SUPERFUND PRELIMINARY SITE CLOSE-OUT REPORT
WIDE BEACH DEVELOPMENT SITE
ERIE COUNTY
BRANT, NEW YORK

I. INTRODUCTION

This Preliminary Close-Out Report documents that the Environmental Protection Agency (EPA) has completed remedial action activities at the Wide Beach Development site in accordance with OSWER Directive 9320.2-3C. The United States Army Corps of Engineers (USACE) and the New York State Department of Environmental Conservation (NYSDEC) conducted a pre-final inspection on September 26, 1992 and determined that the contractor, Kimmins Thermal Corporation (Kimmins), has constructed the remedy in accordance with remedial design (RD) plans and specifications. Activities necessary to achieve site completion are underway.

II. SUMMARY OF SITE CONDITIONS

Site Background

The Wide Beach Development, incorporated in 1920, is a small lake-side community with 60 residential homes situated on about 55 acres. The site is located in the Town of Brant, Erie County, New York.

Between 1964 and 1978, about 41,000 gallons of waste oil, some of which was contaminated with polychlorinated biphenyls (PCBs), were applied to local roadways for dust control. In 1980, the installation of a 1 mile sanitary sewer line in the community resulted in the excavation of highly contaminated soils from the roadways. Surplus excavated soil was used as fill in several residential yards.

An investigation of an odor complaint in 1981 by the Erie County Department of Environment and Planning led to the discovery of 19 drums in a wooded area at the Wide Beach Development community. Two of these drums contained PCB-contaminated waste oil. Subsequent sampling indicated the presence of PCBs in the air, roadway and yard soils, vacuum cleaner dust from the homes, and in water samples from private wells.

The site was included on the National Priorities List in September 1983, primarily because of the potential for exposure of the community to PCBs in air-carried dust, surface water and groundwater.

In June-July 1985, in response to the levels of PCB contamination found in the homes during the remedial investigation (RI) at the site, EPA performed an immediate removal action including: 1) paving of the roadways, drainage ditches, and driveways to prevent further exposure of the public via the dust and runoff routes; 2) decontamination of the

homes by rug shampooing, vacuuming, and replacement of air conditioner and furnace filters; and 3) protection of individual private wells by the installation of particulate filters. The immediate removal action addressed the immediate threat to public health.

Remedial Investigation and Feasibility Study Results

An RI and feasibility study (FS) was conducted by NYSDEC's contractor, EA Engineering, Science, and Technology, Inc., during 1984 and 1985 to determine the nature and extent of the contamination at and emanating from the site, to assess the threat the site poses to public health and the environment, and to develop and evaluate various alternatives to remediate the site. The RI concluded that: 1) PCBs, specifically Aroclor 1254, were the primary contaminants at the site; 2) surficial soils in the roadways, drainage ditches, driveways and front yards of lots bordering the roadways were highly contaminated with PCBs; 3) contamination of drinking water wells was sporadic and, when detected, was in the parts per billion range; 4) observation wells screened in the sanitary sewer trench were the most contaminated; 5) surface water transport was the most important route of migration; 6) on-site soils would act as a long-term source of PCBs; and 7) routes of human exposure to PCBs include ingestion of contaminated vegetables, ingestion of soil, inhalation and dermal absorption.

A number of remedial alternatives were identified and evaluated for their capability to reduce the PCB concentration in the soil to the lowest possible level consistent with engineering feasibility, environmental effects and protection, public safety, costs and regulatory restraints. The results of the analysis showed the "No-Action" alternative to be considerably less protective than the action remedial alternatives, and that there were no significant differences among the remedial alternatives. However, since EPA considers the treatment of contaminants to be more favorable than land disposal, chemical treatment of the PCB-contaminated soils above 10 parts per million appeared to be the preferred alternative.

Record of Decision Findings

Based upon the results of the RI/FS, a Record of Decision (ROD) was signed on September 30, 1985, selecting excavation and chemical treatment (utilizing potassium polyethylene glycol (KPEG)) of about 37,600 cubic yards of PCB-contaminated soils from the site's roadways, drainage ditches, driveways, yards and wetlands; backfilling of the excavated areas with the treated soil; treatment of the perched water in the sewer trench; and construction of a hydraulic barrier at the end of the sewer trench, as the long-term remedial measure for the site.

