

EPA Region 5 Records Ctr.



310011

Third Five-Year Review Report

for

Laskin/Poplar Oil Company Superfund Site

City

Ashtabula County, Ohio

May 2009

PREPARED BY:

**United States Environmental Protection Agency
Region 5
Chicago, Illinois**

Approved by:

Date:

A handwritten signature in black ink that reads "Richard C. Karl". The signature is written in a cursive style and is positioned above a horizontal line.

5-15-09

Richard C. Karl, Director
Superfund Division

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Five-Year Review Report

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List of Acronyms

ARARs	Applicable or Relevant and Appropriate Requirements
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CIC	Community Involvement Coordinator
COCs	Contaminants of Concern
EPA	United States Environmental Protection Agency
CFR	Code of Federal Regulations
ICs	Institutional Controls
IMMP	Inspection, Maintenance, and Monitoring Plan
MCLs	Maximum Contaminant Levels
NCP	National Contingency Plan
NPL	National Priorities List
OAC	Ohio Administrative Code
Ohio EPA	Ohio Environmental Protection Agency
O&M	Operation and Maintenance
PCBs	Polychlorinated biphenyls
PRPs	Potentially Responsible Parties
RA	Remedial Action
RAO	Remedial Action Objective
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RPM	Remedial Project Manager
SROU	Source Removal Operable Unit
SVOC	Semi-volatile Organic Compound
TBC	To Be Considered
UAO	Unilateral Administrative Order
UU/UE	Unlimited use and unrestricted exposure

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Executive Summary

The remedy for the Laskin/Poplar Oil Company Superfund Site in Ashtabula County, Ohio included construction of a multi-layer cap to cover soils and delisted ash which had a reported total Hazard Index greater than one, or a reported potential excess life-time cancer risk greater than one-in-one-million (1×10^{-6}); construction of groundwater diversion trenches around the area to be capped; construction of slurry trench cut-off walls around the area to be capped; grading of the pit, tank, pond, and north slope areas to facilitate the installation of the cap; excavation of buried ravine area and backfilling with low permeability fill; filling of the fresh water pond area with clean off-site fill; and stabilization and disposal of residuals on-site.

The trigger for this Five Year Review is the completion of the last Five Year Review on May 20, 2004.

The assessment of this Five Year Review found that the final remedy at the Laskin/Poplar Oil Company Site is currently protective of human health and the environment because threats at the Site have been addressed through capping of contaminated soil, maintaining groundwater levels below the unweathered shale, implementation of Site restrictions that consist of a six-foot high chain link perimeter fence with three-strand barbed wire and warning signs posted at approximately 200 foot intervals along the fence, and institutional controls that consist of restrictions on land development, groundwater extraction and certain Site uses.

However, the owner of the property, which is coextensive with the Site, recently died. At the time of this Five Year Review, EPA could not determine the current disposition of the property. Further, back taxes in an amount exceeding \$115,000 are currently owed on the property. Finally, while the institutional controls are currently effective, it is unclear whether those institutional controls would serve to bind and restrict future owners. Therefore, EPA will determine and track the disposition of the property, determine whether additional measures need to be taken to ensure the effectiveness of the institutional controls, and determine whether EPA can reasonably implement any additional institutional controls.

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Five-Year Review Summary Form

SITE IDENTIFICATION		
Site name (from WasteLAN): Laskin/Poplar Oil Company Superfund Site		
EPA ID (from WasteLAN): OHD061722211		
Region: 5	State: OH	City/County: Ashtabula County
SITE STATUS		
NPL status: <input type="checkbox"/> Final <input checked="" type="checkbox"/> Deleted <input type="checkbox"/> Other (specify)		
Remediation status (choose all that apply): <input type="checkbox"/> Under Construction <input type="checkbox"/> Operating <input checked="" type="checkbox"/> Complete		
Multiple OUs? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Construction completion date: 09 / 23 / 1993	
Has site been put into reuse? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
REVIEW STATUS		
Lead agency: <input checked="" type="checkbox"/> EPA <input type="checkbox"/> State <input type="checkbox"/> Tribe <input type="checkbox"/> Other Federal Agency _____		
Author name: Patrick Hamblin		
Author title: Remedial Project Manager	Author affiliation: U.S. EPA, Region 5	
Review period: 07 / 23 / 2008 to 03 / 16 / 2009		
Date(s) of site inspection: 10 / 28 / 2008		
Type of review:		
<input checked="" type="checkbox"/> Post-SARA <input type="checkbox"/> Pre-SARA <input type="checkbox"/> NPL-Removal only <input type="checkbox"/> Non-NPL Remedial Action Site <input type="checkbox"/> NPL State/Tribe-lead <input type="checkbox"/> Regional Discretion		
Review number: <input type="checkbox"/> 1 (first) <input type="checkbox"/> 2 (second) <input checked="" type="checkbox"/> 3 (third) <input type="checkbox"/> Other (specify) _____		
Triggering action:		
<input type="checkbox"/> Actual RA Onsite Construction at OU # _____	<input type="checkbox"/> Actual RA Start at OU# _____	
<input type="checkbox"/> Construction Completion	<input checked="" type="checkbox"/> Previous Five-Year Review Report	
<input type="checkbox"/> Other (specify)		
Triggering action date (from WasteLAN): 05 / 20 / 2004		
Due date (five years after triggering action date): 05 / 20 / 2009		

Five-Year Review Summary Form, cont'd.

Issues:

1. The owner of the property recently died, and the property is subject to outstanding taxes exceeding \$115,000. While the institutional controls are currently effective, it unclear as a matter of law as to whether those institutional controls would serve to bind and restrict future owners.

Recommendations and Follow-up Actions:

1. EPA will determine and track the disposition of the property, determine whether additional measures need to be taken to ensure the effectiveness of the institutional controls, and determine whether EPA can reasonably implement any additional institutional controls.

Protectiveness Statement(s):

The final remedy at the Laskin/Poplar Oil Company Site is currently protective of human health and the environment because threats at the Site have been addressed through capping of contaminated soil, maintaining groundwater levels below the unweathered shale, implementation of Site restrictions that consist of a six-foot high chain link perimeter fence with three-strand barbed wire and warning signs posted at approximately 200 foot intervals along the fence, and institutional controls that consist of restrictions on land development, groundwater extraction and certain Site uses.

However, the owner of the property, which is coextensive with the Site, recently died. At the time of this Five Year Review, EPA could not determine the current disposition of the property. Further, back taxes in an amount exceeding \$115,000 are currently owed on the property. Finally, while the institutional controls are currently effective, it is unclear whether those institutional controls would serve to bind and restrict future owners. Therefore, EPA will determine and track the disposition of the property, determine whether additional measures need to be taken to ensure the effectiveness of the institutional controls, and determine whether EPA can reasonably implement any additional institutional controls.

