

# Occidental Chemical Corporation Superfund Site

Lower Pottsgrove Township, Montgomery County, Pennsylvania

## *Explanation of Significant Differences*

Cleanup Progress and Community Update

April 9, 2008

The United States Environmental Protection Agency (EPA) has issued an Explanation of Significant Differences (ESD) for the Occidental Chemical Corporation Superfund Site (“OxyChem” or the “Site”) located in Lower Pottsgrove Township, Montgomery County, Pennsylvania. The Site is located on Armand Hammer Boulevard, and may also be known as the Firestone Tire and Rubber Company property.

### What is an ESD?

An ESD is a document that is issued when EPA determines that a planned change to a remedial action is “significant,” but does not fundamentally alter the remedy selected in the Record of Decision (ROD) with respect to scope, performance, or cost.

This ESD modifies the remedy selected and cleanup levels in EPA’s 1993 ROD for Operable Unit-2 (OU-2). EPA will hold an Open House to discuss the ESD details with the community.

### EPA OPEN HOUSE

Please join us if you have any questions or concerns regarding the ESD.

**Wednesday, April 16, 2008**

**7:00 p.m. until 8:30 p.m.**

**Pottsgrove Middle School**

**1351 N. Hanover St.**

**Pottstown, PA. 19464**

**EPA will provide a short presentation and dedicate the remaining time to Questions & Answers.**

### Where Can I Review the ESD?

**The ESD is summarized on page 2.** To review the ESD in full, please visit the websites or local repositories listed below:

- [www.epa.gov/reg3hwmd/super/sites/PAD980229298/index.htm](http://www.epa.gov/reg3hwmd/super/sites/PAD980229298/index.htm)
- [www.epa.gov/arweb](http://www.epa.gov/arweb)

Or visit the

- Pottstown Public Library  
500 East High Street, Pottstown, PA 19464
- U.S. EPA Region 3 Office,  
Administrative Records Rm,  
1650 Arch Street, Philadelphia, PA 19103  
Please call Anna Butch for an appointment at:  
(215) 814-3157



### **Cleanup Progress and ESD Summary:**

This ESD modifies the 1993 ROD for Operable Unit-2 (OU-2). OU-2 consists of four inactive earthen lagoons that were used to dispose of polyvinyl chloride (PVC) waste materials. EPA had determined that the PVC material (totaling approximately 38,000 cubic yards), as well as coal fines and soils at the bottom of the lagoons, contain elevated levels of vinyl chloride and other hazardous substances.

The selected remedy for OU-2 included:

- Onsite drying and recycling of the PVC material,
- Removing residual PVC material, coal fines, and contaminated soils from the earthen lagoons and disposing in a landfill; and
- Restoring the earthen lagoon area to the original grade.

In 1995, EPA issued an ESD to modify the ROD so that some materials were to be disposed of in an onsite, seven-acre landfill, rather than off-site disposal.

OxyChem had requested that EPA consider issuing an ESD to revise the cleanup criteria selected for the soil underlying the earthen lagoons due to technical problems with the cleanup procedures.

Those technical issues included:

- Difficulties, during remedial design pilot studies, with the technology to be used for drying the PVC material,
- Uncertain feasibility of accomplishing drying procedures for the PVC material in a cost-effective manner, and
- Market fluctuations for recycled PVC material.

In addition, the company stated that the arsenic in the earthen lagoons may be unrelated to the PVC sludge in the lagoons, but instead due to natural background conditions at the site.

*Summary continues...*

Due to the technical problems encountered by OxyChem and to investigate the possibility that the arsenic levels may be related to natural conditions, EPA conducted a Human Health Risk Assessment (HHRA). Based on the HHRA results, OxyChem conducted a Focused Feasibility Study (FFS), with EPA oversight, to re-evaluate the cleanup options for the earthen lagoons.

After an evaluation of the alternatives proposed in the FFS report, EPA has determined that the remedy selected in the ROD for OU-2 will be modified from recycling, and/or treatment, and on-site landfill disposal of the contents of the earthen lagoons, to disposal of all contents of the earthen lagoons to an off-site landfill, and cleanup levels modified.

