2002800

Site-Specific Justification for the Partial Deletion from the National Priorities List (of Operable Unit 1 - Landfill Cap Area) of the Douglas Road/Uniroyal, Inc. Landfill Superfund Site Mishawaka, Indiana

June 2020

Table of Contents

List of Acronyms	4
Purpose	6
Agency Concurrence	6
Community Involvement	7
Site Background and History	7
Location/Project Organization	7
NPL Listing	7
History of Contamination	8
Remedial Investigation and Feasibility Study (RI/FS)	8
Remedial Investigation	8
Risk Assessment	8
Feasibility Study	9
Remedy Selection	9
OU1 and OU2 Records of Decision (RODs)	9
2012 Explanation of Significant Differences (ESD)	10
Remedy Implementation	10
Operable Unit 1 (OU1)	10
Operable Unit 2 (OU2)	11
Final Inspections and Reports	11
Conversion to Active Landfill Gas Collection System	11
Institutional Controls	12
Operable Unit 1 (OU1)	12
Operable Unit 2 (OU2)	12
Operation and Maintenance (O&M)	13
O&M Work Plans and Reporting	13
Landfill Cap System O&M	14
Landfill Gas System 0&M	14
Institutional Controls Monitoring	15
Demonstration of Cleanup Activity Quality Assurance/Quality Control (QA/QC)	15
Five-Year Reviews (FYRs)	16
Determination that OU1 Meets the Criteria for Deletion	17

Figure 1: OU1 – Landfill Cap Area, Douglas Road/Uniroyal Inc., Landfill Site	
Figure 2: St. Joseph County Administrative Control Area (ACA), Douglas Road/U Landfill Site	
APPENDIX A: NPL PARTIAL DELETION DOCKET REPORTS INDEX, OU1 - LANDE	TILL CAP AREA,
DOUGLAS ROAD/UNIROYAL, INC. LANDFILL SITE	20

List of Acronyms

ACA	- Administrative Control Area
CERCLA	A - Comprehensive Environmental Response, Compensation and Liability Act
cm/s	- centimeters per second
CQA	- Construction Quality Assurance
EPA	- U.S. Environmental Protection Agency
ESD	- Explanation of Significant Differences
FR	- Federal Register
FS	- Feasibility Study
FYR	- Five Year Review
GCL	- Geosynthetic Clay Liner
IAC	- Indiana Administrative Code
IC	- Institutional Control
IDEM	- Indiana Department of Environmental Management
LTRA	- Long-Term Remedial Action
mg/kg	- milligrams per kilogram (parts per million)
µg/kg	- micrograms per kilogram (parts per billion)
µg/l	- micrograms per liter (parts per billion)
NCP	- National Oil and Hazardous Substances Pollution Contingency Plan
NPDES	- National Pollutant Discharge Elimination System
NOIPD	- Notice of Intent for Partial Deletion
NPL	- National Priorities List
0&M	- Operation and Maintenance
0U1	- Operable Unit 1, Landfill Cap Area of Site
0U2	- Operable Unit 2, Groundwater Portion of Site
PAHs	- Polynuclear Aromatic Hydrocarbons
PCBs	- Polychlorinated Biphenyls
PCOR	- Preliminary Close Out Report
PRGs	- Preliminary Remediation Goals

- QA/QC Quality Assurance/Quality Control
- RAOs Remedial Action Objectives
- RI Remedial Investigation
- RI/FS Remedial Investigation/Feasibility Study
- ROD Record of Decision
- SVOCs Semivolatile Organic Compounds
- TCE Trichloroethlyene
- VOCs Volatile Organic Compound

Site-Specific Justification for the Partial Deletion from the National Priorities List (of Operable Unit 1 - Landfill Cap Area) of the Douglas Road/Uniroyal, Inc. Landfill Superfund Site Mishawaka, Indiana

Purpose

The U.S. Environmental Protection Agency (EPA) Region 5 is proposing to delete Operable Unit 1 (OU1) - Landfill Cap Area of the Douglas Road/Uniroyal Inc. Landfill Superfund Site (Douglas Road Site or Site, sometimes misspelled as "Douglass Road") from the National Priorities List (NPL). All cleanup actions have been implemented for OU1, and no further response action other than operation and maintenance (O&M), monitoring, and five-year reviews (FYRs) is necessary for the OU1 – Landfill Cap Area of the Site.

This document provides EPA's justification for the proposed partial deletion action. The Operable Unit 2 (OU2) - groundwater portion of the Site will remain on the NPL and is not being considered for deletion as part of this action. EPA and the Indiana Department of Environmental Management (IDEM) will continue to evaluate whether OU2 meets EPA's criteria for NPL deletion as additional groundwater data is collected and evaluated.

EPA plans to publish a Notice of Intent for Partial Deletion (NOIPD) (of OU1) of the Douglas Road Site from the NPL in the Federal Register (the proposed rulemaking) and will open a 30-day public comment period on this proposed action. This document provides information about the Site and explains how OU1 meets EPA's criteria for partial deletion. The documents which provide support for this report and for deleting OU1 of the Site from the NPL are available for review in the Douglas Road Site Partial Deletion Docket. This docket is available online at https://www.regulations.gov and at EPA's webpage for the Site at

https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.docdata&id=05016 96. An index of the documents included in the partial deletion docket is provided in Appendix A.

