



UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION III
STATEMENT OF BASIS
GROVE U.S. L.L.C.
SHADY GROVE, PENNSYLVANIA
PAD 043 891 647

I. Introduction

The United States Environmental Protection Agency (EPA) has prepared this Statement of Basis (SB) to solicit public comment on its proposed decision for the Grove U.S., L.L.C. facility located at 1565 Buchanan Trail East, Shady Grove, PA 17256 (Facility). EPA's proposed decision consists of the compliance with and maintenance of institutional controls. This SB highlights key information relied upon by EPA in making its proposed decision.

EPA's proposed decision is that previous investigations and subsequent cleanup activities are sufficient to protect human health and the environment. EPA also proposes that a February 2008 environmental covenant, prohibiting direct groundwater use in the central portion of the facility, is adequate to provide long-term prevention of exposure to residual contamination.

The Facility is subject to EPA's Corrective Action Program under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984, 42 U.S.C. §§ 6901 et seq. (Corrective Action Program). The Corrective Action Program is designed to ensure that certain facilities subject to RCRA have investigated and cleaned up any releases of hazardous waste and

hazardous constituents that have occurred at their property. The Commonwealth of Pennsylvania is not authorized for the Corrective Action Program under Section 3006 of RCRA. Therefore, EPA retains primary authority in the Commonwealth for the Corrective Action Program.

The Administrative Record (AR) for the Facility contains all documents, including data and quality assurance information, on which EPA's proposed decision is based. See Section IX, Public Participation, for information on how you may review the AR.

II. Facility Background

The Facility property consists of approximately 300 acres and is surrounded by private property, most of which is farmland. The closest residential properties to the Facility are to the southeast. A location map and property diagram are attached as Figures 1 and 2, respectively.

Operations at the Facility began in 1947 with the construction of rubber-tired farm wagons. By 1952, the Facility began production of a small crane. The Facility continues to fabricate, machine, and assemble parts in support of the production of cranes.

III. Summary of Environmental Investigation

The environmental investigations upon which EPA is relying were prepared pursuant to the Pennsylvania Land Recycling and Environmental Remediation Standards Act, commonly referred to as Act 2. This section will refer to "Act 2" or "Pennsylvania Statewide Health Standards" to remain consistent with the investigation reports. EPA has evaluated the standards and finds that the standards referenced are as protective of human health and the environment as EPA guidance requires.

Facility-wide environmental investigations began in January 1990 with a Preliminary Assessment by NUS Corporation. The assessment summarized information regarding the Facility background, environmental setting, and waste types and quantities generated at the Facility. An inspection of the Facility was also performed, and three solid waste management units (SWMU) were identified: Drum Pickup Point areas, the Hazardous Waste Storage Pad, and the former Solvent Recovery Unit. Other than a release that was being remediated at the time of the inspection at the former Solvent Recovery Unit (see below), each of the SWMUs appeared able to adequately contain any potential releases.

An Environmental Indicator (EI) inspection was performed in July 2002 to determine whether human exposures to any contamination and the migration of any contaminated groundwater were under control at the Facility. Several SWMUs in addition to the three identified in the Preliminary Assessment were identified and inspected; no documentation or evidence was found of any releases occurring at any of these SWMUs. The EI inspection report also discussed three areas of concern at the Facility. These three areas are discussed in more detail below, and include information that has been obtained since the completion of the EI inspection.

Former Solvent Recovery Unit

Investigation of specific areas of the Facility began in 1986 with plans to close the former solvent recovery unit. During closure, soil contaminated with benzene, toluene, ethyl benzene, and xylenes (collectively, BTEX) was discovered in the immediate vicinity of the former solvent recovery unit. As a result, approximately 100 tons of contaminated soil was removed from the area in 1988. Groundwater samples collected from three production wells nearest the former solvent recovery unit did not contain detectable levels of BTEX. However, the Pennsylvania Department of Environmental Protection (PADEP) suggested additional work would be necessary to adequately characterize the area.

