

MEMORANDUM

DATE:

SUBJECT: ENFORCEMENT ACTION MEMORANDUM - Determination of  
Threat to Public Health and the Environment at the Marina Cliffs/Northwestern  
Barrel Facility  
South Milwaukee, Wisconsin (Site ID #05PO)

FROM: Fred Bartman, Remedial Project Manager  
Remedial Response Section IV

Craig Thomas, On Scene Coordinator  
Emergency Response Branch, Section II

TO: Richard Karl, Acting Director  
Superfund Division

**I. PURPOSE**

The purpose of this memorandum is to document the determination of an imminent and substantial threat to public health, welfare, and the environment posed by the presence of uncontrolled hazardous substances located at the Northwestern Barrel/Marina Cliffs Facility in South Milwaukee, Wisconsin (Figure 1). The hazardous substances consist of lead and polychlorinated biphenyls (PCBs) in soils associated with a former barrel reconditioning operation.

U.S. EPA anticipates that potentially responsible parties (PRPs) will perform this removal action pursuant to an Administrative Order. The proposed response action will mitigate threats to public health, welfare, and the environment posed by the presence of uncontrolled hazardous substances at the Facility. Proposed removal actions include, but are not limited to, the removal and off site disposal of contaminated soils located near the Marina Cliffs and Bay Heights condominium complex and an adjacent City of South Milwaukee right of way (the "Properties"), and the restoration of those Properties.

This proposed action is based on site investigation activities performed under a July 5, 2002 Administrative Order by Consent (AOC) for the Properties. The AOC required site sampling and the preparation of an Engineering Evaluation/Cost Analysis (EE/CA). Samples were taken for surface and subsurface soils around all adjacent properties and indoor air, groundwater and soil gas sampling primarily around the Marina Cliffs condominium. Based on the sampling obtained during the EE/CA, this action is classified as a time critical removal action and will be done in conjunction with non-time critical removal work scheduled to be implemented in 2004 at adjacent areas of the Northwestern Barrel Facility.

The Northwestern Barrel/Marina Cliffs Facility is not on the National Priorities List (NPL).

## **II. SITE CONDITIONS AND BACKGROUND**

The CERCLIS ID number for the Site is WID981095995

### **A. Removal Site Evaluation**

The initial definition and investigation of the Northwestern Barrel/Marina Cliffs Facility focused on the 13-acre parcel adjoining Lake Michigan and owned by Towne Realty, Inc. The Northwestern Barrel Company conducted most of its operations in that area. Sampling activities were performed on the Properties from December 2002 to February 2003 to determine to what extent releases of contamination (and thus the boundary of the Facility) extended beyond the 13-acre parcel. These soil sampling activities, combined with a review of previous sampling data from the Property, were part of the EE/CA investigation under the July 5, 2002 AOC.

A uniform 75 foot grid was established over the Properties (31 borehole locations). Additional borings were added in the Marina Cliffs condominiums area to further define the extent of contamination. Overall, surface and subsurface samples from 49 borehole locations were collected.

Results at most of the surface sampling locations indicated that compounds of potential concern were at low concentrations, similar to background. The only notable exceptions were at four locations primarily around the Marina Cliffs condominiums and a small area near the Bay Heights complex. The maximum PCB concentration was at 22 parts per million (ppm). Lead was also detected in one surficial sample at 803 ppm within the City of South Milwaukee Right of Way.

Similarly, results at most of the subsurface sampling locations indicated that contamination was at low concentrations, similar to background. PCBs and lead, however, were detected around the Marina Cliffs condominiums at a depth of 2 to 4 feet.

The EE/CA investigation also identified volatile organic compounds in soil at a depth to 6 to 15 feet. The risks and cleanup options associated with deeper soils, soil gas and groundwater will

be evaluated more fully in the EE/CA addressing the Properties under the July 5, 2002 AOC.

At this point, however, U.S. EPA has determined that regardless of the measures evaluated to address other contamination on the Properties, any cleanup approach will require excavation of surface and shallow soils containing lead in excess of 400 ppm and PCBs in excess of 1 ppm. The PRPs conducting the EE/CA are willing to perform this work, which will proceed as a time critical removal action.