Deletion or partial deletion of a site from the NPL does not create, alter, or revoke any individual's rights or obligations. Deletion or partial deletion of a site from the NPL does not in any way alter the EPA's right to take enforcement actions, as appropriate. The NPL is designed primarily for informational purposes and to assist EPA management. Section 300.425(e)(3) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) states that a deletion or partial deletion of a site from the NPL does not preclude eligibility for future response actions, should future conditions warrant such actions. As OU1 is part of the Douglas Road Site, Section 300.425(e)(3) is applicable to this proposed action.

Agency Concurrence

EPA requested concurrence from IDEM to partially delete OU1 of the Douglas Road Site from the NPL on April 29, 2020. IDEM issued a concurrence letter on May 12, 2020. EPA Headquarters concurred with the Notice of Intent to Delete OU1 of the Site from the NPL on June 1, 2020.

Community Involvement

EPA and IDEM satisfied public participation activities for the Site as required in the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), Section 113(k), 42 U.S. C. 9613(k), and CERCLA Section 117, 42 U.S.C. 9617. EPA presented the results of its Site investigations and the cleanup alternatives for the Site to the public and offered public comment periods on the proposed cleanup plans and for all four FYRs for the Site.

EPA conducted public meetings and availability sessions to discuss Site progress, mailed fact sheets about the Site to the community, and maintained a local information repository at the Mishawaka Library, 209 Lincolnway East, Mishawaka, Indiana 46544, where residents could review Site information. Additionally, during the remedial action for OU2 - Groundwater, EPA and the City of Mishawaka redesigned the treated Site effluent/stormwater discharge system to include a filter strip to address community concerns about potential impacts to Juday Creek.

EPA will publish a notice of availability of the NOIPD and the 30-day public comment period in the *South Bend Tribune* concurrent with the publication of the NOIPD in the *Federal Register* to satisfy public participation procedures required by Section 300.425(e)(4) of the NCP.

The documents that EPA relied on for this Site-Specific Justification for the Partial Deletion report and the deletion of OU1 from the Douglas Road Site are available for review in the partial deletion docket. (*See* Partial Deletion Docket Reports Index in Appendix A). The partial deletion docket and copies of the reports in the docket are available to the public online at <u>https://www.regulations.gov</u> and at EPA's webpage for the Douglas Road Site at

https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.docdata&id=05016 96.

Site Background and History

Location/Project Organization

The Douglas Road Site (CERCLIS ID No. IND980607881) is located in St. Joseph County, near the northwest intersection of Douglas and Grape Roads, just north of Mishawaka, Indiana. The Site is approximately 32 acres in size. The Site includes the 16-acre landfill cap area (OU1) and an additional 16 acres of property (OU2) that EPA acquired adjacent to the west boundary of OU1 to build an artificial wetland to treat contaminated groundwater which extended approximately 0.7 miles west/southwest of the Site.

The Site is bounded by the Indiana State Toll Road I-80/I-90 to the north; retail stores and an apartment complex to the east; a commercial property, residential property, and Douglas Road to the south; and commercial and residential properties to the west. (*See* Figure 1). In 1996, EPA connected approximately 95 residents downgradient of the Site to municipal water supplied by the City of Mishawaka and the City of South Bend as part of a time-critical removal action.

NPL Listing

EPA proposed the Douglas Road Site to the NPL on June 10, 1986 (51 FR 21099). EPA finalized the Site listing on the NPL on March 31, 1989 (54 FR 13296).

History of Contamination

The OU1 property was excavated in the 1950s to use the gravel for the construction of the interstate. Uniroyal Plastics (Uniroyal) leased the gravel pit and used it to dispose of plant wastes between 1954 and 1979. From 1954 to 1971, Uniroyal disposed of solvents, fly ash, paper, woodstock, rubber and plastic scrap at the Site. Starting in 1971, Uniroyal only disposed of fly ash at the Site. In December 1979, Uniroyal closed the Site to avoid having to comply with the pending Resource Conservation and Recovery Act regulations pertaining to landfill operations.

Information from Uniroyal indicates that about 302,000 gallons of hazardous waste was disposed of at the Site. The liquid waste contained chemicals including methyl ethyl ketone, acetone, tetrahydrofuran, toluene, hexane, and xylene. Historical aerial photos of the landfill show several pits containing liquid that may have been used for disposal. The largest and longest of these pits was located in the central area of OU1.

Remedial Investigation and Feasibility Study (RI/FS)

The State of Indiana and Uniroyal signed a consent decree in 1989 under which Uniroyal agreed to perform a remedial investigation (RI) and feasibility study (FS) at the Site. The purpose of the RI/FS was to characterize the contamination at the Site and to evaluate cleanup alternatives to address the unacceptable risks posed by the Site. Uniroyal filed for bankruptcy in 1991 before the RI/FS was completed and discontinued work at the Site. Following the bankruptcy, it was determined that EPA should be the lead agency for the remaining Site work and IDEM would be the support agency.

Remedial Investigation

EPA completed a fund-financed RI at the Site in 1994. The RI found that surface soil at the Site was contaminated with volatile organic compounds (VOCs) at concentrations as high as 20,000 micrograms/kilogram (μ g/kg), semi-volatile organic compounds (SVOCs) at concentrations as high as 160,000 μ g/kg, and polychlorinated biphenyls (PCBs) at concentrations as high as 16,000 μ g/kg. Lead was detected in surface soil at a maximum concentration of 1,920 milligrams/kilogram (mg/kg). Arsenic was detected in surface soil at a maximum concentration of 62 mg/kg.

Groundwater was contaminated with VOCs at concentrations as high as 15,000 micrograms/liter (μ g/l), SVOCs at concentrations as high as 29 μ g/l, and metals at concentrations as high as 15 μ g/l. Residential well samples were contaminated with VOCs at concentrations as high as 110 μ g/l.

