamination appears to extend to a depth of 16 feet bls. Chlorinated solvents were detected at concentrations above applicable clean-up objectives in only two soil samples in this area.
- 3) A relatively small area in the northeastern corner of the 100 Cantiague Rock Road parcel was investigated further due to nickel contamination detected in one soil boring. The nickel contamination was limited. However, some radiological contamination was identified in the interval from 5.5 -16.5 feet bls in one of the soil borings in this area.
- 4) A relatively small area in the central portion of the 70 Cantiague Rock Road parcel near the northern property border has some radiological contamination. The area is immediately south of the area discussed under item #2.

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It should be noted that all the above areas are covered by asphalt or concrete. Consequently, under the current site conditions, direct exposure to these soils is not possible.

Besides the soil sampling, air sampling was performed inside the vacant 140 Cantiague Rock building. This building was evaluated for indoor air impacts due to the presence of chlorinated solvents in the soils adjacent to and beneath the eastern portion of the building. Tetrachloroethene was detected in indoor air samples from the rear and central portions of the building. The levels detected were slightly above the NYSDOH guideline value for PCE in air. Detections of PCE in a subsequent round of indoor air samples were less than the NYSDOH guideline value. Based on these results, there are no immediate health concerns with respect to PCE in indoor air.

Under the current site conditions, no health concerns were identified for site workers based on the data obtained during the supplemental soil investigation.

The results of the supplemental investigation for on-site soils are presented in more detail in the Supplemental Voluntary Investigation Report, July 2001. A copy of this report has been placed in the public repositories listed on the cover of this fact sheet.

SUPPLEMENTAL ON-SITE GROUNDWATER INVESTIGATION

The supplemental investigation for the FSEPIF site is being done in stages. The supplemental report discussed above describes the results of the supplemental soils investigation. The next stage is a supplemental investigation of the on-site groundwater.

Although the supplemental groundwater investigation is discussed generally in the Supplemental Investigation Work Plan, November 2000, another more detailed work plan was developed for this investigation. The title of this work plan is the Monitoring Well Work Plan, July 2001. A copy has been placed into the public repository.

The investigation was conducted in July and August 2001. The actual investigation included the following:

- 1) Groundwater sampling at 20 feet intervals in four deep borings in the eastern portion of the site to determine the vertical extent of the radiological and chemical groundwater contamination.
- 2) Four permanent deep monitoring wells were constructed in the four borings discussed under item #1. All four deep wells were screened at approximately 120

feet below land surface.

- 3) Three permanent shallow wells were constructed to monitor the shallow groundwater quality in the eastern portion of the site.
- 4) The four new deep wells, the three new shallow wells, and the five existing shallow wells were sampled for both radiological and chemical sampling parameters.
- 5) The network of monitoring wells were surveyed so that the groundwater flow direction in the shallow and deep zones could be determined.

The results of the on-site groundwater investigation are expected to be available by the end of this year and will be the subject of a third fact sheet. Figure 2 shows the locations of the new and existing monitoring wells.

Preliminary results of the on-site groundwater investigation show high concentrations of tetrachloroethene in groundwater at the downgradient border of the site. For this reason, an off-site groundwater investigation will be required.

NYSDOH RADIOLOGICAL SAMPLING

The NYSDOH performed limited shallow soil sampling at selected properties in the vicinity of the FSEPIF site. The properties investigated were:

- 1) Private property at 75 Cantiague Rock Road
- 2) Cantiague Park Playground
- 3) Cantiague Park Golf Driving Range

The survey included a walk over of the investigated areas with a radiation survey instrument followed by the collection of soil samples in the areas with the highest readings. A total of 10 soil samples were collected and analyzed at NYSDOH's Wadsworth Laboratory.

Native soil and rocks all contain background concentrations of radiation. The readings on the field survey instrument and the detections in the analyzed soil samples on the 75 Cantiague Rock Road property and the Cantiague Park Playground were indicative of background conditions.

The area of the golf driving range which is adjacent to the FSEPIF site did contain some elevated concentrations of uranium-238 and uranium-235. However, external exposure levels resulting from the elevated uranium concentrations are only slightly above area background levels and well below typical clean-up levels used by NYSDEC at other sites. The NYSDOH does not believe that the concentrations of uranium found in the samples pose any health threat to the public or employees of

Nassau County.

Due to the slightly elevated readings seen through instrumentation and sample analysis on the area adjacent to the site on the golf driving range, the NYSDOH has recommended additional surface soil sampling on immediately adjacent properties. The intent of this sampling is to ensure that nearby areas which may have been impacted by airborne contaminants from the FSEPIF site are adequately investigated and released from further scrutiny. It is expected that the forthcoming fact sheet for the on-site groundwater investigation report will also include a discussion of the results of this additional surface soil sampling. A copy of these results will be placed in the public repositories, when available.

TEMPORARY ASPHALT COVER

The volunteer has placed a temporary asphalt cover over two small areas on the Cantiague Park golf driving range and one small, unpaved area in the rear of the 140 Cantiague Rock Road parcel. The three areas which were covered with asphalt had been determined to contain radiological contamination above typical background concentrations. The formerly exposed soils in these three areas did not present a health risk. However, the volunteer performed this work to alleviate public concerns about potential contact with these exposed soils. It is expected that the contaminated soils will be excavated in 2002 and shipped to an approved off-site facility.

