SEPA

Superfund Record of Decision:

Publicker/Cuyahoga Wrecking, PA

50272-101

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15. Supplementary Notes

15. Abstract (Limit: 200 words)

The Publicker/Cuyahoga Wrecking site is a 37-acre, abandoned manufacturing plant in Philadelphia, Pennsylvania. A chemical company lies to the north, a marine terminal to the south, and the Delaware River to the east. Although the immediate area surrounding the site is primarily industrial, approximately 400,000 people live within one mile of the site. From 1912 to 1985, Publicker Industries owned and operated a liquor and industrial alcohol manufacturing plant at the site. The plant included 440 large tanks, storage drums, product stock, chemical laboratories, reaction vessels, production buildings, warehouses, a power plant, and several hundred miles of aboveand below-ground process lines. Petroleum was also stored onsite during the late 1970s and the early 1980s. Publicker Industries discontinued operations and sold the property in 1986. EPA evaluated site conditions in 1987 following two explosions and a large fire. Tankers, pits/sumps, and numerous process lines were found to contain fuel oils or other contaminated oils. EPA initiated an emergency removal action in December 1987 to stabilize the site and control the threat of additional fires and explosions. Emergency removal activities included onsite bulking and storing of solid and liquid waste streams; disposing of highly reactive laboratory wastes and cylinders offsite; crushing approximately 3,100 emptied drums; wrapping overhead pipelines insulated with (See Attached Sheet)

17. Document Analysis a. Descriptors

Record of Decision - Publicker/Cuyahoga Wrecking, PA

First Remedial Action

Contaminated Media: soil, gw

Key Contaminants: VOCs, other organics (PCBs, pesticides)

b. Identifiers/Open-Ended Terms

c. COSATI Field/Group

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EPA/ROD/R03-89/073 Publicker/Cuyahoga Wrecking, PA First Remedial Action

16. Abstract (continued)

asbestos; and implementing a 24-hour fire and security watch. According to EPA estimates, over one million gallons of bulked waste materials remain onsite stored in dilapidated tanks and drums. Twelve waste streams have been identified, including base neutral liquids and solids, organic liquids and solids, oxidizing liquids and solids, water reactives, chlorides, crushed empty metal drums, and contaminated oils. This remedial action is designed to stabilize the site and enable continued site cleanup of soil, ground water, and asbestos. The primary contaminants of concern affecting the soil and ground water are VOCs, and other organics including PCBs and pesticides.

The selected remedial action for this site includes offsite treatment and disposal of the various waste streams in RCRA-permitted facilities; demolition of above-ground process lines, with proper packaging of contaminated insulation and onsite storage pending disposition in a subsequent remedial action; and offsite disposal of hazardous chemicals recovered from within the lines. The estimated capital cost for this remedial action is \$13,900,000; there are no O&M costs.

Declaration For The Record Of Decision

Site Name and Location

Publicker Industries Site City of Philadelphia, Philadelphia County, Pennsylvania Site Stabilization Operable Unit

Statement of Purpose

This decision document represents the selected remedial action for this site developed in accordance with the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and to the extent practicable, the National Contingency Plan (NCP).

Statement of Basis

This decision is based upon the administrative record (index attached). The attached index identifies the items which comprise the administrative record upon which the selection of a remedial action is based.

The Commonwealth of Pennsylvania concurs with the selected remedy. A copy of the concurrence letter is attached.

Description of the Selected Remedy

This initial operable unit was developed to protect human health and the environment by eliminating the present threat of fire and/or explosion as a result of known potentially hazardous chemicals and other chemical compounds on-site. The selected remedial action will enable the site cleanup, which began as a removal action, to continue, utilizing remedial program funding in place of emergency removal program dollars. Bulked hazardous/flammable waste streams will be transported off-site and will undergo treatment and disposal at permitted Resource Conservation and Recovery Act (RCRA) facilities.

Subsequent investigations into other operable units addressing the soil, ground water and asbestos contamination at the site are forthcoming. The major components of the selected remedy are as follows:

- * Transportation and off-site disposal of the known remaining on-site waste streams to permitted RCRA facilities.
- * Demolition of above-grade process lines that traverse the site. This may include the recovery of unknown hazardous chemicals and the removal of pipe insulation materials such as asbestos-containing materials. Dismantled process lines will remain on-site until future site remedial actions are performed.
- * Proper packaging of the insulation materials removed from the process lines. Insulation materials, including asbestos, will be properly stored on-site until future site remedial actions are performed.
- * Transportation and off-site disposal of hazardous chemicals recovered from within the process lines to permitted RCRA facilities.

Declaration

The selected remedy is protective of human health and the environment, attains Federal and State requirements that are applicable or relevant and appropriate for this remedial action and is cost-effective. This remedy satisfies the statutory preference for remedies that employ treatment that reduces toxicity, mobility, or volume as a principal element and utilizes permanent solutions and alternative treatment (or resource recovery) technologies to the maximum extent practicable.

Date

Edwin B. Erickson

Regional Administrator

Region III

Remedial Alternative Record of Decision Summary Publicker Industries Site

Introduction

This initial Record of Decision (ROD) for the Publicker Industries Site will focus on eliminating the most immediate potential threats to human health and the environment which continue to exist at the site. These threats include potential fire and/or explosion from known potentially hazardous chemicals and other chemical compounds on-site.

This selected remedial action will enable EPA to continue the cleanup which began as a removal action at the site, utilizing remedial program funding in place of removal program dollars.

A Remedial Investigation/Feasibility Study (RI/FS) of the site is currently scheduled to begin in August 1989. This study will identify the nature and extent of contamination to area soils and ground water. Based on the data collected during the RI, several Focused Feasibility Study (FFS) reports may be developed to address each contaminated media. Subsequent RODs will be prepared to address these issues.

Site Location and Description

The Publicker Industries Site is located in the southeast portion of the City of Philadelphia, Pennsylvania (see Figure 1). 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 Delaware Avenue. The site is adjacent to and under the Walt Whitman Bridge which spans the Delaware River from Philadelphia to New Jersey.

The area is primarily industrial; however, there are major population centers within one mile. In addition, there are several businesses (primarily food plants), the Philadelphia Naval shipyard, two large outdoor sports Arenas and Interstate 95 in close proximity. Center city Philadelphia is approximately two miles from the site. Within three-quarters of a mile are the cities of Gloucester and Camden, New Jersey.

An estimated population of 400,000 people lives within approximately one mile of the site. Three schools and two hospitals are located within a one and one-half mile radius of the site.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III

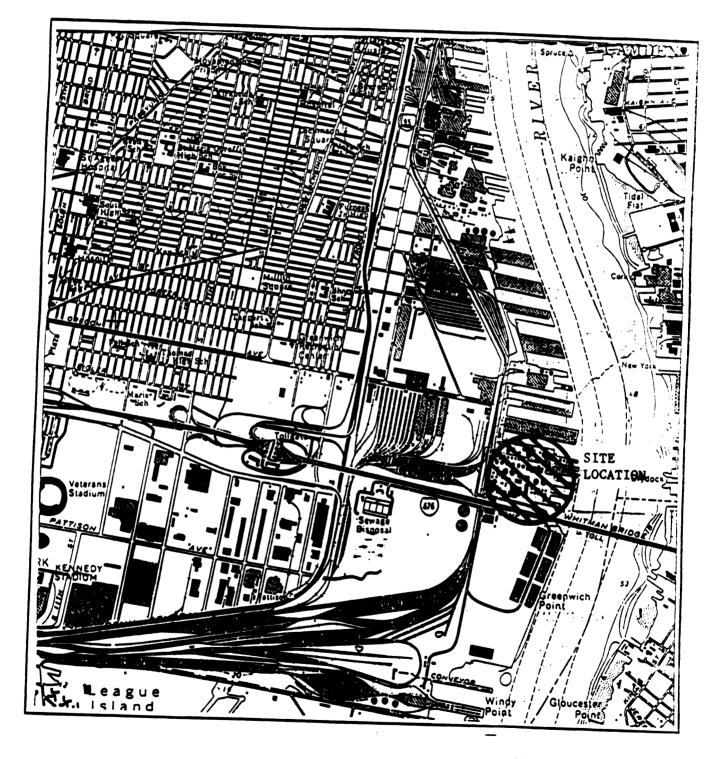


FIGURE 1

Publicker Industries had operated a liquor and industrial alcohol distillation process at the site until approximately three years ago. The site is approximately 37 acres in area and includes nearly 440 large tanks, storage drums, product stock, chemical laboratories, reaction vessels, production buildings, warehouses, a power plant and an estimated several hundred miles of above— and below—ground process lines. The general layout of the site and surrounding area is shown on Figure 2.

Many of the existing structures have deteriorated due to weather, fire and neglect. The facility has three waterfront piers that extend into the Delaware River.

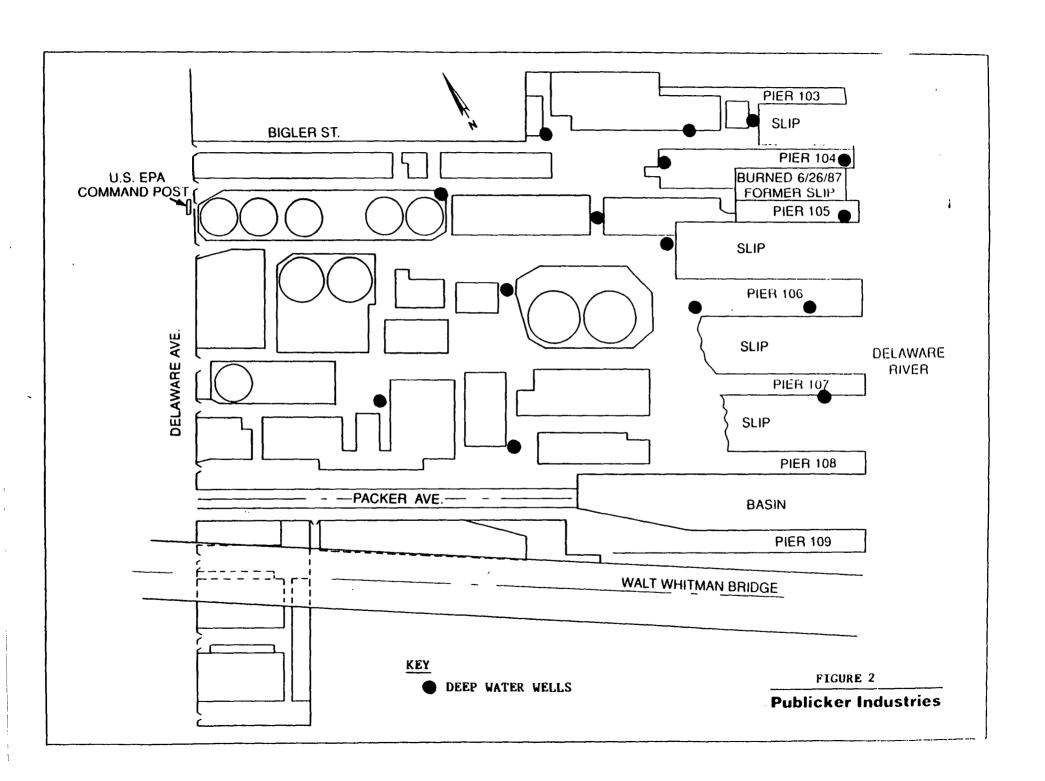
Nineteen deep production wells (See Figure 2), ranging in depth from 150 to 200 feet, are reported to exist on the site property. (Only 15 of the 19 wells have been located from existing site maps.) These deep wells were installed 40 to 50 years ago to supply cooling water to heavy equipment at the facility.