In 1991 a soil gas survey and further soil samples were taken at the Facility. Areas of toluene, ethyl benzene, and xylene contamination north and east of the former solvent recovery unit were delineated, and a soil vapor extraction system was constructed and operated from 1994 to 1998 to remediate the soils. A Final Report under the Act 2 program was submitted to PADEP in 1998. Through the remedial efforts discussed above, the Facility achieved the residential Statewide Health Standard (SHS) for the former solvent recovery unit area. PADEP approved the Final Report in October 1998.

Former Hydraulic Oil UST

In 1994 an 8000-gallon hydraulic oil underground storage tank (UST) was removed from the northern portion of the Facility. Hydrocarbon-impacted soils were encountered during the UST removal. The lateral extent of contamination was delineated, impacted soil was excavated, and a groundwater monitoring program was planned. Three monitoring wells were installed in 1996 and were sampled nine times for BTEX from 1996 to 1999. All sample results were below applicable cleanup levels. Although it appears that this area was never formally closed under the Act 2 program, discussions with PADEP in December 2009 confirmed that there were no remaining issues in this area. As an added protective measure, this area is included in an environmental covenant that prohibits groundwater use in the central portion of the Facility. More information on the environmental covenant can be found in Section V, below.

Gasoline Fueling Island

During the removal of four USTs in November 1993, minor soil contamination was observed under one of the tanks. An investigation was performed, and the Facility submitted a Storage Tank Closure report to PADEP in 1994. Further investigation was deemed necessary since one of the soil samples collected beneath one of the USTs exceeded PADEP cleanup standards for benzene, ethyl benzene, xylenes, and total petroleum hydrocarbons. Several monitoring wells were installed and sampled as part of the further investigation, which was detailed in the Gasoline Fueling Island Groundwater Characterization report submitted to PADEP in 1998. In 2003, a Remedial Action Plan was submitted to PADEP in accordance with Act 2 that described the steps to be taken to complete remedial obligations at the gasoline fueling island; this plan was approved by PADEP in September 2003.

A Remedial Action Completion report was submitted to PADEP in April 2007. This report included eight consecutive quarters of groundwater monitoring in the area in order to

evaluate plume stability and extent. In comparison to monitoring data from 1998, the data from the 2007 report suggested that the size of the plume of contamination had decreased. A fate and transport model was constructed that suggested the maximum transport distance for the dissolved gasoline constituents would be 990 feet. Since the property boundary (as the point of compliance) is located approximately 2200 feet from the Gasoline Fueling Island, the report concluded that off-site migration of gasoline constituents was not of concern. Exposure routes to the plume of contamination beneath the gasoline fueling island were also evaluated and were deemed incomplete due to the depth to groundwater and its direction of flow, the lack of any surface water features close enough to be impacted by the localized groundwater contamination beneath the Facility, and the lack of any exceedances of the Act 2 vapor screening values. Ingestion of groundwater beneath the Facility in the area deemed the Affected Property, as shown on Figure 2, was the only potentially complete exposure route; therefore, an environmental covenant restricting groundwater use in the Affected Property area was proposed. This covenant was subsequently developed and recorded on February 7, 2008 with the Franklin County Recorder of Deeds. The Facility demonstrated attainment of the Act 2 Statewide Health Standard for gasoline constituents in groundwater beneath the Gasoline Fueling Island, as described in the Remedial Action Completion Report, which was approved by PADEP in May 2007.

EPA conducted a site visit in December 2009 as a follow-up to the Environmental Indicator Inspection. Solid Waste Management Units and Areas of Concern described in the 2002 inspection were reviewed. No evidence of any releases was observed. Documentation regarding the remediation of the Gasoline Fueling Island, described above, was obtained during this visit. As a result of this site visit, EPA determined that both Environmental Indicators had been met at the Facility (see Section VII, below).

