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 1996, Governor George E. 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. These 43 acres represent the balance of property once owned by Kay-Fries Inc., which, prior to 1996, had not been the subject of any DEC field investigations. These parcels are 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. All of the 43 acres plus the school yard constitute the "Offsite PSA". 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 offsite 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 offsite PSA was to determine if there was hazardous waste contamination on the 43 acres or in the school yard.

The DEC issued the Final Offsite 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. No other areas of contamination resulting from the disposal of hazardous waste were found 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 analysis not only reports the Target Compound List, but also screens for all volatile and semivolatile organic tentatively identified compounds (TICs). Therefore, with the exception of formaldehyde which dissipates as soon as it is exposed to the atmosphere, all chemicals used or manufactured at Kay Fries would be detected by these analyses. The field work included the following:

1. Surface water and sediment samples were collected from five 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. Soil vapor samples were collected 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 using a gas chromatograph and a mass spectrometer for volatile organics. The soil vapor survey was used as a screening tool to locate the soil and groundwater sampling points.

3. Surface soil samples were collected 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. Subsurface soil samples were collected from nine locations across the offsite PSA study area. Subsurface soil samples were analyzed for cyanide and the full TCL.

5. Groundwater samples were collected from 23 locations. These included nine 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. Permanent 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. (See consistent finding in Groundwater Section below.) 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 level in one subsurface soil sample, however the concentration was well

within the published range of typical background 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 ppb, significantly above the groundwater quality criteria of 5 ppb, 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 to further define the chlorinated solvent contamination found.

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 (murky water) in the groundwater samples collected for this investigation. Metals are leached from the murky materials when the groundwater sample is preserved with nitric acid. The prepacked wells installed as part of this offsite PSA will be sampled again, 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 this 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. (See Soil Section above.) 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 and soil contamination was identified during the offsite PSA. Chlorinated solvent contamination was found between property lots 15 and 19 on 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 26, 1997 and ending October 31, 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 chlorinated solvent contamination found between property lots 15 and 19 on Kay Fries Drive. Results are anticipated in spring 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
74 East Main Street
Stony Point, NY 10980
(914) 427-5012

DEC Region 3 Office
21 South Putt Corners Rd.
New Paltz, NY 12561
(914) 256-3018

DEC, Albany Office
50 Wolf Road, Room 242
Albany, NY 12233-7010
(518) 457-3395

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FOR ADDITIONAL INFORMATION

For questions, comments, or if you have any additional information regarding 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.