



UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION III

FINAL DECISION AND RESPONSE TO COMMENTS

Western Berks Community Landfill and Recycling Center
Birdsboro, Pennsylvania
PAD 000 443 705

PURPOSE

The United States Environmental Protection Agency (EPA) is issuing this Final Decision and Response to Comments (FDRTC or Final Decision) selecting the Final Remedy for the Western Berks Community Landfill and Recycling Center, located at 455 Poplar Neck Road, Birdsboro, Pennsylvania (hereinafter referred to as the Facility). The Final Decision is issued pursuant to 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. Sections 6901 *et seq.*

On August 28, 2013, EPA issued a Statement of Basis (SB) in which it described the information gathered during environmental investigations at the Facility and proposed a Final Remedy for the Facility. The SB is hereby incorporated into this Final Decision by reference and made a part hereof as Attachment A.

This FDRTC selects the remedy that EPA evaluated under the SB. Consistent with the public participation provisions under RCRA, EPA solicited public comment on its proposed Final Remedy. On August 28, 2013, a notice of the SB was published on the EPA website: www.epa.gov/reg3wcmd/public_notices.htm and in the Reading Eagle newspaper. The thirty (30) day comment period ended on September 27, 2013.

Since EPA did not receive any comments on the SB during the public comment period, EPA has determined it is not necessary to modify the proposed Final Remedy set forth in the SB; thus, the remedy proposed in the SB is the Final Remedy selected by EPA for the Facility.

FINAL DECISION

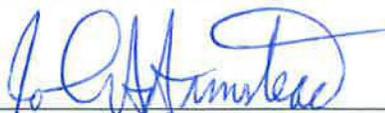
EPA's Final Remedy for the Facility consists of the following:

- (1) Operation and maintenance of the groundwater monitoring system as required by PADEP Solid Waste Permit No. 100739.
- (2) Maintenance of landfill caps as required by PADEP Solid Waste Permit No. 100739.
- (3) Operation and maintenance of the leachate collection system as required by PADEP Solid Waste Permit No. 100739.
- (4) Compliance with and maintenance of land use restrictions to prohibit residential use of the Facility by protecting the integrity and functionality of: all landfill caps, the gas collection systems, the leachate detection/collection and treatment/removal systems, and the groundwater monitoring wells as required by PADEP Solid Waste Permit No. 100739. EPA anticipates that when the landfill is no longer operating, the Facility's Post-Closure Permit will require compliance with and maintenance of the same land and groundwater use restrictions in order to minimize the potential for human exposure to contamination and protect the integrity of the remedy. If the land and groundwater use restrictions are not required by such Post-Closure Permit, EPA proposes to implement such restrictions through an enforceable mechanism such as an order, permit or an Environmental Covenant to be entered pursuant to the Pennsylvania Uniform Environmental Covenants Act, 27 Pa.C.S. §§ 6501-6517.

DECLARATION

Based on the Administrative Record compiled for the corrective action at the Western Berks Community Landfill and Recycling Center facility, I have determined that the remedy selected in this Final Decision and Response to Comments, which incorporates the August 28, 2013 Statement of Basis, is protective of human health and the environment.

Date: 9.30.13



John A. Armstead, Director
Land and Chemicals Division
U.S. Environmental Protection Agency, Region III

Attachment A: Statement of Basis (August 2013)

Attachment A

STATEMENT OF BASIS

Western Berks Community Landfill and Recycling Center

Birdsboro, Pennsylvania

Signed August, 2013



STATEMENT OF BASIS

REGION III
ID # PAD 000
443 705

Western Berks Community Landfill and Recycling Center
Birdsboro, Pennsylvania

Signed August, 2013

Facility/Unit Type:	Hazardous//Municipal, Residual/Municipal Waste Landfill
Contaminants:	Heavy metals and organic chemicals
Media:	Groundwater and soil
Proposed Remedy:	Operation and maintenance of groundwater monitoring system, maintenance of landfill caps, operation and maintenance of the leachate collection system, compliance with and maintenance of institutional controls

