



UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY  
REGION III

STATEMENT OF BASIS

TECUMSEH REDEVELOPMENT, INC.  
Williamsport Wire Rope Disposal Area  
(formerly Bethlehem Steel Wire Rope Facility)

Maynard Street and US-220/I-180,  
Williamsport, PA 17701  
Lycoming County

PAD 003 053 753

Prepared by  
Office of Pennsylvania Remediation  
Land and Chemicals Division  
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## List of Abbreviations and Acronyms

EI	Environmental Indicator
EPA	Environmental Protection Agency
ICs	Institutional Controls
MCL	Maximum Contaminant Level for drinking water
mg/l	milligram per liter
PADEP	Pennsylvania Department of Environmental Protection
PADER	Pennsylvania Department of Environmental Resources
RCRA	Resource Conservation and Recovery Act
RSL	Regional Screening Level for tap water

## Section 1: Introduction

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The United States Environmental Protection Agency (EPA) has prepared this Statement of Basis to solicit public comment on its proposed remedy for the Tecumseh Redevelopment, Inc. (Tecumseh Redevelopment) Williamsport Wire Rope Disposal Area (hereafter referred to as Facility or Disposal Area), located at Maynard Street and US-220/I-180, Williamsport, Pennsylvania 17701.

EPA's proposed remedy for the Facility is:

- continued compliance with the terms and conditions of Pennsylvania Department of Environmental Protection (PADEP) Permit for Hazardous Waste Facility Post-Closure ID# PAD 003 053 758 (Post-Closure Permit), and
- implementation of an environmental covenant to restrict certain uses of the Facility land and groundwater.

This Statement of Basis highlights key information relied upon by EPA in proposing its remedy for the Facility.

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.* The Corrective Action program requires that owners and/or operators of facilities subject to certain provisions of RCRA investigate and address releases of hazardous waste and hazardous constituents, usually in the form of soil or groundwater contamination, that have occurred at or from 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 of Pennsylvania for the Corrective Action Program.

EPA is providing a forty-five (45) day public comment period for this Statement of Basis. EPA 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 after the comment period has ended.

Information on the Corrective Action program can be found by navigation to:

<https://www.epa.gov/hwcorrectiveactionsites>. A fact sheet, and the Government Performance and Results Act Environmental Indicator Determination for the Facility can be found by navigating to <https://www.epa.gov/hwcorrectiveactionsites/hazardous-waste-cleanup-tecumseh-redevelopment-incorporated-formerly-0>.

The Administrative Record for the Facility contains all documents, including data and quality assurance information, on which EPA's proposed remedy is based. See Section 8, Public Participation, for information on how you may review the Administrative Record.

## Section 2: Facility Background

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The Facility is located at the foot of Maynard Street in Williamsport, Lycoming County, Pennsylvania, along the West Branch of the Susquehanna River (Figure 1 - Facility Location). The Disposal Area covers approximately 4.2 acres. It is surrounded by a highway (US-220 / I-180) and the West Branch of the Susquehanna River to the south and east; the Wirerope Works, Inc. manufacturing plant to the north; and the residential/commercial properties of central Williamsport to the west and north (Figure 2 – Waste Management Areas and Monitoring Locations).

The Facility was formerly owned by Bethlehem Steel Corporation (Bethlehem Steel), which purchased the property from the Williamsport Wire Rope Company in 1937. At that time, the property included both the Disposal Area and the Bethlehem Steel Wire Rope manufacturing plant. The manufacturing plant is located north of the Disposal Area across a railroad track and service road.

Bethlehem Steel manufactured wire, wire rope and strand at the Bethlehem Steel Wire Rope manufacturing plant. The Disposal Area was used for the disposal of waste generated at the manufacturing plant. In July 1989, the manufacturing plant was sold to the current owner, Wirerope Works, Inc. Bethlehem Steel retained ownership of the Disposal Area. Tecumseh Redevelopment, the current owner of the Disposal Area, acquired the Facility in 2003.

This Statement of Basis addresses only the Disposal Area, which contains the closed surface impoundments and sludge drying beds used for disposal of waste from the Bethlehem Steel Wire Rope manufacturing plant. EPA evaluated both the manufacturing plant and the Disposal Area in 1990. EPA determined that the Disposal Area was the only environmentally significant area of the properties.