In June of 1987, the carbon dioxide utilization portion of the facility was destroyed in a multi-alarm fire. During the fire, numerous explosions and fire flares were reported which led fire officials and the U.S. Environmental Protection Agency (EPA) emergency response personnel to believe that chemical products were still present at the facility.

An initial site inspection was conducted by EPA and its support staff on July 9, 1987. City of Philadelphia representatives were also on-site to inspect portions of the facility which were not affected by the fire. Numerous spill areas, improper drum storage and leaking process lines were observed by the inspection team. A sheen, originating from the site was apparent in the waters of the Delaware River.

Tanks, pits/sumps, and numerous process lines on-site were found to contain fuel oils or other contaminated oils. (Pesticides and volatile organic compounds not commonly found in fuel oils have been identified as contaminants in some of these oils.) EPA has determined that a major quantity of this contaminated oil is contained in unsound storage vessels (leaking pipelines and tanks). It has been estimated that 252,000 gallons of unsecured contaminated oil had been previously stored on-site.

In addition to these waste products, further inspections and inventories have identified shock-sensitive and explosive materials throughout the facility.



Tanks containing spent grain material from the whiskey manufacturing operation have been determined by EPA to contain approximately 70,000 gallons of reactive and flammable layers/phases that exhibit RCRA hazardous waste characteristics (i.e., ignitability, corrosivity, reactivity, EP toxicity). These tanks contain residual grain materials collected from fermentation tanks and grain dryers. Analysis of these tanks shows that layers of flammable (flash point less than 140 degrees Fahrenheit) and reactive materials are present.

Site History

Publicker Industries, Inc. is a publicly held corporation headquartered in Greenwich, Connecticut. From approximately 1912 to late 1985, Publicker owned and operated a liquor and industrial alcohol manufacturing plant at the site. The Publicker facility fermented potatoes, molasses, corn, and various grains, and distilled the 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 1970s. During these prosperous times, the plant employed over 1,000 people. The site was also utilized as a petroleum product storage facility during the late 1970s and early 1980s.

Plant operations had been in decline since the late 1970s and employment had decreased to 5 people before Publicker discontinued operations in February 1986. In 1986, Publicker sold the property to Overland Corporation, a subsidiary of Cuyahoga Wrecking Corporation.

During demolition activities, two Cuyahoga employees were killed by an explosion which resulted from the cutting of a process line with a torch. Shortly after this incident, Overland Corporation declared bankruptcy and abandoned the facility. The property is currently being administered by a bankruptcy trustee.

In June 1987, a portion of the facility was destroyed in a multi-alarm fire during which numerous explosions and fire flares were reported. Following the fire, EPA Emergency Response Personnel evaluated the site and determined immediate measures were required to control and stabilize site conditions.

Prior EPA Site Activities

On September 4, 1987, EPA and Publicker Industries entered into a Consent Order under Section 106 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended, 42 U.S.C. Section 9606. Under the Consent Order, Publicker hired O.H. Materials of Findley, Ohio to perform site stabilization measures. These measures focused on assessing the site and identifying the presence and nature of hazardous substances at the site.

On December 8, 1987, an EPA site—safety coordinator conducted a site inspection of the facility. During this visual inspection, it was determined that site conditions continued to present threats to human health and the environment. An EPA on-scene coordinator (OSC) immediately initiated a removal action using CERCLA emergency funds.

During an Emergency Removal Action, EPA significantly stabilized conditions at the site by addressing the various fire and explosion threats. Wherever possible, solid and liquid waste streams were bulked on-site and stored for future disposal. Highly reactive lab wastes and cylinders were transported off-site for disposal. All materials removed from the site were transported to facilities regulated under the Resource Conservation and Recovery Act (RCRA) and the Toxic Substances Control Act (TSCA). Approximately 3,100 emptied drums were crushed on-site after bulking operations were completed. Overhead pipelines insulated with asbestos coverings were wrapped with plastic where necessary to abate the potential for the airborne release of friable asbestos material. Asbestos droppings and piles randomly located throughout the site were bagged and stored on-site. Buildings which were found to contain asbestos were secured and warming signs posted. A summary of all prior EPA removal program activities are presented in Table 1.

To deter trespassing and unauthorized entry and exit of vehicles at the site, concrete barriers and snow fencing were installed along Packer and Delaware Avenues.

Emergency removal activities ended on December 16, 1988, due to the lack of additional funding from the removal program budget. A 24-hour site security and fire watch are continuing to ensure safety at the site until the remedial activities can be initiated.

On May 5, 1989, EPA proposed that the site be added to the National Priorities List.

Other Site Activities

In a bankruptcy court order dated July 7, 1987, Freedom Savings and Loan Association was authorized to sell ..."all inventory, equipment and fixtures including, without limitation, all scrap, scrap metals, salvage, materials, tanks, piping, and containment structures, production, transmission, storage and handling equipment and all items or materials created by or removal thereof at the former Publicker Industries Site by private sale." On January 19, 1988, Bruga Corporation of Robbinsville, New Jersey purchased from Freedom Savings and Loan Association, the Stillhouse and Ethylene Hydration Areas of the facility. On June 13, 1988, Bruga Corporation entered into a Consent Order under CERCLA Section 106, 42 U.S.C. Section 9606. The Consent Order requires Bruga to

Table 1

Summary of Prior EPA Removal Activities

- 1. All known and unknown laboratory containers disposed of off-site to permitted RCRA facilities.
- All PCB contaminated electrical equipment containing PCB levels greater than 50 ppm disposed of off-site to permitted RCRA facilities. All PCB electrical equipment containing PCB levels less than 50 ppm are secured on-site.
- Gas cylinders were removed from site by private parties or remotely opened on-site, vented, crushed and staged on-site.
- Acid liquids neutralized on-site.
- 5. Base neutral, oxidizing and organic liquids bulked and stored on-site in reconditioned tanks.
- 6. Flammable liquids and solids bulked/disposed of off-site to permitted RCRA facilities.
- 7. Solid waste streams bulked and secured on-site.
- 8. Acid solids disposed of off-site to permitted RCRA facilities.
- 9. Mercury and mercury containing compounds transported off-site to permitted RCRA facilities.
- Radioactive laboratory compounds disposed of off-site to permitted RCRA facilities.
- 11. Approximately 7,000 gallons of material have been removed from the above-grade process lines and bulked securely on-site.
- 12. Piles of asbestos were bagged and secured on-site. Buildings containing asbestos were boarded-up and warning signs posted. Some overhead piping with asbestos insulation were wrapped with plastic to prevent the release of friable asbestos material.
- A structural inspection was conducted on-site due to worker and operational safety concerns.
- 14. Fuel oil and other contaminated oils have been bulked in secure tanks on-site.

dismantle and decontaminate, if necessary, all equipment that is removed from the site. This work is currently underway.

On December 8, 1988, EPA and AAA Warehousing, Inc. (AAA) of Brooklyn, New York entered into a Consent Order under CERCIA Section 106, 42 U.S.C. Section 9606, whereby AAA was granted permission to remove from the site some stainless steel tanks and rail tank cars which AAA owned. Removal of AAA's property began on December 9, 1988. All seven rail tank cars have been transported off-site; however, the stainless steel tanks have not been removed.

Extent of Contamination

Twelve (12) waste streams have been identified on-site to date. These include base neutral liquids and solids, organic liquids and solids, oxidizing liquids and solids, water reactives, chlorides, crushed empty metal drums and contaminated oils. The various consolidated waste streams are stored in drums and existing tank structures which are in various stages of dilapidation. Some of the waste materials from these drums and tanks are incompatible and, if mixed, could result in the formation of more dangerous compounds. It is estimated that over one million gallons of bulked waste material remain on-site from the previous emergency removal action. Ground water and soils contamination is likely. An RI/FS will be conducted to study these media and possible remedial alternatives.

Current Site Status

The integrity of many of the site structures is poor due to past fires and to the age of the facility. Although many of the on-site waste streams have been consolidated, the potential threat of release remains. Figure 3 identifies the locations of bulk wastes and other waste streams on-site. The waste streams and their associated volumes are summarized in Table 2. The actual volume of the waste streams is currently unknown, therefore, estimates have been based on the volume capacity and/or dimension of the containers.

The wastes are presently secured in tanks and in drums; however, the deteriorated condition of the structures surrounding the consolidated wastes poses a threat to these storage vessels. Although temporary repairs have been made to and testing has been done on the 35-year old storage tanks, their structural integrity can in no way be certified for any definite period of time. These risks are compounded by the condition of the concrete containment wall surrounding the storage tanks. In the event of rupture or collapse of the storage tanks, the wall could not contain a catastrophic release. In addition, the on-site, drum-staging area, which is in disrepair, is emitting detectable vapors.

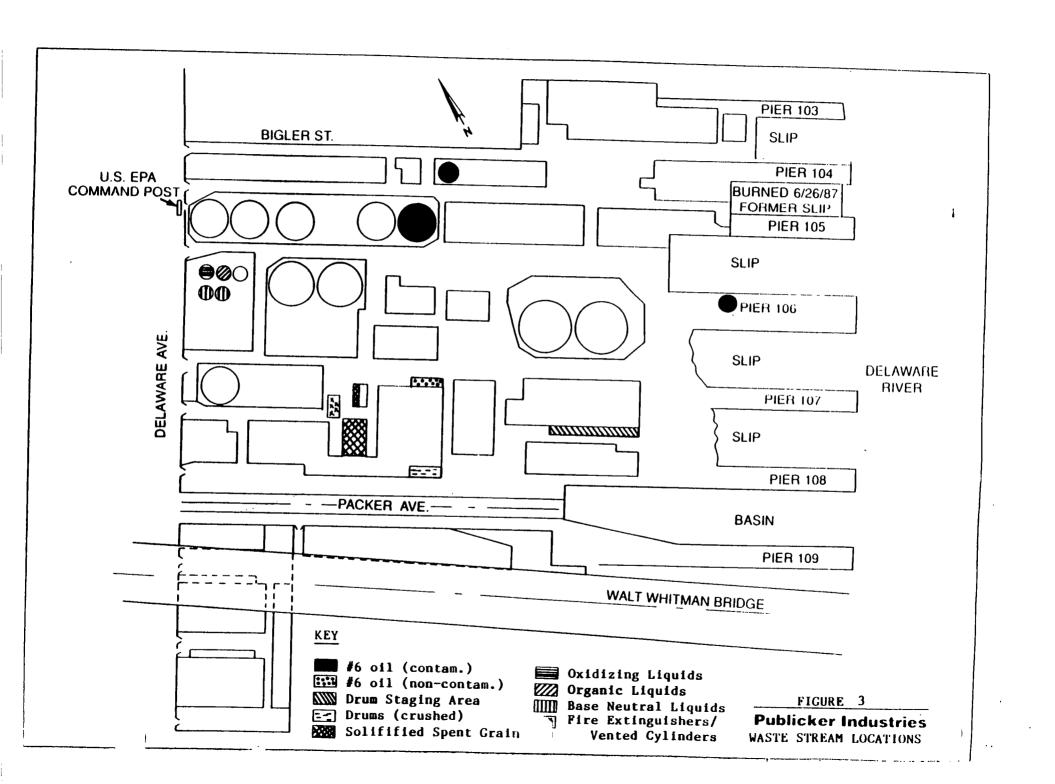


Table 2

Estimated Waste Stream Volumes

<u>Waste Stream</u>	Estimated Volume
Bulk Organic Liquids (multi-phased)	158,815 gallons
Organic Solids	2,500 gallons
Bulk Oxidizing Liquids (multi-phased)	38,845 gallons
Oxidizing Solids	8,845 gallons
Bulk Base Neutral Liquids (multi-phase)	383,810 gallons
Base Neutral Solids	5,865 gallons
Contaminated #6 Fuel Oil and Water	3,080 gallons
Solid Site Debris (crushed empty metal drums and protective clothing)	20 cubic yards
PCB Contaminated Oil and Electrical Equipment	320 gallons
Fuel and Lubricating Oils Chlorides	250,000 gallons 110 gallons
Water Reactives	85 gallons

Due to these existing site conditions, a 24-hour fire and security watch is required. In the event of a chemical release, a fire, or an unauthorized entry, the fire watch and security measures will initially control the situation until the appropriate response individuals arrive on the scene. The quick attention to an incident and the notification of response personnel are critical.