The primary contaminants of concern at the Site were trichloroethylene (TCE), vinyl chloride, and arsenic in groundwater and polynuclear aromatic hydrocarbons (PAHs), PCBs and bis(2-ethylhexyl) phthalate in soil.

Risk Assessment

The RI Report included a risk assessment to evaluate the risks that Site contaminants posed to human health and the environment. The risk assessment indicated that OU1 posed unacceptable cancer and noncancer risks to potential on-site workers and future residents living on the OU1 property. The risk assessment also calculated unacceptable risks to off-site residents who might use the groundwater as a drinking water supply.

The OU1 surface soil posed a maximum excess lifetime cancer risk (ECLR) to potential on-site workers of 2×10^{-4} and a noncancer hazard index of 2.8. Maximum risks to future on-site residents from OU1 surface soil were an ECLR of 5×10^{-4} and a noncancer hazard index of 27.

Maximum risks to potential future residents using on-site groundwater as a water supply were a ELCR of 4×10^{-3} and a noncancer hazard index of 11.7. Maximum risks calculated to current residents from off-site residential well use were an ECLR of 3×10^{-4} and a noncancer hazard index of 5.4.

EPA's ecological risk assessment determined that ecological damage from surface soil and groundwater contamination was likely in the absence of any remedial actions.

Feasibility Study

EPA evaluated three final cleanup alternatives to address the OU1 waste and soil contamination in a 1995 Focused Feasibility Study Report for OU1:

- Alternative 1 No action;
- Alternative 4A Composite barrier cap with a compacted clay soil barrier layer with a maximum permeability of 1 x 10⁻⁷ centimeters/second (cm/s); and
- Alternative 4B Composite barrier cap with a geosynthetic clay liner (GCL) soil barrier layer with a maximum permeability of 1 x 10⁻⁸ cm/s.

EPA evaluated seven cleanup alternatives to address the groundwater contamination at the Site in a 1995 OU2 Feasibility Study Report:

- Alternative 1 No action;
- Alternative 2 Institutional controls (ICs);
- Alternative 3 Oxygen enhancement with air sparging for on-Site groundwater contamination;
- Alternative 4 Groundwater extraction and discharge to Mishawaka wastewater treatment plant;
- Alternative 5 Groundwater extraction, air stripping treatment, and discharge to Juday Creek;
- Alternative 6 Groundwater extraction, constructed wetland treatment and discharge to Juday Creek; and
- Alternative 7 Groundwater extraction, fluidized carbon bed treatment and discharge to Juday Creek for on-Site groundwater contamination.

Remedy Selection

OU1 and OU2 Records of Decision (RODs)

EPA selected a cleanup remedy for OU1 of the Site in a July 13, 1995 ROD. The remedial action objectives (RAOs) for OU1 were to remediate the on-site waste material and contaminated soil. EPA selected a cleanup remedy for OU2 in a May 3, 1996 ROD. The RAOs for OU2 were to address contaminated on-site and off-site groundwater.

EPA's selected cleanup remedy for OU1 was Alternative 4B - a composite barrier cap with a GCL soil barrier layer meeting the requirements of 329 Indiana Administrative Code (IAC) 2-14-19. EPA's selected cleanup remedy for OU2 was Alternative 6 - groundwater extraction, constructed wetland treatment with re-infiltration of groundwater into the aquifer and partial discharge to Juday Creek.

2012 Explanation of Significant Differences (ESD)

EPA issued an Explanation of Significant Differences (ESD) modifying the OU2 remedy on September 14, 2012. The 2012 ESD formalized a requirement for institutional controls to prohibit any use of groundwater within the area of OU2 off-site downgradient groundwater contamination where TCE and arsenic exceed drinking water standards. *See* Institutional Controls section below.

Remedy Implementation

EPA completed the remedial designs for the OU1 and OU2 cleanup remedies in 1997. In 1999, the U.S. Army Corps of Engineers acquired approximately 16 acres of private property adjacent to the west side of the OU1 landfill area on behalf of EPA to construct the artificial wetlands for the OU2 remedy. Pursuant to Section/Paragraph 3 of the September 1, 2015 State Superfund Contract (SSC) Amendment and Section/Paragraph 23 of the September 29, 1996 OU2 SSC, the State will accept the transfer of the interest in the real property acquired by the EPA in order to implement the remedial action (RA). EPA constructed the remedial action from 1999 to 2000.

Operable Unit 1 (OU1)

The construction activities for the OU1 remedy involved:

- Clearing and regrading OU1 in preparation for capping;
- Excavating approximately 2,200 cubic yards of on-Site and off-Site soils located at the southern limit of the landfill contaminated above EPA's Preliminary Remediation Goals (PRGs) and placing them in the capping area;
- Excavating landfill gas collection trenches and installing piping for a passive landfill gas collection system;
- Installing landfill gas monitoring wells (18 total);
- Installing a low-permeability, multi-layer cover over the landfill (see below);
- Excavation and repair of surface water drainage trenches;
- Seeding the landfill cap;
- Replacement of site fencing; and
- Constructing a permanent access road.

The landfill cap consists of (from top to bottom):

- 6-inch topsoil layer with vegetative covering;
- 12-inch protective soil layer;
- 12-inch drainage layer with a minimum permeability of 1 x 10-3 cm/s;
- Polyvinyl chloride flexible membrane liner (20-mil minimum);
- GCL soil barrier layer with a maximum permeability of 1 x 10⁻⁸ cm/s; and
- 12-inch (minimum) gas collection layer.