I. INTRODUCTION

The United States Environmental Protection Agency (EPA) has prepared this Statement of Basis (SB) to solicit public comment on its proposed remedy for the Western Berks Community Landfill and Recycling Center (Facility), formerly known as Western Berks Refuse Authority (WBRA). The Facility is subject to EPA's Corrective Action program under the Solid Waste Disposal Act, as amended, commonly referred to as the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Sections 6901 *et seq.*

EPA is providing a 30-day public comment period on this SB and may modify its proposed remedy based on comments received during this period. EPA will announce its selection of a final remedy for the Facility in a Final Decision and Response to Comments (Final Decision) after the comment period has ended. Information on the Corrective Action program as well as a fact sheet for the Facility can be found by navigating to <http://www.epa.gov/reg3wcmd/correctiveaction.htm>.

The Administrative Record (AR) for the Facility contains all documents on which EPA's proposed remedy is based. See Section VIII for information on how you may review the AR.

II. FACILITY BACKGROUND

The Facility is owned and operated by WBLF Acquisition Company, LLC. The Facility is an active municipal waste landfill which operates under Solid Waste Permit No. 100739 (State Permit) issued by the Pennsylvania Department of Environmental Protection (PADEP)

in 1972. It is located at 455 Poplar Neck Road, in Cumru Township, Berks County, PA. The Facility is situated in an oxbow of the Schuylkill River (the Schuylkill). It is surrounded by the Schuylkill on the west, south, and east sides of the Facility property. The area immediately surrounding the Facility is mainly industrial (Figure 1).

The Facility covers over 200 acres and consists of several disposal areas: Site A, Site B-1, Site B-3-1, Site B-3-2, Strip Area, Eastern Expansion (including former Site B-2), and Site C. The Facility contains hazardous waste, residual waste, and municipal waste in separate cells. The hazardous waste cell is an isolated cell located within Site A. That cell operated from 1976 to 1985 when it was closed under a closure plan approved by Pennsylvania Department of Environmental Resources (PADER), the predecessor agency to PADEP.

A leachate collection system collects the leachate that is generated from the disposal areas. Leachate from the hazardous waste cell is collected and trucked off-site for treatment. Leachate from the non-hazardous cells is treated at an on-site plant located at the southern perimeter of the Facility property adjacent to the Schuylkill. It operates under NPDES Permit PA 0054852, issued by PADEP. The treated water is discharged to the Schuylkill.

Areas of Investigation (Figure 2)

