



Iowa Department of Public Health

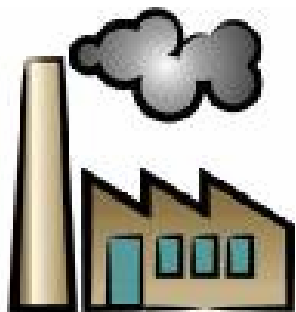
Hazardous Waste Site Health Assessment Program

Alcoa – Davenport Works **Sub-slab Gas and Air Sampling Data**

Highlights: The US Environmental Protection Agency (EPA), the Alcoa – Davenport Works Facility (Alcoa), and concerned citizens and community leaders of Riverdale, Iowa have requested the Iowa Department of Public Health (IDPH) Hazardous Waste Site Health Assessment Program to evaluate the health impacts of exposures to **volatile organic vapors** detected within residences located immediately to the west of the Alcoa property. The health consultation addresses potential **inhalation exposures** to individuals that may have occupied the residences in which the air sampling was completed. The contaminants of concern are the following volatile organic chemicals: **cis-1, 2-DCE, PCE, TCE and vinyl chloride.**

Background

The U.S. Environmental Protection Agency (EPA) has been working in cooperation with Alcoa to evaluate the migration of chemical vapors from below the ground surface and potentially originating from the Alcoa property. This evaluation of chemical vapors from below ground is a part of the ongoing investigation around the release of volatile organic compounds (VOCs) during previous activities at Alcoa. The evaluation of chemical vapors was initiated by the completion of soil-gas sampling from beneath basement slabs in two homes on South Bellingham Road (226 and 249 S. Bellingham Road), located immediately to the west of the Alcoa property. Indoor and outdoor air sampling for VOCs was also completed at these two homes which are owned by Alcoa.



What are VOCs?

VOC stands for Volatile Organic Compounds. VOCs are a group of chemicals that share similar properties. VOCs contain carbon, they evaporate quickly, and they are generally used as solvents.

Why was a Health Consultation Written?

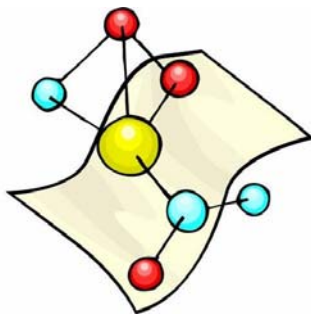
Community members have expressed concerns about adverse health conditions that may have been caused by exposures to VOCs. In order to address these concerns, and answer questions posed by residents, a Health Consultation was written. In addition, EPA has requested that IDPH analyze the vapor sampling results to determine if more sampling is necessary on S. Bellingham Road.

What contaminants of concern were found during the sub-slab and indoor and outdoor air gas sampling on South Bellingham Road?

Cis-1, 2-Dichloroethene (DCE), tetrachloroethene (PCE), trichloroethene (TCE), and vinyl chloride were found during the gas sampling.

What levels of VOCs were found during the sampling event?

For all chemicals, the highest level detected in the September 2004 sampling event is below all health effect levels that consider both cancer and non-cancerous health concerns. A conclusion can be made that any individuals exposed to the level of chemicals detected during the September 2004 sampling event would not be expected to have any adverse health effects, even over a lifetime of exposure.



Where can I get a copy of the Health Consultation?

Health Consultations were mailed to residents who live on Bellingham Road. The consultation is also available online at the following URL:

http://www.idph.state.ia.us/eh/pdf/env/alcoa_davenport.pdf

What were the Conclusions of the Health Consultation?

From the air monitoring data collected during the September 2004 sampling event, it is concluded that:

- Exposure to the outdoor and indoor levels of VOCs detected during September 2004 is not likely to impact human health.
- VOCs that migrated underground from the Alcoa-Davenport Works plant and were detected during September 2004 do not pose a public health hazard at 226 and 250 S. Bellingham Road from inhalation exposures.

What Happens Next?

- IDPH will continue to review monitoring data provided by EPA and/or Alcoa and update health recommendations as necessary.
- IDPH will continue to address and evaluate community concerns.
- IDPH will provide assistance with community health education as needed and requested.

What if I have additional questions or need more information?

The following Hazardous Waste Site Health Assessment Program Staff are available to answer your questions or provide more information.

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