Operable Unit 2 (OU2)

The remedial construction activities for OU2 included:

- Clearing and grubbing 16-acre OU2 property;
- Installing five extraction wells;
- Installing 14 additional monitoring wells (to total 36 for Site);
- Excavating four wetland cells;
- Rough and final grading of wetland area;
- Installing a GCL, sand blanket, and topsoil in the wetland cells;
- Wetland planting with cattails and bulrush;
- Seeding wetland areas;
- Replanting wetland areas and wetland plants that did not survive initial planting;
- Installing a filter strip by the City of Mishawaka in the City's off-site filtration basin to receive 20 percent of treated wetland effluent from the Site and stormwater from Douglas Road to prevent any potential impacts to Juday Creek, ensuring that discharges to Juday Creek would be in compliance with the substantive requirements of a National Pollutant Discharge Elimination system (NPDES) permit developed for the Site by the IDEM; and
- Entering into an agreement between EPA and the City of Mishawaka which addressed the operation and maintenance of the filter strip including the City of Mishawaka's commitment to operate and maintain the filter strip and perform any necessary repairs.

System operations for the groundwater extraction system began in September 2000 with the operation of all five groundwater extraction wells. Four extraction wells were located along the property boundary and one extraction well was located downgradient of the Site to contain the offsite groundwater contamination.

The extracted groundwater was conveyed to the four wetland cells. Wetland Cells 1 and 2 worked in parallel, each treating half of the flow. Cell 3 was intended to polish the entire flow. Cell 4 worked as a re-infiltration and evaporation basin for the treated flow. The piping for partial discharge into the City of Mishawaka storm sewer leading to Juday Creek was never fully connected and has never been used.

Final Inspections and Reports

EPA and IDEM conducted a pre-final inspection of the Site on September 14, 2000. EPA issued a Preliminary Site Close Out Report (PCOR) for the Site on September 19, 2000. The PCOR documented that all construction activities for the remedial action were complete and in compliance with the 1995 OU1 and 1996 OU2 RODs, the remedial design plans and specifications for the Site. The complete details of the OU1 and OU2 remedial action construction activities are available in the September 2000 Interim Remedial Action Report, which is available in the partial deletion docket. EPA approved the Interim Remedial Action Report on October 5, 2000.

Conversion to Active Landfill Gas Collection System

In 2002, EPA converted the passive OU1 landfill gas collection system to an active landfill gas collection system. EPA converted the system to control unacceptable levels of methane that were detected at some of the gas monitoring locations at the perimeter of the landfill during initial

monitoring. All of the piping for an active gas collection system was installed during the OU1 remedial action; all that was needed to convert the system was the installation of a blower system.

EPA installed the blower system in September 2002 and activated the system on October 4, 2002. The blower exerts a vacuum on the landfill vents and collects any gasses that are trapped under the cap and vents them to the atmosphere. EPA evaluated whether the extracted gas would need to be treated by using Summa canisters to collect landfill gas samples from the vents. Since the estimated VOC emission rate of 20 pounds/year was less than the regulatory limit of 10 tons/year under the Clean Air Act, the emissions did not require treatment. As a contingency, additional space was provided in the blower building if gas treatment was needed in the future.

EPA conducted two methane monitoring events on October 5, 2002, and October 17, 2002, which confirmed that the active landfill gas control system was effective. The complete details of the initial methane monitoring results and system conversion can be found in the January 2003 Long-Term Remedial Action 2002 Performance Report, which is available in the partial deletion docket for the Site. The active landfill gas collection system continues to operate and is overseen and monitored by IDEM. (*See* the Operations and Maintenance section of this report).

Institutional Controls

Operable Unit 1 (OU1)

EPA's selected remedy for OU1 in the 1995 ROD included ICs to restrict land and groundwater use on the landfill property. On December 13, 2011, IDEM and Uniroyal (under a court-order), executed a restrictive covenant for the OU1 capped landfill property. The restrictive covenant:

- Prohibits activity at the OU1 property that may interfere with response activities, long-term monitoring or measures necessary to assure the effectiveness and integrity of any response actions, including prohibiting interference with fencing and warning sites.
- Prohibits residential use of the OU1 property, including daily childcare or educational facilities for children (e.g., daycare centers for children or K-12 schools).
- Prohibits the use of the property for growing food crops.
- Prohibits the installation or use of groundwater wells on the property unless part of a Site investigation and/or remediation and requires dewatering activities to require appropriate handling, treatment and disposal of any extracted contaminants in the groundwater.
- Prohibits excavation or construction activities on the property (including ditches, buildings, wells, pipes, or roads) unless approved by EPA or IDEM.

The property restrictions run with the land and are binding on future owners and their respective successors, assigns and transferees.

Operable Unit 2 (OU2)

The 1996 OU2 ROD did not include ICs to prevent exposure to unacceptable levels of Site contaminants in downgradient groundwater. At the time of the OU2 ROD, EPA determined that providing the municipal water supply to the affected area through EPA's 1994 to 1996 emergency removal action provided adequate protection from exposure to off-Site groundwater.

In 2012, EPA determined that it was necessary to augment the OU2 remedy to include enforceable restrictions to prevent exposure to unacceptable levels of Site-related groundwater contaminants downgradient of the Site. EPA issued an Explanation of Significant Differences (ESD) on September 14, 2012. The ESD required the implementation of ICs that prohibit any use of groundwater within the off-Site area of downgradient groundwater contamination where TCE and arsenic exceed drinking water standards.

