

Project Name

Landfill Exposure Assessment - KinBuc Landfill

Client

Continental Insurance, All State National Union and Home Insurance

Services Provided

- Evaluation of Materials Disposed at Landfill
- Analysis of Blood Samples
- Mapping of Alleged Exposure Routes

Project Description

SAI was retained by four insurance companies in a lawsuit involving 50 plaintiffs seeking relief from alleged releases from operations at Kin-Buc Landfill.

The Kin-Buc Landfill, approximately 65 acres, was used from 1945 to 1977 for the disposal of industrial process waste, chemical waste, municipal liquid and solid waste. During its operating life the landfill operators were cited for improper disposal practices, as well as numerous spills, fires, and other potentially hazardous procedures.

SAI was retained to perform an exposure assessment to determine the presence and contaminant levels of materia disposed at the Kin-Buc site during its operating life. The lawsuit alleged that improper disposal of hazardous wastes had produced health impacts to the neighboring community.

Approach

SAI conducted a review of: (a) materials disposed at the landfill, (b) plaintiff's employment background, medical history, and leisure activities, (c) toxicity profiles for chemicals routinely used by the plaintiffs in the workplace, (d) blood samples, (e) site investigations, and (f) mapping of alleged exposure routes from neighboring landfills and other contributory sources (highways, industrial centers, etc.).

Aerial photographs were used to evaluate the changing land use patterns and to document the development of residential and industrial land use in the area surrounding the plaintiff's residences. Processes used at the surrounding industrial establishments were analyzed for contributory exposure and records at the local police and fire stations were reviewed to obtain information regarding the reporting of releases or calls for assistance during emergency conditions.

While conducting a thorough review of these exposure routes, SAI retained the services of a medical laboratory to conduct blood sampling for the fifty plaintiffs and a control group of fifty representatives, for which SAI analyzed the blood constituents and contaminant concentration levels. SAI also retained medical authorities from Rutgers University and University of Pennsylvania Medical School to validate all medical analyses.

The study concluded that the plaintiffs had not suffered health effects due to the operation of the landfill. The SAI report was used by the defendants to negotiate an out-of-court settlement.