Remedial Design and Remedial Action

The remedial design (RD) was initiated by EPA's contractor, Ebasco Services, Inc. (Ebasco), in May 1986. Sampling, to better define the extent of contamination at the site,

was performed by Ebasco in November 1986. To determine the suitability of KPEG to remediate the site's soils, bench-scale treatability studies were performed. Based upon favorable results of the bench-scale studies, EPA's contractor proceeded with on-site pilot-scale treatability studies. Using the results of the pilot-scale tests, a commercial-size unit was designed. The RD, including the preparation of bidding documents to construct the remedy, was completed in February 1989.

In December 1988, an interagency agreement was signed with the USACE for the procurement of a remedial action (RA) contractor and to provide for USACE management and administration of the RA contract. In May 1989, the USACE solicited requests for proposals. Proposals were received in July 1989 and, after their evaluation, in October 1989, an RA contract was awarded to Kimmins.

A Value Engineering Change Proposal offering a different dechlorination technology (SoilTech Anaerobic Thermal/Dechlorination Process) than that in the contract documents (KPEG) was submitted by Kimmins in February 1990. A demonstration test of the proposed technology was performed in September 1990. The test demonstrated that the technology could reduce the PCB concentration in the treated soil to less than 2 parts per million, as required. The technology was accepted, and processing of PCB-contaminated soil commenced in October 1990; processing was completed in September 1991.

A wetland delineation study performed during the RD determined that the only suitable area on-site for the set-up of the chemical treatment unit and for the storage of the contaminated and treated soil piles was a nine-acre portion of a wetland. Following the completion of the processing of the PCB-contaminated soils in September 1991, the contract with Kimmins was amended to include the restoration of the wetlands. The restoration of the wetland was completed on September 11, 1992.

During the implementation of the RD/RA, a number of significant differences from the ROD became necessary, although these differences were not considered to have fundamentally altered the remedy set forth in the ROD. An *Explanation of Significant Differences* was issued, in August 1992, describing the differences and the explanation for them. In summary, the differences are: 1) using virgin asphalt, instead of recycling "clean" asphalt for repaving, since this approach was less expensive; 2) restoring the on-site wetland area (not previously identified), which was the only suitable area on-site for installing the chemical treatment unit and for the storage of the contaminated and treated soil piles; 3) disposing of quantities of treated soil off-site (the ROD called for all of the treated soil to be used as backfill on-site) since a) borrow soil that was brought in to match production rates of the treatment unit with excavation rates resulted in excess treated soil, b) processing altered the physical properties of the soil leaving it unsuitable for road sub-base material, c) the road 's grade was lowered to improve stormwater drainage (resulting in surplus soil), and d) excess soil that was to be stored on-site was disposed of off-site since the storage area was determined to be a wetland; and 4) not treating the PCB-contaminated perched water in the sewer trench and not constructing

a hydraulic barrier at the end of the sewer trench to prevent off-site migration of PCB-contaminated groundwater since the results of a perched water study undertaken during the design determined that the PCB-contamination of the perched water was due principally to the PCB-contaminated soil particles suspended in the water (the source of which was removed when the contaminated soils were excavated). In addition, the *Explanation of Significant Differences* noted that the remedial action cost increased from the ROD estimate of $8.8 million to approximately $27.7 million. Of the $18.9 million increase, about $12.7 million is attributable to the increased cost for the chemical treatment of the PCB-contaminated soils that were processed (even though only 22,600 cubic yards of soil were required to be treated compared to the 37,600 cubic yards estimated in the ROD). The increase in the treatment cost reflects the difficulty of estimating the cost of an innovative technology. The remaining cost increase of $6.2 million was due to a number of construction activities not accounted for in the ROD (*i.e.*, the on-site mobilization and demobilization of the processing unit and the use of an on-site laboratory), unforeseen construction activities and associated costs that became evident during the construction phase itself (*i.e.*, the off-site disposal of treated soil), and additional construction activities necessary to comply with wetland-related requirements (*i.e.*, the restoration of the wetland).

Community Relations Activities Performed

Following the discovery of PCBs in on-site drums in July 1981, the presence of PCBs in on-site soils and drinking water was identified by the Erie County Department of Environment and Planning. On May 8, 1982, a public meeting was held to discuss the extent of the PCB contamination problem at the Wide Beach Development site.

A more comprehensive sampling program was performed by EPA's Field Investigation Team in April 1983. On October 27, 1983 a public meeting was held to explain the results of this investigation.

On April 8, 1985, a public meeting was held to present the results of the RI. On August 29, 1985, a public meeting was held to present the results of the FS and to identify the remedy that EPA and NYSDEC proposed for the site.

A public meeting was held on December 15, 1988 to discuss the RD that was then being developed and to obtain the community's input.

On April 25, 1990, a public meeting was held to inform the community that a contract had been awarded by the USACE to perform the remediation, and that remedial activities were about to commence at the site.