The area of off-site groundwater contamination addressed by the ESD is within the St. Joseph County administrative control area (ACA) for groundwater use established in 2007 (*see* Figure 2). The entire area overlying the plume has been designated as an ACA under St. Joseph County Code, Chapter 52, Section 52.043 Ordinance 38-05 (April 12, 2005).

The ACA restricts access to contaminated groundwater, prevents contamination of the underlying aquifer through a permitting system, and requires the health department to approve any new groundwater wells in the ACA. While EPA believed that the county ordinance effectively prevented exposure to Site-related groundwater contamination, the ESD required EPA to verify the scope and effectiveness of the ordinance and determine if additional controls were required.

EPA and IDEM evaluated St. Joseph County's ACA for the area of OU2 off-site groundwater contamination. In May 2014, IDEM issued a letter to St. Joseph County providing notice that the County's ACA for groundwater meets the definition of an IC restricting potential exposure under IAC 13-11-2-5-8.5(f). EPA concurred with the State's determination.

Operation and Maintenance (O&M)

EPA conducted initial O&M of the OU1 and OU2 remedies. IDEM assumed O&M for the landfill cap and landfill gas collection system portion of the remedy (OU1) on October 11, 2003. EPA operated and maintained the OU2 groundwater extraction and wetland treatment remedy as a long-term remedial action (LTRA) until July 11, 2011. IDEM assumed O&M for OU2 on July 11, 2011.

IDEM reviewed the groundwater monitoring data for the Site in 2015 and determined that the OU2 groundwater attained the cleanup levels in the ROD. IDEM shut the OU2 groundwater extraction and wetland treatment system down on February 4, 2015 to evaluate whether the groundwater treatment system was still necessary or if the system could be eliminated.

Subsequent monitoring indicates that the only chemical remaining in groundwater above the cleanup criteria is arsenic in a few downgradient groundwater monitoring wells located within the St. Joseph County ACA. The highest concentrations of arsenic detected during the post-shutdown monitoring were detected in groundwater monitoring well MW-15S and ranged from 15.4 μ g/l to 19.7 μ g/l. These concentrations of arsenic are above the federal maximum contaminant level for arsenic in drinking water, which is 10 μ g/l. IDEM will continue to conduct groundwater monitoring at the Site until the groundwater data demonstrates that the Site meets EPA's criteria for full site completion and the remaining portions of the Site (OU2) can be proposed for deletion.

O&M Work Plans and Reporting

IDEM conducts O&M for the landfill cap portion of the remedy in accordance with the October 2000 O&M Manual. O&M for the landfill gas collection system is conducted in accordance with the Carbonair Environmental Systems September 13, 2002 Operations and Maintenance Manual. The

Carbonair Environmental Systems 2003 Operations and Maintenance Manual is included as part of the Landfill Gas Technical Memorandum in Appendix A of the January 2003 Long-Term Remedial Action 2002 Performance Report. IDEM collects and analyzes landfill gas and groundwater samples for monitoring and compliance reporting in accordance with the September 12, 2016 Sampling and Analysis Plan and the June 24, 2016 Quality Assurance Project Plan.

IDEM's contractor documents O&M activities for the Site in quarterly and annual monitoring reports. The most recent O&M and sampling and compliance data for the Site can be found in the January 20, 2020 Douglas Road Landfill Superfund Site Operations and Maintenance (O&M) Report Revision 1.0, 4th Quarter 2019 and the December 16, 2019 Douglas Road Landfill Superfund Site Annual Groundwater Sampling Report. Copies of these reports are available in the partial deletion docket for the Site.

The 2019 O&M Report documents from Site inspections that the landfill cap remedy is in good condition. Air emissions from the landfill gas collection system are well below state and federal regulatory criteria and do not require treatment. Methane monitoring results collected from the 18 gas monitoring wells installed around the perimeter of the landfill were at or near a concentration of zero percent methane. These concentrations are well below the Site-specific action level for methane of five percent methane by volume.

Landfill Cap System O&M

O&M activities for the landfill cap include:

- Monthly inspections of the landfill cap, drainage system, access road, and fence to ensure that the landfill cover system is intact, free of debris, nuisance plants/animals, and erosion/settlement, and otherwise functioning properly;
- Quarterly detailed cap inspections;
- Removal and disposal of trash and debris from the cap, the fence line, drainage ditches, and stormwater drop inlets;
- Fence repairs and cap repairs as needed;
- Removal of woody vegetation from the drainage ditches;
- Removal of vegetation from the perimeter gravel road and addition of gravel to remove ponding; and
- Trapping nuisance animals and filling burrows.

Landfill Gas System O&M

Monitoring activities for the landfill gas collection system include:

- Monthly inspections of the vacuum extraction blower and associated process piping, valves, and controls;
- Monthly inspection of the equipment shed for integrity;
- Quarterly monitoring of the landfill gas vent wells for methane, carbon dioxide and oxygen to evaluate trends in the gas generation rate and to determine if system adjustments are needed to maximize gas removal and capture;
- Quarterly effluent vapor compliance sampling from the blower discharge using a Summa canister and an 8-hour regulator for VOC analysis to evaluate the discharge of organic Hazardous Air Pollutants to the atmosphere;

- Monthly inspection of 18 perimeter landfill gas monitoring probes for integrity;
- Quarterly monitoring of the landfill gas monitoring probes for methane, carbon dioxide, and oxygen levels to document compliance with state and federal regulations, determine if adjustments are needed in the gas collection system, and ensure the safety of the surrounding properties.