Risk Assessment

Due to the close proximity (within a one and one-half mile radius) of residences, major highways, waterways, schools, hospitals and transportation routes to the site, any release could potentially affect thousands of people. The consolidated waste streams currently stored on-site in drums and in tanks include, but are not limited to base neutral liquids and solids, organic liquids and solids, oxidizing liquids and solids, water reactives, chlorides, and contaminated oils. A major release caused by the rupture or collapse of the storage vessels on-site could force the evacuation of large numbers of people, close down businesses, and affect large portions of the City of Philadelphia due to disruption of public transportation and major highways (Walt Whitman Bridge, I-76, I-295, I-95). Process piping that may contain ignitible liquids and vapors is also a major contributing factor to site risk. A major release from the site could possibly affect residences as far away as New Jersey, depending on meteorological conditions.

The threats to human health and the environment can be separated into four categories:

- 1) Fire and/or explosion associated with the hazardous waste streams
- 2) The presence of potentially hazardous chemicals stored on-site
- 3) The potential for the migration of oils and chemical mixtures into the Delaware River
- 4) Vapor emissions from the on-site drum-staging area, which is in disrepair.

The potential threat of fire at the Publicker Site is extreme. There have been fires in the past, and the continuing threat is deemed to be significant by the City of Philadelphia Fire Marshal's Office. The facility is in very poor condition because of past fires, demolition on the site, neglect, and vandalism. These are all contributing factors to the possible occurrence of future fires at the site.

Many of the process and storage buildings contain large amounts of wood construction materials, some of which are over 50 years old. There are many spill areas of unknown composition, some of which are potentially ignitible. A fire could easily cause drums staged on-site to rupture or explode, releasing chemical contaminants into the environment.

Description of Alternatives

Using information collected by EPA OSCs and the findings of past and present investigations and data analyses, EPA has developed the following three alternatives for an early action ROD at the Publicker Industries Site. A Proposed Plan. outlining the conditions at the site and the alternatives evaluated was issued March 1, 1989 along with the Agency's proposed alternative. This was also published and a public meeting was held March 15, 1989. Due to the unstable nature of the site and time constraints imposed by the continued threats at the site, this Proposed Plan and supporting documents in the file constitute a Focused Feasibility Study and are the basis upon which this ROD is written. The selected remedial action will eliminate the threat of fire and/or explosion associated with storage tank residues. process lines containing ignitible/ hazardous liquids, and quantities of bulk hazardous chemicals stored on-site.

A remedial alternative considering the continued longterm containment of these waste streams on-site was not considered because it is not consistent with future site remediation activities and does not satisfy the statutory mandate to utilize permanent solutions.

Alternative 1 - No Action

The No Action Alternative is required by the National Contingency Plan (NCP) to be considered through the detailed analysis of remedial alternatives. This alternative provides a baseline comparison against which other remedial measures can be compared. With this alternative, EPA would not implement any additional measures to protect either human health or the environment from the existing threats at the Publicker Site. Existing waste streams would remain on-site with the continued threat of fire and/or explosion due to storage which is unsafe and inappropriate for the long-term.

This alternative would not minimize or appreciably eliminate the potential catastrophic threat to human health and the environment that currently exists. In addition, this alternative does not satisfy the statutory mandate to utilize permanent solutions, nor does it comply with the statutory preference for remedial actions that reduce toxicity, mobility, and volume. This alternative would allow no remediation at the site until completion of an RI/FS report.

<u>Alternative 2</u> - Completion of Site Stabilization Activities: Off-site Treatment

Under this alternative, the conditions that continue to pose the fire and/or explosion threat at the Publicker Industries Site would be eliminated. This action would be the initial remedial action at the site; the first phase in what will eventually be a complete remediation of other potential hazards (i.e., soil, ground water, asbestos).

The following actions are proposed to be accomplished:

- * The transportation and off-site disposal of the known remaining on-site waste streams to permitted RCRA facilities.
- * The demolition of above-grade process lines that traverse the site. This may include the recovery of unknown hazardous chemicals and the removal of pipe insulation materials such as asbestos-containing materials. Dismantled process lines will remain on-site until future site remedial actions are performed.
- * The proper packaging of the insulation material removed from the process lines. Insulation materials, including asbestos, will be properly packaged and stored on-site until future remedial actions are performed.
- * The transportation and off-site disposal of hazardous chemicals recovered from within the process lines to permitted RCRA facilities.

The actual volume of the waste streams is presently unknown and will have to be determined during the design period. Estimates are based on the volume capacity and/or dimensions of the container. (See Table 2.)

Preliminary analytical data for the waste streams are available. In the case of the bulk liquids, analytical data are not available for the bulk volume. Analytical data are available, however, for the individual waste streams that are included in the bulk volume. Additional sampling of bulk waste volumes will be required before disposal in order to identify the chemical compositions.

All waste streams will be disposed of off-site. The necessary RCRA waste disposal permits will be obtained by the waste disposal contractor. The use of RCRA permitted facilities depends upon EPA regulations pertaining to the individual waste streams identified during additional sampling efforts. All local, State, and Federal regulations that apply to the off-site disposal of the waste streams will be

adhered to. Emphasis will be placed on current EPA off-site disposal policies.

Permits will be obtained for the transportation of the waste streams to the disposal facilities. Only licensed Department of Transportation (DOT) waste haulers will be utilized. The hazardous waste haulers will adhere to all local, State, and Federal regulations that apply to the transportation of the waste streams.

In the case of the process lines, the exact distance that they cover has never been measured. However, it is assumed that the distance covers several hundreds of miles.

As each process line is dismantled, the waste recovery of its contents will be performed. During previous removal activities on-site, identification of process line contents was unsuccessful. The hazardous materials that may be found and recovered from the process lines must be sampled, analyzed, transported, and disposed of according to the previously stated requirements. The process lines that are to be addressed during the recovery operations are those which are overhead and begin or end at a building. Many of the process lines are incorporated into areas of structural concerns; therefore, other structures associated with the process lines may need to be demolished during process-line dismantling.

During the dismantling of the process piping, pipe insulation materials consisting of fiberglass, asbestos or other insulating materials will be removed. It is known that a portion of the insulation is asbestos; however, the exact amount of asbestos insulation on the process lines is not known. The insulation material and dismantled process piping will be stored on-site in a secured area for future disposal.

Due to the unavailability of detailed analytical data, it is not possible at this time to select specific treatment methods for the various on-site waste streams. This determination will be made once all of the bulk waste volumes have been sampled and analyzed. However, it can be determined at this time whether a specific waste stream is amenable to physical/chemical treatment, biological treatment, thermal treatment or recycling technologies. In addition, certain waste streams may also be landfilled, if allowed under the RCRA land-ban regulations.

With the aid of EPA's Technical Assistance Team (TAT) contractor, at least one treatment option was selected for each of the 12 on-site waste streams. These are summarized in Table 3.

Table 3

Summary of Treatment Technologies

<u>Waste Stream</u>	Treatment Technology
Bulk Organic Liquids (multi-phased)	Thermal Treatment Physical/Chemical Treatment
Organic Solids	Thermal Treatment
Bulk Oxidizing Liquids (multi-phased)	Thermal Treatment Physical/Chemical Treatment
Oxidizing Solids	Thermal Treatment
Bulk Base Neutral Liquids (multi-phased)	Physical/Chemical Treatment Biological Treatment
Base Neutral Solids	Thermal Treatment Landfill
Contaminated #6 Fuel Oil and Water	Thermal Treatment Recycle
Solid Site Debris (crushed empty metal drums, protective clothing)	Thermal Treatment
PCB Contaminated Oil and Electrical Equipment	Thermal Treatment
Fuel and Lubricating Oils	Recycle
Chlorides	Thermal Treatment
Water Reactives	Thermal Treatment Physical/Chemical Treatment

In cases where more than one treatment option is listed, the waste stream may be amenable to one or more technologies, depending on the characteristics of the waste stream. If, for example, a waste stream contains a large percentage of water, it may be cost-effective to treat before it is incinerated. In addition, if a portion of a waste stream can be recovered through a recycling process, the by-product may also be thermally treated.

Final selection of technologies will be made based on vendor responses to performance specifications. Criteria to be used in this selection include:

- Compliance with their permits
- Compliance with SARA and ARARs
- Permanence
- Ultimate fate of contaminants
- Reduction in volume, mobility and toxicity
- Costs

<u>Alternative 3</u> - Completion of Site Stabilization Activities: On-site Treatment

This alternative has the same major components as and is similar to Alternative 2, with the exception that the treatment of the waste streams would be performed on-site. Incineration, recycling or other physical/chemical and biological treatment processes would be mobilized on-site to treat the various waste streams.

Due to the close proximity of site structures and the lack of available open space to mobilize several treatment processes, this alternative is not implementable at this site. In addition, the use of incineration in an area where large volumes of ignitible/ hazardous wastes are closely stored is not a safe practice. Also, the operation of an on-site incinerator would receive public opposition. Historically, area residents have opposed other projects where potential impacts to air quality are likely.

For the reasons stated above, this alternative will be eliminated from further consideration.

Comparative Analysis

The two remaining alternatives were evaluated against the following nine criteria:

- 1) protection to human health and the environment;
- 2) compliance with Applicable or Relevant and Appropriate Requirements (ARARS);
- short-term effectiveness;
- 4) long-term effectiveness;
- 5) reduction of toxicity, mobility, and volume;
- 6) implementability:
- 7) state acceptance:
- 8) community acceptance; and
- 9) cost.

1. Protection of Human Health and the Environment

The No Action Alternative provides no protection of either human health or the environment. The continued threat of fire and/or explosion from stored hazardous wastes would still be present at the site.

The Site Stabilization Alternative will eliminate the potential threats to human health and the environment by removing and disposing of the waste streams off-site. Risks associated with fire and/or explosion would therefore be eliminated.

2. Compliance with ARARs

Since no site remediation will occur under the No Action Alternative, it will not be in compliance with ARARS.

The ARARs considered for the Site Stabilization Alternative, under this initial remedy, are only those which pertain to the action being taken to eliminate the potential threat of fire and/or explosion, thereby protecting human health and the environment.

During the removal and disposal of waste streams from tanks, lines and vessels, and the removal and disposal of drummed materials, all ARARs associated with tanks, tank system standards and the use and management of containers. where appropriate, will be met. During these activities, the level of air emissions will be in compliance with National Air Quality Standards. The off-site transport of waste streams will meet all ARARs associated with DOT and RCRA requirements. Removal and packaging of process pipe insulation materials which contain asbestos will be handled in accordance with National Environmental Standards for Hazardous Air Pollutants (NESHAP). The ARARs associated with remedial efforts beyond the scope of this remedial action will be addressed in a subsequent ROD. The Site Stabilization Alternative will meet those ARARs identified above which are summarized in Table 4.