Other Comments:

Date of last Regional review of Human Exposure Indicator (from WasteLAN): 9/28/2006

Human Exposure Survey Status (from WasteLAN): Current Human Exposure Controlled and Protective Remedy in Place

Date of last Regional review of Groundwater Migration Indicator (from WasteLAN): 6/13/2007

Groundwater Migration Survey Status (from WasteLAN): Contaminated Groundwater Migration Under Control
Ready for Reuse Determination Status (from WasteLAN): Site Ready for Anticipated Use

Five-Year Review Report

I. Introduction

The purpose of the Five Year Review is to determine whether the remedy at a site is protective of human health and the environment. The methods, findings, and conclusions of reviews are documented in Five Year Review Reports. In addition, Five Year Review Reports identify issues found during the review, if any, and identify recommendations to address them.

The United States Environmental Protection Agency (EPA) is preparing this Five Year Review Report pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) §121, 42 U.S.C. § 9621 and the National Contingency Plan (NCP). CERCLA §121 states:

If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the site, the President shall review such remedial action no less often than each five years after the initiation of such remedial action to assure that human health and the environment are being protected by the remedial action being implemented. In addition, if upon such review it is the judgment of the President that action is appropriate at such site in accordance with section [104] or [106], the President shall take or require such action. The President shall report to the Congress a list of facilities for which such review is required, the results of all such reviews, and any actions taken as a result of such reviews.

EPA interpreted this requirement further in the NCP. 40 CFR §300.430(f)(4)(ii) states:

If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such action no less often than every five years after the initiation of the selected remedial action.

EPA, Region 5, conducted the Five Year Review of the remedy implemented for the Source Removal and Final Operable Units (OUs) at the Laskin/Poplar Oil Company Superfund Site in Ashtabula County, Ohio. This review was conducted by EPA in consultation with Ohio EPA from July 2008 through January 2009. This report documents the results of the review.

This is the third Five Year Review for the Laskin/Poplar Oil Company Superfund Site. The triggering action for this statutory review is the completion of the second Five Year Review on May 20, 2004. This Five Year Review is required because hazardous substances, pollutants, or contaminants remain at the Site above levels that allow for unlimited use and unrestricted exposure.

II. Site Chronology

Table 1: Chronology of Site Events

<i>EVENT</i>	<i>DATE</i>
Greenhouses receive waste oils	1960s-1970s (est.)
EPA conducts emergency actions at the Site	1981 - 1983
EPA proposes Site for National Priorities List (NPL)	12/30/1982
Final Listing on NPL	9/8/1983
Initial Record of Decision (ROD) remedial selection for source removal	8/9/1984
PRPs conduct removal actions	1985 - 1987
Record of Decision (ROD) issued for source removal operable unit	9/30/1987
EPA issues Order V-W-88-C-002 for source removal	2/26/1988
Overall Remedial Investigation / Feasibility Study conducted	7/27/1983 - 6/29/1989
Record of Decision (ROD) issued for overall Site remediation	6/29/1989
Consent Decree 4:90 CV0483 entered	9/1990
Remedial Design - final remedy including landfill cap	7/27/1990 - 3/23/1992
Remedial Action - source removal	6/27/1991 - 11/22/1992
Final Remedial Action - final remedy including landfill cap	3/23/1992- 4/21/1994
Final inspection of the remedial action	9/20/1993
Preliminary Close Out Report signed	9/23/1993
Inspection, Maintenance, and Monitoring Plan (IMMP) developed	4/1994
First Five Year Review finalized	6/2/1999
EPA agrees to reduction in monitoring requirements in IMMP plan	6/30/1999
Deletion of Site from NPL	9/5/2000
Second Five Year Review finalized	5/20/2004

III. Background

Physical Characteristics

The Laskin/Poplar Oil Company Site (the "Site") is approximately 50 miles east-northeast of Cleveland, in Ashtabula County, Jefferson Township, Ohio west of the village of Jefferson (approximate population 3,400). The Site is located southwest of the intersection of State Route 307 and Poplar Street, and immediately south of Cemetery Creek (**FIGURE 1**).

The Site consists of a 9.0 acre triangular shaped parcel which at one time contained the residence of the property owner (Mr. Alvin Laskin), a greenhouse complex, a boiler house, miscellaneous small buildings and sheds, and numerous tanks, ponds and pits.

Land and Resource Use

The land area surrounding the Site can be characterized as predominantly recreational and residential. Cemetery Creek lies directly north of the Site in a wooded ravine. Several residential properties are located directly north of Cemetery Creek along State Route 307. Water for all homes within 0.5 mile of the Site is obtained from the Consumer's Ohio Water Company. The western portion of the Site is bordered by several softball fields and a wooded area which extends from north of the Site. Poplar Street is located on the eastern border of the Site, while the south is bordered by open fields and the Ashtabula County fairgrounds. Although most of the recreational facilities are limited to use during the summer, a certain amount of activity related to the fairground occurs year round.

History of Contamination

The greenhouses on the Laskin/Poplar Oil Company Site were in operation for approximately 80 years, beginning in the early 1890s. In the 1950s, boilers were installed to heat the greenhouses. Storage tanks and pits were installed during the 1960s to store the oil that fired the boilers, and the Poplar Oil Company accepted waste oil during the 1960s and 1970s. In 1977, EPA and Ohio EPA identified polychlorinated biphenyls (PCBs) in the waste oil.

Waste oils were also used for oiling gravel roads in Ashtabula County as a dust control measure. As part of the Remedial Investigation (RI), samples were collected from local roads to determine the level of contamination that may exist in those areas.

Initial Response

In early 1981, EPA conducted an investigation at the Site and detected PCBs in groundwater and soils. In 1981 and 1982, the EPA performed several emergency actions at the Site. The emergency actions included draining and regrading two ponds which had been used for oil separation; diversion of surface runoff to a retention pond to prevent flooding; removal of 302,000 gallons of waste oil, which was taken to an off-site incinerator; treatment and off-site

disposal of 430,000 gallons of contaminated surface water; and solidification of 205,000 gallons of sludge.

In 1983, the Site was placed on the National Priorities List (NPL) of uncontrolled hazardous waste sites. Initial RI activities were conducted from December 1983 to November 1984, and included the installation of monitoring wells, and sampling of soils, groundwater, sediment, oiled road surfaces, surface water, boiler and smokestack. An August 9, 1984 Record of Decision (ROD), selected a remedy that included incineration of contaminated water and oils with PCBs. During the winter of 1985-86, the potentially responsible parties (PRPs) removed approximately 250,000 gallons of waste oil and wastewater, in response to an administrative order issued in August 1984.

Work at the Laskin/Poplar Oil Site was organized into two OUs. A September 30, 1987 ROD was signed for the Source Removal Operable Unit (SROU) that selected an interim remedy for the site that included construction of a fence, incineration of oils, sludges, and visibly contaminated source soils, off-site treatment of wastewater, dismantling and off-site disposal of tanks, off-site disposal of incinerator ash, and backfilling excavated areas. EPA issued Administrative Order V-W-88-C-002 to 39 PRPs on February 26, 1988, requiring that a Source Removal remedial action be performed. Twenty of the companies responded to the order and initiated a remedial design effort.