Institutional Controls Monitoring

IDEM provides long-term stewardship of the OU1 IC through regular Site inspections to confirm that there are no unauthorized land or groundwater uses of the OU1 property. IDEM communicates with St. Joseph County to ensure that the restrictive covenant for the OU1 property remains in place and is enforceable. A transfer in the ownership of the OU1 property in March 2017 had no impact on the property or OU1 ICs.

Long-term stewardship of the St. Joseph County ACA is provided by regular communication with the county as well as IDEM's May 1, 2014 letter to the St. Joseph County Health Department notifying the County that IDEM is relying on the County's ACA as a remedial measure. IDEM's May 1, 2014 letter also notified the County that IAC 36-1-6-11 requires the County to give IDEM written notice at least sixty days before amending or repealing the ordinance or ACA, and again within thirty days after passing, amending, or repealing the ordinance or ACA.

Demonstration of Cleanup Activity Quality Assurance/Quality Control (QA/QC)

EPA's contractor, CH2M Hill, provided construction quality control and verification sampling during the remedial action in accordance with the 1995 Final Verification Cleanup Plan for the Site. The construction quality control and verification activities included:

- Developing a Construction Quality Assurance (CQA) Plan submitted and approved by EPA during the remedial design (Appendix B of the 1995 Final Verification Cleanup Plan);
- Developing an inspection checklist;
- Developing field procedures;
- Conducting weekly inspections and providing findings to the CH2M Hill site manager and construction subcontractor;
- Preparing a Construction Inspection Report to document inspections and testing;
- Reviewing and approving submittals;
- Updating record drawings;
- Issuing Nonconformance Reports as necessary;
- Conducting and supervising testing;
- Conducting visits by design engineers as needed;
- Supervising corrective work;
- Following procedures for work modification;
- Issuing record drawings; and
- Reviewing and approving modifications to the scope of work.

CH2M Hill conducted testing and inspections throughout the remedial action construction in accordance with the specifications in the remedial design and the CQA Plan. These included:

- Reviewing survey grades provided by subcontractors;
- Inspecting all pipe trenches, manhole installations, backfilling, and pipe testing;
- Observing and documenting all drilling activities;
- Reviewing all quality control documentation of the geosynthetic materials used in construction;
- Observing and documenting geosynthetic installation;
- Inspecting all electrical conduits, connections, and equipment;
- Inspecting all flow control structures; and
- Reviewing all soil tests provided by subcontractors.

CH2M Hill conducted soil sampling to confirm that the area of off-Site soil contamination above EPA's PRGs was fully excavated in accordance with the Field Sampling Plan in Appendix A of the 1995 Final Verification Cleanup Plan.

Sampling and laboratory analyses conducted during the LTRA and O&M was performed in accordance with the 2001 Quality Assurance Project Plan Revision 1; 2005 Quality Assurance Project Plan Revision 2; and the 2010 Landfill Gas Monitoring Plan. IDEM conducts current sampling and analysis activities for the Site in accordance with the 2016 Quality Assurance Project Plan.

Five-Year Reviews (FYRs)

EPA conducts FYRs at sites to determine whether a cleanup remedy remains protective of human health and the environment. The review methods, findings, and conclusions are documented in FYR reports. EPA identifies any site issues found during the review in the FYR report with recommendations to address the issues.

To date, EPA has conducted four FYRs of the remedial actions implemented at the Douglas Road Site. These reviews are statutory reviews and are required because hazardous substances, pollutants or contaminants remain at the Site above levels that allow for unlimited use and unrestricted exposure. EPA completed the fourth FYR for the Site on July 19, 2017.

EPA's 2017 FYR did not identify any issues or recommendations for the OU1 remedy at the Douglas Road Site. The 2017 FYR determined that the OU1 remedy protects human health and the environment. Specifically, EPA found no evidence of exposure to OU1 contaminants and the existing land and groundwater use at the property is consistent with the land use restrictions. The lowpermeability, multi-layer landfill cap, the landfill gas collection system, Site perimeter fence, and signs effectively limit exposure to Site contaminants remaining at OU1. O&M, landfill gas monitoring, and ICs in the form of an enforceable restrictive covenant will ensure that the OU1 landfill cap remedy and landfill gas collection system remain protective over the long-term.

The 2017 FYR determined that the OU2 remedy is protective of human health and the environment, that the OU2 ICs are effective, and that there is no exposure to remaining groundwater contaminants.

The next FYR for the Site is due in July 2022.

Determination that OU1 Meets the Criteria for Deletion

OU1 of the Douglas Road Site meets all site completion requirements specified in Office of Solid Waste and Emergency Response (OSWER) Directive 9320.2-22, Close Out Procedures for National Priorities List Sites. All cleanup actions and remedial action objectives for OU1 set forth in the 1995 ROD have been implemented for all pathways of exposure. The selected remedial action, RAOs, and PRGs for the landfill area, soil contamination, and landfill gas are consistent with EPA policy and guidance.

EPA's 2017 FYR confirmed that the OU1 remedy is protective of human health and the environment. The low-permeability, multi-layer landfill cap, active landfill gas collection system, perimeter fence, and signs effectively limit exposure to OU1 contaminants. There is no evidence of exposure to OU1 contaminants and the existing use of the OU1 property is consistent with the requirements of the land and groundwater use restrictions. O&M of the OU1 remedy, landfill gas monitoring, and institutional controls in the form of a restrictive covenant ensure that the OU1 landfill cap remedy and landfill gas collection system remain protective over the long-term.