The Facility consists of six closed disposal units: three surface impoundments and three sludge drying beds.

### Impoundments

- East Impoundment No. 6 – flow equalization
- Middle Impoundment No. 5 – dewatering
- West Impoundment No. 4 – flow equalization overflow

The total capacity of the impoundments was approximately 6 million gallons. Impoundments No. 4 and No. 6 operated until November 1982. Impoundment No. 5 operated until December 1987.



Wastewaters from the manufacturing plant were treated in the plant's centralized wastewater treatment facility. Sludge from the wastewater treatment facility was sent to the three impoundments to dewater. From 1969 until 1982, impoundments No. 4 and No. 6 received untreated wastewater which contained approximately 5% untreated spent pickle liquor, a listed hazardous waste (K062). The impoundments were classified as hazardous waste units because they received untreated spent pickle liquor.

All three impoundments were closed as hazardous waste units. The area is secured by a fence with a locking gate.

### Drying Beds

The drying beds were used until November 1982 to dry and store lime-stabilized spent pickle liquor sludge, a non-hazardous waste. Dried sludge was taken to an off-site landfill for disposal until 1980. After that time, the dried sludge accumulated in the drying beds.

The drying beds were closed as non-hazardous waste units.

The disposal units were closed in accordance with the closure requirements prescribed in the Order for Closure of Surface Impoundments, issued by the Pennsylvania Department of Environmental Resources (PADER), currently the Pennsylvania Department of Environmental Protection (PADEP), to Bethlehem Steel on April 28, 1989.

PADEP issued a Post-Closure Permit to Bethlehem Steel Corporation in April 1994, and a permit renewal to Tecumseh Redevelopment in October 2008. Tecumseh Redevelopment continues post-closure care requirements for maintenance and environmental monitoring of the Disposal Area.

## **Section 3: Environmental Assessment and Completed Actions**

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Bethlehem Steel completed closure of the disposal units in 1990. Bethlehem Steel and Tecumseh Redevelopment have performed post-closure monitoring and maintenance activities under the terms of the RCRA Post-Closure Permit. All closure and post-closure activities have been with the oversight of PADEP.

### **Remedial Activities Completed**

Closure of Disposal Units – The waste management units were closed in 1989/1990 by consolidating the waste and surrounding soil from drying beds into the impoundments. The impoundments were then closed by stabilizing the waste and capping the waste in place. The impoundments were capped as a single impoundment area.

The major elements of the closure were:

- excavating the sludge and surrounding contaminated soil from the impoundments and drying beds;
- physically and chemically stabilizing the sludge and contaminated soil with cement kiln dust;
- analyzing the stabilized waste for EP Toxic metals to document that the metals were immobilized;
- adding a subbase of limestone in the excavated impoundments in order to remediate groundwater contamination;
- replacing the stabilized sludge/soil (approximately 11,300 cubic yards) into the impoundments; and
- grading and capping the area of the impoundments to prevent exposure to waste material and infiltration of surface water through the closed impoundments.

The composition of the cap is (from bottom to top):

- 50-mil high-density polyethylene liner,
- geonet drainage layer,
- 95-mil nonwoven geofabric,
- 2.5 feet of cover soil, and
- a 6-inch vegetated topsoil layer.

Drying Beds - The drying beds area was backfilled with clean soil. In October 1993, PADEP approved the paving of the drying beds area for use as a parking lot for the adjacent restaurant. The approval required that any material excavated from the drying beds area must be relocated back into the drying beds area. The area is still owned by Tecumseh Redevelopment. It is under long-term lease to 21<sup>st</sup> Century Properties as a parking area.

Impoundments – The impoundments closure area is approximately 2.3 acres. It includes the capped area and the access road. In November 1990, Bethlehem Steel Corporation filed a deed notice identifying the closed impoundments area with the Office for Recording of Deeds for Lycoming County.

Tecumseh Redevelopment is conducting monitoring and maintenance at the closed impoundments area, as required by the Post-Closure Permit.

**Monitoring** (Figure 2 – Waste Management Areas and Monitoring Locations)

Groundwater monitoring is conducted for the closed hazardous waste impoundments area to assess the adequacy of the closure measures. Monitoring for the residual waste drying beds area is not required since the waste and adjacent soil was removed. Only marginally contaminated soil is likely to remain.



