



UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY  
REGION III

STATEMENT OF BASIS

SECHAN LIMESTONE INDUSTRIES, INC.

2925 NEW CASTLE ROAD  
PORTERSVILLE, PENNSYLVANIA

EPA ID NO. PAD 002 860 377

Prepared by  
Office of Remediation  
Land and Chemicals Division  
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## Table of Contents

Section 1: Introduction.....	3
Section 2: Background.....	3
Section 3: Environmental Assessment and Completed Actions .....	4
Section 4: Corrective Action Objectives.....	7
Section 5: Proposed Remedy .....	7
Section 6: Evaluation of Proposed Remedy.....	8
Section 7: Financial Assurance .....	10
Section 8: Public Participation.....	10
Section 9: Index to Administrative Record.....	11

## Figures

- Figure 1: Site Location Map
- Figure 2: Waste Management Areas
- Figure 3: Current Groundwater Monitoring Well Network

## List of Abbreviations and Acronyms

AR	Administrative Record
COA	Consent Order and Agreement
EI	Environmental Indicator
EPA	Environmental Protection Agency
IC	Institutional Control
PADEP	Pennsylvania Department of Environmental Protection
RCRA	Resource Conservation and Recovery Act
UECA	Uniform Environmental Covenants Act

## 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 final remedy for the Sechan Limestone Industries, Inc. facility located at 2925 New Castle Road, Portersville, PA (Facility or Sechan). EPA has prepared this Statement of Basis to explain the rationale for and to solicit public comment on its proposed remedy.

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 of 1984, 42 U.S.C. §§6901 et seq., commonly referred to simply as RCRA. The corrective action program requires owners of certain current and past hazardous waste management operations to reduce or eliminate exposure to hazardous chemicals released to the environment. The Commonwealth of Pennsylvania's Department of Environmental Protection (PADEP) also has a long history of addressing environmental contamination at the Facility. However, PADEP is not authorized to implement the RCRA corrective action program. In Pennsylvania, that authority rests solely with EPA.

Information on the corrective action program as well as a fact sheet (listed under Sechan Limestone Industries Inc.) for the Facility can be found on the internet at <https://www3.epa.gov/reg3wcmd/ca/pa.htm>.

EPA has compiled an administrative record (AR) containing 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 AR.

## Section 2: Background

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The Facility is located south of the intersection of US Route 422 and US Route 19 in Portersville, PA. The Sechan site is located in a predominantly rural area of western Pennsylvania and occupies approximately 685 acres. Figure 1.

It operated primarily as a limestone quarry from the 1940s through the mid-1970s. Several quarried areas were used for landfilling from 1972 through 1985.

The landfill areas and associated impoundments and sedimentation ponds operated under PADEP solid waste permits. Landfill areas A, A', C-3, F, and G received only non-hazardous, lime-neutralized pickle liquor waste. Landfill area C received both hazardous and non-hazardous waste. Areas C-1 and C-2 operated under RCRA Interim Status authority from July 1982 until April 1985. Figure 2.

All landfill areas and associated units were closed under the supervision of the PADEP. The post-closure requirements are specified in the October 23, 1996 Consent Order and Agreement (COA).

The Facility continues to monitor the groundwater to ensure that contamination from the closed landfills does not migrate off-site. Current site activities include only the post-closure activities of maintenance and monitoring.

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

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Sechan has operated under PADEP permits and orders since 1979. Waste disposal activities were prescribed by PADEP Solid Waste Permit No. 300705, issued 9/6/1979 and amended on 2/15/1980.

Closure activities were performed in accordance with the PADEP-approved plan and with PADEP oversight.

The post-closure activities at Sechan are overseen by PADEP under its authorized RCRA hazardous waste program. The post-closure requirements were originally specified in the 1987 Post Closure Plan, which was incorporated into the 1987 COA. Modifications to the post-closure requirements are specified in the 1996 COA. The 1996 COA requires continued inspection, maintenance, monitoring, and assessment of the landfill caps and groundwater monitoring system

#### **1. Waste Disposal Units**

All waste disposal units were former limestone strip pits that were lined with clay soil from the site. They operated under Pennsylvania Department of Environmental Resources (now known as PADEP) Permit No. 300705.