### **The ESD remedial action of the lagoons will include the following:**

- The PVC material will be excavated, solidified (if needed) and exported to a properly licensed facility located in Canada.
- Soils underneath and surrounding the PVC material and the coal fines layer that exceed cleanup levels, will be excavated and disposed of in an off-site landfill.
- Soils from the berms surrounding the PVC material area that are below cleanup levels will be used to re-grade the lagoons.
- PVC material discovered in 2006, in a floodplain area of the Site, will be excavated and included with the other PVC material excavated from the lagoons.

### Site Background:

- The property is approximately 257 acres in size, and is bound on three sides by the Schuylkill River.
- The Site is separated into two cleanup areas, called Operable Units (OUs). OU-1 addresses onsite contaminated groundwater. OU-2 addresses the four inactive earthen lagoons.
- EPA investigations have shown site-related contamination in groundwater, soils, and sediments at the Site. Contaminants of concern include trichloroethylene (TCE), vinyl chloride monomer, trans-1-2-dichloroethene (1-2-DCE), and styrene.
- A groundwater treatment system, for OU-1 has been in operation since 1999.
- EPA placed the Site on the National Priorities List in 1989.

### Site History:

Before World War II, the Occidental Chemical Site was owned by Jacobs Aircraft Engine Company (Jacobs), which manufactured aircraft engines on the property. The Defense Plant Corporation (DPC) bought the property in 1942, but Jacobs continued to operate and manufacture aircraft engines for DPC until late 1944. In 1945, DPC leased the Site to Firestone Tire and Rubber Company (Firestone), which purchased the property in 1950. Firestone manufactured tires and polyvinyl chloride (PVC) resins on the Site. In 1980, Firestone sold the property to Hooker Chemicals and Plastics Corporation. This company later became Occidental Chemical Corporation, which manufactured PVC resins at the Site until January 2005.

From 1942 to 1985, operators disposed of wastes, including cutting oils, metal filings, tires, and PVC sludge resins, into a 17-acre solid waste landfill on the Site. In 1985, the owner closed this landfill and the Pennsylvania Department of Environmental Protection (PADEP) required continuous pumping of groundwater beneath the Site to prevent contaminants from moving off-site. Another landfill on the Site, seven acres in size, was used for disposing residual wastes, and in 1998, after PADEP approval, this second landfill was closed.

There were also four unlined lagoons, which were used to dispose of PVC sludge. These four unlined lagoons were used until 1974, and are being addressed by the remedial actions outlined in the ROD for OU-2. Two other onsite waste disposal areas were two lined lagoons, which were built in 1974. They received the PVC sludge overflow from the plant wastewater treatment system. These two lagoons were closed in 1995.



# Occidental Chemical Corporation Superfund Site Cleanup Progress and Community Update—ESD

April 9, 2008



U.S. Environmental Protection Agency Region 3  
Attn: Trish Taylor  
1650 Arch Street (3HS52)  
Philadelphia, PA 19103

## EPA OPEN HOUSE

If you would like to hear more about the ESD, please join us on:

**Wednesday, April 16, 2008**

from

**7:00 p.m. until 8:30 p.m.**

at the

**Pottsgrove Middle School**

1351 N. Hanover Street  
Pottstown, PA. 19464

## For More Information

Site-related documents are available for review at the following locations:

- [www.epa.gov/arweb](http://www.epa.gov/arweb)
- [www.epa.gov/reg3hwmd/super/sites/PAD980229298/index.htm](http://www.epa.gov/reg3hwmd/super/sites/PAD980229298/index.htm)
- Pottstown Public Library  
500 East High Street  
Pottstown, PA 19464



If you have additional questions about the Site,  
please contact one of the EPA representatives listed below:

**Trish Taylor**, Community Involvement Coordinator  
215-814-5539 or [taylor.trish@epa.gov](mailto:taylor.trish@epa.gov)

**Maria (Angie) Garcia**, Remedial Project Manager  
215-814-3199 or [garcia.maria@epa.gov](mailto:garcia.maria@epa.gov)