

Union Carbide Corp. – Technology Park

(A Subsidiary of The Dow Chemical Company)

1840 Union Cardide Drive
South Charleston, WV 25303
Congressional District 2
EPA ID #: WVD060682291
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Status

In March 2010, a Corrective Measures Proposal (CMP) was submitted to EPA which proposed final corrective measures for the facility. The proposed corrective measures include maintenance of the landfill covers; continued operation of the lower ward leachate collection system and the Ward B central drain sump pumping system; and institutional controls. EPA had no comments on the CMP.

On September 30, 2010, EPA issued a Statement of Basis (“SB”), in which EPA proposed the Final Remedy for the Facility. The SB described the information gathered during the environmental investigations of the Facility, clean-up actions previously undertaken at the Facility, and explained EPA’s proposed Final Remedy for the Facility. Consistent with public participation provisions under RCRA, EPA requested comments from the public on the proposed Final Remedy.

EPA held a thirty (30) day public comment period which began on September 30, 2010 and ended October 30, 2010.

The EPA issued its Final Decision regarding the Facility on December 15, 2010. All of the comments received by EPA during the public comment period were carefully reviewed by EPA and have been addressed and incorporated into the Final Remedy.

Background

Union Carbide Corporation (UCC) entered into a Facility Lead agreement with the Environmental Protection Agency (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 in Ward Hollow.

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

The RFI Report for the “low priority” SWMUs was submitted to the EPA and West Virginia Department of Environmental Protection (WVDEP) in January 2005. In addition, groundwater samples were collected in 2007, which indicated that contaminants are not discharging to the alluvial aquifer north of the UCC Technology Park. In 2006, a groundwater monitoring well was sampled near the northwest boundary of the facility (referred to as the Greenhouse Area) and was found to contain volatile organic compounds (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. Groundwater continues to be monitored in accordance with the EPA approved Groundwater Monitoring Plan for both Ward Hollow and the Greenhouse Area.

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 and Building 707 Area. At Ward B Landfill, additional cover and drainage control was installed in October 2002 and the water from the central drain line, which previously discharged into Ward A Pond, was rerouted to the Holz Impoundment in 2007. The additional cover and drainage control was the final action necessary at the facility to meet the Human Exposure Environmental Indicator (EI), which was recorded on May 22, 2003. The Interim Measure in the Building 707 Area consisted of soil removal actions to remove impacted soil that was identified during a 2007 investigation. The soil removal actions were conducted in 2008 and 2009.

Human health risk assessments (HHRA) were completed for Ward A Landfill, Ward Branch, and buildings where there was a potential for vapor intrusion. The final HHRA's were submitted to EPA in 2009.

An ecological risk assessment (ERA) of the Ward A and B Landfills was conducted in 2005. Based on the findings in the ERA Report, additional investigation activities to support a Baseline Ecological Risk Assessment were conducted between 2007 and 2009. The final Baseline Ecological Risk Assessment was submitted to EPA in January 2010.

Site Description

The UCC Technology Park is located on a 574-acre tract in South Charleston, West Virginia. The historical and current property uses vary widely across the facility – ranging from offices and laboratories in the northern portion of the facility, to landfills and undeveloped areas throughout the rest of the facility. In 2010, 71 acres of the facility were sold to the United Disciples of Christ Church and 258 acres were donated to the West Virginia Higher Education Policy Commission. UCC has retained ownership of 245 acres consisting of the inactive landfills and surrounding area.

Site Responsibility

RCRA Corrective Action activities at this facility are being conducted under the direction of EPA Region 3 with assistance from the WVDEP.

Contaminants

Based on available information, including risk assessments completed for the UCC Technology Park, there are no imminent threats to human health or the environment from SWMUs at the UCC 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 UCC Technology Park.

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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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