Explanation of Significant Differences

CLAREMONT POLYCHEMICAL CORPORATION SUPERFUND SITE

Town of Oyster Bay, Nassau County, New York

EPA Region 2

September 2000

INTRODUCTION

In accordance with Section 117(c) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) , and Section 300.435(c)(2)(i) of the National Oil and Hazardous Substances Pollution Contingency Plan, if after the Environmental Protection Agency (EPA) selects a remedial action, there are significant changes with respect to that action, an explanation of the significant differences and the reasons for such changes must be published.

This Explanation of Significant Differences (ESD) describes changes to the second phase of the groundwater remedy described in the September 1990 Record of Decision (ROD) for the Claremont Polychemical Corporation (CPC) Superfund Site (the Site).

The ROD required the ground-water cleanup to be implemented in two sequential phases.

The remedy for the groundwater underlying the CPC Property required the installation of extraction wells at the CPC Property boundary to capture the most contaminated portion of the Site groundwater and treatment of the groundwater on the CPC Property.

The second phase of the groundwater remedy addresses the contaminated groundwater migrating beyond the CPC Property boundary. The 1990 ROD stated that this portion of the groundwater would be addressed by installing additional recovery wells further downgradient from the CPC Property and pumping the extracted groundwater to the CPC Property for treatment. In lieu of installing extraction wells beyond the CPC Property boundary and constructing an additional system to treat this groundwater, three existing groundwater recovery wells and the existing groundwater treatment system located at the Old Bethpage Landfill (OBL) Superfund Site will be used to capture this portion of the groundwater plume. The OBL Superfund Site groundwater treatment system is operated by the Town of Oyster Bay (Town).

This ESD was developed by EPA, as lead agency, with support from the New York State Department of Environmental Conservation (NYSDEC). Detailed technical information leading to the changes to the selected remedy for the CPC off-property groundwater contamination can be found in the "Report on the Extent of Capture and Treatment of the Claremont Site Plume" (August 1997) and quarterly monitoring reports prepared for the OBL Site.

This ESD is being provided as a supplement to those reports, and to inform the public of EPA and NYSDEC's changes to the CPC off-Property groundwater remedy.

This ESD will become part of the Administrative Record file for the Site. The entire Administrative Record for the Site, which includes, among other things, the ROD, and other relevant documents are available for public review at the following location:

Plainview-Old Bethpage
Public Library
999 Old Country Road
Plainview, NY 11803
Telephone Number:
(516) 938-0077
Hours: Monday - Friday,
9:00 a.m. - 9:00 p.m.
Saturday, 9:30 a.m. - 5:30 p.m.
Sunday, 1:00 p.m. - 9:00 p.m.

The Administrative Record file and other relevant reports and documents are also available for public review at the EPA Region II office at the following location:

U.S. Environmental Protection Agency
290 Broadway, 18th floor
New York, New York 10007
Hours: 9:00 am - 5:00 pm
(Monday - Friday)

The modifications to the off-Property groundwater remedy presented by this ESD are not considered by EPA or NYSDEC to be fundamental alterations of the off-Property groundwater remedy selected in the 1990 ROD.

SUMMARY OF SITE HISTORY, CONTAMINATION PROBLEMS, AND SELECTED REMEDY

The Site is located in an industrial section of Old Bethpage in Nassau County, New York. The Site property consists of a 1-story building, covering 40,000 square feet, which is situated on approximately 9.5 acres of land adjacent to the OBL Superfund Site. The OBL Site is a former landfill, which has been capped, and a groundwater recovery and treatment facility has been constructed to treat contaminated groundwater emanating from the landfill.

CPC produced pigments for the coloring of plastics and inks, coated metallic flakes, and vinyl stabilizers from August 1966 through October 1980. The principal wastes generated were organic solvents (primarily volatile organic compounds such as tetrachloroethene (PCE)), resins, and wash wastes (mineral spirits). Operations at the Site resulted in the contamination of soil and groundwater, as well as contamination of the interior of the process building. In 1979, an inspection by the Nassau County Health Department, revealed numerous tanks and approximately 3,000 drums, many of which contained hazardous substances and were leaking. Contaminated soils were also observed.