Site A	<p>Site A is a 25-acre disposal area that operated from 1972 until 1996. It operated as a municipal waste landfill, accepting municipal waste and certain industrial and residual wastes approved by PADEP, formerly known as the Pennsylvania Department of Environmental Resources (PADER). An isolated cell within Site A (northeast corner) accepted hazardous waste, including battery casings, lead-contaminated soil, oil burner residue, electroplating filter press cake, and spray booth sludge from 1976 to 1985.</p> <p>All of Site A cells are lined with either an asphalt or synthetic liner. The hazardous waste cell is lined with an asphalt liner, as it was constructed prior to construction requirements for hazard waste landfills. Leachate is collected via a piping system under the liners. Leachate from the hazardous waste cell is sent off-site to a hazardous waste treatment facility. Leachate from the remainder of Site A is treated at the on-site permitted leachate treatment facility.</p> <p>The entire Site A was capped in 1989 with a two-foot thick soil/bentonite cover. The hazardous waste cell was also capped with a multi-layered cap of soil/bentonite and a synthetic liner, in accordance with the PADER-approved closure plan.</p> <p>In 2010, lead-contaminated soil was removed from the former equipment staging area at Site A and sent off-site for disposal.</p>
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<p>Site B-1</p>	<p>Site B-1 was divided into five cells and covers a total of 19.6 acres. From 1990 to 2012 municipal waste was disposed of at this Site. All cells were constructed with a double liner and leachate collection system. The leachate is treated at the on-site permitted leachate treatment facility. After final settling and filling, all five cells will be capped and vented in accordance with the State Permit.</p>
<p>Sites B-3-1 and B-3-2</p>	<p>These two Sites collectively cover 12.5 acres and received residual waste (stabilized Envirote wastewater treatment plant sludge) from 1983 until 1997. Site B-3-1 was constructed with synthetic liners, while Site B-3-2 was constructed with double synthetic liners. Both Sites have leachate detection and collection systems which connect to the on-site permitted leachate treatment facility. Site B-3-1 was capped in 2001 and Site B-3-2 was capped in 2002, with a State approval letter for closure of these two Sites issued in 2006.</p>
<p>Strip Expansion</p>	<p>The Strip Expansion is situated between Site B-1 and Sites B-3-1/B-3-2, with sections overtopping each these Sites for a total fill capacity of 3.5 acres. The Strip Expansion was constructed with double synthetic liners incorporating a leachate detection and collection system that connects to the on-site permitted leachate treatment facility. During 2008 to 2010, municipal waste was disposed at this Site. Since the Strip Expansion overtops a portion of Site B-1, the capping and venting will be completed in conjunction with the eastern half of Site B-1 closure activities.</p>
<p>Eastern Expansion</p>	<p>The Eastern Expansion is permitted to consist of six municipal waste disposal cells covering a total of 28.3 acres. During construction of the Eastern Expansion, Site B-2 was completely exhumed along with its entire underlying clay base and several feet of bedrock. In late 2010, the Eastern Expansion became an active municipal waste landfill. It was constructed with a double synthetic liner and leachate detection/collection system that is connected to the on-site permitted leachate treatment facility. After settling and filling, the cells will be capped and vented in accordance with the State Permit.</p>
<p>Site C</p>	<p>Site C is permitted to be built sometime in the future as a two cell municipal waste landfill covering a total of 13.8 acres. It is to be constructed with a double synthetic liner and leachate detection/collection system which will be connected to the on-site permitted leachate treatment facility. After settling and filling, Site C will be capped and vented in accordance with the State Permit.</p>

III. SUMMARY OF ENVIRONMENTAL INVESTIGATIONS

Area	Description
Site A Site B-1 Sites B-3-1 and B-3-2 Strip Expansion Eastern Expansion	Groundwater is monitored as part of the Facility-wide monitoring required under the State Permit. There are currently 18 groundwater monitoring wells; one background well and 17 perimeter wells. With the construction of the Eastern Expansion only one private off-site well is available to be sampled. The sampling schedule is prescribed by the State Permit. Wells are monitored on a quarterly, semi-annual, or annual schedule, based on the specific needs of the Site that each well is monitoring.
Facility Groundwater	<p>Groundwater quality has improved over time as disposal areas have been capped to prevent infiltration of water through the waste. Groundwater monitoring results show no exceedances of Maximum Contaminant Levels (MCLs), codified at 40 C.F.R. Part 141 and promulgated pursuant to the Safe Drinking Water Act, 42 U.S.C. § 300f, <u>et seq.</u>, for any of the contaminants on-site.</p> <p>Groundwater monitoring will continue under the State Permit and through the required post-closure period for the Facility.</p>

Under the Government Performance and Results Act (GPRA), EPA has set national goals to address RCRA corrective action facilities. Under GPRA, EPA evaluates two key environmental clean-up indicators for each facility: (1) Current Human Exposures Under Control and (2) Migration of Contaminated Groundwater Under Control. The Facility met these indicators on April 16, 2003. The environmental indicator determinations are available at <http://www.epa.gov/reg3wcmd/ca/md.htm>.

IV. CORRECTIVE ACTION OBJECTIVES

Corrective Action Objective: Containment of hazardous wastes and hazardous constituents that remain in place at the Facility and the control of human and environmental exposure to those hazardous wastes and hazardous constituents in a non-residential land use scenario.

V. PROPOSED REMEDY

- (1) Operation and maintenance of groundwater monitoring system as required by PADEP Solid Waste Permit No. 100739.
- (2) Maintenance of landfill caps as required by PADEP Solid Waste Permit No. 100739.

(3) Operation and maintenance of the leachate collection system as required by PADEP Solid Waste Permit No. 100739.