The groundwater monitoring system has been in place since 1989. During closure operations in 1990, all monitoring wells showed increased concentrations of monitored parameters due to excavation activities. The post-closure period, since 1991, shows a trend of decreasing contaminant concentrations in the groundwater.

Groundwater generally flows toward the north/northeast, away from the river. This flow is the result of elevated river levels controlled by the flood-control dam located approximately 600 feet downstream of the Facility. River water flows under the Facility and discharges back to the river downstream of the dam. Under season high groundwater conditions, the groundwater may flow south/southeast to discharge to the river.

In accordance with the requirements of the Post-Closure Permit, groundwater is monitored to assess the quality and flow direction of the groundwater. The groundwater is monitored at 6 locations, 1 upgradient (background) and 5 downgradient/sidegradient of the closed impoundments. Groundwater samples are analyzed for indicator parameters and the 4 constituents of concern: iron, manganese, lead, and chromium. Groundwater was monitored quarterly until 2002. In March 2002, PADEP issued a minor modification to the Post-Closure Permit. The permit modification reduced the groundwater monitoring requirement to semi-annual sampling, based on the stable quality of the groundwater samples during the preceding years.

### **Environmental Indicators**

EPA uses two Environmental Indicators (EIs) to evaluate a contaminated facility's progress toward meeting final cleanup standards. They are:

- Current human exposures under control (also referred to as Human Exposure EI), and
- Migration of contaminated groundwater under control (also referred to as Groundwater EI).

Based on an evaluation of all site characterizations, inspections, and environmental data; EPA determined, in April 1999, that the Facility meets both the Human Exposure EI and the Groundwater EI.

### **Current Site Conditions**

Post-closure care is in accordance with the Post-Closure Permit. There are no operations on site other than mowing, general maintenance, and inspection of the Facility. The impoundments area is surrounded by a perimeter fence with a locking gate. The Facility is inspected quarterly by Tecumseh Redevelopment and annually by PADEP. The most recent PADEP inspection, conducted on 2/3/2017, noted that the closed impoundments were well vegetated with no erosion.

Semi-annual groundwater sampling continues at the six monitoring wells: M-6 (upgradient/background), M-1, M-4R, M-5R, M-8, and M-9. A review of the most recent two years of monitoring data identified only two contaminants above the EPA drinking water screening levels: iron and manganese.

EPA uses the following drinking water screening levels:

- the National Primary Drinking Water Standard Maximum Contaminant Levels (MCLs), promulgated pursuant to Section 42 U.S.C. §§ 300f et seq. of the Safe Drinking Water Act and codified at 40 CFR Part 141; and
- EPA Regional Screening Levels (RSLs) for tap water, when no MCL exists.

EPA does not have an MCL for either iron or manganese. Therefore, RSLs were used to evaluate the concentrations in groundwater.

The following table summarizes the contaminant concentrations that exceeded the RSLs. Concentrations are in milligrams per liter (mg/l).

Contaminant	Screening Level RSL - mg/l	Location	Concentration Range mg/l	Average Concentration mg/l
Iron	14	M-6 background	10.1 to 35.4	21.7
		M-9	18.7 to 20.8	19.7
Manganese	0.43	M-6 background	3.0 to 5.0	4.4
		M-1	0.7 to 1.0	0.9
		M-4R	1.6 to 2.0	1.8
		M-8	5.4 to 6.4	5.8
		M-9	1.6 to 2.0	1.8

Both iron and manganese are present in the upgradient/background well, M-6, at concentrations similar to wells adjacent to the closed surface impoundments. This correlation is consistent throughout the post-closure monitoring period. Therefore, these contaminants are more likely attributable to background concentrations than to releases from the impoundments.

## Section 4: Corrective Action Objectives

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### Disposal Units

EPA's corrective action objectives for the Disposal Area are:

- Impoundments area - to contain the waste beneath the cap in order to control exposure to any hazardous constituents in the waste, and
- Drying beds area – to prevent exposure to residual contamination that may remain in the soil.



## **Groundwater**

EPA has determined that site remediation already conducted at the Facility has returned groundwater to background levels.

EPA's corrective action objective for groundwater is to continue to prevent releases from the disposal units into the groundwater.