Overall a time critical removal action is considered necessary for the following reasons:

Lead concentrations exceed the screening level of 400 ppm that was derived by U.S. EPA to be protective of a residential child using the Integrated Exposure Uptake Biokinetic (IEUBK) Model for lead in children.

PCB concentrations exceed U.S. EPA's self implementing (40 C.F.R. Part 761.61(a) residential cleanup level of 1 ppm.

Figure 2 shows areas of concern that indicate elevated concentrations of lead and PCBs. These areas exceed risk-based criteria described above. The definition of this area also consolidates sampling activities that were conducted prior to initiation of the EE/CA. These other actions are described in Section E.

## **B. Physical Location and Site Characteristics**

The 13-acre parcel (the "Site") and the Properties are located on the shoreline of Lake Michigan in the city of South Milwaukee, Wisconsin (NW ¼, NW ¼, Section 13, Township 5N, Range 22E) near the intersection of Marina Road and Fifth Avenue. The locations of the Site (latitude 42°53'59" N, longitude 87°50'55" W) and the Properties are shown on Figure 1. Generally, the Site and the Properties are bounded to the east by Lake Michigan, to the west by Fifth Avenue, to the north by the South Milwaukee Wastewater Treatment Plant, and to the south by Marina Drive. A plan of the existing conditions of the Site and the Properties is presented on Figure 2.

Northwestern Barrel Company's barrel reconditioning operations were conducted on an approximately 18-acre parcel of property. U.S. EPA initially focused on the 13-acre eastern portion of the property, which is owned by Towne Realty, Inc. and which is where most of the barrel reconditioning operations took place. The 13-acre Site area included the ravine, lake bluff, and upland areas and was the focus of Time-Critical and Non-Time-Critical Removal Actions conducted pursuant to 1995 and 1998 Unilateral Administrative Orders (Docket Nos. V-W-95-C-313 and V-W-98-C-486) and a 2001 Administrative Order on Consent (Docket No. V-W-01-C-630). The remaining 5 acres, including the residential properties located immediately west of the Site as well as the right-of-way owned by the City of South Milwaukee located immediately south of the Site (the "Properties"), are the focus of the EE/CA Report which is being prepared pursuant to the July 5, 2002 AOC.

The Site area and the Properties are municipally zoned for residential occupancy. Land use of the Properties is residential. Land use in the surrounding area is residential consisting of mostly homes, apartment and condominium buildings. The South Milwaukee Wastewater Treatment Plant property is located immediately north of the Site and the Properties. Residences are serviced with a municipal water supply that utilizes Lake Michigan as a source of drinking water.

The surface topography at the Site and the Properties is dominated by the shoreline bluff which rises approximately 60 feet from the sand beach adjacent to Lake Michigan. General stratigraphy in the vicinity of the Site and the Properties is characterized as approximately 150 feet of silty clay glacial drift overlying Silurian dolostone bedrock. The drift was deposited during the Woodfordian substage of the Wisconsinan glaciation. The principal stratigraphic unit in the vicinity of the Site and the Properties is a silty clay till of the Oak Creek formation. The silty clay till has a very low permeability, which acts as an aquitard limiting the potential for downward groundwater migration.

U.S. EPA prepared a Region 5 Superfund Environmental Justice (EJ) analysis for the area surrounding the Site. This analysis is presented in Attachment III. In Wisconsin, the low-income percentage is 28 and the minority percentage is 13. To meet the EJ concern criteria, the area within 1 mile of the Site must have a population that is double the state low-income percentage and/or double the state minority percentage. That is, the area must be at least 56% low-income and/or 26% minority. At this Site, the low-income percentage is 26% and the minority percentage is 8% as determined by Arcview or Landview III EJ analysis. Therefore, this site does not meet the region's EJ criteria based on demographics as identified in Region 5 Interim Guidelines for Identifying and Addressing a Potential EJ Case, June 1998.

### **C. History**

The Northwestern Barrel Company operated a barrel reconditioning facility on the Site and possibly on a portion of the Properties from approximately 1941 until 1964. Northwestern Barrel Company reconditioned both steel and wood barrels. Used barrels were received from a wide variety of companies for cleaning and reconditioning. The operations included handling, washing, and refurbishing of drums and barrels. The residuals from these operations were disposed of at the Facility. Northwestern Barrel Company then sold the reconditioned drums.