(4) Compliance with and maintenance of land use restrictions to prohibit residential use of the Facility by protecting the integrity and functionality of: all landfill caps, the gas collection systems, the leachate detection/collection and treatment/removal systems, and the groundwater monitoring wells as required by PADEP Solid Waste Permit No. 100739. EPA anticipates that when the landfill is no longer operating, the Facility's Post-Closure Permit will require compliance with and maintenance of the same land and groundwater use restrictions in order to minimize the potential for human exposure to contamination and protect the integrity of the remedy. If the land and groundwater use restrictions are not required by such Post-Closure Permit, EPA proposes to implement such restrictions through an enforceable mechanism such as an order, permit or an Environmental Covenant to be entered pursuant to the Pennsylvania Uniform Environmental Covenants Act, 27 Pa.C.S. §§ 6501-6517.

VI. EVALUATION OF PROPOSED REMEDY

Threshold Criteria	Evaluation
<p>1) Protect human health and the environment</p>	<p>The operation, maintenance and monitoring activities required by the proposed remedy are already requirements under the PADEP Solid Waste Permit No. 100739 (State Permit), which was issued and is enforceable by PADEP. That permit requires the Facility to operate and maintain the caps and to inspect them annually; to monitor the groundwater and leachate; and to operate and maintain the leachate detection and collection system.</p> <p>The State Permit restricts land and groundwater uses at the Facility for any purpose other than as a landfill. EPA anticipates that when the landfill is no longer operating, the Facility's Post-Closure Permit will require operation and maintenance of the caps, the groundwater monitoring system and the leachate detection and collection system, and compliance with and maintenance of land and groundwater use restrictions that minimize the potential for human exposure to contamination and protect the integrity of the remedy. If the Facility Post-Closure Permit does not contain all of the components required by EPA's Final Remedy or if the Facility fails to meet its obligations under its PADEP permits, EPA proposes to implement such requirements through an enforceable mechanism(s) such as an order, permit and/or an Environmental Covenant to be entered pursuant to the Pennsylvania Uniform Environmental Covenants Act, 27 Pa.C.S. §§ 6501-6517.</p>

	<p>Monitoring data indicate there are no significant groundwater impacts from the Facility. Furthermore, groundwater is not used as a potable water source within the Facility boundary and groundwater from the Facility discharges to the Schuylkill River.</p>
2) Achieve media cleanup objectives	<p>EPA's proposed remedy meets the cleanup objectives based on assumptions regarding current and reasonably anticipated land and water resource use(s). Groundwater monitoring confirms there are no significant impacts or releases to groundwater beneath the landfill. The landfill caps and the State Permit operating requirements prevent human and environmental exposure to the hazardous wastes and hazardous constituents remaining in the landfill.</p>
3) Remediating the Source of Releases	<p>The State Permit requires all landfill leachate to be collected and treated so it does not contaminate the groundwater. Groundwater monitoring and Facility inspections continue under the State Permit.</p>

Balancing Criteria	Evaluation
1) Long-Term Effectiveness	<p>The proposed remedy will maintain protection of human health and the environment over time by controlling exposure to the hazardous constituents remaining in the disposal areas. EPA's proposed remedy requires the compliance with and maintenance of land and groundwater use restrictions at the Facility.</p>
2) Reduction of Toxicity, Mobility, or Volume of Hazardous Waste	<p>The reduction of toxicity, mobility and volume of hazardous constituents at the Facility has already been achieved by the construction and operation of the leachate collection and treatment system. In addition, groundwater quality has improved over time as disposal areas have been capped to prevent infiltration of water through the waste.</p>
3) Short-Term Effectiveness	<p>EPA's proposed final remedy does not involve any activities, other than those imposed under the State Permit, such as construction or excavation that would pose short-term risks workers, residents, and the environment.</p>