The Site was proposed for inclusion on the National Priorities List (NPL) in October 1984 and was added to the NPL in June 1986.

In March 1988, EPA initiated a remedial investigation and sampled the surface and subsurface soil, the groundwater, underground storage tanks and the building. The findings of the investigation resulted in the selection of several distinct remedial actions for the Site which included: removal of underground storage tanks; treatment of identified PCE-contaminated soils via low-temperature enhanced volatilization; treatment of the contaminated groundwater underlying the CPC Property via an

on-Site air stripping/carbon adsorption system ; treatment of the contaminated groundwater beyond the CPC Property boundary via an on-Site air stripping/carbon adsorption; and decontamination of the metals-contaminated process building.[1]

In September 1988, EPA initiated a removal action to address the release of hazardous substances and overpack and/or stabilize deteriorated containers, treatment basins, and aboveground tanks. In September 1989, EPA identified a remedy to address these hazardous materials in a Record of Decision. The remedy required compatibility testing, bulking, consolidation, treatment and disposal of the wastes at off-Site Resource Conservation and Recovery Act (RCRA)-permitted facilities. This remedial action was completed in 1990.

The remedial actions involving the PCE-contaminated soils and the process building decontamination were completed by the U.S. Army Corps of Engineers, pursuant to an interagency agreement with EPA. Currently, the groundwater extraction and treatment system on the CPC Property is treating 420 gallons per day of contaminated groundwater.

A recently discovered new area of soil contaminated with PCE and other organic compounds is being evaluated by EPA for potential remedial action, and may be the subject of a future ROD following an initial pilot study of soil vapor extraction technology for this cleanup.

BASIS FOR REMEDY MODIFICATION

The 1990 ROD for the CPC Site stated that the groundwater remediation strategy at the Site should consist of two sequenced phases to evaluate data from the operation of the OBL and CPC on-Property groundwater treatment systems prior to designing and implementing the remedy for the CPC off-Property groundwater contamination. By following this approach, EPA hoped to maximize the overall efficiency of the CPC groundwater remediation program.

Concerned that the OBL groundwater recovery system was capturing a significant portion of the CPC off-Property plume, and that this might impact the Town's ability to complete its OBL groundwater remedial program, the Town conducted a study of the groundwater dynamics and presented it to EPA in August 1997.[2] It included: 1) a comparative assessment of the OBL Site and CPC Site as potential sources of PCE in groundwater[3]; 2)

---

[1] EPA has designated these actions as separate operable units or OUs. An operable unit is a discrete action that comprises an incremental step toward comprehensively addressing site problems. Due to the complexity of the contamination at the CPC Site, the cleanup called for by the 1990 ROD has been divided into a number of OUs. These OUs address the early actions at the Site as well as different media. They also include sequential actions performed over time and actions that are concurrent but located in different parts of the Site.

[2] "Report on the Extent of Capture and Treatment of the Claremont Site Plume."

[3] PCE is a compound that has not been associated with the OBL Site, except at trace levels. However, PCE has been found in high concentrations in the soil and groundwater at the CPC Site.

delineation of the Claremont PCE plume both before and after startup of the OBL groundwater recovery system; and 3) an assessment of the likely future impacts on the OBL groundwater recovery system from remedial activities at the CPC Site, and from another nearby potential source of impact to the groundwater, the Nassau County Fireman's Training Center.

According to the study, baseline groundwater-flow and water-quality data collected prior to startup of the OBL groundwater treatment facility indicate that a portion of the PCE plume associated with the CPC Site was present within the effective capture zone of certain OBL recovery wells.

Groundwater-flow and water-quality data collected indicate that the OBL groundwater treatment facility is capturing and treating the CPC off-Property PCE groundwater plume. The groundwater-flow data indicate that the effective capture zone of the OBL recovery wells developed soon after startup, and that its size and shape has remained stable over time. Three of the five OBL groundwater recovery wells are currently capturing predominantly PCE contamination. PCE concentrations in the recovery wells have been the highest in Recovery Well (RW) 5, which is closest to the CPC Site, followed by RW-4 and RW-3, which are increasingly farther away from the CPC Site. Concentrations of contaminants that are specifically attributed to the OBL have decreased in these three wells to levels below remediation objectives for the OBL Site remedy.