An expanded RI was conducted in fall and winter of 1987-88. Work included installation of monitoring wells, geophysical studies, bathymetric surveys, along with additional sampling of groundwater, surface water, soils, and sediments. A feasibility study for the complete remediation at the Site was finalized on April 7, 1989. The feasibility study presented an array of alternatives to address the overall Site contamination. Eight alternatives for the Laskin/Poplar Oil Company Site were evaluated by the EPA. A ROD for the Site was issued on June 29, 1989, which documented EPA's preferred alternative for the complete Site remediation.

Basis for Taking Action

The RI Report and RODs identified areas of concern on the Site; including areas of disposed hazardous waste, contaminated soils, sediments, groundwater, structures and debris. The reports documented the presence of volatile organic compounds (VOC), semi-volatile organic compounds (SVOC), polycyclic aromatic hydrocarbons (PAHs), PCBs, pesticides, and inorganic compounds at the Site. All known contaminants at the Site with environmental criteria or toxicity values were selected for evaluation in the health assessment and treated as potential contaminants of concern (COCs) (**TABLE 2**). The primary risks associated with the Site included the potential for future consumption of groundwater underlying the Site and ingestion of on-site soils containing PCBs, PAHs and inorganic compounds.

IV. Remedial Actions

Remedy Selection

The 1987 ROD for SROU required on-site incineration of oils, sludges, and visibly contaminated source soils as an interim remedy at the Site.

The 1989 ROD described the final remedy for the site. The objectives of the 1989 ROD were as follows:

- To control a public health risk through direct contact with and incidental ingestion or inhalation of contaminated soils;
- To control potential long term risk to groundwater from residual constituents in the soils; and
- To control potential long-term risk associated with surface water runoff.

The major components of the Final Remedial Action included:

- Construction of groundwater diversion trenches around the area to be capped;
- Construction of slurry trench cut-off walls around the area to be capped;
- Grading of the pit, tank, pond, and north slope areas to facilitate the installation of the cap;
- Excavation of the buried ravine area and backfilling with low permeability fill;
- Filling of the fresh water pond area with clean off-site fill;
- Construction of a multi-layer cap to cover the delisted ash and any soils which have a reported Total Hazard Index greater than one or a reported potential excess life-time cancer risk greater than one-in-one-million (1×10^{-6});
- Stabilization and disposal of residuals on-site.

Remedy Implementation

After the 1989 ROD was issued, Consent Decree negotiations for the design and implementation of both the Source Removal and the Final Remedial Action took place between EPA and a group of PRPs. The requirements of the Source Removal Administrative Order were included in this Consent Decree. In addition, several elements of the final remedy were incorporated into the Source Removal Actions by agreement between the EPA and the Settling Defendants. The Source Removal project was essentially completed in December 1992. The Final Remedial Action involved construction of a groundwater diversion trench, slurry walls, and low permeability cap and general site grading, and major construction activities were completed on September 15, 1993.

Waste oils, wastewater and sludges were collected and consolidated with like material in pits or frac tanks that were brought on-site. A total of 6,002 gallons of oils were recovered and eventually processed for thermal destruction. The on-site wastewater treatment plant processed a total of 164,360 gallons of wastewater. Sludges were collected and segregated into pumpable and non-pumpable sludges. A total of 280,509 gallons of pumpable sludges were collected,

mixed and screened prior to being incinerated. A total of 2,585 cubic yards of non-pumpable sludges were collected and incinerated.

Following removal of waste materials, a total of 33 steel tanks were decontaminated and sized to manageable scrap and sent to the metal recycler for recycling. 2 fiberglass tanks used for fuel oil storage were decontaminated, shredded and disposed of on-site in an area to be covered with the final remedy cap.

A total of 220 drums were collected and the contents determined. Liquids were removed for incineration or water treatment. All solid materials, including protective clothing, were shredded along with the drums and processed through the incinerator for thermal destruction.

The boiler house remediation and demolition consisted of a group of tasks conducted over a period of approximately one year. Asbestos-contaminated material that was not directly exposed to combustion gases was removed and properly disposed of in an appropriate landfill. The remaining asbestos-contaminated material was analyzed for dioxin, was determined to have dioxin contamination of less than the action level of 1 parts per billion (ppb).

Four steam generating boilers were dismantled and disposed of. Boiler house soils were removed to a depth of twelve inches and incinerated. Sampling of the remaining soil was conducted to confirm that remediation goal of 1 ppb had been achieved. The boiler house stack was demolished using controlled explosives, and the resulting brick rubble was crushed and incinerated. The boiler house structure proper, including concrete floor sections, was shredded and incinerated, except for a few oversized members. Large pieces were decontaminated and disposed of off-site to a metals recycler. Once analytical results demonstrated that objectives had been met for on-site disposal, ash was moved to a permanent ash storage area on an asphalt pad in the former freshwater pond basin, until such time that backfilling requirements developed. Backfilling the Site started upon completion of Pit #4 demolition and receipt of the Ohio solid waste waiver.

Remedial activities at the Laskin/Poplar Oil Company Site were completed with the construction of a groundwater diversion system and a low permeability cap (**FIGURE 2**). The cap at the Laskin/Poplar Oil Site covers the part of the Site where the soil has an estimated excess lifetime cancer risk greater than 1×10^{-6} or a Total Hazard Index greater than 1.0. A diversion trench was constructed up-gradient of the capped area, in order to intercept all groundwater flow in the shallow aquifer moving northward toward the Site, and a drain in the trench conducts the intercepted flow directly to Cemetery Creek. Treatment of the diverted water was not required because upgradient groundwater is not contaminated. Although the trench and cap effectively de-watered the Site, groundwater and surface water monitoring were initially conducted as part of the Inspection, Maintenance, and Monitoring Plan (IMMP) because hazardous substances were present on-site. Currently, groundwater levels are monitored in order to determine if the Site remains dewatered.

Institutional Controls

Institutional controls (ICs) are non-engineered instruments, such as administrative and/or legal controls that help minimize the potential for exposure to contamination and protect the integrity of the remedy. Compliance with ICs is required to assure long-term protectiveness for those areas that do not allow for unlimited use or unrestricted exposure (UU/UE).

FIGURE 3 identifies those areas that do not support unlimited use and unrestricted exposure and the table below summarizes existing ICs for these restricted areas. All non UU/UE areas are addressed effectively by ICs as determined by IC evaluation activities which are discussed below.