The residential properties located immediately west of the Site are currently privately owned and the right-of-way located immediately south of the Site was conveyed by Towne Realty to the City of South Milwaukee in April 1999.

### **D. Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant**

The sampling activities conducted under the EE/CA investigation on the Properties documented, among other things, the presence of elevated levels of lead and PCBs.

#### **E. Other Actions to Date**

Historical sampling conducted at the Properties included surface soil sampling conducted by the Wisconsin Department of Health and Family Services (WDHFS) on July 11, 1997.

Background sampling in November 1996 and in December 2000, as part of the EE/CA investigation for the Site area

Non-Time-Critical Site-Wide Evaluation investigation activities were initially completed by the Performing Parties at the Properties in March and June/July 1998.

Between March 9, 1998 and March 17, 1998, Non-Time-Critical Site-Wide Evaluation investigation field activities were conducted

Between June 29, 1998 and July 1, 1998, Non-Time-Critical Site-Wide Evaluation investigation field activities were conducted. Subsurface soil samples were also collected at one of the residential properties located immediately west of the Site by representatives of the property owners in December 1999.

In response to a request from the Marina Cliffs Condominium Association, a total of six boreholes (i.e., BH-36 to BH-41) were advanced and surface/subsurface soil samples were collected south of Marina Cliffs Condominium Building Nos. 3 and 4 on March 19, 2002. The boreholes were advanced and the soil samples were collected/analyzed in accordance with the USEPA-approved Scope of Work. These activities were completed prior to the effective date of the AOC to allow completion of surface water drainage modification activities in this area in the spring of 2002 by the Association.

#### **F. Current actions**

U.S. EPA reviewed and approved a Site EE/CA Report dated January 30, 2004. The EE/CA Report and a proposed plan were released for a thirty day public comment which ended on March 5, 2004. The EE/CA determined that excavation of two small areas, site restoration, monitored natural attenuation of a small area of groundwater contamination, and limited institutional controls are necessary in order to complete removal activities in the Site area.

U.S. EPA is currently contemplating combining the remaining Site work with the actions described in this memo.

The EE/CA for the Properties will continue to be developed, possibly including a pilot study on the VOC hot spot areas identified on Figure 2. The EE/CA will also develop a formal streamlined risk assessment on the Properties and develop alternatives for groundwater cleanup.

## **G. State and Local Authorities' Roles**

Both the Wisconsin Department of Natural Resources and the Wisconsin Department of Public Health have been active participants in all removal processes. All plans and reports have been reviewed by State personnel. WDPH and WDNR will continue to advise U.S. EPA.

The City of South Milwaukee has historically been involved primarily due to residents' concerns during the time critical removal action at the Site area. The City is also involved in outlining a strategy to redevelop the Site once the removal actions in this action memo are completed, and is the owner of the right-of-way where part of the removal actions will take place.

## **H. Potential for continued State/local response**

The City of South Milwaukee and State authorities do not have the financial resources to pursue removal actions that may be required at the Facility. The State will continue to monitor any action taken at the Facility, and may continue to conduct inspections, review reports and advise U.S. EPA.

## **III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES**

A removal action is necessary in several small areas to abate the threat to public health, welfare or the environment posed by the release and potential release of hazardous substances. The NCP, 40 C.F.R. Section 300.415(b)(2), provides eight specific criteria for evaluation of a threat and the appropriateness of a removal action. Observations documented during the investigation indicate that the Properties meets the following criteria for a time-critical removal action:

a. Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances, pollutants or contaminants

This factor is present at the Properties due to the presence of elevated levels of lead and PCBs at the Marina Cliffs condominium complex.

b. High levels of hazardous substances or pollutants or contaminants in soils, largely at or near the surface that may migrate

This factor is present at the Properties due to the existence of elevated levels of contaminants in surficial soils. These soils may migrate due to airborne dust or surface runoff.

c. Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released

This factor is present at the Properties due to the existence of elevated levels of lead and PCBs in surficial soils. These soils may migrate due to airborne dust or surface runoff.

d. The unavailability of other appropriate federal or state response mechanisms to respond to the release

This factor supports the actions required by this memorandum because State and local authorities lack the financial resources to address the threats to human health and the environment.