IV. Corrective Action Objectives

EPA's Corrective Action Objectives for the Facility are the following:

1. Soils

EPA has determined that Pennsylvania's residential statewide health standards for direct contact with soils are protective of human health and the environment for individual contaminants at this Facility. Facility soils have met this standard through the various sampling efforts and environmental investigations noted above. Therefore, EPA's Corrective Action Objective for Facility soils is complete, and no further action is required for Facility soils.

2. Groundwater

EPA has determined that Pennsylvania's residential statewide health standards for groundwater are protective of human health and the environment for individual contaminants at this Facility. Although concentrations of some contaminants in groundwater continue to exceed this standard, it has been demonstrated that the area with exceedances is decreasing in size, is not migrating, and has no receptor. Therefore, EPA has determined that conditions at the Facility are protective of human health and the environment provided that consumptive uses of groundwater

are prohibited in this area. Therefore, EPA's Corrective Action Objective for Facility groundwater is to control exposure to the hazardous constituents remaining in the groundwater by requiring the compliance with and maintenance of a groundwater use restriction at the Facility.

V. Proposed Decision

Institutional Controls

ICs are non-engineered instruments such as administrative and/or legal controls that minimize the potential for human exposure to contamination and/or protect the integrity of the decision by limiting land or resource use. Under this proposed decision, some contaminants remain in the groundwater at the Facility above levels appropriate for residential uses. Because some contaminants remain in the groundwater at the Facility at levels which exceed residential use, EPA's proposed decision requires the compliance with and maintenance of the following groundwater use restriction:

1. Groundwater beneath the Affected Property (as shown in Figure 2) shall not be used for any purpose other than to conduct the operation, maintenance, and monitoring activities required by PADEP and/or EPA, unless it is demonstrated to PADEP, in consultation with EPA, that such use will not pose a threat to human health or the environment or adversely affect or interfere with the selected remedy and PADEP, in consultation with EPA, provides prior written approval for such use.

EPA proposes that the existing groundwater use restriction is necessary to prevent human exposure to contaminants. The restriction is enforceable through the Environmental Covenant executed pursuant to the Pennsylvania Uniform Environmental Covenants Act, 27 Pa. C.S. Sections 6501-6517, (UECA). The covenant was recorded in the chain of title for the Facility property in February 2008.

VI. Evaluation of EPA's Proposed Decision

This section provides a description of the criteria EPA used to evaluate the proposed decision consistent with EPA guidance. The criteria are applied in two phases. In the first phase, EPA evaluates three decision threshold criteria as general goals. In the second phase, for those remedies which meet the threshold criteria, EPA then evaluates seven balancing criteria.

A. Threshold Criteria

1. Protect Human Health and the Environment

Prior to the Facility's excavation and disposal activities, the primary human health and environmental threats posed by contaminated soils at the Facility were related to direct contact with those soils. Additional threats were related to the potential for migration of contamination in the soils through soil erosion, surface water run-off and leaching to the groundwater. The 2007 Remedial Action Completion report evaluated all relevant exposure pathways, including the potential for vapor intrusion into present or future buildings. With respect to groundwater,

while contamination remains in the groundwater beneath the Facility, the contaminants are contained in the shallow aquifer, do not migrate beyond the Facility boundary, and, considering the hydrogeologic conditions beneath the Facility, do not present a vapor intrusion concern. Based on the results of the 1998 Final Report and the 2007 Remedial Action Completion report discussed above, EPA has determined that the Facility's excavation, disposal, and other remedial activities previously performed are protective of human health and the environment provided that the groundwater use restriction is complied with and maintained.

2. Achieve Media Cleanup Objectives

The Facility has achieved the residential Statewide Health Standard (SHS) for soils throughout the property and for groundwater outside the boundary of the Affected Property as shown on Figure 2. The SHS for soil and groundwater meet EPA risk guidelines for human health and the environment at the Facility. EPA's proposed decision requires the implementation and maintenance of an institutional control to ensure that groundwater beneath the Affected Property is not used for consumptive purposes.

