FIVE-YEAR REVIEW REPORT PUBLICKER INDUSTRIES SUPERFUND SITE PHILADELPHIA, PENNSYLVANIA

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Region III

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U.S. Environmental Protection Agency Region 3 Hazardous Waste Management Division Five-Year Review (Type Ia) Publicker Industries, Philadelphia, Pennsylvania

I. Introduction

Authority Statement. Purpose. EPA Region 3 conducted this review pursuant to CERCLA Section 121(c), NCP Section 300.400(f)(4)(ii), and OSWER Directives 9355.7-02 (May 23, 1991) and 9355.7-02A (July 26, 1994). It is a statutory review. The purpose of a five year review is to ensure that a remedial action remains protective of public health and the environment and is functioning as designed. This document will become a part of the Site File. This review (Type Ia) is applicable to a site at which the response is ongoing.

Site Characteristics. The Publicker Industries Site (the Site) is a former liquor/alcohol distillery located in the southeast portion of the City of Philadelphia, Pennsylvania. The Site is bordered to the east by the Delaware River, to the north by the Ashland Chemical Company, to the south by the Packer Marine Terminal and New Orleans Cold Storage, and to the west by Christopher Columbus Boulevard (formerly Delaware Avenue). The Site is adjacent to, and partially under the Walt Whitman Bridge, which spans the Delaware River from Pennsylvania to New Jersey.

The area is primarily industrial; however, there are major population centers within a one-mile radius of the Site. In addition, there are several major businesses (primarily food plants), the Philadelphia Naval Shipyard, one indoor and one large outdoor arena, and Interstate 95 in close proximity to the Site. An estimated population of 1,701 people live within a one-mile radius of the Site, in the cities of Camden and Gloucester, New Jersey, and Philadelphia, Pennsylvania.

The Site covers approximately 42 acres and contained the remains of nearly 440 structures including large tanks, chemical laboratories, reaction vessels, production buildings, warehouses, and power plants. A series of seven alternating piers and slips is located along the waterfront of the Site. Most of the existing Site structures and features were deteriorated due to weather, fire, and neglect.

Publicker Industries, Inc., a publicly-held corporation headquartered in West Greenwich, Connecticut, owned and operated a liquor and industrial alcohol manufacturing plant at the Site from 1912 to late 1985. The Publicker plant (Plant) fermented potatoes, molasses, corn, and various grains to form various kinds of alcohols. The alcohols were used in numerous products, including whiskey, solvents, cleansers, antifreeze, and rubbing alcohol. The Plant's production peaked during World War II and

again in the 1970's, employing over 1,000 people during those periods. The Site was also used as a petroleum product and chemical storage facility during the late 1970's and early 1980's. Based on the review of Site records, numerous chemicals were manufactured or stored at the Site during plant operation. The following is a summary of chemicals previously manufactured at the Plant: acetaldehyde, acetone, amyl acetate, acetic acid, butyl acetate, butyl alcohol, butyl chloride, denatured alcohol, ethyl acetate, ethanol, ethylene glycol, isolamyl alcohol, isopropyl alcohol, methanol, methyl ethyl ketone, and methyl isobutyl ketone.

Plant operations were discontinued in February 1986 and, later that year, Publicker Industries sold the property to the Overland Corporation. Overland Corporation declared bankruptcy and abandoned the Site in November 1986 following an explosion at the Site that killed two Cuyahoga Wrecking Corporation (Overland Corporation's parent corporation) demolition workers.

From December 1987 to December 1988, EPA conducted an emergency removal action which included the stabilization of Site facilities, drum and tank contents characterization, bulking and securing of over 850,000 gallons of numerous waste streams, offsite disposal of laboratory containers, and above-grade process line liquids removal. In May 1989, the Site scored 59.99 on the Hazard Ranking System, and was added to the National Priorities List (NPL) in October 1989.

In June 1989, the first Record of Decision (ROD) for the Site was issued. The ROD addressed the Site Stabilization Operable Unit (OU-1) only. The remedial action detailed in this ROD consisted of transportation and off-site disposal of known waste streams, demolition of above-grade process lines, and transportation and off-site disposal of wastes discovered in above-grade process lines. Remedial activities began in October 1989 and were completed in December 1990.