#### **IV. ENDANGERMENT DETERMINATION**

Given the current conditions at the Properties and the nature of the hazardous substances on-site, actual or threatened releases of hazardous substances from the Properties, if not addressed by implementing and completing the response actions selected in this action memorandum, may present an imminent and substantial endangerment to public health, welfare, or the environment. The possibility of further releases of the hazardous substances presents a threat to the nearby population and the environment via the exposure pathways described in section III, above.

#### **V. PROPOSED ACTIONS**

The hazardous substances at the Properties are located near a residential area and must be addressed. The proposed removal actions at the Properties would eliminate the imminent and substantial threats to human health, welfare, or the environment, as outlined in this memorandum.

U.S. EPA has determined that the following response actions are appropriate to mitigate threats posed by the presence of hazardous substances at the Properties:

1. Develop and implement a site-specific workplan including a proposed time line;
2. Develop and implement a site-specific health and safety plan;
3. Provide site security measures which may include, but not be limited to, security guard service and fencing;
4. Remove and dispose offsite of soils with elevated levels of lead and PCBs estimated to be 2,400 cubic yards;
5. Perform confirmatory sampling to verify cleanup;
6. Backfill and restore excavated areas;
7. Regrade the Properties to minimize erosion and;
8. Restore/Replace Properties to their original condition..

All hazardous substances, pollutants or contaminants removed off-site pursuant to this removal action for treatment, storage or disposal shall be treated, stored, or disposed of at a facility in compliance, as determined by U.S. EPA, with the U.S. EPA Off-Site Rule, 40 C.F.R Section 300.440, 58 Federal Register 49215 (Sept. 22, 1993). The state ARARs identified in prior removal actions will be followed where applicable and a request for an update to state ARARs has been made.

The removal action will be taken in a manner not inconsistent with the NCP. The OSC has started planning for provisions of post-removal site control, consistent with the provisions of section 300.415(1) of the NCP. U.S. EPA anticipates that after implementation of this removal action, there will be no need for post-removal site control in the excavated areas. The work is expected to last six weeks.

All applicable and relevant and appropriate requirements (ARARs) of federal and state law will be complied with, to the extent practicable. A federal ARAR determined to be applicable for the Site is the Off-Site Rule. A state ARAR determined to be applicable for the Site is the Subtitle G: Waste Disposal Regulations. Any additional federal and state ARARs will be addressed to the extent practicable.

The response actions described in this memorandum directly address actual or threatened releases of hazardous substances, pollutants or contaminants at the Properties which may pose an imminent and substantial endangerment to public health, welfare, or the environment. These response actions do not impose a burden on the affected property disproportionate to the extent to which that property contributes to the conditions being addressed.

#### **VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN**

A delay or inaction at the Properties may result in an increased likelihood of direct human contact with hazardous substances. Since the Properties are easily accessible, the various threats to human health and/or the environment pose a serious threat to the local population. Additionally, any delay or non-action will also increase the likelihood of migration of contaminants off-site into the neighborhood.

#### **VII. OUTSTANDING POLICY ISSUES**

No significant policy issues are associated with the Properties at the Northwestern Barrel/Marina Cliffs Facility.

#### **VIII. ENFORCEMENT**

The PRPs at this Site are identified, and U.S. EPA expects that they can and will perform the selected response actions properly and promptly. For administrative purposes, information concerning the enforcement strategy for this site is contained in the Enforcement Confidential addendum. (Attachment I)

#### **IX. RECOMMENDATION**

This decision document represents the selected time critical removal action for Properties at the Northwestern Barrel/Marina Cliffs Facility, developed in accordance with CERCLA as

amended, and is not inconsistent with the NCP. This decision is based on the Administrative Record for the site (see Attachment II). Conditions at the Properties meet the criteria of Section 300.415(b)(2) of the NCP for a removal action, and I recommend your approval of the proposed removal action. You may indicate your decision by signing below.

APPROVE: \_\_\_\_\_ DATE: \_\_\_\_\_  
Acting Director, Superfund Division

DISAPPROVE: \_\_\_\_\_ DATE: \_\_\_\_\_  
Acting Director, Superfund Division

Attachments: I. Enforcement Confidential addendum  
II. Administrative Record  
III. Region 5 Superfund EJ Analysis

cc: R. Woreley, USEPA OERR, 5202G  
M. Chezik, U.S. Department of the Interior, w/o Enf. Addendum  
A. Boechter, WDNR, w/o Enf. Addendum