<p>4) Implementability</p>	<p>EPA's proposed remedy is readily implementable. The necessary components of the existing landfill caps; the groundwater, surface water and leachate monitoring systems; and the groundwater treatment and leachate collection systems are in place and are currently operational. In addition, the State Permit imposes current land and groundwater use restrictions that minimize the potential for human exposure to contamination and/or protect the integrity of the proposed remedy. EPA also anticipates that the Post-Closure Permit will restrict future land and groundwater uses. Therefore, EPA does not anticipate any regulatory constraints in implementing its proposed remedy.</p>
<p>5) Cost</p>	<p>The capital costs associated with the installation of the existing landfill caps; the groundwater, surface water and leachate monitoring systems; and the groundwater treatment and leachate collection systems have already been incurred. The Facility has provided financial assurance for post-closure costs under the State Permit.</p>
<p>6)Community Acceptance</p>	<p>EPA will evaluate Community acceptance based on comments received during the public comment period, and will address any comments in the Final Decision.</p>
<p>7)State/Support Agency Acceptance</p>	<p>EPA will evaluate State acceptance of the proposed remedy during the public comment period, and will address any comments in the Final Decision.</p>

VII. FINANCIAL ASSURANCE

Under Federal regulations, 40 C.F.R. § 264.145, the Facility is required to demonstrate and maintain financial assurance. WBLF Acquisition Company, LLC maintains surety bonds in the amount of \$10,934,470, for the Facility.

VIII. PUBLIC PARTICIPATION

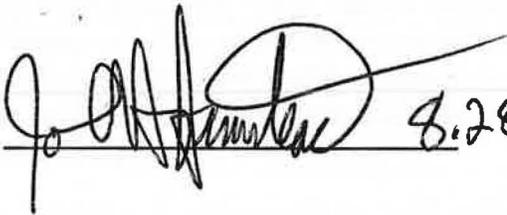
Interested persons are invited to comment on EPA's proposed decision. The public comment period will last thirty calendar days from the date that notice is published in a local newspaper. Comments may be submitted by mail, fax, e-mail, or phone to Ms. Maureen Essenthier, at the address listed below.

A public meeting will be held upon request. Requests for a public meeting should be made to Ms. Maureen Essenthier at the address listed below. A meeting will not be scheduled unless one is requested.

The Administrative Record contains all the information considered by EPA for the proposed remedy at this Facility. The Administrative Record is available at the following location[s]:

U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103
Contact: Ms. Maureen Essenthier (3LC30)
Phone: (215) 814-3416
Fax: (215) 814 - 3113
Email: essenthier.maureen@epa.gov

Date:

 8.28.13

John A. Armstead, Director
Land and Chemicals Division
US EPA, Region III

IX. INDEX TO ADMINISTRATIVE RECORD

PADEP Solid Waste Permit No. 100739, Major Permit Modification, March 28, 2008.

Western Berks Community Landfill and Recycling Center, Groundwater Quality Analysis Reports, Warmkessel Geo-Environmental, Inc., for:

- 4th Quarter 2012
- 3rd Quarter 2012
- 2nd Quarter 2012
- 1st Quarter 2012
- 4th Quarter 2011
- 3rd Quarter 2011
- 2nd Quarter 2011
- 1st Quarter 2011

Comprehensive Ground-Water Monitoring Evaluation, Western Berks Community Landfill, CME-2011, PADEP, inspection date 4/24/2011

Western Berks Community Landfill and Recycling Center 2010 Envirite Site Groundwater Assessment Report, Warmkessel Geo-Environmental, Inc., 11/2010

Comprehensive Ground-Water Monitoring Evaluation, Western Berks Community Landfill, CME-2008, PADEP, inspection date 4/7/2008

Western Berks Refuse Authority Landfill, 2005 Envirite Site Groundwater Assessment Report, Warmkessel Geo-Environmental, Inc., 8/9/2005

Environmental Indicator Determination, Western Berks Refuse Authority, Human Health Under Control, 4/16/2003

Environmental Indicator Determination , Western Berks Refuse Authority, Migration of Contaminated Groundwater Under Control, 4/16/2003

