

SCOVILL INDUSTRIAL LANDFILL SITE: SOIL SAMPLING RESULTS

The Connecticut Department of Public Health has reviewed the environmental sampling data from the Scovill site collected by EPA contractors in April of 1999. We are currently writing a public health assessment that will provide a more detailed assessment of the public health implications of the site. This fact sheet is provided to give residents and property owners a summary of our review of the soil data and what it means to people on the site. Overall, our review indicates that under current site conditions, the levels of contamination found in surface soil (0-6 inches) do not present a health risk.

One hundred twenty-four soil samples from 55 different locations throughout the Scovill investigation area were collected and analyzed for a wide variety of chemicals including: volatile organic compounds, semi-volatile organic compounds, pesticides, polychlorinated biphenyls, metals and cyanide. Analysis was performed on sam-



SURFACE SOIL EVALUATION

The most commonly identified compounds above comparison values were polycyclic aromatic hydrocarbons or PAHs. Benzo(a)anthracene, benzo(b)fluoranthene and benzo(a)pyrene were the PAHs identified in the 0-6 inch soil samples. The highest concentrations detected were in the range of 2 to 2.7 parts per million (ppm), which is above the CT Residential Direct Exposure Criteria (CT soil clean up standard) of 1 ppm. However, these concentrations are not likely to cause adverse health effects. This is because the concentration of 1 ppm was set using conservative estimates about the amount of the contaminant one would ingest (200 milligrams per day (mg/day) for a child, 100 mg/day for an adult) and the length of time (365 days/year for 30 years) one would be exposed. Those types of exposure are not likely for people living or working on the Scovill site since much of the areas are grass covered or paved. In addition, these concentrations of PAHs are not very different from levels found in soils in most urban areas.

PAHs are a group of more than 100 different compounds that are formed during the incomplete com-

bustion of coal, oil, gas, wood, garbage or other organic substances such as tobacco and charbroiled meats. PAHs are commonly found in the air, water and soil. Some PAHs have caused cancer in laboratory animals in high dose, long term studies.

There was one surface soil sampling location that had elevated levels of nickel (1,780 ppm), chromium (12,900 ppm), copper (27,000 ppm), and lead (641 ppm). Similar concentrations of these metals were not found in any of the other surface soil samples. While these concentrations are significantly above the comparison values, this sample was in a wooded area away from the residential and commercial properties on site and it is unlikely that people would come in contact with soils in this area on a regular basis.

ADDITIONAL INFORMATION

In general, soil samples collected from 6 to 24 inches below the surface were found to have higher levels of PAHs and metals. One sampling location located within the fenced Calabrese portion of the site had polychlorinated biphenyls or (PCBs) identified at 1.4 ppm, slightly above the CT Residential Direct Exposure Criteria of 1 ppm. The contamination in deeper soil is not a direct public health concern since it is not accessible. However, **residents are reminded not to dig below the surface to make sure that there is no contact with elevated levels of PAHs and metals that were identified in deeper soil samples.**

Residents living on site receive their drinking water from a public water supply. Therefore there is no risk associated with drinking contaminated water.

Some indoor air samples were collected by EPA contractors. Of those samples that were valid (one sample could not be used because it was moved during sampling) no contamination was found above levels of health concern.

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IN SUMMARY:

Under current site conditions, the surface soil does not present a public health risk.

Most surface soil samples (0-6 inches) did not contain contaminants above comparison values.

The most commonly identified contaminants above comparison values were PAHs. The levels found do not present a public health threat.

Soil samples collected from deeper depths (6-24 inches) in general had higher levels of contamination.

Residents are reminded not to dig or disturb soils on the site.

If you have any questions about the sampling results and the health implications of the site, please call Jennifer Kertanis, CT DPH at 860-509-7742.