## **Section 5: Proposed Remedy**

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The proposed remedy is outlined below. It proposes continued compliance with the Post-Closure Permit and the implementation of institutional controls (ICs). ICs are generally non-engineered mechanisms such as administrative and/or legal controls that minimize the potential for human exposure to contamination and/or protect the integrity of a remedy. As a result, the proposed remedy will require Tecumseh Redevelopment to implement land use restrictions to prohibit human exposure to contamination left in place. ICs may be established through an enforceable mechanism such as an order, permit or an environmental covenant pursuant to the Pennsylvania Uniform Environmental Covenants Act. If the enforceable mechanism selected were to be an environmental covenant, it would be recorded with the Facility property records.

EPA's proposed remedy for the Facility is:

1. Tecumseh Redevelopment shall continue to comply with the terms and conditions of the PADEP Permit for Hazardous Waste Facility Post-Closure ID# PAD 003 053 758.
2. Tecumseh Redevelopment shall implement land and groundwater use restrictions to prevent human exposure to contaminants at the Facility through an Environmental Covenant pursuant to the Pennsylvania Uniform Environmental Covenants Act, 27 Pa. C.S. Sections 6501-6517, to be recorded with the deed for the Williamsport Wire Rope Disposal Area. The following restrictions shall apply:
  - a) The Facility shall not be used for residential purposes;
  - b) Groundwater at the Facility shall not be used for any purpose, including, but not limited to, use as a potable water source, other than to conduct the maintenance and monitoring activities required by PADEP and/or EPA;
  - c) No new wells shall be installed at the Facility unless it is demonstrated to PADEP that such wells are necessary to perform post closure activities and PADEP provides prior written approval to install such wells;
  - d) The Facility shall not be used in any way that will adversely affect or interfere with the integrity and protectiveness of the cap over the disposal units, unless it is

demonstrated to PADEP that such use will not pose a threat to human health or the environment and PADEP provides prior written approval for such disturbance; and

- e) All earth moving activities at the Facility, including excavation, drilling and construction activities, shall be conducted in a manner such that the activity will not pose a threat to human health or the environment, or adversely affect or interfere with the requirements of the Post-Closure Permit. No such activities shall take place at the Facility unless PADEP provides prior written approval.

## Section 6: Evaluation of Proposed Remedy

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Consistent with national guidelines, EPA evaluates proposed corrective action remedies in two phases. EPA first evaluates them against three threshold criteria. For those meeting the threshold criteria, EPA then evaluates seven balancing criteria.

Threshold Criteria	Evaluation
1) Protect human health and the environment	<p>The primary human health and environmental threats posed by the disposal areas are related to direct contact with the waste and contamination remaining in place and any hazardous constituents leaching to the groundwater. These threats have been mitigated by the closure activities required by PADEP and by the requirements of the Post-Closure Permit.</p> <p>The Post-Closure Permit requires post-closure care, including: groundwater monitoring, final cover maintenance, and security/maintenance inspections.</p> <p>Implementation of the proposed environmental covenant to restrict land and groundwater uses will minimize the potential for human exposure to contamination and protect the integrity of the remedy.</p> <p>In addition, monitoring data indicate there are no significant groundwater impacts from the disposal areas.</p>
2) Achieve media cleanup objectives	Media cleanup objectives were achieved by consolidating, stabilizing, and capping the waste material.
3) Remediating the source of releases	Remediation of source areas was achieved by consolidating, stabilizing, and capping the waste material. In addition, groundwater monitoring and site inspections continue under post-closure requirements to detect any releases that may occur in the future.



Balancing Criteria	Evaluation
4) Long-term effectiveness	The proposed land use restrictions will maintain protection of human health and the environment over time by controlling exposure to waste material and the remaining contaminated soil. EPA anticipates that these restrictions will be implemented through an environmental covenant to be recorded with the Facility property records.
5) Reduction of toxicity, mobility, or volume of the hazardous constituents	Toxicity, mobility, or volume of the hazardous constituents has been largely reduced by past remediation at the Facility. The waste material is stabilized and capped in the impoundments area. Any remaining contaminated soil at the drying beds area is covered with clean fill and surface paving (parking lot).
6) Short-term effectiveness	EPA anticipates that the proposed land use restrictions will be implemented shortly after EPA selects a final remedy.
7) Implementability	EPA's proposed remedy is readily implementable. EPA does not anticipate any regulatory constraints in requiring the Facility property owners to continue compliance with the Post-Closure Permit and implement the institutional controls described above.
8) Cost	The proposed remedy is cost effective. The costs associated with the institutional controls will be minimal.
9) Community acceptance	EPA will evaluate community acceptance during the public comment period and provide an analysis in the Final Decision and Response to Comments.
10) State/support agency acceptance	EPA will evaluate state acceptance during the public comment period and provide an analysis in the Final Decision and Response to Comments.