The response actions taken at OU1 are protective of human health and the environment, therefore, the taking of additional remedial measures at OU1 is not appropriate. No further Superfund response is necessary for OU1 other than 0&M, monitoring, and FYRs. Section 300.425(e) of the NCP states that a Superfund site or a portion of a site may be deleted from the NPL when no further response action is appropriate. EPA, in consultation with the State of Indiana, has determined that all required response actions have been implemented for OU1, and that no further response action other than 0&M, monitoring, and FYRs is appropriate for the OU1 - Landfill Cap Area portion of the Site. IDEM sent EPA a letter concurring with EPA's proposed deletion of OU1 from the NPL on May 12, 2020.

Figure 1: OU1 – Landfill Cap Area, Douglas Road/Uniroyal Inc., Landfill Site

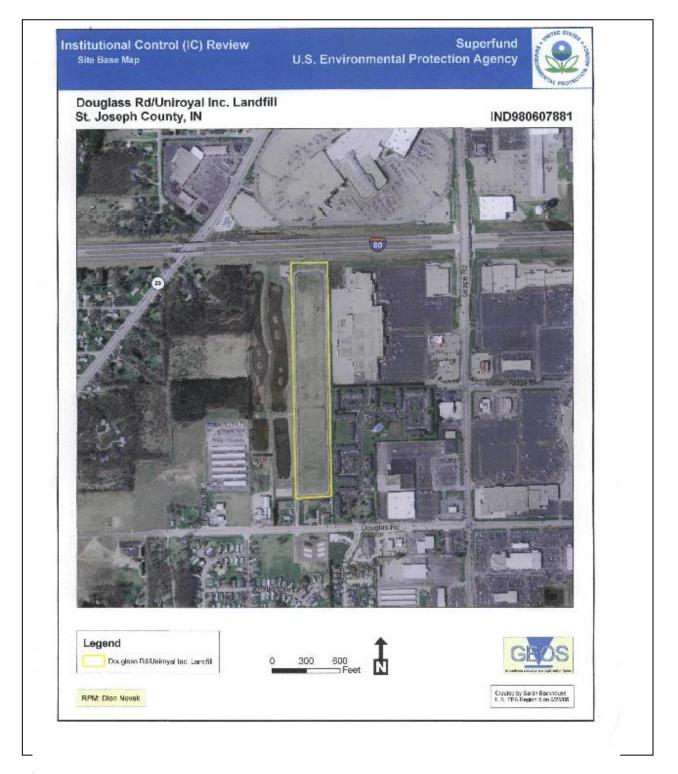
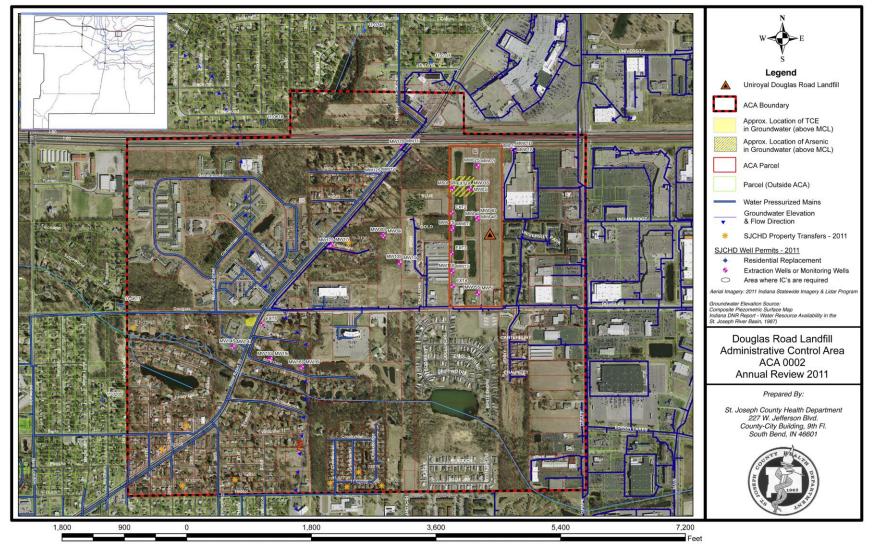


Figure 2: St. Joseph County Administrative Control Area (ACA), Douglas Road/Uniroyal, Inc. Landfill Site



APPENDIX A: NPL PARTIAL DELETION DOCKET REPORTS INDEX, OU1 – LANDFILL CAP AREA, DOUGLAS ROAD/UNIROYAL, INC. LANDFILL SITE

NPL PARTIAL DELETION DOCKET REPORTS INDEX Douglas Road Landfill/Uniroyal Site - Operable Unit 1, Landfill Cap Area