3. Remediating the Source of Releases

In all proposed decisions, EPA seeks to eliminate or reduce further releases of hazardous wastes or hazardous constituents that may pose a threat to human health and the environment. The Facility met this objective by removing several underground storage tanks and tons of contaminated soil, in addition to the operation of a soil vapor extraction system for four years to further remediate soils. Although the Facility still operates several USTs that could be potential sources of releases in the future, these tanks are registered with and regulated by the PADEP, are double-walled and include leak detection systems, and would be quickly addressed through the state's Storage Tank Program. Other than these active tanks, there are no remaining large, discrete sources of waste from which constituents would be released to the environment. Therefore, EPA has determined that this criterion has been met.

B. Balancing/Evaluation Criteria

1. Long-Term Effectiveness

The proposed ICs will maintain protection of human health and the environment over time by controlling exposure to the hazardous constituents remaining in groundwater. EPA's proposed decision requires the compliance with and maintenance of a groundwater use restriction at the Facility. The groundwater use restriction has already been implemented through an environmental covenant recorded in the chain of title for the Facility property. The environmental covenant runs with the land and as such will be enforceable by the Commonwealth of Pennsylvania against current and future land owners.

2. Reduction of Toxicity, Mobility, or Volume of the Hazardous Constituents

The reduction of toxicity, mobility and volume of hazardous constituents at the Facility has already been achieved by the excavation of impacted soils and the removal of several USTs. Natural attenuation of the area of impacted groundwater beneath the Facility continues to reduce

hydrocarbon concentrations.

3. Short-Term Effectiveness

EPA's proposed decision does not involve any activities, such as construction or excavation, that would pose short-term risks to workers, residents, or the environment. The groundwater use restriction has already been implemented through an environmental covenant recorded in the chain of title for the Facility property.

4. Implementability

EPA's proposed decision is readily implementable. The IC is in place. Therefore, EPA does not anticipate any regulatory constraints in implementing its proposed decision.

5. Cost

EPA's proposed decision is cost effective. An environmental covenant has already been recorded with the deed to the Facility property. Therefore, there should be no additional costs associated with implementing the proposed decision and minimal costs associated with monitoring and enforcing the environmental covenant.

6. Community Acceptance

EPA will evaluate Community acceptance of the proposed decision during the public comment period and will be described in the Final Decision and Response to Comments.

7. State/Support Agency Acceptance

EPA will evaluate State acceptance based on comments received from PADEP during the public comment period and will be described in the Final Decision and Response to Comments.

VII. Environmental Indicators

EPA sets national goals to measure progress toward meeting the nation's major environmental goals. For Corrective Action, EPA evaluates two key environmental indicators for each facility: (1) current human exposures under control and (2) migration of contaminated groundwater under control. The EPA has determined that the Facility met these indicators on August 13, 2010.

VIII. Financial Assurance

EPA has evaluated whether financial assurance for corrective action is necessary to implement EPA's proposed decision at the Facility. Given that EPA's proposed decision does not require any further engineering actions to remediate soil, groundwater, or indoor air contamination at this time and given that the costs of implementing institutional controls at the Facility will be minimal, EPA is proposing that no financial assurance be required.

IX. Public Participation

Before EPA makes a final decision on its proposal for the Facility, the public may participate in the decision selection process by reviewing this SB and documents contained in the Administrative Record (AR) for the Facility. The AR contains all information considered by EPA in reaching this proposed decision. It is available for public review during normal business hours at:

U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103
Contact: Mr. Griff Miller
Phone: (215) 814-3407
Fax: (215) 814-3113
Email: miller.griff@epa.gov

Interested parties are encouraged to review the AR and comment on EPA's proposed decision. The public comment period will last thirty (30) calendar days from the date that notice is published in a local newspaper. You may submit comments by mail, fax, or e-mail to Mr. Griff Miller. EPA will hold a public meeting to discuss this proposed decision upon request. Requests for a public meeting should be made to Mr. Miller.

