Montrose

FACT SHEET

Kliegman Brothers, Inc.
76-01 77th Avenue, Glendale, Queens County

file
241031

Environmental Information, Focused Remedial Investigation And Expanded Indoor Air Investigation

May 2001

Prepared by:

STATE OF NEW YORK
DEPARTMENT OF
ENVIRONMENTAL CONSERVATION

STATE OF NEW YORK
DEPARTMENT OF HEALTH

Background

The New York State Department of Environmental Conservation (NYSDEC) began an environmental investigation in June 2000 at the former Kliegman Brothers property, located at 76-01 77th Avenue, Glendale, Queens County, shortly after learning from a private environmental consulting firm that the soil and groundwater at the site are contaminated with tetrachloroethene. For many years, until the company filed for bankruptcy in 1999, the Kliegman Brothers property had been used as a warehouse and distribution facility for laundry and dry-cleaning supplies and chemicals, including tetrachloroethene, which is commonly called PERC. The current owners of the site are not responsible for causing the PERC contamination at the site but have taken responsibility for the investigation and remediation of the site. Currently available information indicates that releases of PERC occurred on the property during the Kliegman Brothers' occupancy of the site.

The purpose of this fact sheet is to:

- Provide a summary of environmental information available for the Kliegman Brothers property;
- Provide information regarding the upcoming sampling at the site;
- Propose the collection of indoor air samples from additional residences near the site;
- Answer some general questions about PERC and exposure;
- Discuss future activities at the Kliegman Brothers property; and
- Provide names and telephone numbers for people you can call should you have any questions about the information in this Fact Sheet.

Preliminary Environmental Site Investigation

Soil and Groundwater

After the NYSDEC received information about the presence of PERC contamination in soils at the site, a sampling plan was developed to ascertain subsurface contamination and the likelihood of its migration from the site through the subsurface soils. This investigation was completed in June 2000 and included the installation of 17 soil borings at the site, collection of soil gas samples from various depths within the borings, and groundwater sampling. All samples were tested for PERC and its breakdown products, and other volatile organic compounds. Testing results indicated that elevated concentrations of PERC and its breakdown products exist in soil gas and groundwater at the site.

Indoor Air

Representatives of the New York State Department of Health (NYSDOH), New York City Department of Health (NYCDOH), and NYSDEC conducted indoor air sampling at selected homes around the Kliegman Brothers property to determine if PERC contamination at the Kliegman Brothers property is affecting indoor air quality in homes

proximate to the site. The investigation, conducted in October and December 2000, targeted homes immediately adjacent to the site on 76th Street, 78th Street, 79th Street, and Edsall Avenue. No effects on indoor air quality were noted in seven of the ten homes tested, and only marginal effects on indoor air quality were noted in two of the three remaining homes tested. However, significant impacts to indoor air quality were noted in the basement of one residence on Edsall Avenue. Based on field observations and proximity of the residence to the former Kliegman Brothers facility, the contamination is likely attributable, in whole or part, to PERC that has migrated away from the Kliegman property in the form of soil vapor and entered the dwelling through floor pits in the basement. Measures (sealing openings in the basement floor) have been taken to minimize the entry of contaminated soil gas into the basement.

Additional building owners and residents who live near the site will be contacted to obtain their permission to sample the air in their homes for the presence of PERC. The testing results and an interpretation of the findings will be provided to the building owners and residents.

Follow-up Environmental Site Investigation

Additional sampling is scheduled to be performed at the site starting at the end of May 2001. The sampling will be performed by a consulting firm retained by the owners of the site. The field work will be completed in approximately three weeks and a report of the findings of the investigation will be prepared following receipt and review of the laboratory results. The purpose of the sampling is to determine the lateral and vertical extent of contamination in the soil at the site (this will include the area beneath the buildings as well as the lot to the north of the building). This information will be used to design a Soil Vapor Extraction System (SVES) for the remediation of the soil in the north lot area. The SVES will consist of a series extraction wells which will be installed in the area of contaminated soil and connected by pipes to a central vapor treatment unit. Contaminated soil vapor will be collected in the extraction wells and treated before being discharged into atmosphere.