##### Hazardous Waste Units C-1 & C-2

These units cover an area of approximately 10 acres. They received waste between August 1981 and May 1985. The units contain neutralized spent pickle liquor, electric arc furnace emission control dust (K061), waste water treatment sludge from electroplating (F006), electroplating bath sludge, EP Toxic wastes (containing barium, cadmium, chromium and lead), and petroleum-refining sludge (mixed with soil).

The units were closed and capped in 1987 with multi-layer synthetic/soil caps, as required by PADEP.

##### Non-Hazardous Waste Units A, A', C-3, F, and G

These units cover an areas of approximately 20 acres. Areas A, A', C-3, and F received waste between January 1980 and April 1981. Area G received waste in 1972 and 1973. The units contain lime-neutralized spent pickle liquor. Unit C-3 also contains some municipal waste. They were capped with clay soil caps.

### Support Operation Units

The following units supported the landfilling operations:

- truck wash area to clean trucks after unloading waste;
- settling basins (8) to collect rainwater runoff;
- unloading basins (8) constructed of concrete and used to stabilize waste with flyash and kiln dust; and
- leachate holding tanks (4) to store contaminated groundwater prior to off-site disposal.

These units were removed as part of the landfill closure activities, with the exception of the stormwater basins.

## **2. Monitoring**

Forty-three (43) wells were installed between 1979 and 1986 to monitor both upgradient and downgradient groundwater in two aquifers beneath the site. In 1990 the plan was modified to require monitoring of 17 wells surrounding Area C. This modification was approved by PADEP based on an assessment of quarterly monitoring data that documented only area C required continued monitoring.

Current groundwater monitoring is performed pursuant to the 1996 COA. A total of eight wells in both shallow and deep aquifers are sampled quarterly. Two upgradient and six downgradient wells surrounding Area C are monitored for indicator parameters and the constituents of concern: cadmium, chromium and lead. Monitoring well locations are identified in Figure 3.

## **3. Remedial Activities Completed**

Remediation activities at the facility included remediation of contaminated groundwater and closure of the waste management units.

### Groundwater Remediation

Groundwater contamination attributed to C-1 was first documented in 1983. In response, Sechan repaired the clay liner at the southwest corner of Area C-1 and began pumping groundwater from three wells in the area of the detected contamination. The groundwater remediation system operated from August 1984 through March 1988. PADEP authorized the termination of the groundwater remediation system after Sechan installed an impermeable cap over Area C-1 and the groundwater quality improved.

### Facility Closure

The Facility was closed with the oversight of PADEP. Closure requirements were completed in 1987. All disposal units were closed with waste remaining in place.

The non-hazardous waste units, areas A, A', C-3, F, and G, were graded and covered with a cap consisting of several feet of clay, soil, and a vegetation layer.

The hazardous waste units, areas C-1 and C-2, were covered with a clay cap in 1985 after disposal operations ceased. In 1986, PADER required Sechan to cap both C-1 and C-2 with geosynthetic multi-layer caps.

A closure plan for C-1 and C-2 was approved in May 1987. The landfill caps consists of an impermeable liner, drainage layer, geotextile, cover soil and vegetation layer. Closure activities were completed by mid-summer of 1987. Closure certification, post-closure care and monitoring requirements for the C areas were established in the December 16, 1987 COA.

#### **4. 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).

In April 2001, EPA and PADEP conducted a site visit. The visit consisted of a site tour and information gathering to assess the current status of the site. EPA determined that both Environmental Indicators for human exposures and groundwater migration are under control.

#### **5. Current Site Conditions**

##### Soils

All contaminated material is contained under the landfill caps. The closed disposal units are heavily vegetated with no signs of erosion.

##### Groundwater

The groundwater is monitored quarterly, in accordance with the approved post-closure plan. A review of the most recent 8 quarters of monitoring showed no contaminants above the EPA drinking water screening levels.

##### Surface Water

The nearest surface water body, Slippery Rock Creek, is located east and approximately 1000 feet from the facility boundary and approximately 2500 feet downgradient from the closed disposal units. Since all disposal units are capped and groundwater beneath the Facility is not contaminated, there is no threat of contamination migrating to Slippery Run Creek.

