New York State Department of Environmental Conservation
Division of Environmental Remediation

# KAY-FRIES, INC. HAZARDOUS WASTE SITE #344023
# OFFSITE PRELIMINARY SITE ASSESSMENT

TOWN OF STONY POINT, ROCKLAND COUNTY
FACT SHEET - SEPTEMBER 1997

## *INTRODUCTION*

In October of 1996, Governor Pataki announced that the New York State Department of Environmental Conservation (DEC) would conduct a Preliminary Site Assessment (PSA) covering 43 acres of property adjacent to the Kay-Fries, Inc. Inactive Hazardous Waste Site in the Town of Stony Point. This 43 acres represents the balance of property once owned by Kay-Fries Inc., which, prior to 1996, had not been the subject of any DEC field investigations. It is located to the north, west, and south of the 22 acre Kay-Fries Site listed in the New York State Registry of Inactive Hazardous Waste Disposal Sites. The scope of the PSA was expanded to include portions of the West Haverstraw Elementary School property. The investigation involved collecting information regarding these properties from the local officials and the community, gathering historical information about the area, collecting environmental samples in the area, performing laboratory analyses of the samples, and evaluation of the information.

The PSA was conducted and funded by the DEC using the 1986 Environmental Quality Bond Act (Superfund). The work was performed by Camp, Dresser and McKee, one of the DEC's Standby Superfund Consultants. The New York State Department of Health (DOH) assisted the DEC in this work. The purpose of the PSA was to determine if there was hazardous waste contamination on the 43 acres.

The DEC issued the Final PSA Report in September 1997. One area of groundwater contamination was identified during the offsite PSA. A potential source of chlorinated solvent contamination was found between property lots 15 and 19 on Kay Fries Drive in the Town of Stony Point. An investigation is underway to determine the location of the source of the groundwater contamination. The offsite PSA found that there were no other areas of contamination resulting from the disposal of hazardous waste within the offsite study area, including the West Haverstraw Elementary School yard. A summary of the information presented in the Final PSA Report is presented in this Fact Sheet.

## *PSA FIELD WORK*

In December 1996, the DEC held a public meeting at the Haverstraw Town Hall at which information regarding the past history and possible disposal of hazardous materials was solicited. In response to the concerns raised by the community and at the request of the New York State Department of Health, the original scope of work was expanded to include portions of the elementary school property.

The field work began on December 18, 1996 and was completed on June 30, 1997. Many of the samples were analyzed for cyanide and the full target compound list (TCL) which includes; volatile organic compounds, semivolatile organic compounds, metals, PCBs, and pesticides. The volatile and semivolatile analytical work not only reprots the TCL, but also screens for all volatile and semivolatile organic compounds. Therefore, with the exception of formaldehyde, all chemicals used or manufactured at Kay Fries would be detected by these analyses. The field work included the following:

1. Collection of surface water and sediment samples from 5 locations in the wetland area. Each sample was analyzed for the full TCL. These samples were collected and analyzed to determine if there is any impact to the wetland area.

2. Collection of soil vapor samples from 65 locations on a grid laid out over properties along Kay Fries Drive and the elementary

school property. Each soil vapor sample was analyzed by gas chromatograph and mass spectrometer for volatile organics. The soil vapor survey was used as a screening tool to locate the soil and groundwater sampling points.

3. Collection of surface soil samples from 23 locations. These included 9 locations on the elementary school property, 3 locations along the former plant entrance road, 6 locations chosen for comparison as background (3 over the Helen Hayes sanitary sewer line and 3 at the Theills Elementary School), and 5 locations near several empty drums. The samples along the former entrance road were analyzed for metals, PCBs, and pesticides. The samples collected on the school property, the background locations, and near the empty drums, were analyzed for cyanide and the full TCL.

4. Collection of 9 subsurface soil samples. Subsurface soil samples were analyzed for cyanide and the full TCL.

5. Collection of groundwater samples from 23 different locations. These included 9 locations on the elementary school property, 1 location on Hoke Drive, and 13 locations on the properties along Kay Fries Drive. The groundwater samples were analyzed for cyanide and the full TCL.

6. Monitoring wells, constructed with prepacked well screens, were installed at three of the groundwater sample locations. These wells and two existing monitoring wells were used to calculate the direction of groundwater flow.

The field work for the soil vapor survey began on February 17, 1997 and was completed on March 4, 1997. Based on these results, a soil and groundwater sampling location was added between 15 and 19 Kay Fries Drive, and two of the proposed locations were adjusted.

The groundwater sampling and a majority of the surface soil sampling were conducted between April 21, 1997 and May 7, 1997. The remainder of the soil sampling was conducted on June 30, 1997.

## *PSA RESULTS*

**Soil:** The presence of chlorinated solvents was identified in subsurface soil samples collected at locations WP17 and WP21 (see attached map). Chlorinated solvents were also identified in soil gas and groundwater samples at these locations. The main source of the solvents appears to be near sample location WP17, between 15 and 19 Kay Fries Drive. Further investigation to characterize the horizontal and vertical extent of solvent contamination in the subsurface soils in these areas is underway.

