

Union Carbide Corp. – Technology Park

(A Subsidiary of The Dow Chemical Company)

3200-3300 Kanawha Turnpike
South Charleston, WV 25303
Congressional District 2
EPA ID #: WVD060682291
Last Updated: 12/19/2008

Current Progress at the Site

Union Carbide Corporation (UCC) entered into a Facility Lead agreement with EPA on December 15, 1999 for conducting corrective action at the Technology Park (formerly Technical Center). UCC reviewed existing data on the site's Solid Waste Management Units (SWMUs) and prioritized them based on potential risk. A Resource Conservation Recovery Act (RCRA) Facility Investigation (RFI) was conducted in 2000 and 2001. Additional groundwater monitoring wells were installed in December 2001, May 2002, June 2003 and June 2004 to evaluate the extent of the groundwater contamination. A conceptual groundwater flow model was also developed to assist in evaluating groundwater migration in Ward Hollow.

The RFI Report for the "low priority" SWMUs was submitted to the Environmental Protection Agency (EPA) and West Virginia Department of Environmental Protection (WVDEP) in January 2005. Groundwater continues to be monitored for temporal trends in contaminant concentrations. In addition, groundwater samples were collected in 2007, which indicated that contaminants are not discharging to the alluvial aquifer north of the Technology Park. In 2006, a groundwater monitoring well was sampled near the northwest boundary of the facility and was found to contain VOCs. As part of a due diligence Phase II assessment for a potential property transfer, five additional groundwater wells were installed. One of those wells also contained VOCs. Monitoring of these locations has continued during 2008 to determine trends of VOCs in these monitoring wells.

A Supplemental RFI for the "low priority" SWMUs was completed in 2005 and 2006 at the "low priority" SWMUs identified as requiring additional investigation in the 2005 RFI Report. The data from these investigations was submitted to EPA in the Current Conditions Report in March 2008.

During the RFI process, Interim Measures were implemented at the Ward B Landfill, which was an area that data indicated may pose a potential risk to human health and the environment. With concurrence from EPA, UCC installed additional cover and drainage control for the Ward B Landfill in October 2002. This was the final action necessary at the facility to meet the Human Exposure Environmental Indicator (EI), which was recorded on May 22, 2003. In 2007, the water from the central, which discharged into Ward A Pond, was rerouted to the Holz Impoundment.

UCC conducted temporal groundwater monitoring in 2004 and 2005 to support meeting EPA's Groundwater EI. The Groundwater EI documentation was submitted to EPA in August 2005 and approved by EPA in September 2005.

An ecological risk assessment (ERA) of the Ward A and B Landfills was conducted in 2005. The Draft ERA report was submitted to EPA in April 2006. Based upon the findings in the ERA Report, a Sampling and Analysis Plan was developed and submitted in October 2007, with the majority of the field work being completed in December 2007. A Baseline Ecological Risk Assessment was submitted to EPA in September 2008.

Site Description

The UCC Technology Park is located on a 650-acre tract in South Charleston, West Virginia, of which approximately 125 acres are developed. The Technology Park provides primarily research and development and process engineering functions for the Corporation. Facilities include laboratories, pilot plants, shops and miscellaneous offices. Recently, the facility has become a technology park that is utilized by other businesses.

Site Responsibility

RCRA Corrective Action activities at this facility are being conducted under the direction of EPA Region 3 with assistance from the West Virginia Department of Environmental Protection.

Contaminants

Based on available information, which includes a risk assessment, there are no imminent threats to human health or the environment from SWMUs at UCC's Technology Park. The main contaminants known to be present in groundwater in Ward Hollow are bis (2-chloroisopropyl) ether and 1-4 dioxane. In the northwest area of the facility, tetrachloroethene and chloroform are the primary groundwater contaminants.

Community Interaction

A Community Relations Plan has been prepared and approved by EPA. Communication to the public relies heavily on interaction with the South Charleston Area Community Advisory Panel (CAP). The CAP comprises interested members of the nearby community and meets on a regular basis. As outlined in the Community Relations Plan, work associated with the Facility Lead Agreement is routinely shared with the CAP.

During 2001, in addition to the normal communications, EPA presented the philosophy behind the Facility Lead concept to the CAP. Also, a UCC representative conducted a "Geology/Hydrogeology" course for the CAP. This course explained the basic concepts of geology and hydrogeology and how they relate to remediation at the Technology Park.

Government Contacts

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For more information about EPA's corrective action webpage, including Environmental Indicators, please visit our site at: www.epa.gov/reg3wcmd/correctiveaction.htm

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