## Section 4: Corrective Action Objectives

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### 1. Landfills

For the approximately 30 acres occupied by the closed landfills, EPA's corrective action objective is to contain the waste beneath the caps and vegetation layers to control exposure to any hazardous constituents in the waste.

### 2. Groundwater

EPA has determined that site remediation already conducted at the Facility has returned groundwater to its maximum beneficial use. EPA has used the National Primary Drinking Water Standard 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 RSLs for tapwater where no MCLs exist.

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

## Section 5: Proposed Remedy

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The proposed remedy is outlined below. It proposes 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 Sechan to implement land use restrictions to prohibit human exposure to waste 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. Sechan shall continue to comply with the terms and conditions of the 1996 COA with PADEP, which includes post-closure care requirements.
2. Sechan 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 (UECA), to be recorded with the deed for the Sechan property. The following restrictions shall apply to the Facility areas that has been impacted by the landfills and support activities (Restricted Areas):

- a) The Restricted Areas shall not be used for residential purposes;
- b) Groundwater at the Restricted Areas 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 on the Restricted Areas 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 Restricted Areas shall not be used in any way that will adversely affect or interfere with the integrity and protectiveness of the multi-layered covers over the landfill areas, unless it is demonstrated to EPA that such use will not pose a threat to human health or the environment and EPA provides prior written approval for such disturbance; and
- e) All earth moving activities on the Restricted Areas, including excavation, drilling and construction activities, shall be conducted in a manner such that the activity will not pose a threat to human health and the environment or adversely affect or interfere with the post-closure requirements of the 1996 COA. 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 landfills are related to direct contact with the waste remaining in place and any hazardous constituents leaching to the groundwater. These threats have been mitigated by the closure and post-closure activities required by PADEP under the COA.</p> <p>It requires Sechan to maintain the landfill caps and to operate and maintain the groundwater monitoring system. 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 landfills.</p>
2) Achieve media cleanup objectives	Media cleanup objectives have been achieved by past remediation at the Facility; groundwater remediation and capping of the landfills.



Threshold Criteria	Evaluation
3) Remediating the source of releases	Remediation of source areas has been achieved by past groundwater remediation and capping of the landfill areas. In addition, groundwater monitoring and site inspections continue under PADEP-approved 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 remaining contaminated soil. EPA anticipates that these restrictions will be implemented through an enforceable permit, order, or 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 remaining contaminated material is covered by caps and vegetative layers.
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 implement institutional controls described above.
8) Cost	The proposed remedy is cost effective. Sechan has already completed the remedial activities. The costs associated with implementing the proposed land use restrictions requires would 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 1996 COA, a bond in the amount of \$323,209, satisfies the financial assurance requirement. In addition, the mechanisms in place under the PADEP RCRA authorities to evaluate and modify the financial assurance on an annual basis 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 thirty (30) calendar days from the date that notice is published in a local newspaper. Comments may be submitted by mail, fax, 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 (3LC30)  
Phone: (215) 814-3407  
Fax: (215) 814 - 3113  
Email: [essenthier.maureen@epa.gov](mailto:essenthier.maureen@epa.gov)