## Section 7: Financial Assurance

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EPA is proposing that the financial assurance in place under the Post-Closure Permit, in the amount of \$330,231, satisfies the financial assurance requirement. In addition, the mechanisms in place under PADEP authorities to evaluate and modify the financial assurance are sufficient.

## Section 8: Public Participation

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You are invited to comment on EPA's proposed remedy. The public comment period will last forty-five (45) calendar days from the date that the notice is published in a local newspaper. Comments may be submitted by mail, email, or phone to Maureen Essenthier at the address listed below.

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

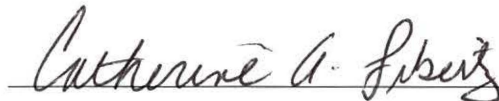
The Administrative Record contains all information considered by EPA for the proposed remedy. It is available at the following location:

U.S. EPA Region III  
1650 Arch Street  
Philadelphia, PA 19103  
Contact: Maureen Essenthier (3LC20)  
Phone: (215) 814-3416  
Email: [essenthier.maureen@epa.gov](mailto:essenthier.maureen@epa.gov)

## Section 9: Signature

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Date: 6-30-17



Catherine A. Libertz, Acting Director  
Land and Chemicals Division  
US EPA, Region III

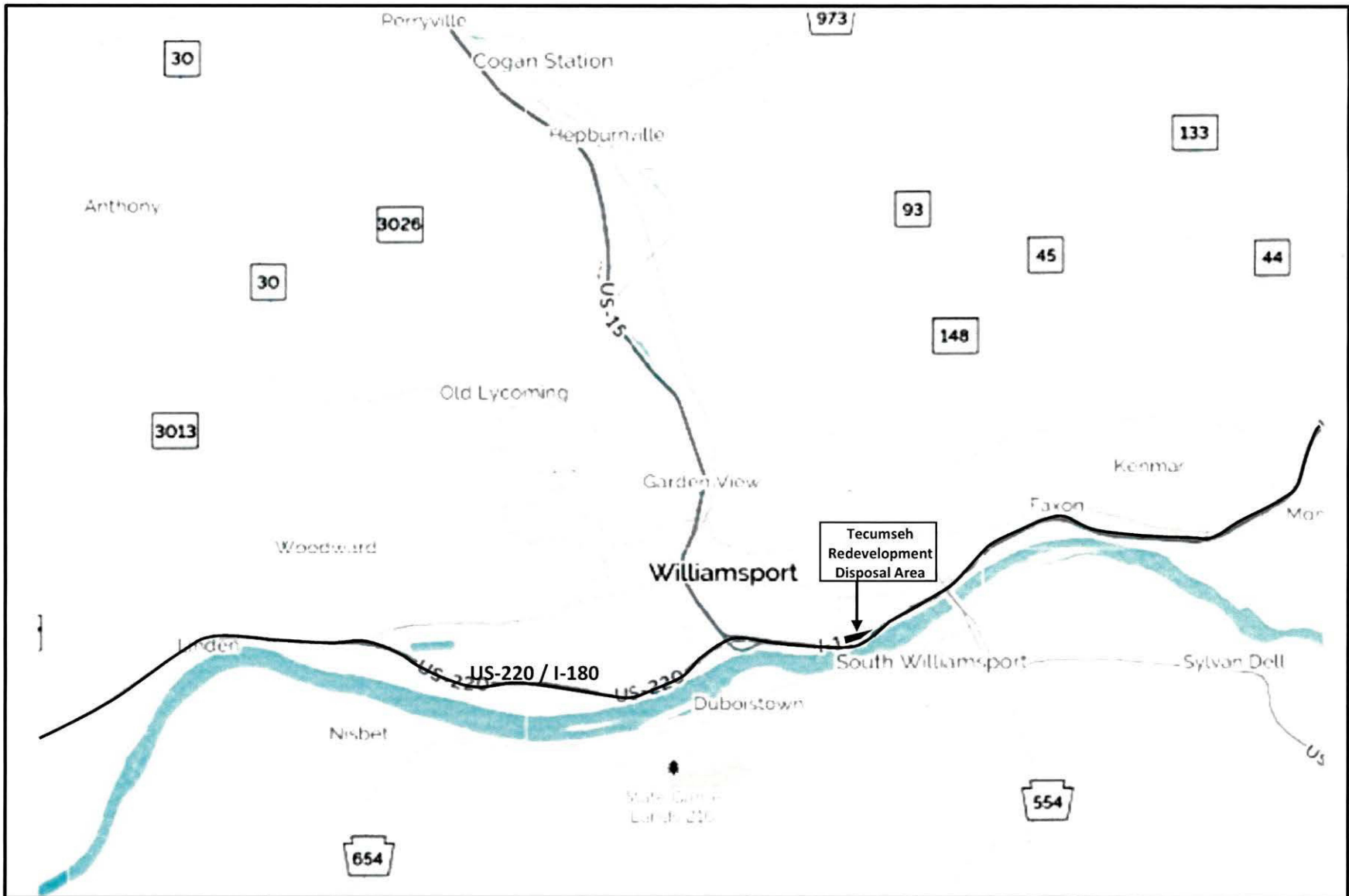


## Section 10: Index to Administrative Record

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1. EPA Review of Environmental Monitoring Data, 2<sup>nd</sup> Quarter 2015 through 4<sup>th</sup> Quarter 2016, EPA Memo, 5/31/2017
2. PA Surety Bond for Waste Management Facility, Tecumseh Redevelopment, Inc. - Williamsport, Facility, 3/14/2017
3. PADEP Inspection Reports, Tecumseh Redevelopment, Inc., Williamsport, PA:
  - 2/3/2017 and 12/29/2015