EPA will respond to all relevant comments received during the comment period. If EPA determines that new information warrants a modification to the proposed decision, EPA will modify the proposed decision or select other alternatives based on such new information and/or public comments. EPA will announce its final decision and explain the rationale for any changes in a document entitled the Final Decision and Response to Comments (FDRTC). All persons who comment on this proposed decision will receive a copy of the FDRTC. Others may obtain a copy by contacting Mr. Miller at the address listed above.

List of Figures

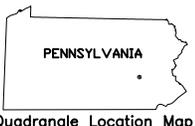
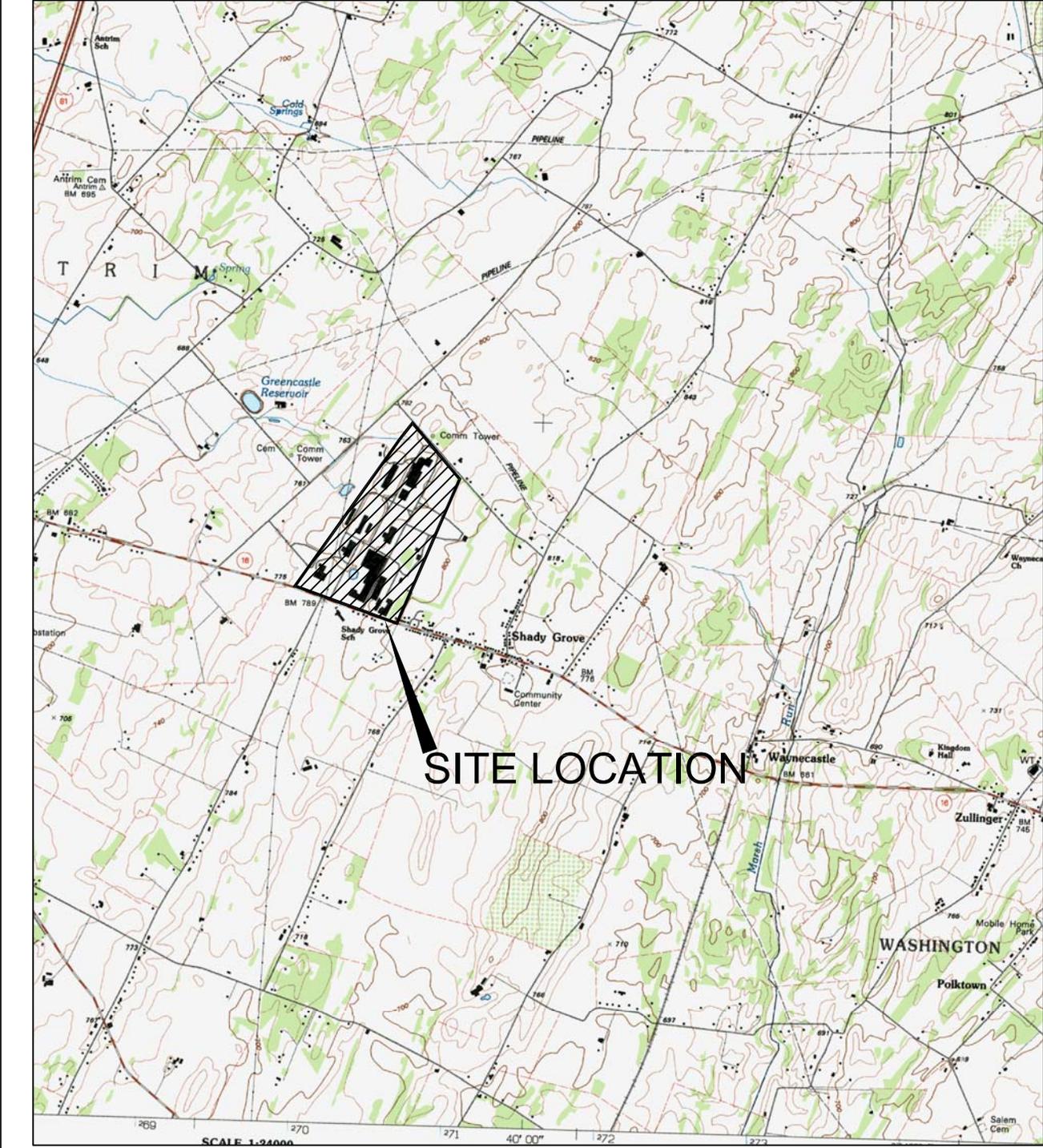
Figure 1: Site Location Map