3. Short-term Effectiveness

With the implementation of the No Action Alternative, the continuing threat of fire and/or explosion will not be eliminated. The potential threat of such an occurrence continues to be imposed on both human health and the environment. This threat will not be abated in any form until completion of an RI/FS , Remedial Design (RD), and Remedial Action (RA).

The Site Stabilization Alternative will allow remediation of the existing threats in a 6-to 8-month period, with little, if any, impact to human health and the environment. Some minor impacts may occur during imple-

Table 4

ARAR Summary

Action	Alt. 1 No Action	Alt. 2 Site Stabilization
Off-site transport of waste streams	N/A	Transport of hazardous waste streams for disposal must satisfy DOT regulations as outlined in 49 C.F.R. Part 107, Sections 171.1-171.500 and RCRA regulations as outlined in 40 C.F.R. Parts 262 and 263
		Transport of waste streams must also satisfy PADER's provisions under Hazardous Waste Management Rules and Regulations, Section 75.263, Transporters
Removal/packaging of asbestos wastes	N/A	Asbestos must be handled in accordance with the National Environmental Standards for Hazardous Air Pollutants (NESHAP) 40 C.F.R. Sections 61.140-61.156
Removal and disposal of drums	N/A	All appropriate regulations concerning Use and Management of Containers 40 C.F.R. Sections 264.170-178 Appropriate sections of PADER's Section 75.265(q), Use and Management of Containers
Describ and dismosal	N /3	All appropriate regulations
Removal and disposal of materials from tanks, lines, and vessels	N/A	All appropriate regulations Concerning Tank System Standards 40 C.F.R. Sections 264.190—199
V050020		Appropriate sections of PADER's Section 75.265(r), Tanks
Release of air emissions from drum staging/disposal operations	N/A	Any air emission generated by the Remedial Action will not exceed National Ambient Air Quality Standards 40 C.F.R. Part 50
Landfill disposal of waste streams	N/A	RCRA Land Disposal Restrictions 40 C.F.R. Sections 268.1-268.50

mentation of this alternative due to vapors/odors and offsite transportation of wastes; however, these impacts will be very small and will be controlled and monitored. Site specific safety and health monitoring programs will be implemented during the RA..

4. Long-term Effectiveness

Selection of the No Action Alternative will not eliminate the potential threat of fire and/or explosion as they will continue to pose a threat to human health and the environment. The No Action Alternative may also lead to further degradation of area ground water.

The Site Stabilization Alternative will provide reliable protection of human health and the environment over time by eliminating hazards at the site which are both current and future risks. This alternative will also allow the long-term remediation process to continue without any imminent threats to human health or investigation teams. Additionally, no long-term management of the waste streams addressed in the ROD will be required.

5. Reduction of Toxicity, Mobility, and Volume

The No Action Alternative provides no reduction of either toxicity, mobility, or volume of the waste streams at the site.

The Site Stabilization Alternative will provide for the total reduction in the toxicity, mobility, and volume of the waste streams since these wastes will be either destroyed by thermal treatment, neutralized by treatment, or recycled. Residuals from treatment/recycling processes will be disposed of off-site. However, if landfilling is selected as a treatment method, the statutory requirements for reduction of toxicity, mobility, and volume will not be satisfied.

6. Implementability

Since there is nothing to implement under the No Action Alternative, this is not applicable to this situation.

Under the Site Stabilization Alternative, services required for the disposal of the waste streams do exist and will be obtained. No technical or administrative obstacles for implementing this alternative appear to exist.

7. State Acceptance

The Commonwealth of Pernsylvania, Department of Environmental Resources (DER), has reviewed the information available for this site and has concurred with this Record of Decision (ROD). (See attached DER concurrence letter).

8. Community Acceptance

A public comment period for the Proposed Plan was held from March 1, 1989 to March 30, 1989. On March 15, 1989, a public meeting was held at the Winnet South Philadelphia Community Center to discuss EPA's preferred alternative as described in the Proposed Plan. Area residents, local and State officials that attended the meeting were supportive of EPA's preferred alternative (i.e., Alternative 2).

At the request of Publicker Industries, Inc., the public comment period was extended to May 19, 1989. Additional time was required by Publicker to review the project site files and prepare comments. Comments received during the public meeting and the public comment period are presented in the attached responsiveness summary.

9. Cost

The No Action Alternative would have no costs associated with it since no Remedial Action (RA) would occur until completion of an RI/FS and RD activities.

Total costs associated with the Site Stabilization Alternative are estimated to be \$13.9 million. These costs are capital costs for project implementation which include waste stream transportation and disposal expenses. There will be no operation and maintenance costs associated with this alternative.

Selected Remedy

Based on available data and analysis conducted to date, Alternative 2 (Completion of Site Stabilization Activities: Off-site Treatment) is selected as the appropriate remedy for meeting the goals of the initial operable unit at the Publicker Industries Site. This alternative consists of:

- * Transportation and off-site disposal of the known remaining on-site waste streams to permitted RCRA facilities.
- * Demolition of above-grade process lines that traverse the site. This may include the recovery of unknown hazardous chemicals and the removal of pipe insulation materials such as asbestos-containing materials. Dismantled process lines will remain on-site until future remedial actions are performed.
- * Proper packaging of the insulation materials removed from the process lines. Insulation materials including asbestos, will be properly packaged and stored on-site until further remedial actions are performed.

* Transportation and off-site disposal of hazardous chemicals recovered from within the process lines to permitted RCRA facilities.

This alternative will eliminate all potential threats of fire and/or explosion which negate all current and immediate threats to human health and the environment. This alternative will remove a real and imminent threat to the safety of the people of the City of Philadelphia, Pennsylvania, and the surrounding properties.

Specific treatment technologies are not identified at this point so as not to limit potential viable technologies under remedial action. Final selection of technologies will be made based on vendor responses to performance specifications. Criteria to be used in this selection include:

- Compliance with their permits
- Compliance with SARA and ARARs
- Permanence
- Ultimate fate of contaminants
- Reduction in volume, mobility, and toxicity
- Costs

As required by Section 121 of CERCLA, as amended, 42 U.S.C. Section 9621, Alternative 2 is protective of human health and the environment, reduces the toxicity, mobility, and volume of contamination, will attain ARARs, and utilizes permanent solutions to the maximum extent practicable. This alternative is cost-effective, achieves implementable objectives and offers an effective, implementable remedy which provides long-term remediation by destroying or removing contaminants of concern from the site, and is consistent with future site remediation activities.

RESPONSE OBJECTIVES

The response objectives for this operable unit are:

- * Reduce or eliminate potential exposure pathways by which contaminants may reach potential receptors.
- * Protect the environment from potential leaks and/or catastrophic tank failure.
- * Be cost-effective.
- * Be in compliance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA).
- * Be conducted in accordance with the National Contingency Plan (NCP-Section 300.678.

- * Be in compliance with applicable or relevant and appropriate requirements (ARARS).
- * Provide permaner solutions to contamination problems to the maximum e.tent practicable.
- * Be effective over both the short and long-term.
- * Be acceptable to State authorities and the local community.
- * Leave the facility in a state conducive to remediation of other areas of the site.

Schedule

Predesign sampling and preparation of contract specifications and documents are estimated to take one month. Once the site is promulgated on the Superfund National Priorities List (NPL), remedial funds will become available to perform the selected remedial action. It is anticipated that the selected remedial action will take an additional six to eight months to complete.

PUBLICKER/CUYAHOGA WRECKING PLANT SITE ADMINISTRATIVE RECORD FILE * INDEX OF DOCUMENTS

FACTUAL INFORMATION/DATA

- 1) Report: Preliminary Report, Environmental Evaluation, Former Publicker Industries, Inc., Refinery, Philadelphia, prepared by Dames & Moore, 7/21/86. P. 1-6.
- 2) Region III Incident Notification Report, prepared by the Coast Guard, 6/26/87. P. 7-7.
- 3) Pollution Report #1, 6/26/87. P. 8-9
- 4) Pollution Report #2, 7/1/87. P. 10-11.
- 5) Pollution Report #3, 7/7/87. P. 12-12.
- 6) Pollution Report #4, 7/13/87. P. 13-14.
- 7) Report: Publicker Industries Site, Philadelphia, PA, Assessment Scope of Work, (no author cited), 7/14/87.
 P. 15-17.
- 8) Pollution Report #5, 7/17/87. P. 18-19.
- 9) Pollution Report #6, 7/17/87. P. 20-21.
- 10) Pollution Report #7, 7/22/87. P. 22-23.
- 11) Problem Areas List, Publicker Industries Site, Philadelphia, PA, 7/24/87. P. 24-24.
- 12) Pollution Report #8, 7/24/87. P. 25-27.
- 13) Pollution Report #9, 7/27/87. P. 28-29.
- 14) Pollution Report #10, 8/13/87. P. 30-31.
- * Administrative Record File available 3/9/89, updated 6/22/89.

Note: Company or organizational affiliation is identified only when it appears in the record.

- 15) Report: Final Progress Report for Overland Corporation Facility in Philadelphia, Pennsylvania, prepared by O.H. Materials Corporation, 11/12/87. P. 32-35.
- 16) Memorandum to Mr. Tom Voltaggio, U.S. EPA, re: Site conditions and possible site visit, 12/1/87. P. 36-36.
- 17) Pollution Report #1, 12/9/87. P. 37-38.
- 18) Pollution Report #2, 12/9/87. P. 39-40.
- 19) Pollution Report #3, 12/9/87. P. 41-42.
- 20) Pollution Report #4, 12/10/87. P. 43-46.
- 21) Pollution Report #5, 12/10/87. P. 47-50.
- 22) Pollution Report #6, 12/11/87. P. 51-52.
- 23) Pollution Report #7, 12/11/87. P. 53-55.
- 24) Pollution Report #11, 12/15/87. P. 56-59.
- 25) Report: Former Publicker Industries Site Briefing Document, prepared by Mr. David P. Wright, 3/88.

 P. 60-62.
- Report: Report of Findings and Work Activities,
 Federal Removal Project, Publicker Chemical Site,
 Philadelphia, Pennsylvania, prepared by B.E.S.
 Environmental Specialists, Inc., 9/14/88. P. 63-81.
- 27) Excerpts from the Publicker Industries Site Federal On-Scene Coordinator's Report, (no author cited), (undated). P. 82-86.
- 28) Report: <u>Preliminary Operations Plans</u>, (no author cited), (undated). P. 87-90.
- Report: Publicker Industries Site Original Tank Assessment, (no author cited), (undated). P. 91-115.
- 30) Background information re: Chemicals manufactured at the Publicker Plant, (no author cited), (undated). Two maps and three tables are attached. P. 116-121.
- 31) Publicker Industries Site, Scope of Work, (no author cited), (undated). P. 122-127.

32) Note re: Availability of analytical data, (no author cited), (undated). P. 128-128.

OTHER AGENCY DOCUMENTATION

1) Memorandum to Mr. Harry J. Cusick, City of Philadelphia, from Mr. Roger M. Ulshafer, City of Philadelphia, re: Fire Safety at the Publicker Site, 12/4/87. P. 129-129.