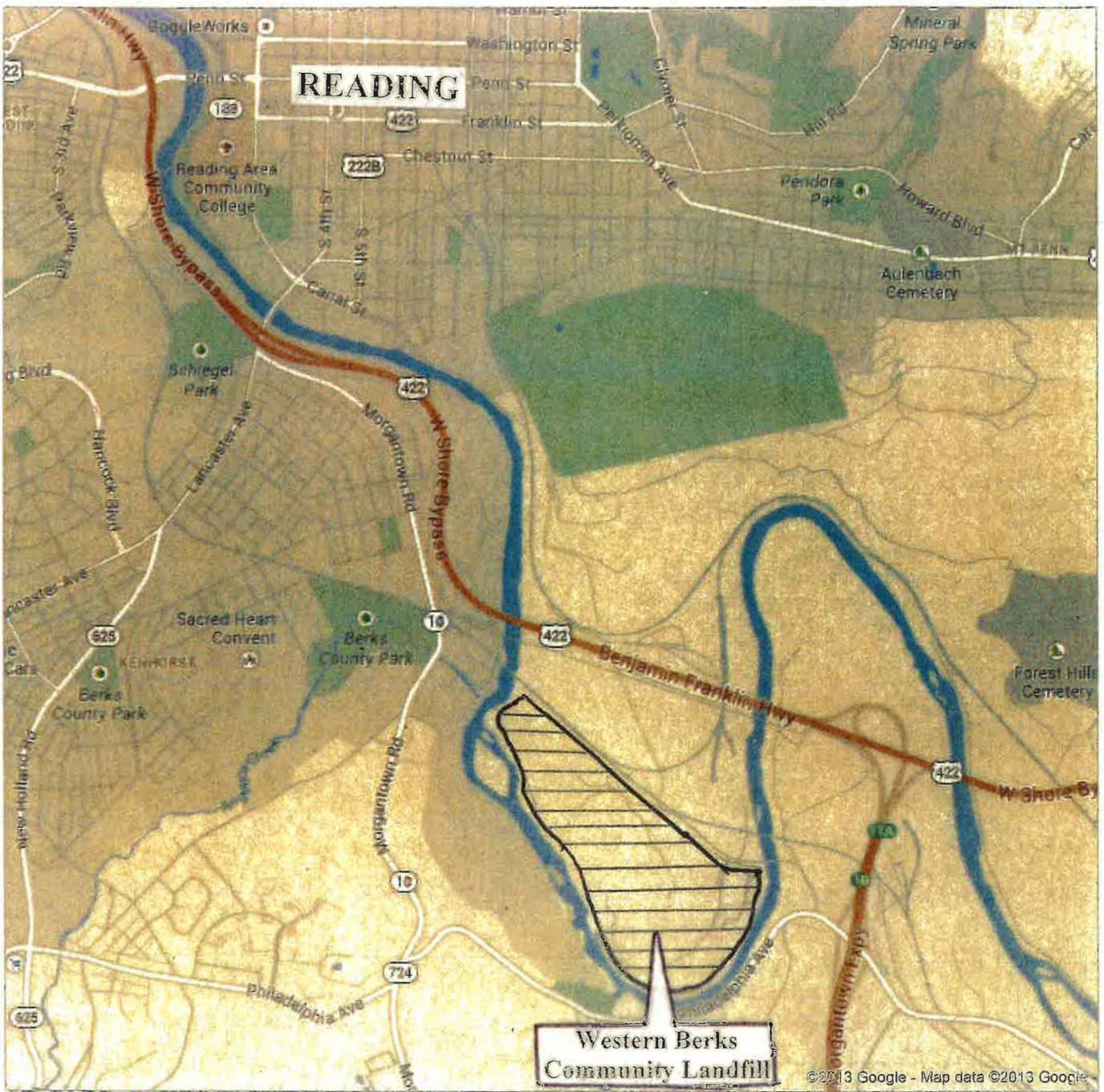
Environmental Indications Inspection Report, Forster Wheeler Environmental Corporation, March 2002, prepared for PADEP and EPA