Table 3: Institutional Controls Summary Table

Media, Engineered Controls, & Areas that Do Not Support UU/UE Based on Current Conditions.	IC Objective	Title of Institutional Control Instrument Implemented (note if planned)
Landfill cap	Restrictions would be placed on future use of the Site to maintain the integrity and performance of the remedial alternative. The restrictions would be imposed to prohibit land use incompatible with the remedy, and groundwater extraction.	Pursuant to a civil Consent Decree filed September 13, 1990 in <i>United States v. Laskin, et al.</i> , Alvin Laskin and Mildred Laskin, acting jointly, recorded a Declaration of Conditions, Covenants, and Restrictions in the Ashtabula County Recorder of Deeds on October 15, 1990. EPA will investigate the necessity and feasibility of implementing additional ICs.
Groundwater	Restrictions on groundwater use for drinking water purposes would be placed on the Laskin Poplar Oil Site. The ROD indicated that after the site is de-watered, there will be essentially no groundwater available for any purpose at the Site.	Pursuant to a civil Consent Decree filed September 13, 1990 in <i>United States v. Laskin, et al.</i> , Alvin Laskin and Mildred Laskin, acting jointly, recorded a Declaration of Conditions, Covenants, and Restrictions in the Ashtabula County Recorder of Deeds on October 15, 1990. EPA will investigate the necessity and feasibility of implementing additional ICs.

The restrictions in place at the Laskin/Poplar Oil Company Site are currently effective to maintain the integrity and performance of the remedy. The Declaration of Conditions, Covenants, and Restrictions filed with the Recorder of Ashtabula County by Mildred and Alvin Laskin pursuant to the Consent Decree, among other things, prohibits groundwater use, and Site use or development that may jeopardize the performance of the remedy. The Site is completely surrounded by a chain link fence to prevent any interference or vandalism at the Site. Although there is essentially no groundwater available for any purpose at the Site due to the de-watering

process, groundwater underlying the Site should not be used for drinking water. Currently there are no residential wells located on the strip of land between the Site and Cemetery Creek.

However, it is unclear whether the filed Declaration of Conditions, Covenants, and Restrictions would serve to bind and restrict future owners of the property. The filed Declaration of Conditions, Covenants, and Restrictions *does* provide that the "conditions, covenants and restrictions . . . provided in this Declaration . . . shall run with the land and shall be binding on and inure to the benefit of all persons having right, title or interest in any part of the Property and to the parties to the Consent Decree." In addition, at the time of this Five Year Review, it is not clear who owns the property. Alvin Laskin died, and Mildred Laskin recently died in November 2008. Further, at the time of this Five Year Review, EPA could not locate any probate records for Mildred Laskin or an executor of her estate. Finally, there are unpaid taxes for the property exceeding \$115,000. Therefore, EPA will determine and track the disposition of the property, determine whether additional measures need to be taken to ensure the effectiveness of the ICs, and determine whether EPA can reasonably implement any additional ICs. Specifically, EPA will investigate the necessity and feasibility of implementing an environmental covenant meeting the requirements of Ohio Rev. Code §§ 5301.82, 5301.83, and 5301.88 of Ohio's Uniform Environmental Covenants Act, Ohio Rev. Code §§ 5301.80 - 5301.92.

Under the 1989 ROD, a component of the selected remedy consists, in relevant part, of the "impos[ition] of access and use restriction." With regard to groundwater, the ROD concludes:

Restrictions on groundwater use for drinking water purposes would be placed on the Laskin Poplar Oil site. Currently there are no residential wells located on the strip of land between the site and Cemetery Creek. Although groundwater beneath the area between the site and Cemetery Creek is not contaminated, groundwater should not be used for drinking water. After the site is de-watered, there will be essentially no groundwater available for any purpose.

With regard to ICs, the 1989 ROD provides that:

Restrictions would be placed on future use of the site to maintain the integrity and performance of the remedial alternative. The restrictions would be imposed to prohibit site use, land development, and groundwater extraction.

With regard to ICs, the Consent Decree requires:

Owner Settling Defendants [Alvin Laskin and Mildred Laskin] agree that any deed, title or other instrument of conveyance which transfers any right, title or interest or which permits any use of the property of Owner Settling Defendants, shall contain a notice that the Site is the subject of this Decree, setting forth the style of the case, case number, and Court having jurisdiction herein. Owner Settling Defendants further agrees [SIC] that he [SIC] will impose restrictions on use of his property by recording with the Ashtabula County Recorder's Office, within thirty (30) days of entry of this Consent Decree, a document incorporating

such restrictions, in a form acceptable to the United States. Owner Settling Defendants agree that such restrictions shall bar any future use of the site that U.S. EPA determines is inconsistent with the remedial action Work to be performed under this Consent Decree, including a bar on any excavation, grading, filling, drilling, mining or other construction or development, or farming or parking, on his property, or, any other activity which U.S. EPA determines would present conditions that would not be protective of human health or the environment. Owner Settling Defendants shall not use or permit the use of groundwater or surface water on their property except with the advance written approval of U.S. EPA. Such restrictions shall expressly bar removal of the cap, or, any excavation or closure or modification of the diversion trench, except with the express written approval of U.S. EPA, and only if such activity is in furtherance of the Performance Standards and purposes of the remedial action set forth in the ROD and the SOW.

On October 15, 1990, Alvin Laskin and Mildred Laskin filed a "Declaration of Conditions, Covenants, and Restrictions," including a surveyed description of the property, with the Recorder of Ashtabula County, Ohio. At the time of the filing, the EPA determined that the Declaration of Conditions, Covenants, and Restrictions complied with the requirements of the Consent Decree.

In 2005, The Chicago Title and Insurance Company performed a title commitment search on the property. The title commitment search identified the Consent Decree and the Declaration of Conditions, Covenants, and Restrictions as filed with the Recorder of Ashtabula County, Ohio. The Chicago Title and Insurance Company's search identified these documents among the exceptions to any policy of title insurance to be issued in connection with the property. The search identified no liens or encumbrances, such as utility rights-of-way, that could defeat the restrictions identified in the Consent Decree and the Declaration of Conditions, Covenants, and Restrictions. Additionally, Recorder of Ashtabula County website describes the property as an "EPA Superfund Site." The search did identify liens in the amounts of \$90,312.35 and \$908.16 for unpaid taxes through the year 2004.

However, it is unclear as to whether the filed Declaration of Conditions, Covenants, and Restrictions would serve to bind and restrict future owners of the property under Ohio Rev. Code § 5301(C), and (D) of Ohio's Uniform Environmental Covenants Act. The cited provisions of the Act provide that enforceable instruments filed prior to the Act, remain enforceable under the Act. The filed Declaration of Conditions, Covenants, and Restrictions *does* provide that the "conditions, covenants and restrictions . . . provided in this Declaration . . . shall run with the land and shall be binding on and inure to the benefit of all persons having right, title or interest in any part of the Property and to the parties to the Consent Decree." In addition, at the time of this Five Year Review, it is not clear who owns the property. Alvin Laskin died in 1993, and Mildred Laskin died recently in November of 2008. Further, at the time of this Five Year Review, EPA could not locate any probate records for Mildred Laskin or an executor of her estate. Finally, the records of the Auditor of Ashtabula County show that, while the property has not been foreclosed, there are unpaid taxes exceeding \$115,000. Although the County has not instituted foreclosure proceedings for the collection of the delinquent taxes, upon foreclosure the

property shall be forfeited to the State if no buyer can be found. Ohio Rev. Code § 5723.01(A)(1); *see also*, Ohio Attorney General Opinion 96-047 (September 30, 1996).