In addition to the above meetings, there were a number of informal meetings at the site with the residents to discuss the progress of the remediation and to provide an

opportunity for the residents to express their concerns and pose any questions they might have.

The Brant Town Hall is the designated repository for public documents for this site. The documents are also available at EPA's offices in New York, New York and NYSDEC's offices in Buffalo and Albany, New York.

Community turnouts were large at the public meetings during the course of the project. The public has shown a skeptical, yet keen interest in the use of the new technology (chemical treatment) to remediate the site. Although the community was initially concerned, considering that this was the first time that this technology was being used to remediate a site, there was no outright objection to its utilization at the site.

Prior to the on-site pilot plant treatability tests, the pilot plant was brought on-site. During an open house session, the residents were given a tour and a demonstration using clean soil. This served to acquaint the residents with the activities that could be expected on-site during the pilot plant tests and forestall future questions that might have affected testing activities when the pilot plant was in operation.

Residents were also given the option of temporary relocation for the period while construction activities were underway in the vicinity of their properties. This option was accepted by 10 of the 60 families located on-site. Those parties that were relocated were placed in local motels for periods averaging 2-3 weeks.

There will be a public comment period associated with any settlements stemming from the litigation initiated by the United States under the Comprehensive Environmental Response, Compensation, and Liability Act to recover its response costs in connection with the site.

III. DEMONSTRATION OF QUALITY ASSURANCE/QUALITY CONTROL

All samples collected and analyzed, as part of the RA, followed the procedures set forth in the *Site Specific Quality Control Management Plan for the Wide Beach Development Superfund Site Farnham, New York* manual, and the contract drawings and specifications.

Approximately 10 percent of all samples were duplicates taken for quality control purposes. The USACE's New England Division Laboratory was used as the quality assurance laboratory.

Surveys were performed by licensed surveyors.

Daily quality control reports were prepared and submitted to the USACE. They are available in the USACE construction file.

IV. ACTIVITIES AND SCHEDULE FOR COMPLETION

Activity	Responsibility	Date
Plant additional trees in wetland restoration area to better match original state of wetland.	USACE	11/92
Repair damage to one resident's lawn.	USACE	11/92
Sample and analyze perched water.	USACE	11/92
Complete punch list items (list attached).	USACE	As noted
Final inspection.	USACE	12/92
Issue Close-Out Report	EPA	12/92

Attachment

Approved:

Kathleen C. Callahan 9/30/92

Kathleen C. Callahan, Director
Emergency and Remedial Response Division

Date

WIDE BEACH SUPERFUND PROJECT
FIELD INSPECTION PUNCHLIST

DATE: 9/25/92

ITEM NO.	DESCRIPTION	LOCATION ROAD	LOCATION STA.	RE-INSP DATE	ACPT.	REJT.
9	Replace Two APRICOT TREES Owner: Ang Millitello	Eastside of West OVAL	9+90	10/15/92		
10	Replace two APPLE TREES in Backyard: Larry Millitello	EASTSIDE of West OVAL	10+25	10/15/92		
14	REPLACE MISSING Shrubs/ Roses Lot #34	Northside of South OVAL	17+00	10/15/92		
19	Plant 2-5-6' Norway SPRUCE Plant 2 5-6' European Larch Lot #28 (Prince)	SW corner OVAL	15+00	10/30/92		
20	Plant FORSYTHIA (25 ±) to Lightpole Lot #42 (Grabenstein)	Southside OF FOX ST	CH75	10/30/92		
21	Plant 2 weeping cherry trees Plant 25 Forsythia Bushes Lot #44 (ROE)	Eastside of EAST OVAL	1+50	10/30/92		
23	FERTILIZE, Seed, Mulch Lawn Lot #50 (Hansen)	South East of SOUTH ST	10+00	10/15/92		
24	FERTILIZE, Seed, Mulch Lawn, Lot #49 (ROE) AND TOPSOIL	EAST SIDE OF EAST OVAL	1+50	10/15/92		
25	Plant "Burning Bush" next TO Fireplace Lot #50, (HANSEN)	South EAST OF SOUTH ST.	10+00	10/15/92		
33	Clean/REPAIR SANITARY SEWER SYSTEM TO PRECONST. Condition	Vericar Location		"ON HOLD" WAITING FOR ERIE CTY.		
34	FURNISH Closeout Contract Documents			11/30/92		
35	REPLACE DEAD Shrubs @ Lot #44 (ROE)	EAST SIDE OF EAST OVAL	1+50	10/15/92		