PADEP Surety Bond approval letter, 6/27/2011

Site A Closure Plan Approval, PADEP, 9/30/1993

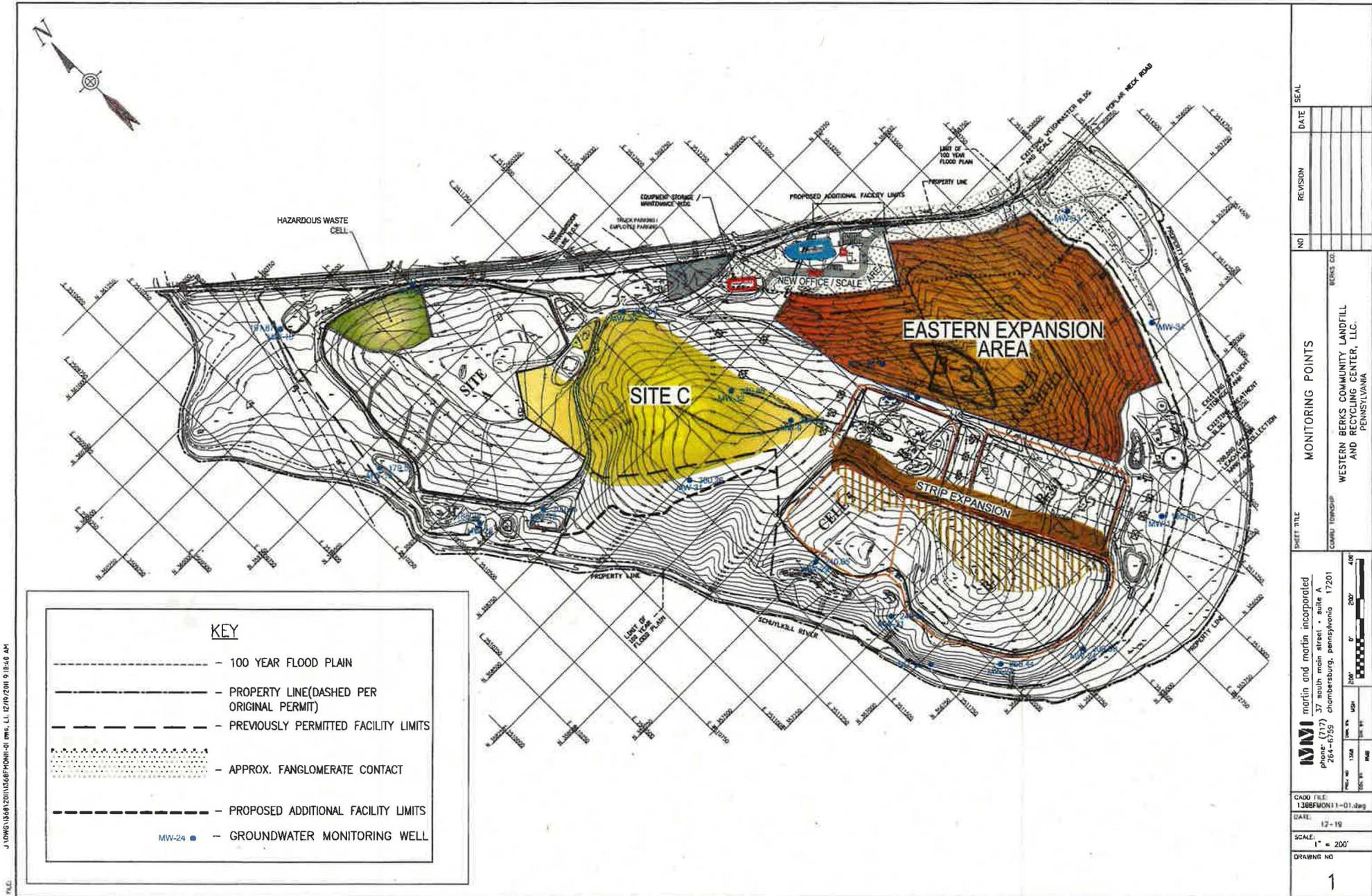
PADEP NPDES Permit No. PA 0054852

Part A Notification of Hazardous Waste Activity, Western Berks Refuse Authority Landfill, dated 7/21/1980 and 7/20/1982



Western Berks Community Landfill and Recycling Center
Birdsboro, Pennsylvania

FIGURE 1



Western Berks Community Landfill and Recycling Center
Birdsboro, Pennsylvania

FIGURE 2