PUBLIC PARTICIPATION

- 1) Handwritten meeting attendance sheet, 7/14/87. Three business cards and a list of "RP contacts" are attached. P. 130-140.
- Newspaper article from the <u>Philadelphia Daily News</u> entitled "EPA Probes Old South Philadelphia Distillery," by Ms. Ramona Smith, 7/24/87. P. 141-141.
- Jindictment in the United States District Court for the District of Maryland, United States of America v. Cuyahoga Wrecking Corporation, Overland Corporation, Samuel Runfola, Virgil Cummings, and Ernest Ray Martin, 10/21/87. P. 142-149.
- 4) Press release from the United States Attorney for the District of Maryland, 11/5/87. P. 150-153.
- 5) Press release from the U.S. Department of Justice, 11/6/87. A document entitled "In the United States District Court for the Eastern District of Pennsylvania, United States of America v. Publicker Industries, Information Count One" is attached. P. 154-156.
- 6) Press release from the U.S. EPA Environmental News entitled "EPA Takes Over Cuyahoga Wrecking Site Clean-Up," 12/15/87. P. 157-158.
- 7) Newspaper article from the <u>Philadelphia Inquirer</u> entitled "EPA Team Cleaning Up Solvent Leak," by Mr. Mark Wagenveld, Philadelphia Inquirer, 1/15/88. P. 159-159.
- Press release from the U.S. EPA Environmental News entitled "EPA Seeks Comments on Proposed Interim Remedial Actions to Stabilize Conditions at the Publicker Site," 2/27/89. P. 160-162.
- 9) Public notice re: EPA seeks comments on proposed remedial actions at the Publicker Industries Site, 3/1/89. P. 163-163.
- Newspaper article from the <u>Daily News</u> entitled "Firefighters Stem Publicker Leak," by Ms. Ramona Smith and Mr. Joe O'Dowd, Philadelphia Daily News, (undated). P. 164-164

POLICY AND GUIDANCE

- Memorandum to Addressees from Mr. Harris L. Crump, U.S. EPA, re: Draft Asbestos Report, 6/20/88. P. 165-166.
- Memorandum to Mr. David P. Wright, U.S. EPA, and Ms. Lisa Marie Price, U.S. EPA, from Ms. Sella M. Burchette, U.S. EPA, re: Asbestos at the site, 7/15/88. P. 167-168.
- 3) A list of General Guidance Documents, U.S. EPA, (undated). P. 169-169.

DECISION DOCUMENTS

- Special Bulletin A from Mr. Robert E. Caron, U.S. EPA, re: Site conditions and status, 7/9/87. P. 170-171.
- 2) Special bulletin A from Mr. T. Massey, U.S. EPA, re: Site conditions and status, 12/9/87. P. 172-173.
- 3) Memorandum to Dr. J. Winston Porter, U.S. EPA, from Mr. James M. Seif, U.S. EPA, re: Additional funding request for the Publicker Industries Site, 12/9/87. P. 174-179.
- 4) Special Bulletin A from Mr. T. Massey, U.S. EPA, re: Site conditions and status, 12/9/87. P. 180-181.
- Memorandum to Dr. J. Winston Porter, U.S. EPA, from Mr. James M. Seif, U.S. EPA, re: Justification for continuation of a removal action at the Publicker Site, 3/1/88. P. 182-185. A memorandum regarding an Interim Additional Funding Request for the former Publicker Industries site is attached.
- Memorandum to Dr. J. Winston Porter, U.S. EPA, from Mr. James M. Seif, U.S. EPA, re: Publicker Industries Site Two Million Exemption Continuation of Removal Activities, 3/23/88. P. 186-202. A memorandum regarding the Two Million Exemption/Additional Funding Request for CERCLA/SARA Removal Actions at the Publicker Industries Site is attached.
- 7) Memorandum to Dr. J. Winston Porter, U.S. EPA, from Mr. Timothy Fields, Jr., re: Region III's Two Million Exemption and Ceiling Increase Request for Continuation of Removal Activities for the Publicker Industries Site, 4/6/88. P. 203-206. A memorandum regarding Publicker Industries Site Two Million Dollar Exemption addendum is attached.
- 8) Memorandum to Mr. James M. Seif, U.S. EPA, from Ms. Lisa Marie Price, U.S. EPA, re: Request for Twelve-Month Exemption for the Publicker Industries Site, 11/17/88. P. 207-212.
- 9) Superfund Program Fact Sheet, Proposed Plan, prepared by U.S. EPA Region III, 3/89. P. 213-217.

ENFORCEMENT DOCUMENTS

- 1) Chapter 11 Voluntary Petition, 1/6/87. P. 218-223. A Corporate Resolution, A Rule 52 Affidavit, and an Order for Retention of Attorneys for Debtor-in-Possession are attached.
- 2) Order Approving Selection of Trustee, 2/11/87. P. 224-226. An Application for Order Approving the United States Trustee's Appointment of a Trustee is attached.
- 3) Order re: Cuyahoga Equipment Corporation, Philip B. Schwab, Mary L. Schwab, Cuyahoga Wrecking Corporation, a Florida Corporation, Cuyahoga Wrecking Co., Inc., an Illinois Corporation, and Jordon & Foster Scrap Corporation, 2/13/87. P. 227-235. Two affidavits and an Order are attached.
- 4) Stipulation and Order Modifying Stay to Permit Foreclosure of Lien upon Property of Overland Corporation, 7/7/87. P. 236-242.
- 5) Letter to Mr. Robert Caron, U.S. EPA from Mr. Robert Gellman, Freedom Savings, re: Permitting access to the site, 7/10/87. P. 243-244.
- Order Amending February 13, 1987 Order and Authorizing Trustee to Execute Right Of Access and Release Agreement with Publicker Industries Inc., and Mortgagee, 7/23/87. P. 245-271. An Application for Order Amending February 13, 1987 Order and Authorizing Trustee to Execute Right of Access and Release Agreement with Publicker Industries, Inc. and Mortgages is attached.
- 7) Letter to Mr. Martin Harrell, U.S. EPA, from Mr. Richard A Penna, Schnader, Harrison, Segal, & Lewis, re: Transmittal of the release agreement and the right of access, 7/31/87. P. 272-283. The release agreement and the right of access are attached.
- 8) Consent Agreement and Order in the Matter of: Cuyahoga Wrecking Site and Publicker Industries, Inc., 8/13/87. P. 284-301.
- 9) Letter to Mr. Martin Harrell, U.S. EPA, from Mr. Richard A. Penna, Schnader, Harrison, Segal, & Lewis, re: Interpretation of the Consent Order, 10/30/87. P. 302-302.

- 10) Letter to Mr. Martin Harrell, U.S. EPA, from Ms. Amy R. Doberman, Schnader, Harrison, Segal, & Lewis, re: Site assessment report, 11/2/87. P. 303-303.
- 11) Letter to Mr. Edward Fox, Carter, Ledyard, & Milburn, from Mr. Martin Harrell, U.S. EPA, re: Fire safety at the plant, 12/4/87. P. 304-305.
- 12) Letter to Mr. Richard A. Penna, Schnader, Harrison, Segal & Lewis, from Mr. Martin Harrell, re: Fire safety at the plant, 12/4/87. P. 306-307.
- 13) Letter to Mr. Martin Harrell, U.S. EPA, from Mr. Edward M. Fox, Carter, Ledyard, & Milburn, re: Freedom Savings and Loan Association interest in the Publicker Site, 12/4/87. P. 308-309.
- 14) Letter to Mr. Richard Penna, Schnader, Harrison, Segal, & Lewis, from Mr. Martin Harrell, U.S. EPA, re: Response actions at the Cuyahoga Wrecking Site, 12/14/87. P. 310-310.
- 15) Letter to Mr. Edward Fox, Carter, Ledyard, & Milburn, from Mr. Martin Harrell, U.S. EPA, re: Response actions at the Cuyahoga Wrecking Site, 12/14/87. P. 311-311.
- 16) Letter to Mr. Peter Bergen, Le Boeuf, Lamb, Lerby, & MacRae, from Mr. Martin Harrell, U.S. EPA, re: Response actions at the site, 12/14/87. P. 312-312.
- 17) Letter to Mr. Martin Harrell, U.S. EPA, from Mr. Edward M. Fox, Carter, Ledyard, & Milburn, re: EPA's response actions at the site, 12/16/87. P. 316-316.
- 18) Letter to Mr. Martin Harrell, U.S. EPA, from Mr. G.S. Peter Bergen, Le Boeuf, Lamb, Lerby, & MacRae, re: Control access to the site, 12/18/87. P. 317-319. A formal response from Publicker Industries, Inc. regarding recent letters and communication about the site is attached.
- 19) Letter to Mr. Richard Penna, Schnader, Harroson, Segal, & Lewis, from Mr. Martin Harrell, U.S. EPA, re: Review of the site assessment report, 1/7/88. P. 320-320.

- 20) Order re: Cuyahoga Equipment Corporation, 2/23/88. P. 321-327. A Notice of Motion by Freedom Savings and Loan Association to Relinquish Control of Access to the Publicker Site and a Motion of Freedom Savings and Loan Association to Relinquish Control of Access to the Publicker Site are attached.
- 21) Order Setting Hearing on Trustee's Application for Approval of Option Agreement with Delaware Avenue Enterprises, Inc., Regarding Priority of Overland Corporation and Setting Procedure for Entertaining Offers, 6/9/88. P. 328-414.
- 22) Order Approving Option Agreement with Delaware Avenue Enterprises, Inc. Regarding Property of Overland Corporation, 7/19/88. P. 415-428. A Schedule C Description and Recital is attached.
- 23) Order Granting Supplemental Approval of Option Agreement with Delaware Avenue Enterprises, Inc. Regarding Property of Overland Corporation As Against Judgement Liens and Encumbrances, 8/9/88. P. 429-431.
- 24) Stipulation re: Cuyahoga Equipment Corporation, 9/23/88. P. 432-433.
- 25) Transcript of Public Meeting, 3/15/89. P. 434-488.
- 26) Letter to Mr. Brian Nishitani, U.S. EPA, from Mr. Barry S. Neuman, Schnader, Harrison, Segal and Lewis, re: Extending the period for submitting written comments on EPA's Proposed Remedial Action, 3/20/89. P. 489-491.
- 27) Report: Report Of Findings And Work Activities, Federal Removal Project, Publicker Chemical Site, Philadelphia, Pennsylvania, prepared by B.E.S. Environmental Specialists, Inc., 7/14/88. P. 492-507.
- 28) Letter to Mr. Jeffrey Winegar, U.S. EPA, from Mr. Jim Dych, CECOS International, re: Review of the Proposed Plans for the Proposed Remedial Actions to stabilize conditions at the Publicker Industries Site, 3/7/89. P. 508-508.
- 29) Publicker Superfund Meeting Attendance List, 3/15/89. P. 509-509.