4. Tecumseh Redevelopment, Inc., Williamsport Wire Rope Facility Former Surface Impoundments Post-Closure Reports
  - 2016 Annual Report, Post-Closure Groundwater Monitoring, January 2017
  - 4<sup>th</sup> Quarter 2016 Semi-Annual, Post-Closure Groundwater Monitoring, January 2017
  - 2<sup>th</sup> Quarter 2016 Semi-Annual, Post-Closure Groundwater Monitoring, July 2016
  - 2015 Annual Report, Post-Closure Groundwater Monitoring, January 2016
  - 4<sup>th</sup> Quarter 2015 Semi-Annual, Post-Closure Groundwater Monitoring, November 2015
  - 2<sup>th</sup> Quarter 2015 Semi-Annual, Post-Closure Groundwater Monitoring, June 2015
5. PADEP Post-Closure Permit ID# PAD 0003 0530758, Tecumseh Redevelopment, Inc., Closed Surface Impoundments, renewal, issued 10/1/2008
6. PADEP Post-Closure Permit ID# PAD 0003 0530758 minor modification, Bethlehem Steel Corporation, 3/27/2002
7. Post-Closure Plan for Bethlehem Steel Corporation Williamsport Hazardous Waste Site, January 2002 revision
8. Approval for paving of sludge drying bed area, PADER letters to Bethlehem Steel Corporation, 8/24/93, 9/28/93, and 10/22/93.
9. Post-Closure Groundwater Monitoring Program, January 1991
10. Deed Notice (Declaration of Bethlehem Steel Corporation), 11/20/1990
11. Certification of Closure for Surface Impoundments and Sludge Drying Beds, October 1990
12. Bethlehem Steel -Williamsport, EPA ID PAD 003 053 753, EPA evaluation memo, 2/22/1990
13. Groundwater Assessment and Abatement Plan, January 1990

14. Order for Closure of Surface Impoundment, including Closure Plan, April 1989 with amendments
15. Bethlehem Steel Corporation Williamsport Plant Hazardous Waste Permit Application, revised 1/30/1991
16. Bethlehem Steel Corporation Wire Rope Plant, Solid Waste Management Unit information letter, 8/26/1985
17. Bethlehem Steel Corporation Williamsport Plant Hazardous Waste Permit Application, 11/7/1980