In conclusion, EPA will determine and track the disposition of the property, determine whether additional measures need to be taken to ensure the effectiveness of the ICs, and determine whether EPA can reasonably implement any additional ICs. Specifically, EPA will investigate the necessity and feasibility of implementing an environmental covenant meeting the requirements of Ohio Rev. Code §§ 5301.82, 5301.83, and 5301.88 of Ohio's Uniform Environmental Covenants Act.

Operation and Maintenance (O&M)

The Consent Decree identified the remedial action to be implemented at the Laskin/Poplar Oil Company Site and required that an Inspection, Maintenance and Monitoring Plant (IMMP) be prepared to describe the actions necessary to inspect and monitor the integrity of the cap and groundwater diversion system. The overall objectives of IMMP are to verify that the Remedial Action is continuing to perform as expected, and to maintain the integrity of the Remedial Action.

With regard to access restrictions, the 1989 ROD provides that: "Access restrictions would be enforced to prevent any interference or vandalism at the Site." The associated Statement of Work Performance Standards required, in part that:

Fencing of the site shall consist of a six-foot high chain link perimeter fence with three-strand barbed wire. Warning signs shall be posted at approximately 200 foot intervals along the fence and at the gate. The warning signs shall advise that the area is hazardous due to chemical contamination and provide a telephone number to call for further information. This fencing shall be sufficient to protect against unauthorized entry into portions of the site which could cause an unacceptable health risk.

Deliverables and tasks associated with the IMMP include Site Inspection Reports with summaries of observations made during inspections and a photo-log of photos taken during the inspection. Site Inspection Reports evaluate the following areas: cap and cap area inspection; critical cap boundary areas; security fence and warning signs inspection; groundwater monitoring network inspection and the groundwater diversion trench system. The objective of the groundwater level monitoring program is to ensure that the groundwater level in the cap area is lowered to the top of the unweathered shale or, if this is not achieved, to ensure that groundwater concentrations do not exceed the Safe Drinking Water Act Maximum Contaminant Levels (MCLs).

Groundwater monitoring data from 1994 to 1999 demonstrated that the remedial action had been effective in lowering the groundwater to below the top of the unweathered shale, thereby preventing impacts to groundwater and surface water. Therefore, it appeared that the cover,

trench and slurry walls were successful in isolating the contaminated soil on the Site from the groundwater and Cemetery Creek. A 1999 request from the Laskin Final Remediation Trust, which represents the settling Potentially Responsible Parties (PRPs), to revise the monitoring schedule was granted. The current monitoring schedule is indicated in **TABLE 4**.

The estimated Operation and Maintenance costs based on projections from the Laskin Trust's quarterly financial reports are provided below.

Table 5: Estimated Annual System Operations/O&M Costs

Dates		Total Cost rounded to nearest \$1,000
From	To	
July 1, 2004	June 30, 2005	\$97,000
July 1, 2005	June 30, 2006	\$53,000
July 1, 2006	June 30, 2007	\$53,000
July 1, 2007	June 30, 2008	\$84,000
July 1, 2007	June 30, 2009 – projected	\$70,000

V. Progress Since the Last Review

This is the third Five Year Review for the Site. The protectiveness statements from the Five Year Reviews conducted in 1999 and 2004 are provided below.

1999 Five Year Review: "Goals set forth in the Record of Decision and the Inspection, Maintenance and Monitoring Plan are being met. Continued monitoring and maintenance of the Site is necessary to assure that these goals continue to be met. The remedies selected for this Site remain protective of human health and the environment."

2004 Five Year Review: "The remedy at the Laskin/Poplar Oil Company Site is protective of human health and the environment because threats at the Site have been addressed through capping of contaminated soil, maintaining groundwater levels below the unweathered shale, installation of fencing and warning signs, and implementation of institutional controls."

The following issues were noted in the 2004 Five Year Review:

- Investigate potential slope instability north of the cap
- Continued presence of animal burrows
- Replacement of warning signs
- Remove or replace worn fabric privacy fencing

These issues have been addressed through implementation of the IMMP, and the development and implementation of a Slope Investigation Work Plan. The presence of burrowing animals continues to require routine attention. Of the issues identified in the 2004 Five Year Review, only assessment of the potential slope instability potentially impacted future protectiveness, and will continue to be assessed through implementation of the Slope Investigation Work Plan.

Table 6: Actions Taken Since the Last Five-Year Review

Issues from Previous Review	Recommendations/ Follow-up Actions	Party Responsible	Milestone Date	Action Taken and Outcome	Date of Action
Slope instability	Implement Slope Investigation	PRPs	EPA/ Ohio EPA	Slope Investigations	On-going

VI. Five-Year Review Process

Administrative Components

The EPA Remedial Project Manager (RPM), Patrick Hamblin, notified Ohio EPA and the PRPs' Project Coordinator (Engineering Management, Incorporated (EMI)) of the initiation of the Five Year review process in July 2008. The EPA RPM headed the Five Year review team, and was assisted by Ohio EPA (primary contact for the review is Andrew Kocher).

The review schedule included the following components:

- Community Notification;
- Document Review;
- Data Review;
- Site Inspection;
- Interviews; and
- Five Year Review Report Development and Review.

Community Notification

In July, 2008, the RPM discussed the need to notify the community that the Five Year review process was underway with the EPA Community Involvement Coordinator (CIC), Sue Pastor. The EPA Office of Public Affairs placed an ad in the Jefferson Gazette on August 20, 2008 announcing that the Five Year Review was in progress and requesting that any interested parties contact EPA for more information.

Document Review

This Five Year Review consisted of a review of relevant documents including Site Inspection Reports # 40 (November, 2004) through #48 (September, 2008), quarterly and annual slope monitoring reports from December 2004 through October 2008, Site Maintenance Reports, the IMMP, the results of EPA's 2008 surface soil sampling activities, the 1987 and 1989 ROD, the Statement Work, a title commitment search performed by the Chicago Title and Insurance Company, the Declaration of Conditions, Covenants, and Restrictions filed with the Recorder of

Ashtabula County by Mildred and Alvin Laskin pursuant to the Consent Decree, and other records of the Recorder of Ashtabula County.

Data Review

Groundwater Monitoring

Under the revised monitoring schedule, water level measurements are taken once per year at selected piezometers. If groundwater levels are recorded above the unweathered shale, then additional groundwater and surface water samples are to be collected for chemical analysis within 120 days. The results of water level measurements conducted since the 2004 Five Year Review are presented in **TABLE 7**. Based on these results, water levels have remained under the unweathered shale, and thus no groundwater or surface water samples were required to be collected.

Site Inspection

EPA and Ohio EPA conducted a Site inspection on October 28, 2008. A representative from EMI accompanied the regulatory team during the inspection. The purpose of the inspection was to assess the protectiveness of the remedy, including the condition of fencing to restrict access, the integrity of the cap, and the effectiveness of land use restrictions. The area of slope instability outside the cap was also observed, and the results and future direction of the Slope Investigation Work Plan were discussed.