Date: 8-10-2016

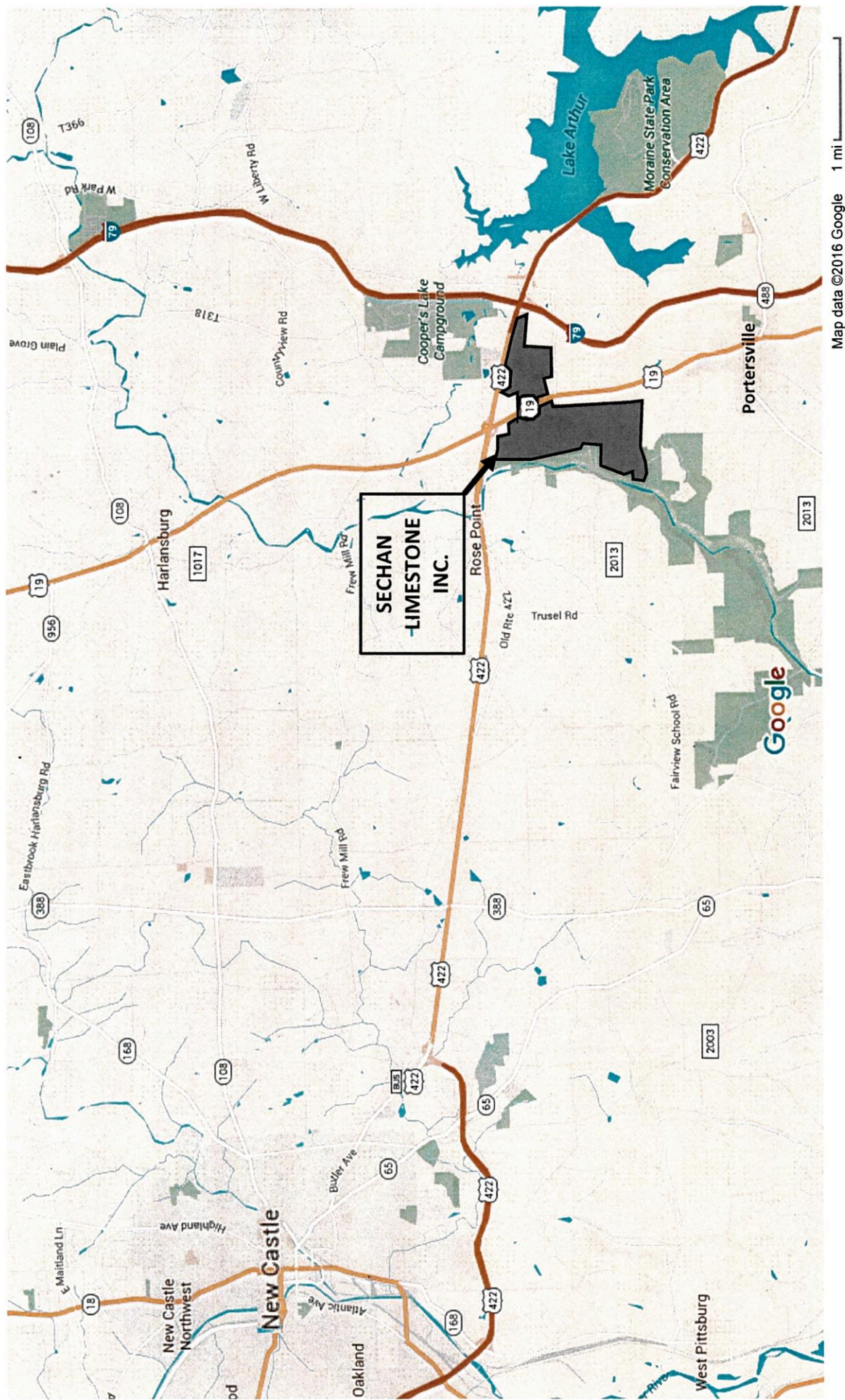
original signed by JAA  
John A. Armstead, Director  
Land and Chemicals Division  
U.S. EPA Region III

## Section 9: Index to Administrative Record

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1. 2015 Comprehensive Groundwater Monitoring Report, PADEP
2. Sechan Cement Kiln Dust Waste Pile Sampling, PADEP email (Christine Hall), dated 8/2/2016
  - Sampling results attached
3. Closure Plans
  - 11-22-96 Closure Plan Modification Letter
  - 10-22-96 Changes to Post-Closure Plan Letter
  - 7-3-96 Groundwater Well Closure Plan
  - 1-3-90 Groundwater Monitoring Plan
  - 11-17-86 Revisions to Closure/Post-Closure
4. Groundwater Monitoring Reports
  - 3-23-16 First Quarter 2016
  - 11-16-15 Fourth Quarter 2015
  - 10-2-15 Third Quarter 2015
  - 6-23-15 Second Quarter 2015
  - 4-20-15 Resample Of Tox, Well D-M
  - 4-13-15 First Quarter 2015
  - 11-17-14 Fourth Quarter 2014
  - 10-9-14 Third Quarter 2014
  - 6-25-14 Second Quarter 2014
5. Legal Documents And Consent Orders
  - 10-23-96 Consent Order And Agreement
  - 10-26-90 Settlement Agreement
  - 4-25-90 Settlement Agreement
  - 12-16-87 Consent Order And Agreement
  - 11-12-86 Final Report RCRA Section 3013 Order
6. Financial Information - 12-10-96 Replacement Bond