OFF-SITE GROUNDWATER INVESTIGATION FOR THE GENERAL INSTRUMENTS SITE

The property immediately south and downgradient of the FSEPIF site is listed as an inactive hazardous waste site. The site is known as the General Instruments (GI) site and is located at 600 West John Street, Hicksville. Like the FSEPIF site, discharges of PCE and TCE at the GI site have also impacted the groundwater.

Since the GI site is downgradient of the FSEPIF site, the plumes of chlorinated solvents originating at each of these sites may commingle to some degree. Consequently, some of the groundwater data from previous groundwater sampling performed for the GI site may also be useful for the subsequent off-site groundwater investigation which will be performed for the FSEPIF site. It is impossible, at this time, to determine what portion of groundwater. Work plans which have been placed in the two public contamination detected in the groundwater sampling performed for the GI site might be attributable to the FSEPIF site.

The groundwater investigation for the GI site is separate from the groundwater investigation for the FSEPIF site. A considerable amount of off-site groundwater sampling was performed in July and August, 2001. This groundwater sampling was located just north of the Long Island Rail Road tracks which are south of West John Street. The area studied ranges from approximately 100 feet to 500 feet west of Charlotte Street. Preliminary results indicate that the groundwater plume of chlorinated solvents is at least 400 feet wide. The groundwater plume at this point contains high concentrations of PCE, TCE, and cis-1.2 dichloroethene, a breakdown product which develops during biodegradation of PCE and TCE.

The recent GI off-site sampling discussed above is more than 1,600 feet south-southwest of the FSEPIF site. Therefore, it is not certain if any of the detections in this sampling are attributable to discharges which occurred at the FSEPIF site. However, the NYSDEC felt that it was important to notify the public of this development. The public will be further informed of the results of the General Instruments off-site groundwater investigation through citizen participation activities to be scheduled for that site. The NYSDEC has requested that the volunteer for the FSEPIF site commence with their off-site groundwater investigation in a timely manner.

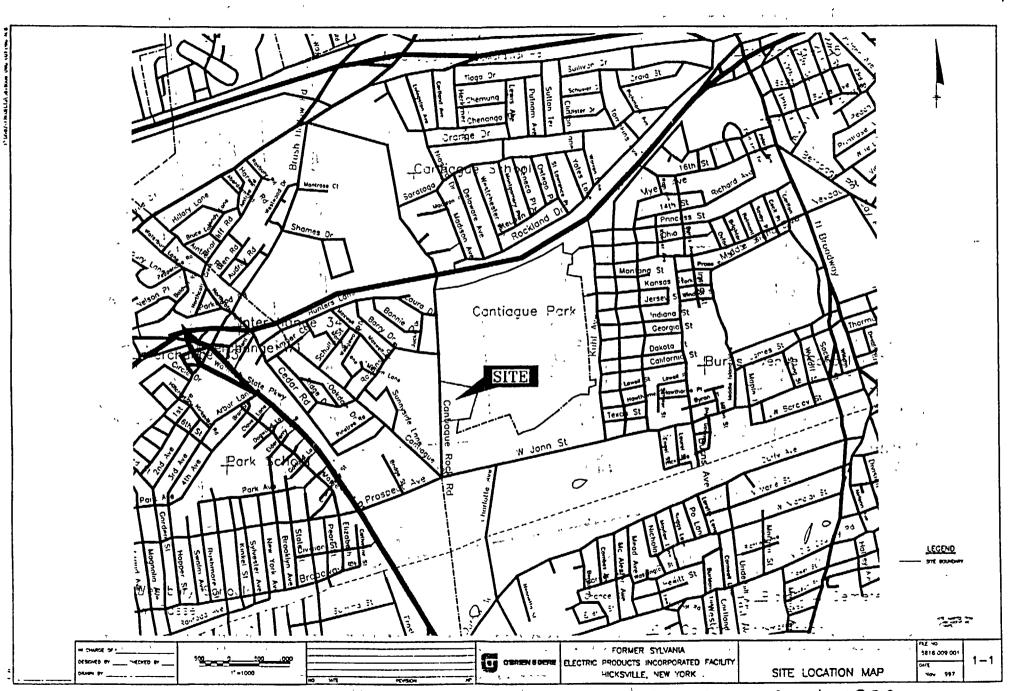
The public should also be aware that public water supply wells are routinely monitored for the types of contaminants present at these sites. If necessary, the water is treated to remove these and other contaminants prior to distribution to the public.

CITIZEN PARTICIPATION

The NYSDEC will continue to update the public about the latest developments at this site through fact sheets. Another fact sheet is expected to be sent towards the end of 2001 to discuss the results of the on-site groundwater investigation and the results of the additional surface soil sampling recommended by the NYSDOH.

Other fact sheets will be prepared for the off-site groundwater investigation and the proposed remedy for the site. A public meeting will be held to present the proposed remedy to the public.

The public is encouraged to read the available reports and document repositories listed on the front page of this fact sheet. Any comments or questions should be directed to any of the contacts listed on the cover page.



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

FORMER SYLVANIA ELECTRIC PRODUCTS INCORPORATED FACILITY MONITORING WELL LOCATIONS