The following summarizes the main topics covered during the inspection:

- The waste cap appeared to be in good physical condition. Animal burrows will require continued, routine maintenance to address.
- The area of erosion and potential slope instability to the north of the cap was observed. This area is located along the steep slope facing Cemetery Creek, immediately outside of the northern fence. Based on results from the PRP's Slope Investigation study, the instability can be described as "surface creep" that appears to be limited to surface soils outside of the capped area, and will require continued monitoring.
- Site fencing was intact and appeared to be in good condition.

Interviews

Immediately following construction completion, there was relatively low community interest at this Site. No community members responded to this or to the previous Five Year review ad that invited readers to contact the CIC for more information on the Five Year review process.

During the last several years, there has been increasing community interest regarding potential re-use of part of the Site property during the County Fair. County and Fair Board representatives

requested that EPA consider the potential re-use of a portion of the Site, outside of the cap, for parking trailers during the annual County Fair. Following the site inspection, the EPA RPM, OEPA Project Manager, and a representative from EMI, along with a representative and contractor from EPA's NPL re-use group, met with Thomas Sartini, the Ashtabula County Attorney, and Bob Jones and Larry Kotnick, representatives from the Fair Board, to further discuss the County's re-use proposal. The County's reuse proposal would result in use of the site that was not considered in exposure assumptions, but the area under consideration is not within the capped area that presented elevated levels of risk. Representatives from the Laskin Trust have expressed reservations regarding potential use of any part of the Site property, and indicated they believe the Consent Decree prohibits parking and would need to be modified to allow any use of the property.

VII. Technical Assessment

Question A: Is the remedy functioning as intended by the decision documents?

A review of the relevant documents and the Site inspection indicate that the remedy is functioning as intended by the ROD, that the IMMP will maintain the effectiveness of the response action, and access controls and ICs are adequate to prevent exposure.

Question B: Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives (RAOs) used at the time of the remedy selection still valid?

There have been no changes in the physical conditions of the Site that would currently affect the protectiveness of the remedy. The exposure assumptions, toxicity data, cleanup levels, and RAOs used at the time of the remedy selection are still valid.

A list of the primary applicable or relevant and appropriate requirements (ARARs) and TBCs are included in **TABLE 8**. There have been no changes in these ARARs and TBCs that affect the protectiveness of the remedy.

There have been no changes in the exposure assumptions that were used in the risk assessment that would affect the protectiveness of the remedy. EPA considers the assumptions in the baseline risk assessment to be conservative and reasonable in evaluating risk-based cleanup levels. No change to these assumptions or to the cleanup levels developed from them is warranted. There has been no change in the standardized risk assessment methodology that would affect the protectiveness of the remedy. Because the remedy implemented engineering and ICs to prevent contact with contaminants are currently in place at the Site, changes in contaminant toxicity would not impact the effectiveness of the remedy.

Question C: Has any other information come to light that could call into question the protectiveness of the remedy?

No other events have affected the current protectiveness of the remedy, and there is no other information that calls into question the current protectiveness of the remedy. However, as

discussed above, the owner of the property recently died. At the time of this Five Year Review, EPA could not determine the current disposition of the property. Further, back taxes in an amount exceeding \$115,000 are currently owed on the property. Finally, while the institution controls are currently effective, it is unclear as a matter of law as to whether those ICs would serve to bind and restrict future owners. Therefore, EPA will determine and track the disposition of the property, determine whether additional measures need to be taken to ensure the effectiveness of the ICs, and determine whether EPA can reasonably implement any additional ICs.

Technical Assessment Summary

Based on a review of relevant documents, data, ARARs, risk assumptions, and the results of the Site inspection, it appears to EPA that the remedy is functioning as intended by the ROD. There have been no changes in the physical conditions of the Site that would affect the protectiveness of the remedy. The extent of slope instability will continued to be assessed through implementation of the Slope Investigation work plan, to ensure that this area will not affect future protectiveness. There have been no changes in exposure pathways or toxicity factors for the contaminants of concern which would impact the effectiveness of the remedy. The County’s reuse proposal would result in use of the site that was not considered in exposure assumptions, but the area under consideration is not within the capped area that presented elevated levels of risk. The Laskin Trust has indicated they believe the Consent Decree prohibits all site use and would need to be modified to allow parking as requested by the County. The remedy is generally operating as expected, and there is no other information available that calls into question the protectiveness of the remedy.

VIII. Issues

Table 9: Issues

Issue	Currently Affects Protectiveness? (Y/N)	Affects Future Protectiveness? (Y/N)
1. ICs. The owner of the property recently died, and the property is subject to outstanding taxes exceeding \$115,000. While the institution controls are currently effective, it unclear as a matter of law as to whether those ICs would serve to bind and restrict future owners.	N	Y

The slope instability facing Cemetery Creek will continue to be monitored to ensure it will not affect future protectiveness.

IX. Recommendations and Follow-up Actions

Table 10: Recommendations and Follow-up Actions

Issue	Recommendations and Follow-up Actions	Party Responsible	Oversight Agency	Milestone Date	Affects Protectiveness (Y/N)	
					Current	Future
1. ICs	EPA will determine and track the disposition of the property, determine whether additional measures need to be taken to ensure the effectiveness of the ICs, and determine whether EPA can reasonably implement any additional ICs.	EPA	EPA	December 2009	N	Y

The slope instability facing Cemetery Creek will continue to be monitored to ensure it will not affect future protectiveness. These activities are currently on-going.

X. Protectiveness Statement(s)

The assessment of this Five Year Review found that the final remedy at the Laskin/Poplar Oil Company Site is currently protective of human health and the environment because threats at the Site have been addressed through capping of contaminated soil, maintaining groundwater levels below the unweathered shale, implementation of Site restrictions that consist of a six-foot high chain link perimeter fence with three-strand barbed wire and warning signs posted at approximately 200 foot intervals along the fence, and ICs that consist of restrictions on land development, groundwater extraction and certain Site uses.

However, the owner of the property, which is coextensive with the Site, recently died. At the time of this Five Year Review, EPA could not determine the current disposition of the property. Further, back taxes in an amount exceeding \$115,000 are currently owed on the property. Finally, while the institutional controls are currently effective, it is unclear whether those ICs would serve to bind and restrict future owners. Therefore, EPA will determine and track the disposition of the property, determine whether additional measures need to be taken to ensure the effectiveness of the ICs, and determine whether EPA can reasonably implement any additional ICs.

XI. Next Review

The next Five Year Review for the Laskin/Poplar Oil Company Superfund Site is required by May 2014, five years from the date of this review.