DESCRIPTION OF SIGNIFICANT DIFFERENCES AND THE REASONS FOR THOSE DIFFERENCES

By this notice, EPA is documenting modifications to the CPC off-Property groundwater remedy selected in the 1990 ROD.

In lieu of the installation of new extraction wells beyond the CPC Property boundary and the construction of an additional groundwater treatment facility as specified in the 1990 ROD, the plume will be captured by the three OBL groundwater recovery wells, RW-3, RW-4 and RW-5, and extracted and treated at the OBL groundwater treatment facility.

EPA and NYSDEC will ensure continued operation and monitoring the OBL recovery system and the CPC off- Property plume to evaluate improvement in groundwater quality. While the installation of additional recovery wells does not seem necessary at this time, provisions will be made to install additional wells if continued monitoring indicates that they would be necessary. Conversely, if monitoring indicates that one or more of the three aforementioned recovery wells are no longer recovering CPC Site contamination, they may be taken out of service.

EPA expects to enter into a cooperative agreement with NYSDEC to provide ninety percent of the funding for the long-term response action related to the cleanup of the CPC groundwater plume beyond the CPC-Property boundary. NYSDEC has informed EPA that it expects to enter into an agreement with the Town of Oyster Bay for the implementation of this effort. EPA can provide funding for this long-term response action for a period of 10 years, or until remedial action goals are achieved, whichever occurs first. Thereafter, NYSDEC would fund the operation and maintenance of the system, if necessary.

The remedial goals for the groundwater remediation beyond the CPC Property boundary are as

follows:

capture the CPC off-Property groundwater plume via a series of groundwater extraction wells,

treat the extracted contaminated groundwater to State and Federal drinking water standards, as well as State groundwater standards, via air stripping,

discharge the treated groundwater back to the aquifer,

reduce the concentrations of CPC contaminants in the off-Property groundwater plume to State and Federal drinking water and groundwater standards.

The significant difference between the off-CPC Property groundwater plume remedies is the location of the treatment system; the modified remedy utilizes the existing OBL groundwater recovery and treatment facility in place of the construction of a second groundwater recovery and treatment facility on the CPC Property.

Utilizing the OBL treatment facility offers several advantages:

It eliminates the capital costs associated with the construction of an additional treatment facility. The associated annual costs for treatment at OBL would be similar to those anticipated under the 1990 ROD.

It should simplify efforts to put the CPC Property back into productive use, since no additional groundwater treatment facilities would be constructed there.

It increases the amount of land that can be put back to productive use at the CPC Property, as the long-term operation of the additional treatment system would no longer be located on the CPC Property .

It reduces the potential for redundancy in the groundwater treatment programs for the two Sites.

It increases the level of coordination between the CPC and OBL groundwater remediation programs.

It makes use of capacity currently available at the OBL groundwater treatment facility, which would likely no longer be utilized due to the progress made in the cleanup of the OBL groundwater plume.

SUPPORT AGENCY COMMENTS

NYSDEC supports the changes to the off-Property Groundwater remedy due to the environmental, public health, and technical advantages over the remedy selected in the September 1990 ROD.

AFFIRMATION OF STATUTORY DETERMINATIONS

Considering the new information that has been developed, EPA and NYSDEC believe that the modified off-Property groundwater remedy is protective of human health and the environment, increases the cost-effectiveness of the action, and complies with Federal and State requirements that are applicable or relevant and appropriate to this remedial action. In addition, the modified remedy continues to utilize permanent solutions and alternative treatment technologies to the maximum extent practicable for this Site.

PUBLIC PARTICIPATION ACTIVITIES

EPA and NYSDEC are making this ESD available to the public to update them on the progress made at the Site, as well as to inform them of the change made to the off-Property groundwater remedy. EPA and NYSDEC invite comments or questions related to this ESD. Additional information regarding the Site is available to the public at the Plainview-Old Bethpage Public Library (address listed on page 2), and at EPA (address listed below). Comments or questions should be directed to:

Maria Jon
Remedial Project Manager
Eastern New York Remediation Section
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, New York 10007-1866
Telephone: (212) 637-3967
Facsimile: : (212) 637-3966