Low levels of polycyclic aromatic hydrocarbons (PAHs), pesticides, and inorganic substances (metals) were identified in surface and subsurface soil samples at concentrations comparable to local background samples. PAHs are produced by burning fossil fuels. Potential sources of PAHs near the study area are the power generating plants, and exhaust from diesel trains and automobiles. It is also possible that the Kay Fries facility contributed to these levels if hydrocarbon based materials were burned in their incinerator, or if they burned fossil fuels to run boilers or heat buildings.

The pesticides detected were commonly used to control insects for agriculture and in residential areas in the 1950s and 1960s. The metals and other inorganic substances are common constituents of minerals present in soils, fertilizers, and salts used for deicing roadways. Lead was found to be slightly above the local background in one subsurface soil sample, however the concentration was well within the published range of typical concentrations in soils. No further characterization of PAHs, pesticides or inorganic substances is warranted.

**Groundwater:** Groundwater sampling identified the presence of chlorinated solvents and metals in excess of the state groundwater quality criteria. Trichloroethane (TCA) was found at a concentration of 350 ug/l, significantly above the groundwater quality criteria of 5 ug/l, at location WP17, the same location at which solvents were found in the soils. Additional soil gas sampling is planned to determine locations for collection of additional soil and groundwater samples.

Several groundwater samples contained elevated levels of metals. The elevated levels of metals are suspected to be a result of the high levels of turbidity in the groundwater samples collected for this investigation. Groundwater samples were collected through Geoprobe slotted probes or temporary wells, which are not designed to limit the amount of fine grained formation material. The formation at the top of the saturated zone consisted of silt and silty sand. Metals are leached from the fine grained material when the groundwater sample is preserved with nitric acid. The prepacked wells installed as part of this investigation will be resampled, both filtered and unfiltered samples will be collected, to confirm this observation.

Phenol was found in three groundwater samples. However, because the phenol was found only where the prepacked wells were installed, it is suspected that the compound is associated with the well materials. These wells will be resampled to confirm this observation.

**Surface Water and Sediments:** PAHs and pesticides were detected in sediment samples collected in the streams and wetlands in the northern portion of the study area. The concentrations were comparable to the levels found in the surface soils, indicating that the levels resulted from the same or similar sources not necessarily related to the Kay Fries facility. The contaminants appear to be adsorbed to the sediments. No contamination was found in the associated surface water samples. No further sampling is warranted in the wetlands.

## *PSA CONCLUSIONS*

One area of groundwater contamination was identified during the offsite PSA. Chlorinated solvent contamination was found between property lots 15 and 19 Kay Fries Drive, in the Town of Stony Point. The DEC is continuing to investigate this area to determine source of the contamination.

The offsite PSA found that there were no other areas of contamination resulting from the disposal of hazardous waste within the offsite study area including:

- The location of the former pond area, now the school playground.
- The former plant entrance road.
- The areas west of the plant where sand mining had taken place.
- The wetland area north of the former plant road.

The direction of groundwater flow in the area is predominantly away from the school property.

## *CURRENT ACTIVITIES*

Copies of Final PSA Report are available at the document repositories that have been established for the Kay Fries Site. *The NYSDEC has established a formal Public Comment Period beginning September 18, 1997 and ending November 19, 1997*. A formal public meeting is scheduled for Wednesday, October 9, 1997 at the Stony Point Elementary School All-Purpose Room, Gurnee Court, Stony Point, NY. The meeting will begin at 7:30 pm.

The DEC has begun the investigation to further define the contamination found between property lots 15 and 19 on Kay Fries Drive. Results are anticipated in the spring of 1998.

## *CITIZEN PARTICIPATION*

A public meeting is scheduled for October 9, 1997 at 7:30 pm at the Stony Point Elementary School to discuss the results of the PSA. The public is invited to attend the meeting and to review site-related documents that are on file in document repositories established for this project at the following locations:

Stony Point Town Hall, DEC Region 3 Office in New Paltz, & the DEC Albany Office on Wolf Road.

## *FOR ADDITIONAL INFORMATION*

For questions or comments on the offsite PSA, contact **Daniel Eaton**, Project Manager, NYSDEC, Albany Office at (518) 457-0639 or toll free at 1-800-342-9296. For general information regarding the projects, contact **Ellen Stoutenburgh**, Citizen Participation Specialist, NYSDEC, Region 3 Office, at (914) 256-3018.

For health-related concerns, contact **Mark VanValkenburg**, Public Health Specialist, NYSDOH at (518) 458-6309 or **Nina Knapp**, Health Liaison Program, DOH at (518) 458-6402 or toll free at 1-800-458-1158 ext. 6402.


N
Cedar Pond Brook
Wetland
Slater Drive
Hoke Drive
WP-19
WP-22
WP-15
TB-1A
WP-20
WP-16
WP-14
WP-21
Water Tank
MW-11
WP-13
TB-2
WP-12
Kay Fries Drive
WP-18
WP-17
Two Sets of Tracks
NYS Route 9W
MW-10
SS-12
SS-10
SS-11
WP-4
WP-5
WP-2
WP-3
WP-6
WP-1
WP-8
MW-7
WP-9
Conrail
West Haverstraw Elementary School
0 50 300
FEET
MW-55 Monitoring Well
WP-9 Geoprobe Point
Soil Sample
Seep Sample
43 acres investigated plus school yard
Kay Fries Operable Unit 1
Kay Fries Operable Unit 2
Kay Fries
Site ID No. 344023
PSA Sample Locations
Division of Environmental Remediation
Drawing: HAVER3.CDR