Remedial Investigation/Feasibility Study (RI/FS) activities began during this time and continued while the remedial action for the first OU was conducted. In June 1991, the ROD for Operable Unit 2 (OU-2) was issued, addressing limited removal of asbestos containing materials from the Site. In April 1992, a large fire at the Site destroyed the building containing bagged asbestos staged at that location during the 1988 emergency removal activities. The fire was limited to buildings in the central portion of the Site. The remedial design was modified to address changes due to the fire. The remedial action for this OU began in February 1995 and was completed in May 1995.

Neither the OU-1 nor the OU-2 ROD remedies required Operation and Maintenance (O&M) or post-remedial action monitoring.

In December 1994, Region III and the Pennsylvania Department of Environmental Protection (PADEP), finalized a prospective purchaser agreement (Agreement) involving the Site. The primary purpose of this Agreement was to settle and resolve the potential liability of the prospective purchaser, Delaware Avenue Enterprises, Inc. (DAE), along with Cresmont Limited Partnership (Cresmont), which owns DAE, and Holt Cargo System's, Inc. (Holt), which is affiliated with both DAE and Cresmont (collectively the Parties). Because of the past and existing contamination at the Site, this agreement settled the potential liability which could otherwise result from the Parties' exercise and execution of an option agreement, acquisition of title to the land comprising the Site, and Parties' limited Site-related activities.

The Parties proposed to demolish and/or remove every building, retaining wall, tank, pipe and structural support both above the ground and below the ground currently located at the Site and, conditioned on the issuance of a Clean Water Act Section 404/Rivers and Harbors Act Section 10 permit ("Permit"), to construct a marginal pier and support facilities which then may be operated by Holt in conjunction with the Packer Avenue Marine Terminal, which is located immediately to the south of the Site. Much of the demolition work has been completed and the 404/Section 10 permit was recently approved.

In exchange for the covenants not to sue, the Parties agreed to pay EPA and PADEP a total of \$2.3 million. Additionally the agreement states that the Parties may petition EPA to be allowed to perform all or a discrete portion of the CERCLA response selected in the ROD for OU-3. The agreed upon value of such work may offset any balance of payments still outstanding to EPA and/or PADEP under this Agreement.

II. Discussion of Remedial Objectives; Areas of Noncompliance

The third and final ROD for the Site was signed on December 28, 1995. The major components of the ROD are: abandonment of on-Site ground water wells; removal, treatment, and off-Site disposal of liquids and sediments in contaminated electric utilities; removal, treatment, and off-Site disposal of liquids and sediments in contaminated storm water trenches and utilities; and removal, treatment and off-Site disposal of miscellaneous wastes. Additionally, should excavation be conducted by current or future owners or occupants where such activities are not specifically a part of the above selected remedy, those excavation activities shall be monitored. PADEP concurred with the selected remedy.

In January 1996, DAE petitioned to do the work in the ROD. Am Amendment to the Agreement is currently being negotiated to embody this agreement to implement the ROD remedy. When signed,

the remedial design and remedial action for the third OU will begin. With EPA's approval, DAE has been demolishing the on-site structures, and demolition is approximately 98% complete. Miscellaneous wastes such as were described in the OU 3 ROD, which were encountered during the demolition, have been addressed as the ROD remedy required.

Since hazardous materials will remain on-site in the soil, post-remedial action monitoring of Site storm water outfalls is required by the OU-3 ROD. In case the storm water utilities are re-contaminated by Site soils, the monitoring will detect if contaminated sediment is discharging to the Delaware River.

III. Recommendations

The Amendment to the Prospective Purchaser Agreement must be finalized as soon as possible to allow the work for the final OU to be completed.

IV. Statement on Protectiveness

The remedy is not at this time protective of human health and the environment. EPA is taking steps to make the remedy protective. Finalizing the Amendment to the Prospective Purchaser Agreement will allow the work on the final OU to be completed.

V. Next Five Year Review

A statutory five year review of the remedy is to be conducted within five years from the date of the initiation of the first remedial action at the Site. The date of initiation of remedial action is the date the contractor mobilizes to start construction, or in this case October 1989. The next five year review will be conducted by October 1999.