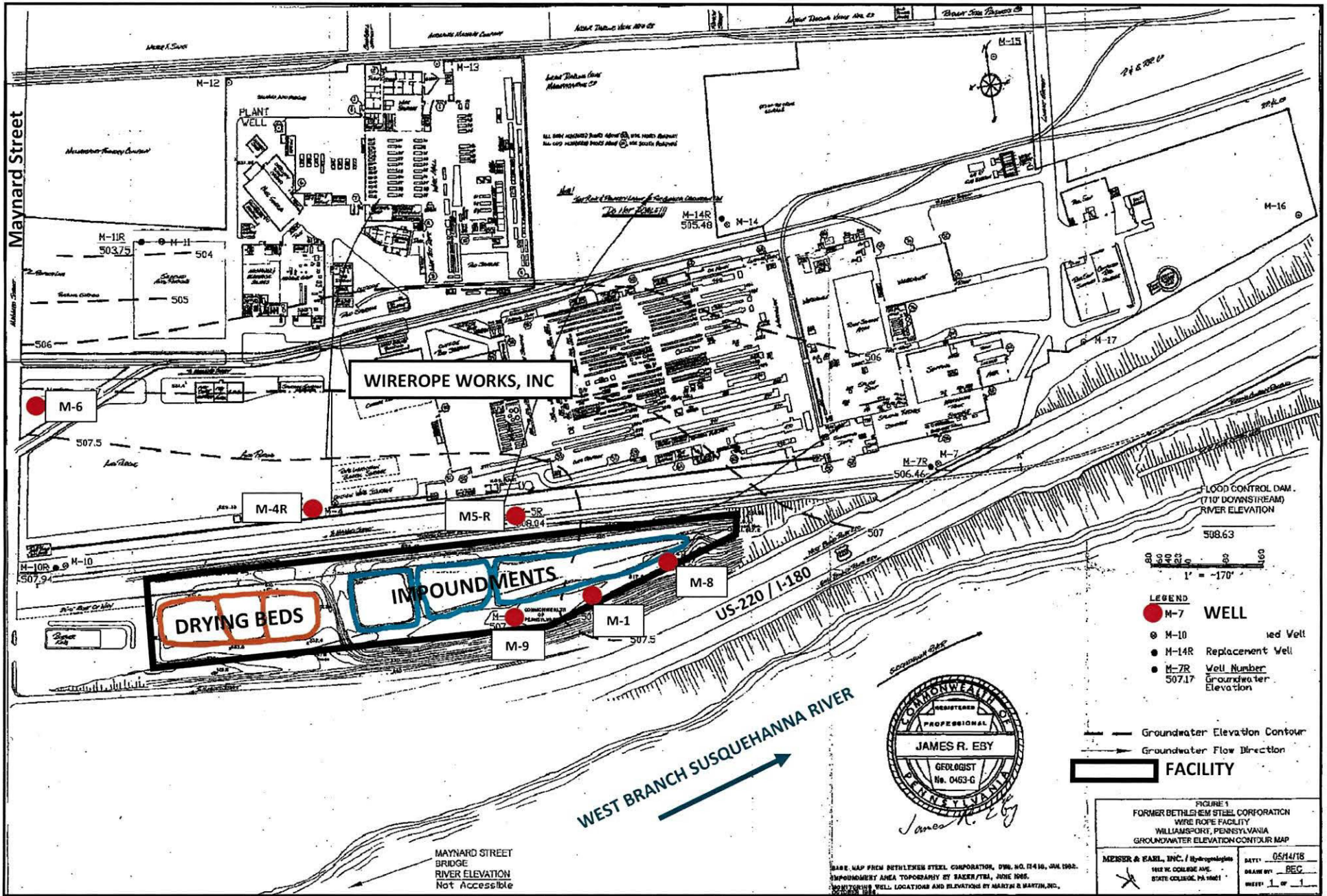


**TECUMSEH REDEVELOPMENT, INC.**  
**Williamsport Wire Rope Disposal Area**

**Figure 1: Facility Location**







TECUMSEH REDEVELOPMENT, INC.  
Williamsport Wire Rope Disposal Area

Figure 2: Waste Management Areas  
and Monitoring Locations