Figure 2: Site Layout Map

Date: 8/23/12

/Abraham Ferdas/

Abraham Ferdas, Director
Land and Chemicals Division
US EPA, Region III



Source: U.S.G.S. Topographic Maps (7.5 Minute)
Greencastle, PA

Commonwealth of Pennsylvania
Department of Environmental Protection

Grove U.S. L.L.C.
Shady Grove, Pennsylvania

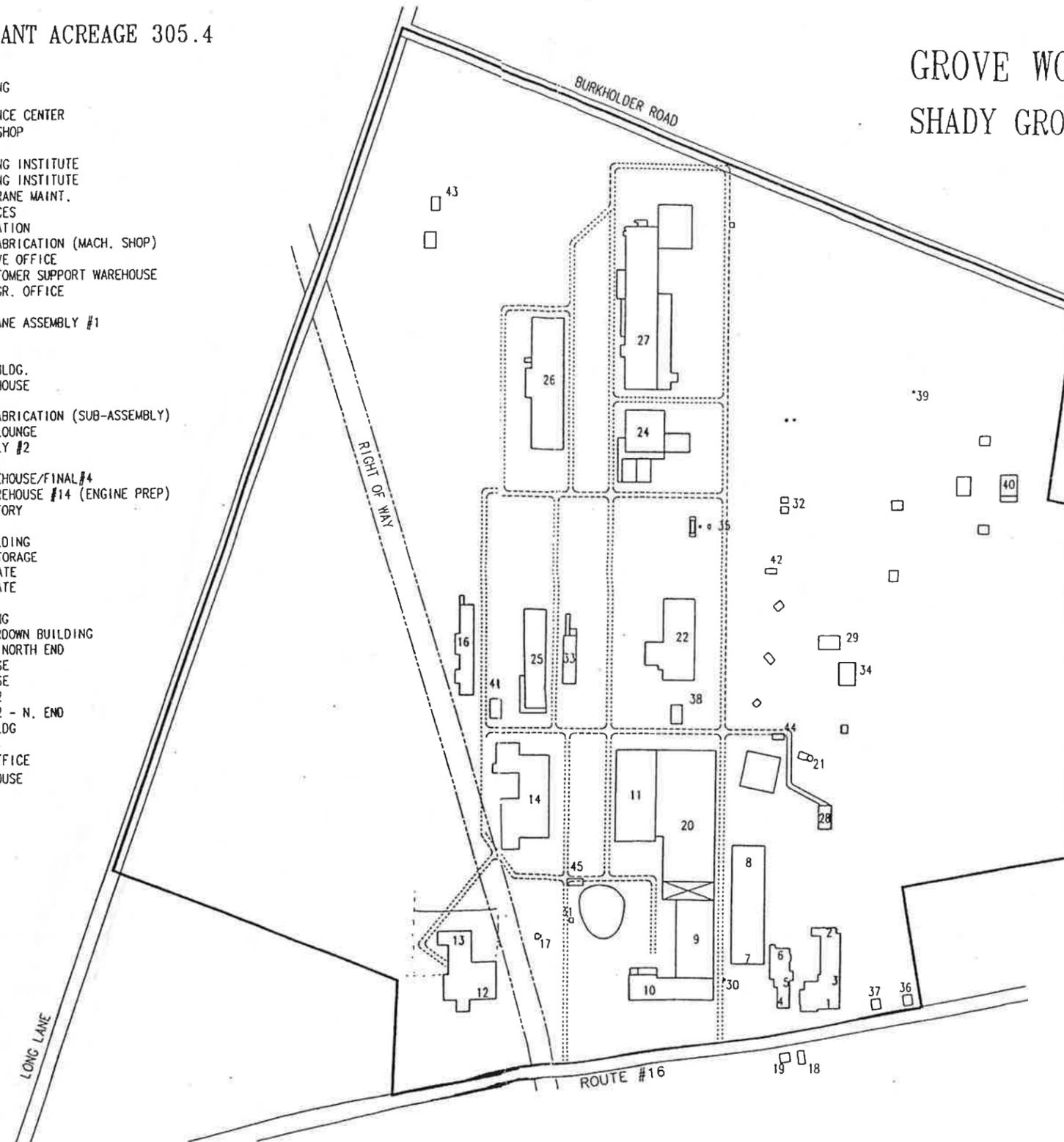
Figure 1
Site Location Map

 FOSTER WHEELER ENVIRONMENTAL CORPORATION

TOTAL PLANT ACREAGE 305.4

GROVE WORLDWIDE
SHADY GROVE PA.

- BUILDING
- 1 EAST CONFERENCE CENTER
 - 2 MAINTENANCE SHOP
 - 3 ARCHIVES
 - 4 GROVE TRAINING INSTITUTE
 - 5 GROVE TRAINING INSTITUTE
 - 6 FORKLIFT / CRANE MAINT.
 - 7 HUMAN RESOURCES
 - 8 PLATE FABRICATION
 - 9 SMALL WELD FABRICATION (MACH. SHOP)
 - 10 ADMINISTRATIVE OFFICE
 - 11 LIFETIME CUSTOMER SUPPORT WAREHOUSE
 - 12 R&D / MFG ENGR. OFFICE
 - 13 R & D SHOP
 - 14 MANLIFT / CRANE ASSEMBLY #1