- 30) Transmittal Sheet to Mr. Brian Nishitani, U.S. EPA, from Mr. Barry Neuman, Schnader, Harrison, Segal and Lewis, re: Transmittal of a Freedom of Information request for additional information on the Publicker Industries Site, 3/24/89. P. 510-517. A letter regarding the Freedom of Information request and the Superfund Program Fact Sheet Proposed Plan are attached.
- 31) Letter to Mr. Barry S. Neuman, Schnader, Harrison, Segal and Lewis, from Mr. Brian M. Nishitani, U.S. EPA, re: Extension of the public comment period, 3/27/89. P. 518-518.
- 32) Letter to AAA Warehousing Inc. from Ms. Donna M. McCartney, U.S. EPA, re: Comments on the Proposed Plan Fact Sheet, 3/31/89. P. 519-521.
- 33) Letter to Mr. Barry S. Neuman, Schnader, Harrison, Segal & Lewis, from Mr. Brian M. Nishitani, U.S. EPA, re: Extension of the public comment period, 3/31/89. P. 522-522.
- 34) Letter to Mr. Barry S. Neuman, Schnader, Harrison, Segal & Lewis, from Mr. Brian M. Nishitani, U.S. EPA, re: FOIA request, 3/31/89. P. 523-523.
- 35) Letter to Ms. Donna M. McCartney, U.S. EPA, from Mr. William Askins, Atochem, Inc., re: Comments on Proposed Plan Fact Sheet, 4/19/89. P. 524-524.
- 36) Letter to Mr. Brian M. Nishitani, U.S. EPA, from Mr. Barry S. Neuman, Schnader, Harrison, Segal & Lewis, re: Request for extension of the public comment period, 4/28/89. P. 525-527.
- 37) Letter to Mr. Jeffrey B. Winegar, U.S. EPA, and Mr. Harold Yates, U.S. EPA, from Mr. R. Scott McCay, Texaco, Inc., re: Comments on possible company liability, 5/1/89. P. 528-529.
- 38) Letter to Mr. Barry S. Neuman, Schnader, Harrison, Segal & Lewis, from Mr. Brian M. Nishitani, U.S. EPA, re: Request for extension of the public comment period, 5/1/89. P. 530-530.
- 39) Letter to Ms. Donna M. McCartney, U.S. EPA, from Ms. Lynn L. Zimmerman, Radian Corporation, re: Comments on possible company liability, 5/5/89. P. 531-533.

- 40) Letter to Mr. Jeffrey B. Winegar, U.S. EPA, from Mr. Barry S. Neuman, Schnader, Harrison, Segal & Lewis, re: Comments on EPA remedial actions at the site, 5/19/89. P. 534-680. The comments are attached.
- 41) Letter to Chester Salomon, Cuyahoga Wrecking Company and Overland Corporation, from Mr. Stephen R. Wassersug, U.S. EPA, re: 106(a) notice of possible liability, 5/25/89. P. 681-683.
- 42) Letter to Mr. James J. Weis, Publicker Industries Inc., from Mr. Stephen R. Wassersug, U.S. EPA, re: 106(a) notice of possible liability, 5/25/89. P. 684-686.
- 43) Letter to AAA Warehousing, Inc. from Mr. Jeffrey B. Winegar, U.S. EPA, re: Transmittal of list of notification letters sent, 5/26/89. P. 687-689. The list is attached.
- 44) Letter to Mr. Jeffrey B. Winegar, U.S. EPA, from Mr. Barry S. Neuman, Schnader, Harrison, Segal & Lewis, re: Cost estimates regarding on-site biological treatment, 5/30/89. P. 690-693. A letter detailing the costs is attached.
- 45) Handwritten letter to Marty [sic] from Dennis Matlock, Weston, Inc., re: Transmittal of information regarding the four bulk storage tanks, (undated). P. 694-729. A handwritten memorandum detailing the tank information is attached.
- 46) Report: Estimated Cost Summary, Publicker Industries, Site Stabilization Operable Unit, prepared by Mr. Jeff Winegar, U.S. EPA, (undated). P. 730-734.

GENERAL GUIDANCE DOCUMENTS *

- 1) "Promulgation of Sites from Updates 1-4," Federal Register, dated 6/10/86.
- 2) "Proposal of Update 4," Federal Register, dated 9/18/85.
- 3) Memorandum to U.S. EPA from Mr. Gene Lucero regarding community relations at Superfund Enforcement sites, dated 8/28/85.
- 4) Groundwater Contamination and Protection, undated by Mr. Donald V. Feliciano on 8/28/85.
- 5) Memorandum to Toxic Waste Management Division Directors Regions I-X from Mr. William Hedeman and Mr. Gene Lucero re: Policy on Floodplains and Wetlands Assessments for CERCLA Actions, 8/6/85.
- 6) Guidance on Remedial Investigations under CERCLA, dated 6/85.
- 7) Guidance on Feasibility Studies under CERCIA, dated 6/85.
- 8) "Proposal of Update 3," Federal Register, dated 4/10/85.
- 9) Memorandum to Mr. Jack McGraw entitled "Community Relations Activites at Superfund Sites Interim Guidance," dated 3/22/85.
- 10) "Proposal of Update 2," Federal Register, dated 10/15/84
- 11) EPA Groundwater Protection Strategy, dated 9/84.
- 12) Memorandum to U.S. EPA from Mr. William Heckman, Jr. entitled "Transmittal at Superfund Removal Procedures Revision 2," dated 8/20/84.
- 13) "Proposal of Update 1," Federal Register, dated 9/8/83.
- Community Relations in Superfund: A Handbook (interim version), dated 9/83.
- 15) "Proposal of First National Priority List," Federal Register, dated 12/30/82.
- 16) "Expanded Eliqibility List," Federal Register, dated 7/23/82.
- 17) "Interim Priorities List," Federal Register, dated 10/23/81.
- 18) Uncontrolled Hazardous Waste Site Ranking System: A User's Manual (undated).
- 19) Field Standard Operating Procedures Air Surveillance (undated).
- 20) Field Standard Operating Procedures Site Safety Plan (undated).

^{*} Located in EPA Region III office.

RESPONSIVENESS SUMMARY PUBLICKER INDUSTRIES SITE RECORD OF DECISION

The U.S. Environmental Protection Agency (EPA) must consider public comments made in response to the Proposed Plan for the Completion of Site Stabilization Activities for the Publicker Industries Site, located in Philadelphia, Pennsylvania.

The public comment period for the Publicker Industries Site Proposed Plan was March 1, 1989 to May 19, 1989. During that time, comments on the proposed plan were received from the public through the public meeting held March 15, 1989, at the Winnet South Philadelphia Community Center and through written comments received at the U.S. EPA Offices. The comments and responses have been organized into the following categories: general, community relations, administrative record, existing conditions, proposed alternatives, cost estimate, and other alternatives.

GENERAL

COMMENT 1:

Comments were made commending EPA on their activities to date and requesting EPA to supply funds and continue activities for the further protection of public health, welfare and the environment in a safe, comprehensive, deliberate, and expeditious manner.

RESPONSE 1:

EPA appreciates the comments from the public on the activities to date. EPA has evaluated alternatives for the completion of site stabilization activities designed to further reduce public health, welfare and environmental threats. The proposed plan addresses these alternatives and identifies EPA's preferred alternative. Further action requires the issuance of a Record of Decision (ROD) regarding the proposed plan, including a responsiveness summary addressing all public comments regarding the proposed plan. Additional funding for the proposed plan is needed under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) remedial program, which first requires the Publicker Industries Site to be placed on the National Priorities List (NPL). The site was proposed for the NPL in April 1989.

COMMENT 2:

Comments were made that removal is only the first step of many to insure safety of the public and environment. In addition, it was urged that the site be returned to an economically productive state.

RESPONSE 2:

The EPA concurs. Following completion of site stabilization activities, the site will undergo additional evaluation under CERCLA. The additional evaluation is referred to as a Remedial Investigation/Feasibility Study (RI/FS). The remedial investigation will most likely focus on three major areas of the site. The first area is the surface buildings and the potential physical hazard to people from collapse. Secondly, the soils at the site will be evaluated for likely contamination from spills or leaks. Finally, the ground water will be sampled and analyzed to determine if contaminants are present, and if present, to identify the potential pathways for contaminant movement and to identify potentially affected water bodies (Delaware River, New Jersey aguifer). The RI/FS will evaluate these items and more, and will propose alternatives for site management to optimize protection of public health and welfare and the environment. The Superfund Amendments and Reauthorization Act (SARA) indicates a preference for permanent remedies which allow reuse of the site. Public meetings will be held throughout the RI/FS to solicit public input on proposed actions and to advise interested parties of the status of all activities.

COMMENT 3:

Concern was raised over the lack of intervention by EPA prior to the fire or while Publicker was operational.

RESPONSE 3:

Problems at the site existed long before people were aware of the dangers of hazardous wastes. The EPA is only 19 years old and CERCLA was promulgated in 1980. CERCLA is intended to give the Federal Government the authority to clean up abandoned hazardous waste sites or to respond to spills of hazardous substances onto land or into the air or non-navigable waters, therefore the EPA did not have the ability to intervene, under CERCLA, prior to the fire. Resource, Conservation and Recovery Act (RCRA), passed in 1976, gives the EPA authority to enforce environmental standards on industries which store, treat, or dispose of hazardous wastes at their sites to protect human health and the environment. The State of Pennsylvania Department of Environmental Resources (DER) was given the authority to enforce the RCRA requirements, and has been involved with the site since approximately 1986. The DER conducted a

coastal fly-over and inspection which led to issuance of violations to the site owners prior to the fire.

EPA shares the concerns of individuals regarding the need for additional environmental laws to reduce the potential for future hazardous occurrences, such as the fire at the Publicker Industries Site.

COMMENT 4:

A commentor who had visited the site earlier wished to see the tanks again.

RESPONSE 4:

The EPA will be happy to take the commentor through the site with an appointment.

COMMENT 5:

A commentor wished to know if any funding would be made available through the Pennsylvania State Superfund program.

RESPONSE 5:

The State of Pennsylvania, as required by law, is responsible for funding 10 percent of the cleanup. Additional funding, for the Publicker Industries Site, from the State has not been proposed or allocated.

COMMENT 6:

Concerns over provisions for public input to Superfund decisions in the proposed National Contingency Plan (NCP) of December 1988 were raised.

RESPONSE 6:

While EPA Region III appreciates the public reviewing the proposed NCP, the comments need to be sent to EPA Head-quarters in Washington D.C. The comments do not directly apply to the Publicker site.

COMMENT 7:

A commentor states that according to EPA, the most serious hazards have been eliminated as a result of past activities, yet EPA is proposing to spend another \$14 million without considering alternatives that would be significantly less expensive and equally, if not more, protective.

RESPONSE 7:

The emergency removal action conducted at the site between December 1987 and December 1988, significantly stabilized conditions by addressing the immediate fire and explosion threats. The potential threat of fire continues to be significant according to the City of Philadelphia Fire Marshall's Office. Due to many spill areas of potentially ignitible substances and site structures containing large amounts of wood construction, some of which are over 50 years old, conditions that contribute to the increased risk of future fires at the site continue to exist. A fire could easily cause tanks and drums containing bulked waste materials onsite to rupture or explode, releasing chemical contaminants into the environment. Based on additional sampling/analytical data required prior to site stabilization design activities, treatment technologies that are compatible with the waste streams will be assessed for cost-effectiveness.

COMMENT 8:

A commentor supports all response actions that are necessary and cost-effective. Nonetheless, as discussed in subsequent comments, the commentor does not believe the record supports the agency's current proposed actions. Present conditions at the site are sufficiently stable to allow additional alternatives to be assessed.

RESPONSE 8:

Conditions at the site have been significantly stabilized when compared to site conditions prior to EPA's Emergency Removal Program activities. Waste streams were bulked in reconditioned tanks and in drums with the understanding that offsite disposal of these substances would occur in the immediate future. The bulking operation performed was intended to be a temporary measure until additional funding was available through the remedial program. The long-term storage of these waste streams under present conditions was not intended and is unsafe and inappropriate. Additional alternatives were considered and are presented in the ROD. Once the bulked wastes are removed offsite for disposal, site entry would be permitted to perform an RI/FS to investigate the extent of soil and ground water contamination.