Attachments

Figures

- Figure 1: Site location
- Figure 2: Site plan
- Figure 3: Institutional Control Areas

Tables

- Table 2: Potential Contaminants of Concern
- Table 4: Current Inspection, Maintenance, and Monitoring Plan (IMMP) Inspection schedule
- Table 7: Groundwater level measurements
- Table 8: Applicable or relevant and appropriate requirements (ARARs) and To Be Considered (TBCs)

FIGURE 1

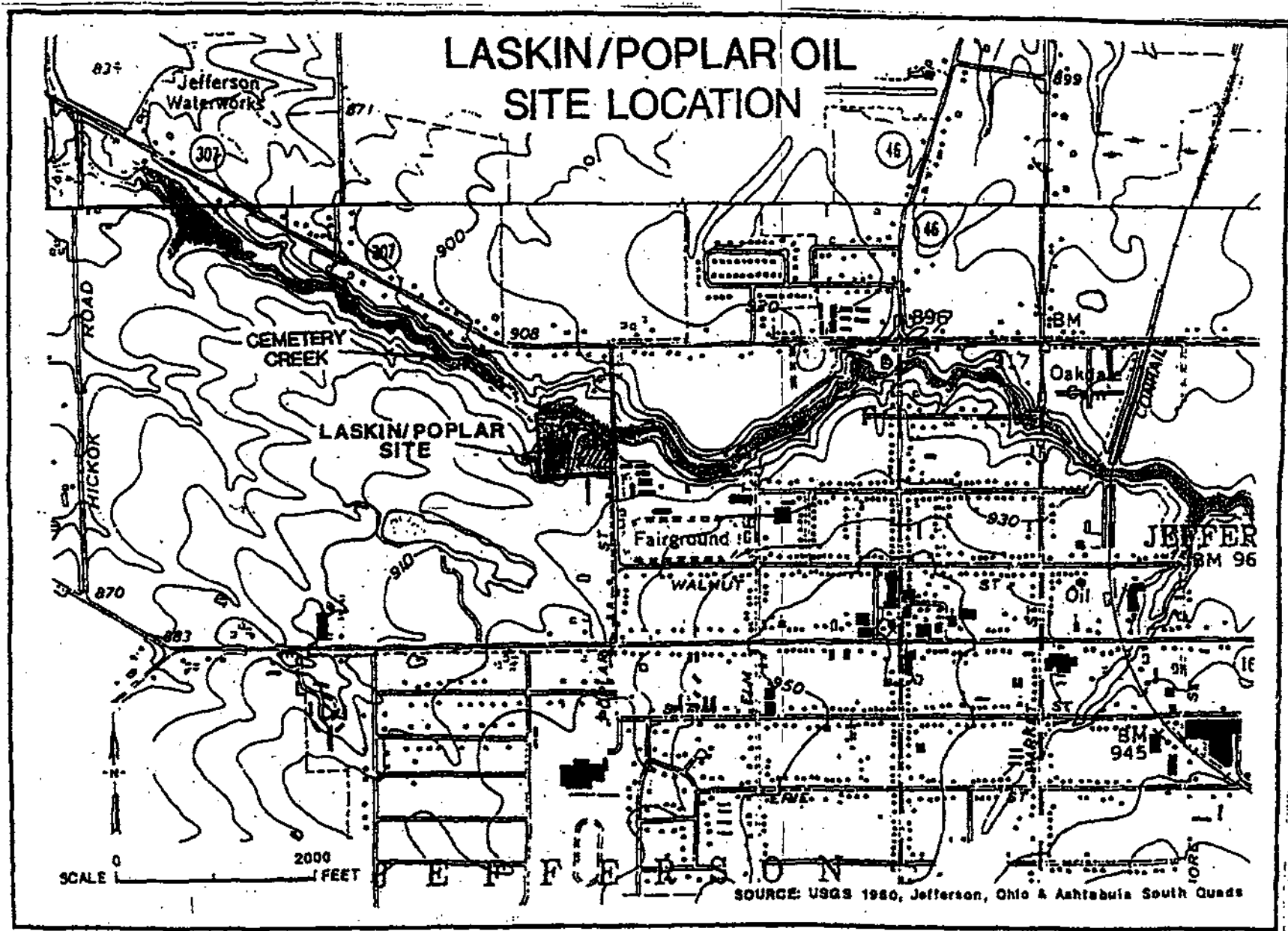


FIGURE 3

Institutional Control (IC) Review

Areas Depicting Required and Implemented Institutional Controls

Superfund
U.S. Environmental Protection Agency







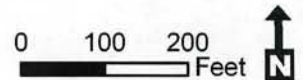
Laskin/Poplar Oil Ashtabula County, OH

OHD061722211



Legend

-  Site Boundary
-  Landfill Cap - Required IC
-Disruption of cap prohibited
-  Land and Groundwater Restrictions - Required IC
-Development prohibited
-Groundwater extraction prohibited
-  Declaration of Covenants and Restrictions (1990) - Implemented IC
-Disruption of cap or trench prohibited
-Disruption of remedial action prohibited
-Groundwater and surface water use prohibited



EPA Disclaimer: Please be advised that areas depicted in the map have been estimated. The map does not create any rights enforceable by any party. EPA may refine or change this data and map at any time.



Created by Sarah Backhouse
U.S. EPA Region 5 on 3/15/2006

TABLE 2

Potential Contaminants of Concern at the Iaskin Poplar Oil Site

Acetone	Gamma HCH (Lindane)
Antimony	Heptachlor
Arsenic	Heptachlor Epoxide
Barium	Indeno(1,2,3-cd)pyrene
Benzene	Isophorone
Benzo(a)anthracene	Lead
Benzo(a)pyrene	Manganese
Benzo(b)fluoranthene	Mercury
Benzo(k)fluoranthene	Methylphenol (Cresol)
Beryllium	Methylene chloride
beta HCH	4-Methyl-2-pentanone (MIBK)
Bis(2-chloroethyl)ether	Nickel
Bis(2-ethylhexyl)phthalate	N-Nitrosodiphenylamine
2-Butanone (MEK)	PCB
Cadmium	Pentachlorophenol
Carbon disulfide	Phenol
Chlordane	Selenium
Chlorobenzene	Silver
Chloroform	Styrene
Chromium	2,3,7,8-TCDD (Dioxin)
Chrysene	Tetrachloroethene
Copper	Thallium
DDT	Toluene
Dibenzo(a,h)anthracene	1,2,4-Trichlorobenzene
Dibutyl phthalate	1,1,1-Trichloroethane
1,1-Dichloroethane	1,1,2-Trichloroethane
1,2-Dichloroethane (EDC)	Trichloroethene
2,4-Dichlorophenol	Trichlorofluoromethane
Dieldrin	2,4,5-Trichlorophenol
Diethyl phthalate	2,4,6-Trichlorophenol
2,4-Dinitrophenol	Vanadium
Endosulfan	Vinyl chloride
Ethylbenzene	Xylenes
Cyanide	Zinc

(a) Potential chemicals of concern identified based on availability of cancer potency factor, reference dose, drinking water criteria or standard, or environmental criteria.