During this phase of the project, the SVES extraction wells and pipes will be installed in the north lot area along with the drilling that will be performed to obtain the soil samples. The completion of the SVES will be performed during the next phase of the project. Drilling at the site will take place on weekdays and during daylight hours. All field work will be performed in adherence with an approved Community Health and Safety Plan.

In addition to the soil sampling, some groundwater samples will be obtained to further evaluate the impacts to groundwater beneath the site.

Questions and Answers

1. What is (PERC)?

PERC is a manufactured chemical that is widely used in dry cleaning of fabrics, including clothes. It is also used for degreasing metal parts and in manufacturing other chemicals. PERC is found in consumer products, including some paint and spot removers, water repellents, brake and wood cleaners, glues and suede protectors. Other names for PERC include tetrachloroethylene, perchloroethylene, and PCE.

2. What is exposure?

Any contact between a person and a chemical is known as exposure. Exposure can occur if a person:

- touches the chemical or something containing the chemical (direct contact);
- breathes in vapors from the chemical or dusts containing the chemical (inhalation); or,
- eats or drinks things containing the chemical (ingestion).

These three ways that a person can come in contact with a chemical are known as routes of exposure. In order for any effect to occur, exposure must occur first.

3. How can I be exposed to PERC?

People are exposed to PERC in air, water and food. Exposures can also occur when PERC or material containing PERC gets on the skin. For most people, almost all the PERC that gets into the body is from the air and water. Since public drinking water is supplied to the site area from upstate sources, it is unlikely that community exposure to contaminated groundwater will occur. Contact with contaminated soils is unlikely as the Kliegman property is largely occupied by a building. In addition, the paved yard to the north of the building is fenced to control trespassing and the contaminated soils are at depth.

PERC gets into outdoor and indoor air by evaporation from industrial or dry cleaning operations and from areas where chemical wastes are stored or disposed. Groundwater near these areas may become contaminated if PERC is improperly dumped or leaks into the ground. PERC may get into indoor air if contaminated vapors in soil, sometimes referred to as soil gas, move beneath buildings and enter basements through openings in the floor and walls.

4. What kinds of health effects can be caused by exposure to PERC in air?

Breathing air with significantly elevated levels of PERC over a prolonged period of time can damage many parts of the body. In humans and animals, the major effects of exposure are on the central nervous system, kidney, liver, and possibly the reproductive system. The type and severity of any health effect on an individual depend on a number of factors, including how long a person has been exposed, the amount or level of the chemical that a person is exposed to, and how sensitive an individual may be to a specific substance. In general, the greater the amount of a substance and the longer a person is exposed, the more likely there may be health effects.

Next Steps

The current owner of the site has hired an environmental consultant for the purpose of conducting further environmental investigations and to develop a cleanup plan to address the subsurface contamination at the Kliegman Brothers property. A work plan has been prepared by the consultant for purposes of providing additional environmental data necessary for the preliminary design of an Interim Remedial Measure (IRM) to address the on-site soil contamination. The purpose of the IRM is to perform an activity which can be taken during the on-going investigation to remedy the significant environmental and public health threat that is associated with the site. The work plan has been reviewed and approved by the NYSDEC and NYSDOH.

For More Information

Please contact the following if you have questions about:

Health Concerns and Proposed Indoor Air Sampling Plan:
John Olm, Public Health Specialist III, NYSDOH: (800) 458-1158, Ext. 27880; or
Mark VanDeusen, Outreach Coordinator, NYSDOH: (800) 458-1158, Ext. 27530; or
Christopher D'Andrea, NYCDOH: (212) 788-4290

Environmental Questions, Kliegman Brothers Site:
Vadim Brevdo, P.E., Project Manager, NYSDEC Region 2: (718) 482-4891