COMMENT 9:

A commentor urges EPA to use time that is available to consider and implement actions that are environmentally preferable, cost-effective, and otherwise consistent with statutory and regulatory requirements.

RESPONSE 9:

EPA has used the time period since the Emergency Removal action to prepare a ROD which selects a remedy that addresses the continued threat of fire and explosion. The selected remedy meets all of the statutory mandates. It is protective of human health and the environment, attains Applicable or Relevant and Appropriate Requirements (ARARs), is cost-effective, utilizes permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable, and has a preference for treatment as a principal element.

COMMUNITY RELATIONS

COMMENT 1:

A question was raised as to why the public meeting was held in the 183rd District while the Publicker Site is located in the 184th District and why the repository is located at the EPA offices.

RESPONSE 1:

The EPA examined a number of locations and conferred with various individuals to find the most convenient and suitable location for the meeting, and chose the Winnet South Philadelphia Community Center. Criteria for selection included the close proximity to the Publicker Site (approximately 2 miles), adequate capacity (200 persons), and easy access (approximately 1.25 miles from I-95). EPA agrees to holding another meeting at a location within the 184th District in the future.

The repository location was selected to allow wide-spread access to the information since there is wide-spread interest in the site. The repository location also allows for new information to be available immediately and for easy maintenance of the information.

COMMENT 2:

A concern was raised that EPA held the public meeting to discuss whether or not the cleanup of the site should continue. The commentor did not want activities to stop.

RESPONSE 2:

EPA needs more money to continue the cleanup and needs to get it from the Superfund remedial program. The reason for the public meeting on March 15 was to streamline the administrative process required in a remedial site cleanup by receiving the public's comments on the proposed plan. EPA

has proposed site stabilization and is not considering a no action alternative at this time.

COMMENT 3:

A commentor asked if EPA had contacted community groups close to the site such as the Whitman Park Council and the Pennsport Civic Association and if the groups were familiar with potential hazards from the site and emergency measures. It was further suggested to contact local, interested community groups to advise them of future public meetings and solicit suggestions on a convenient meeting place.

RESPONSE 3:

The EPA recognizes the comment. In the future, EPA will make all attempts to personally contact local groups to advise them of upcoming meetings and entertain any and all suggestions regarding the meeting place. EPA appreciates receiving any names of interested local groups. The Whitman Park Council was contacted before the March 15th meeting and the council was in agreement with the proposed plan. EPA is unaware with the group's familiarity with the site and upon request, will supply all available and appropriate information to any group.

COMMENT 4:

A comment was made that no notice was given about the availability of technical assistance grants (TAG) to the public.

RESPONSE 4:

TAGs are not available to the public until the site is on the NPL.

ADMINISTRATIVE RECORD

COMMENT 1:

According to a commentor, the following information was not found in the administrative record:

- o Field notes
- o Backup for the costs presented at the public meeting
- o Analytical data for the materials in the bulk storage tanks

- Details on the proposed action such as dismantling the piping
- o Information on the methods of disposal or treatment considered for the proposed action
- O A discussion of whether EPA considered onsite treatment and if so, why it was rejected

RESPONSE 1:

Field notes and backup for the costs presented at the public meeting, which were inadvertently omitted from the administrative record, have since been included.

Due to the vast quantity of analytical data, this information was not included in the administrative record. However, a reference page does exist in the record notifying persons desiring to review the analytical data to contact the Remedial Project Manager.

During this initial remedial action, all above-grade process piping will be dismantled and stored onsite for future disposal. As each process line is dismantled, the recovery of its waste contents will be performed. The hazardous materials that may be found during this activity will be sampled, analyzed, transported, and disposed of offsite. Pipe insulation materials that may contain asbestos will be properly packaged and stored at a secure onsite location for future disposal.

Methods of offsite disposal or treatment considered for the proposed action cannot be selected at this time due to the unavailability of detailed analytical data. Waste streams bulked during the emergency removal action were sampled for compatibility prior to consolidation yet the chemical composition of the final bulked waste and of liquids contained within the above-grade process lines have not been identified. Detailed sampling of the bulked materials and the process line contents will occur prior to design of the bulked waste materials removal and disposal and during the process line dismantling activities, respectively. The selection of disposal or treatment alternatives will be based on the cost-effectiveness of the various amenable treatment/disposal technologies to the waste streams.

EPA has considered onsite treatment of the bulked and unknown process line waste streams. However, onsite treatment was not considered to be implementable at this site. Due to the variety of waste streams onsite requiring a variety of treatment technologies and the close proximity of site structures, the lack of available open space limits the mobilization of several treatment processes. The onsite

incineration of many of these waste streams in an area where hazardous/ignitable wastes are stored is an unsafe practice. Also area residents have opposed other incineration projects due to air quality concerns.

COMMENT 2:

A commentor wishes to correct the following perceived errors and oversights present in the administrative record:

- O Publicker Industries is not the site owner or operator. The property was sold more than 14 months before the fire of June 1987.
- o After the property was sold, a program to dismantle the facilities was initiated which involved a tragic explosion and over 140 bags of asbestos waste. These were not the result of Publicker activities.
- o A former contractor of Publicker's did not state or imply to EPA that the presence of hazardous materials represented "questionable activities" or were "totally unrelated" to Publicker operations as the record indicates. (A letter from the contractor addressing this issue was provided.)
- o The record refers to a fire in 1985. Publicker is only aware of the 1986 explosion and the 1987 fire, both of which occurred after Publicker sold the property.
- o In the written comments, Publicker produced numerous examples to illustrate that they have not been recalcitrant or uncooperative as they feel the record implies.

RESPONSE 2:

Although the facility was sold to Overland Corporation, a subsidiary of Cuyahoga Wrecking Corporation in 1986, for approximately 73 years the site was owned and operated by Publicker Industries Inc. The site was therefore known to local residents as the Publicker Industries facility. The reference of the site by any other name would make it unfamiliar to local residents and may be misleading to others.

The record inadvertently refers to a fire in 1985. The reference of the fire in 1985 is incorrect and is so noted.

It is noted that the other items in this comment do not relate to the substance of the proposed remedial action and

therefore will not be responded to in this responsiveness summary.

EXISTING CONDITIONS

COMMENT 1:

A concern was raised about the air quality in the vicinity of the Publicker Site.

RESPONSE 1:

The immediate removal actions already completed by the EPA have been designed to reduce the potential risk to public health which includes exposure by inhalation. The proposed plan sets forth additional steps intended to further minimize the potential risk to public health, welfare and the environment. The RI/FS will also identify any remaining risk through inhalation and if the risk exists, will identify alternatives to mitigate the risk.

COMMENT 2:

A concern was raised regarding the status and safety of some of the 500,000 gallon tanks onsite.

RESPONSE 2:

Four onsite tanks are currently used for the temporary storage of 1 million gallons of hazardous waste. The superstructure of the four tanks is approximately 35 years old. Prior to the placement of any hazardous wastes in the tanks, the tanks were tested, repaired as needed (new floors, walls), and certified to be structurally sound by a tank testing company. After fixing the old tanks, EPA filled the tanks with water and let them sit for a determined period of time while continually monitoring for leaks. Two other tanks at the site are used for the storage of oil. All tanks are monitored daily for leaks by recording levels, inspecting the surrounding area for signs of spills and leaks, and visually inspecting the tank exteriors for signs of leakage and/or corrosion.

COMMENT 3:

A question was asked regarding the potential for a future catastrophe (fire, explosion, release of chemical fumes into the air) at the site. If there is a potential, are there some kind of emergency procedures in place for evacuation or community notification, as well as programs in place to inform the community of potential hazards?

RESPONSE 3:

The EPA believes that there is a continued threat posed by the Publicker Industries Site which is the reason for the proposed site stabilization activities. There are several programs currently implemented by EPA, at the site, which are designed to minimize potential threats. One program is the 24-hour onsite fire watch and security patrol that has been established to provide immediate notification in the event of a fire, explosion, spill or breach in the site security. Individuals assigned to the 24-hour watch are trained in fire fighting and hazardous waste management procedures. Additionally, a Contingency Plan has been developed in conjunction with the City of Philadelphia. Contingency Plan addresses the procedures for responding to emergency situations at the site, identifies primary response authority where more than one agency would respond, identifies evacuation procedures, provides the notification procedures (call down list) for all potential response groups, and identifies those individuals primarily responsible for all emergency response actions.

In response to community awareness, the EPA will attempt to familiarize all interested parties with potential hazards and in-place response plans for the site. Additionally, in accordance with SARA Title III, EPA is required to actively participate with the community and share all available information on the characteristics and potential hazards regarding the materials and activities at the site.

COMMENT 4:

A comment was made that during the removal actions, there may have been instances where materials were bulked in such a manner so final disposal costs will be greater than if the wastes were not mixed.

RESPONSE 4:

The materials bulked on the Publicker site were sampled and analyzed for compatibility. Only compatible materials were bulked. This is a standard and acceptable practice performed on many sites by both industry and EPA in order to minimize analytical, transportation, and disposal costs. EPA has not bulked materials in such a manner as to knowingly increase disposal costs at the Publicker site.

PROPOSED ALTERNATIVE

COMMENT 1:

A comment was made that the public has been deprived of a meaningful opportunity to comment because the basis of and

assumptions underlying EPA's proposed plan are unknown and undeterminable.

RESPONSE 1:

As required by the NCP, a full 30-day comment period (March 1, 1989, to March 30, 1989) was held to seek public comment on the Proposed Plan. In addition to the 30-day period, Publicker Industries Inc. requested and received an extension to May 19, 1989.

Due to the continuing threat of fire and explosion at the site, an early action to further stabilize site conditions will be performed. Based on current analytical data obtained during the emergency removal action, twelve (12) waste streams have been identified. The identified waste streams are amenable to one or more treatment/disposal technologies which include physical/chemical treatment, biological treatment, thermal treatment, landfilling, and recycling. It is currently unknown, and can not be determined at this time, the specific characteristics of the bulked waste streams and the preferred method of treatment/disposal. Prior to design activities, EPA will perform detailed sampling of the waste streams to determine the most cost-effective method of offsite treatment/disposal.

COMMENT 2:

A commentor feels EPA has not clearly stated why immediate measures are needed.

RESPONSE 2:

The storage of hazardous/ignitible wastes at an abandoned facility that is located near a highly populated area which has had a history of fire and vandalism, warrants EPA's proposed action.

COMMENT 3:

A commentor feels EPA's proposed action, in all likelihood, would not be cost-effective, consistent with a permanent remedy, or consistent with the statutory preference for onsite treatment over offsite disposal.

RESPONSE 3:

As mandated by SARA, all remedial actions must meet certain statutory requirements. The selected initial remedial action for the Publicker Industries site is cost-effective

and is consistent with future site remedial activities. EPA has selected offsite treatment/disposal in place of onsite treatment because of the limited availability of open space for treatment process mobilization, the difficulty in operating treatment processes in an environment which stores large quantities of hazardous/ignitable wastes, and the likelihood of public opposition to any potential air emission release from onsite treatment operations.

COMMENT 4:

A comment was made that the assumption made by EPA that offsite transportation and disposal would be necessary at some point in any future site remediation is unsupported and unsupportable.

RESPONSE 4:

The lack of available open space for the safe operation of treatment processes in an area where large volumes of hazardous/ignitable wastes are stored supports the selection of offsite treatment. Also the likelihood of public opposition resulting from the potential of release of air emissions by onsite treatment operations further supports this action.