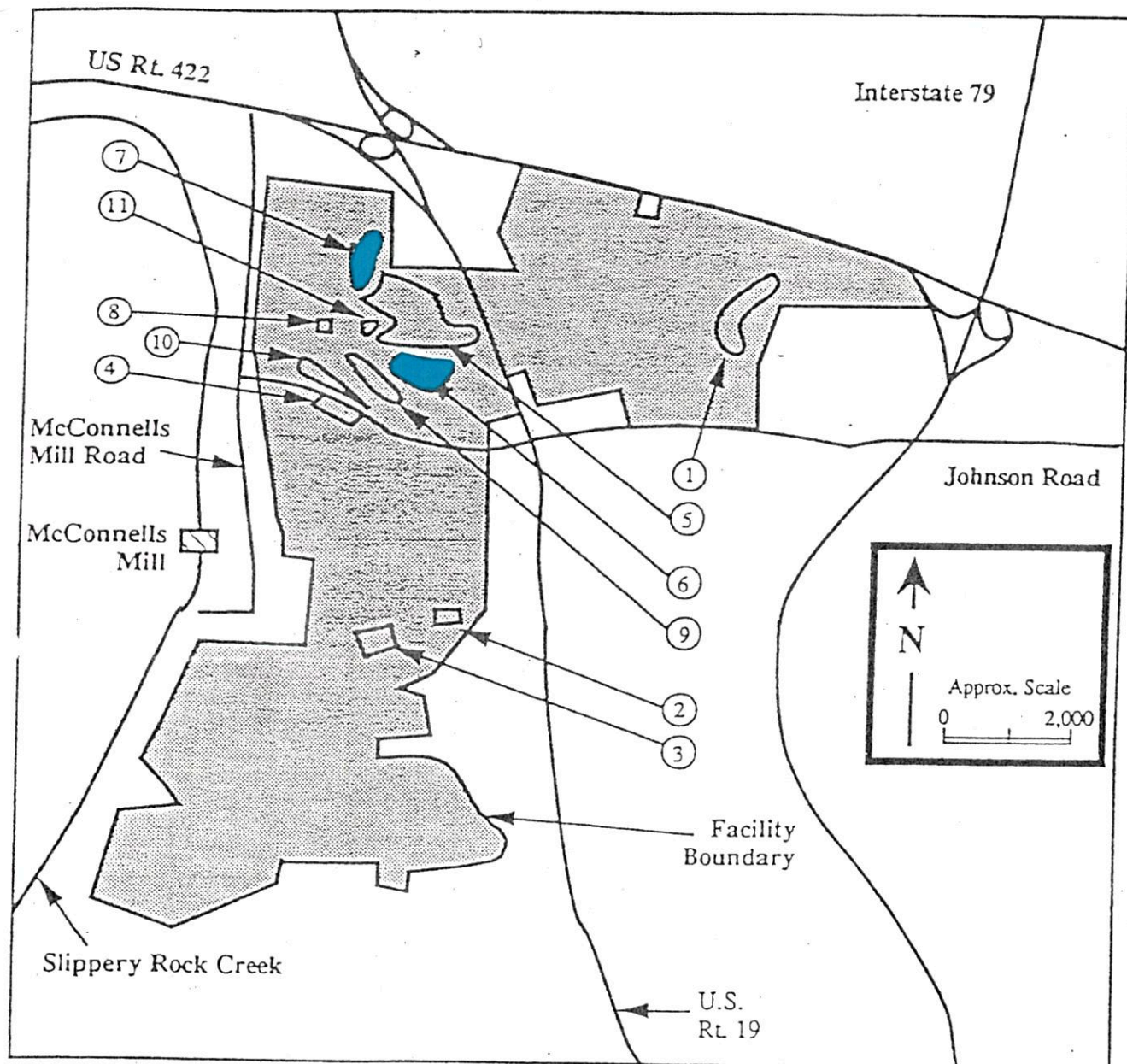




**SECHAN LIMESTONE INC.**  
**FIGURE 1 - Site Location Map**

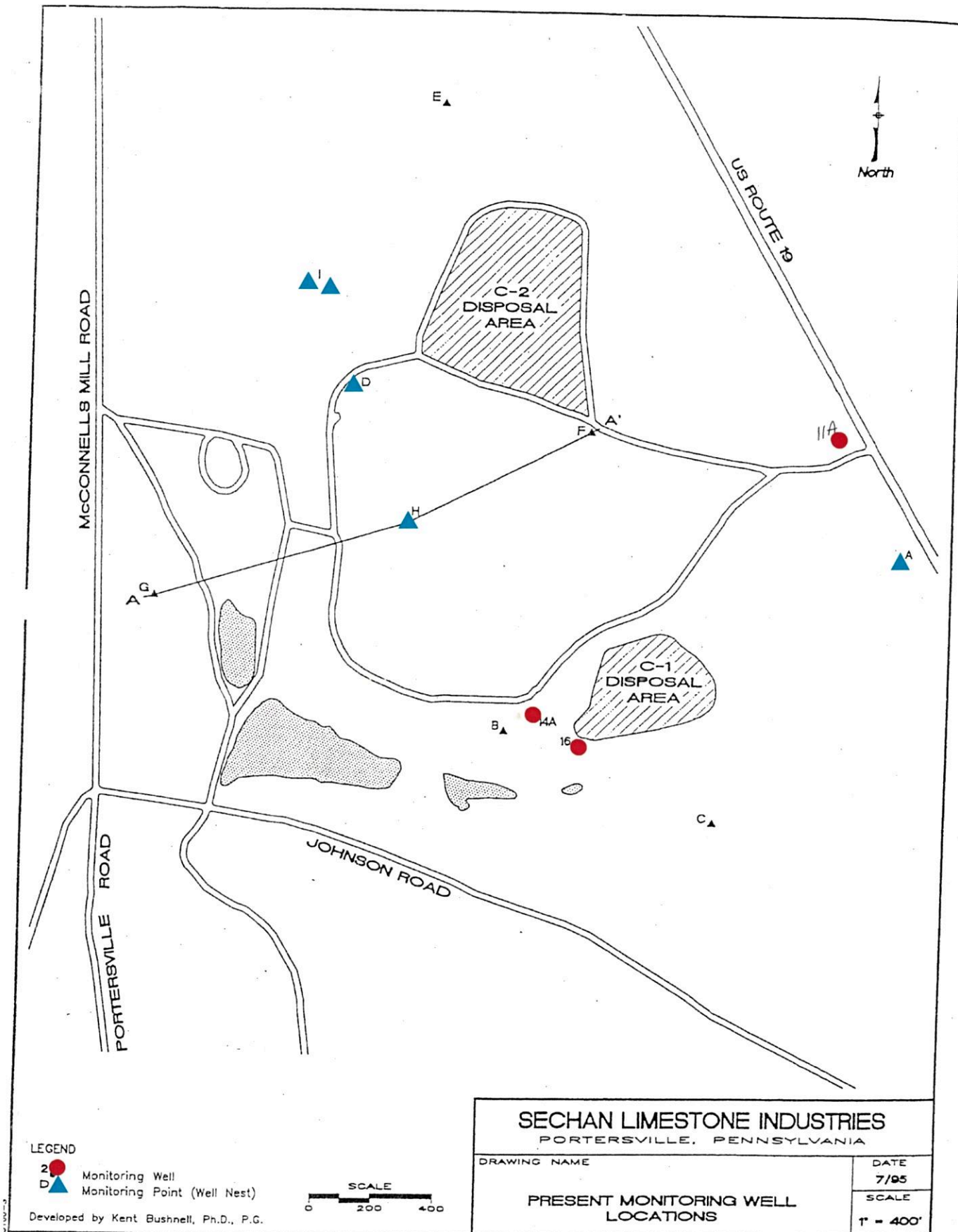


# Sechan Limestone Industries, Inc.



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**SECHAN LIMESTONE INC.**  
**FIGURE 2 - Waste Management Areas**



**SECHAN LIMESTONE INDUSTRIES INC.**

**FIGURE 3 - Current Groundwater Monitoring Well Network**