 - 16 PAINT SHOP
 - 17 SWITCH GEAR BLDG.
 - 18 VENDING WAREHOUSE
 - 19 CREDIT UNION
 - 20 LARGE WELD FABRICATION (SUB-ASSEMBLY)
 - 21 OBSERVATION LOUNGE
 - 22 CRANE ASSEMBLY #2
 - 24 SHIPPING WAREHOUSE/FINAL #4
 - 25 RECEIVING WAREHOUSE #14 (ENGINE PREP)
 - 26 CYLINDER FACTORY
 - 27 BOOM FACTORY
 - 28 WARRANTY BUILDING
 - 29 PLANT ENG. STORAGE
 - 30 EAST GUARD GATE
 - 31 WEST GUARD GATE
 - 32 DRUM STORAGE
 - 33 HEMTT BUILDING
 - 34 TRAINING TEARDOWN BUILDING
 - 35 PUMP HOUSE - NORTH END
 - 36 DWELLING HOUSE
 - 37 DWELLING HOUSE
 - 38 LUNCH ROOM #2
 - 39 PUMP HOUSE #2 - N. END
 - 40 R & D TEST BLDG
 - 41 LUNCH ROOM #1
 - 42 TEST TRACK OFFICE
 - 43 STONE FARM HOUSE
 - 44 MUSEUM
 - 45 GROVE STORE



Commonwealth of Pennsylvania Department of Environmental Protection
Grove U.S. L.L.C. Shady Grove, Pennsylvania
Figure 2 Site Layout Map
FOSTER WHEELER ENVIRONMENTAL CORPORATION