TABLE 4

**U.S. EPA APPROVED REVISED MONITORING SCHEDULE
FOR THE LASKIN/POPLAR OIL SITE**

MONITORING ACTIVITY	1994 IMMP SCHEDULE	APPROVED REVISED SCHEDULE
Water level measurement	Once per year	Once per year
Ground water and Cemetery Creek surface water sampling	Once per year	Within 120 days of detecting a water level in any one peizometer above the unweathered shale

TABLE 7

Recent Groundwater Elevation in Piezometers

Location ID	Date	Well Elev. Top of outer casing (feet)	Well Elev. Top of inner casing (feet)	Depth to water (feet)	Relative GW Elev. (feet)	Approximate Elevation of unweathered Shale (feet)	Report #
P-1	11/17/2004	917.41	917.05	25.99	891.06	894.47	40
P-1	8/29/2005	917.41	917.05	26.17	891.24	894.47	41
P-1	12/27/2005	917.41	917.05	25.52	891.53	894.47	42
P-1	7/10/2006	917.41	917.05	25.51	891.54	894.47	43
P-1	10/30/2006	917.41	917.05	25.80	891.25	894.47	44
P-1	5/3/2007	917.41	917.05	25.83	891.22	894.47	45
P-1	8/2/2007	917.41	917.05	26.18	890.87	894.47	46
P-1	4/15/2008	917.41	917.05	25.90	891.15	894.47	47
P-1	8/5/2008	917.41	917.05	26.00	891.05	894.47	48
P-2	11/17/2004	931.52	931.16	37.96	893.2	895.10	40
P-2	8/29/2005	931.52	931.16	38.42	893.1	895.10	41
P-2	12/27/2005	931.52	931.16	37.71	893.45	895.10	42
P-2	7/10/2006	931.52	931.16	37.68	893.48	895.10	43
P-2	10/30/2006	931.52	931.16	37.69	893.47	895.10	44
P-2	5/3/2007	931.52	931.16	37.76	893.40	895.10	45
P-2	8/2/2007	931.52	931.16	38.23	892.93	895.10	46
P-2	4/15/2008	931.52	931.16	38.10	893.06	895.10	47
P-2	8/5/2008	931.52	931.16	38.00	893.16	895.10	48
P-3	11/17/2004	920.69	920.45	dry	dry @ 899.34	900.69	40
P-3	8/29/2005	920.69	920.45	dry	dry @ 899.69	900.69	41
P-3	12/27/2005	920.69	920.45	dry	dry @ 899.69	900.69	42
P-3	7/10/2006	920.69	920.45	dry	dry @ 899.69	900.69	43
P-3	10/30/2006	920.69	920.45	dry	dry @ 899.69	900.69	44
P-3	5/3/2007	920.69	920.45	dry	dry @ 899.58	900.69	45
P-3	8/2/2007	920.69	920.45	dry	dry @ 899.58	900.69	46
P-3	4/15/2008	920.69	920.45	dry	dry @ 899.58	900.69	47
P-3	8/5/2008	920.69	920.45	dry	dry @ 899.34	900.69	48

TABLE 8

This section reviews the applicable or relevant and appropriate requirements (ARARs) for the Laskin/Poplar Oil site. The basis for ARARs is defined in Section 121(d) of CERCLA, as amended by SARA, which requires that remedial actions comply with all applicable or relevant and appropriate federal environmental or promulgated state environmental or facility siting laws.

The "applicable requirements," as defined in 40 Code of Federal Regulations (CFR) 300.5, are "those clean-up standards, standards of control, and other substantive requirements, criteria, or limitations promulgated under federal environmental or state environmental or facility siting laws that specifically address a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance found at a CERCLA site. Only those state standards that are identified by a state in a timely manner and that are more stringent than federal requirements may be applicable." "Relevant and appropriate requirements," also substantive requirements, criteria, or limitations promulgated under federal environmental or state environmental or facility siting laws, that, while not "applicable" to a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance at a CERCLA site, address problems or situations sufficiently similar to those encountered at the CERCLA site that their use is well suited to the particular site. Only those state standards that are identified in a timely manner and are more stringent than federal requirements may be relevant and appropriate."

In general, ARARs fall into three categories:

- Chemical-specific requirements: Chemical-specific ARARs specify maximum concentrations of particular chemicals in particular environmental media.
- Location-specific requirements: Location-specific ARARs specify restrictions that have been placed on the concentration of hazardous substances or on the conduct of an activity solely because it occurs in a special location.
- Performance, design or other action-specific requirements: Action-specific ARARs and remediation goals are identified for specific remedial actions.

The ARARs identified at the time that the ROD is signed exerts an enduring influence on the remedy. However, the ARARs are reconsidered to a limited extent during the five-year review.

ARARs in the ROD

Chemical-Specific ARARs

Groundwater: The ROD identified federal Maximum Contaminant Levels (MCLs). However, the ROD noted that MCLs will not apply to the completed remedy because the aquifer will be dewatered.

Surface Water: The ROD identified Ambient Water Quality Standards (AWQCs) along with Ohio Water Quality Standards (OWQS) and federal Water Quality Standards (40 CFR 131).

Soil: The ROD identified no chemical-specific ARARs for soil.

Sediment: The ROD identified no chemical-specific ARARs for sediment.

Location-Specific ARARs

The ROD identified the following location-specific ARARs: Flood Plains Executive Order 11980; Wetlands Executive Order 11990; 40 CFR 26418; Great Lakes Drainage Basin Clean Water Act Section 118.

Action-Specific ARARs:

The ROD identified the following action-specific ARARs:

Clean Air Act:

- Air pollution programs, Section 101
- Approval of Air Implementation Plans (40 CFR 52)
- Emissions Standards for Hazardous Air Pollutants (40 CFR 61)

Clean Water Act:

- Water Quality Standards (40 CFR 131)

RCRA:

- Closure Requirements (40 CFR 264.1, 73, 111, 117)
- Storage Containers (40 CFR 264.171-178)
- Storage Tank (40 CFR 264.191-198)
- Surface Impoundments (40 CFR 264.221, 226-228)
- Landfills (40 CFR 264.301-304, 310, 314)
- Incinerators (40 CFR 264.340-343, 351)
- Land Ban Regulations (40 CFR 268 Subpart C)

State of Ohio:

- Ohio Water Quality Standards (3745-01-03, 04, 05, 06, 07)
- Ohio Air Quality Standards (3745-15-06, 07; 3745-18; 3745-17-02, 05, 07, 08, 09; 3745-18-08; 3745-21-02, 03, 05, 07)
- Ohio Waste Disposal Regulations (3745-27-02, 05, 06, 07, 08, 09, 10)
- Ohio Hazardous Waste Regulations (3745-50 to 69)

POTENTIAL NEW ARARS

Chemical-Specific ARARs

Groundwater: The controlling ARAR for groundwater remains MCLs in the event

that dewatering is not successful . No new classes of ARARs for groundwater were identified.

Surface Water: The controlling ARARs for surface water remain AWQCs and Ohio Water Quality Standards. No new classes of ARARs for surface water were identified.

Location-Specific ARARs

No new classes of location-specific ARARs were identified.

Action-Specific ARARs

Action-specific ARARs were specified in the ROD for remedial actions previously performed. Because the five-year review does not include any remedial actions, existing action-specific ARARs do not apply and no new ARARs are identified.