COMMENT 5:

It appears to a commentor to be appropriate to perform a focused feasibility study for the bulk and drummed wastes present on the site as EPA is proposing to address these wastes with an operable unit action at the site. Operable unit actions must be cost-effective and consistent with a permanent remedy.

RESPONSE 5:

Due to the continued threat of fire and explosion at the Publicker Industries site, EPA is taking this early action to further stabilize existing site conditions. A remedial investigation and focused feasibility study would require approximately 12 to 18 months to complete. Current site conditions justify EPA's immediate action. As responded to in other comments, the selected remedial action is cost-effective and consistent with a permanent remedy.

COMMENT 6:

A question was raised regarding the length of time it will take to complete the site stabilization.

RESPONSE 6:

EPA has completed the emergency removal activities. additional work at the facility requires funding through the CERCLA remedial program. In order to receive this funding, the site must be placed on the NPL. The site was proposed for the NPL in April 1989 and it is anticipated the list will be finalized between June and August 1989. Once on the NPL, EPA will advertise in the Commerce Business Daily for thirty days, to solicit bids from contractors to perform the required work, in accordance with the design plans and specifications prepared by the EPA. Review of the bid packages and selection of a contractor will take approximately two months. Following the award of the contract and mobilization of the contractor, site stabilization should be completed within approximately 6 to 8 months. In summary, the completion of the site stabilization activities is anticipated within 12 to 18 months.

COMMENT 7:

A commentor wanted to know if the immediate threat of fire, explosion, and release of chemicals would be eliminated following completion of the site stabilization activities.

RESPONSE 7:

The EPA believes that following the completion of the site stabilization activities, the threat to the community from fire, explosion, and catastrophic release of chemicals will be removed. Already, the threat to the community has been substantially reduced.

COST ESTIMATE

COMMENT 1:

A commentor notes that the proposed plan fact sheet states that the estimated cost of EPA's preferred alternative is \$8.5 million. However, at the public meeting, EPA said the estimate was \$13 million. EPA's written cost estimate is for \$13.9 million.

RESPONSE 1:

EPA has amended the cost estimate based on revisions made to the proposed draft scope of work for site stabilization design activities.

COMMENT 2:

A commentor believes EPA's cost estimate was not prepared in accordance with good engineering practices. It did not include a sensitivity analysis. The commentor estimates

that transportation and offsite disposal of bulk tank and drum contents should be between \$1,198,000 and \$3,355,000 instead of \$6,816,000 as estimated by EPA. The commentor's unit costs were obtained from vendors. The cost estimate is presented as a range because of the lack of material information and variations in vendor prices. Backup for the commentor's cost estimate was provided with the written comments.

RESPONSE 2:

The manner in which EPA's current cost estimate was prepared is to ensure that appropriate funding would be available to complete the site stabilization measures. A large contingency is included in the unit pricing figures for both transportation and treatment/disposal costs due to the unknown chemical characteristics and volumes of the bulk waste streams and process line contents. Also built into the unit price figures is an allowance for any additional unforeseen circumstances that may occur. Once additional sampling is performed and the design finalized, the current cost estimate will be refined.

COMMENT 3:

A comment was made that backup cost information for piping dismantling and asbestos removal and for decanting Tank No. 238 is not available according to EPA. The commentor believes that a cost estimate with no basis is inconsistent with CERCLA objectives of identifying cost-effective alternatives. Detailed comments made about the cost estimate include:

- o EPA's price for offsite disposal of bulk material is \$7/gallon for every type of bulk material. It is unknown if this estimate is an average for all materials. No justification for this cost is given nor is any offsite facility or disposal means identified. EPA said the estimate was obtained from the Technical Assistance Team (TAT) contractor.
- o In a report prepared by B.E.S. Environmental Specialists for EPA entitled "Report of Findings and Work Activities-Federal Removal Project, Publicker Chemical Site", July 1988, costs for the disposal of the Base Neutrals and Oxidizing Liquids are \$0.1 to \$0.5/gallon, not \$7/gallon as used by EPA in the proposed plan.
- o EPA's price for offsite disposal of every type of drummed materials is either \$500/drum or \$1,000/drum. Again, EPA said the estimate was

obtained from the TAT contractor and no justification is available.

- The commentor concurs with EPA's transportation cost estimate of \$2,000 per 4,000 gallons of bulked material. However, the commentor estimates that the 4000 gallons equals roughly 75 drums, not 40 drums as EPA estimates. Therefore, the \$2,000 transportation costs should be for 75 drums, not 40 drums.
- o EPA does not include \$20,000 in their cost estimate to transport material in Bulk Storage Tank 306.
- o The commentor believes PCB solids and liquids will be transported on one vehicle, not two as estimated by EPA. This results in a \$2,000 transportation charge for PCBs not being incurred.

RESPONSE 3:

EPA's current cost estimate will be refined once additional information is obtained. The most appropriate, cost-effective treatment/disposal processes will be selected once additional sampling/analysis is performed on the waste streams. Unit costs for transportation and treatment/disposal expenses will be subject to current industry market pricing.

OTHER ALTERNATIVES

COMMENT 1:

A commentor notes the costs and feasibility of particular alternatives are sensitive to the characteristics of the material. For all the money spent thus far, the commentor notes that analyses to allow selection of a cost-effective alternative was not conducted.

RESPONSE 1:

Detailed sampling and analysis of the various onsite waste streams will be performed prior to the selection of specific treatment/disposal processes to ensure cost-effectiveness.

COMMENT 2:

A comment was made that the hazardous wastes in the bulk storage tanks and drums could remain in storage until an RI/FS is complete. Significant economies of scale could be realized if the waste and contaminated soil are treated together. Continued storage with the proper safety precautions and inspections should be considered. If the tanks were actually rebuilt to industry standards, as stated by EPA, and if all explosive chemicals have been removed, continued storage should be safe. The risks posed by securely stored flammable materials is not necessarily greater than those found at other facilities in the area.

RESPONSE 2:

The time period required to perform a RI/FS is approximately 12 to 18 months. Existing site conditions justify EPA's immediate action. Although signficant site stabilization measures were taken to eliminate the immediate fire and explosion threats, the potential of future fire exists. The safe storage of the flammable materials in the rebuilt tanks is jeopardized by the surrounding conditions of the facility. The facility is in very poor condition because of past fires, demolition on the site, neglect, and vandalism. These are all contributing factors to the possible occurrence of future fires at the site which could ignite the stored materials.

COMMENT 3:

A comment was made that EPA did not consider using onsite incineration to treat the onsite wastes despite the fact that many of the wastes present may be amenable to this technology and the significant quantities present may result in significant economies of scale, and despite the fact that their contractor, B.E.S., specifically recommended that EPA investigate onsite treatment of drummed waste "because of the potential large cost savings". The commentor provided a brief evaluation of the technical feasibility and cost analysis of incineration and found it to be feasible and less expensive (\$2.67 million to \$4.88 million versus \$6.8 million) than EPA's estimate for offsite disposal.

RESPONSE 3:

EPA did consider the use of onsite incineration. However, the use of incineration at the site was eliminated from further consideration due to the unsafe operation in an unstable area where large volumes of ignitible/hazardous wastes are stored.

COMMENT 4:

A commentor evaluated onsite biological treatment of base neutrals and concluded that it should have been considered. The commentor felt they had insufficient analytical information available to accurately evaluate biological treatment; they estimated the needed analytical testing to

seriously evaluate this alternative could be performed for \$10,000 to \$20,000. Unit costs obtained by the commentor indicated a possible cost savings of over \$1.15 million for 383,000 gallons of waste over offsite disposal.

RESPONSE 4:

Offsite biological treatment of bulked base neutral liquids will be considered. However, it is not known at this time whether this waste stream will be amenable to this technology. Base neutral liquids will be sampled and analyzed to determine if substances that may be detrimental to biological treatment are present.

COMMENT 5:

A commentor feels that onsite oxidation of sulfur compounds should have been considered yet they feel the opportunity to take advantage of this technology has been lost since EPA bulked sulfide and nonsulfide wastes together. EPA should have explored possible means of cost savings.

RESPONSE 5:

EPA's Emergency Response Contractors operate on a time and materials contract. Onsite treatment processes have a potential to save costs but usually only when large quantities of materials are being treated. This is due to the initial overhead of setting up the process. There existed three drums of sulfide-containing material; two of these drums were also oxidizing liquids, the other a base neutral liquid. Due to the small quantities of sulfides at very low concentrations, it was deemed appropriate to bulk these materials as oxidizing liquids and base neutral liquids. The hazard associated with sulfides stems from the product of their reaction with acids which produces hydrogen sulfide. This hazard was not significant at the sulfide concentration of 10 ppm and the threat was mitigated once bulked.

COMMENT 6:

A commentor notes that B.E.S. suggested onsite treatment in July 1988 so EPA has no argument that time constraints precludes a more thorough assessment of alternatives.

RESPONSE 6:

Onsite treatment of the various waste streams was not selected due to existing site conditions which have been previously discussed. The selection of the proposed

remedial action was not affected by any time constraint that would have provided for a more thorough assessment of alternatives.

WDR425/018



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES

Post Office Box 2063 Harrisburg, Pennsylvania 17120 March 31, 1989

Deputy Secretary for Environmental Protection

(717) 787-5028

Stephen R. Wassersug, Director Hazardous Waste Management Division EPA Region III 841 Chestnut Building Philadelphia, PA 19107

Re: Letter of Concurrence Publicker Industries, Record Of Decision (ROD)

Dear Mr. Wassersug:

The Record of Decision for the initial operable unit which addresses the site stabilization and remedial removal activities at the Publicker Industries site has been reviewed by the Department.

The major components of the selected site stabilization remedy include:

- * Transportation and disposal of the known remaining on-site waste streams. Bulked hazardous/flammable waste streams will be transported off-site to undergo treatment and disposal at permitted Resource Conservation and Recovery Act (RCRA) facilities.
- * Demolition of above-grade process pipe lines that traverse the site. This may include the recovery of unknown hazardous chemicals and the removal of pipe insulation materials such as asbestos-containing materials.
- * Proper packaging of the insulation materials removed from the process lines. Insulation materials including asbestos will be properly stored on-site until future site remedial actions are performed.
- * Transportation and disposal of all hazardous chemicals recovered from within the process lines. Bulked hazardous/flammable waste streams will be transported off-site to undergo treatment and disposal at permitted Resource Conservation and Recovery Act (RCRA) facilities.

I hereby concur with the EPA's proposed remedy with the following conditions:

* The Department will be given the opportunity to concur with decisions related to subsequent operable units and the future Remedial Investigation and Feasibility Study to identify the extent of, and future potential for, site related contamination and remaining sources of that contamination, and evaluate appropriate remedial alternatives to assure compliance with DER cleanup ARARs and design specific ARARs.

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- * EPA will assure that the Department is provided an opportunity to fully participate in any negotiations with responsible parties.
- * The Department will be given the opportunity to concur with decisions related to the design of the Remedial Action, to assure compliance with DER design specific ARARs.
- * The Department will reserve our right and responsibility to take independent enforcement actions pursuant to state law.
- * This concurrence with the selected remedial action is not intended to provide any assurances pursuant to SARA Section 104(c)(3).

Thank you for the opportunity to concur with this EPA Record of Decision. If you have any questions regarding this matter please do not hesitate to contact me.

Sincerely,

Mark M. McClellan Deputy Secretary

Environmental Protection