Docket ID	Phase Name	Sequence	Document ID	Document Status	Document Title	Document Type
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0146	DoNotPost	This phase is reserved by: Douglass Road/Uniroyal, Inc., Landfill Mishawaka, IN, IND980607881 Region 5	OTHER
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0201	QA_Ready	05-2002663 - June 20, 2018 Permanent Shutdown of the Groundwater Extraction System and Sampling Protocol Douglas Road Landfill Superfund Site Mishawaka, IN	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0202	QA_Ready	05-162592 - June 13, 1995 Administrative Record Site Index - Douglas Road/Uniroyal Inc Landfill - Remedial - Original	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0203	Metadata_Ready	05-162664 - March 4, 1994 CH2M Hill Inc ARCS V - RI/FS Quality Assurance Project Plan (QAPP)	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0204	Metadata_Ready	05-162743 - February 1, 1995 CH2M HILL INC - ARCS V - PUBLIC COMMENT FOCUSED FEASIBILITY STUDY (FS) REPORT	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0205	Metadata_Ready	05-162744 - February 1, 1995 CH2M HILL INC - ARCS V - REMEDIAL INVESTIGATION (RI) REPORT - VOL 1 OF 2 (TEXT)	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0206	Metadata_Ready	05-162745 - February 1, 1995 CH2M HILL INC - ARCS V - REMEDIAL INVESTIGATION (RI) REPORT - VOL 2 OF 2 (APPENDICES A-F)	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0207	QA_Ready	05-162848 - July 5, 1996 Administrative Record Site Index - Douglas Road/Uniroyal Landfill - Remedial - Update #1	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0208	QA_Ready	05-162872 - September 1, 1995 CH2M Hill Inc ARCS V - Public Comment Feasibility Study (FS)	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0209	Metadata_Ready	05-162930 - May 13, 1997 ADMINISTRATIVE RECORD SITE INDEX - DOUGLAS ROAD/UNIROYAL INC LANDFILL - REMEDIAL - ADDENDUM	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0210	Metadata_Ready	05-162931 - July 13, 1995 RECORD OF DECISION (ROD) (SIGNED) - LANDFILL CAP OPERABLE UNIT - DOUGLAS ROAD/UNIROYAL INC LANDFILL	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0211	Metadata_Ready	05-162932 - May 3, 1996 RECORD OF DECISION (ROD) (SIGNED) - GROUNDWATER OPERABLE UNIT - DOUGLAS ROAD/UNIROYAL INC LANDFILL	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0212	Metadata_Ready	05-162933 - February 9, 1995 ADMINISTRATIVE RECORD SITE INDEX - DOUGLAS ROAD/UNIROYAL INC LANDFILL - REMOVAL - ORIGINAL/UPDATE #1	SUPPORTING & RELATED MATERIALS

		_				
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0213	Metadata_Ready	05-162935 - December 19, 1994 ACTION MEMO - REQUEST FOR EMERGENCY REMOVAL ACTION - DOUGLAS ROAD LANDFILL (REDACTED)	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0214	Metadata_Ready	05-162936 - April 4, 1995 RPA ACTION MEMO - REQUEST FOR CEILING INCREASE & EXCEMPTION TO 12 MONTH STATUTORY LIMIT - DOUGLAS ROAD LANDFILL (REDACTED)	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0215	Metadata_Ready	11-164869 - September 19, 2000 (716) PRELIMINARY CLOSE OUT REPORT (Final Remedial Action for the Douglas Road Landfill Site Mishawaka, Indiana)	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0216	Metadata_Ready	05-167446 - September 11, 2002 FIVE YEAR REVIEW REPORT (SIGNED) DOUGLAS ROAD/UNIROYAL INC LANDFILL 2002	· SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0217	Metadata_Ready	11-189631 - March 31, 1989 NPL FEDERAL REGISTER NOTICE	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0218	Metadata_Ready	05-277491 - June 11, 1996 POLLUTION REPORT (POLREP) - FINAL	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0219	Metadata_Ready	05-280097 - September 11, 2007 FIVE YEAR REVIEW REPORT (SIGNED) DOUGLAS ROAD LANDFILL - 2007	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0220	Metadata_Ready	05-352898 - February 1, 1997 CH2M HILL - CHARACTERIZATION OF SURFACE WATER, SEDIMENT, & BIOTA TECHNICAL MEMORANDUM	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0221	Metadata_Ready	05-352899 - June 14, 2001 CH2M HILL - QUALITY ASSURANCE PROJECT PLAN (QAPP) - REV 1	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0222	Metadata_Ready	05-955620 March 1, 2005 CH2M HILL - QUALITY ASSURANCE PROJECT PLAN (QAPP) - REV 2 [REDACTED TO REMOVE COMPANY CONFIDENTIAL INFORMATION IN APPENDIX 1]	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0223	Metadata_Ready	05-352903 - June 26, 1997 CH2M HILL - FINAL REMEDIAL DESIGN - OU1	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0224	Metadata_Ready	05-52904 - June 1, 1995 CH2M HILL - FINAL VERIFICATION CLEANUP PLAN	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0225	Metadata_Ready	05-352908 - January1, 1997 CH2M HILL - SITE REMEDIAL ACTION - FINAL DESIGN SUBMITTAL	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0226	QA_Ready	05-352909 - November 1, 1996 CH2M Hill - Site Remedial Action - Prefinal Design Submittal	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0227	QA_Ready	05-428443 - December 13, 2011 Environmental Restrictive Covenant	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0228	QA_Ready	05-437227 - September 14, 2012 Administrative Record Site Index - Douglas Road Landfill - Update #2 - Remedial Action	SUPPORTING & RELATED MATERIALS

EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0229	QA_Ready	05-441961 - August 20, 2012 Third Five-Year Review Report (SIGNED) - Douglas Road Landfill	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0230	QA_Ready	05-442004 - September 14, 2012 EPA - Explanation of Significant Differences (ESD) (Signed)	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0231	QA_Ready	05-442032 - September 24, 2012 EPA - Sitewide Ready for Anticipated use (SWRAU) - Douglas Road/Uniroyal Inc. Landfill	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0232	QA_Ready	05-16658 - June 1, 2011 CH2M Hill - Long-Term Remedial Action - 2010 Through 2011 Performance Report	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0233	QA_Ready	05-516659 - January 1,1997 CH2M Hill - Remedial Design - Groundwater Operable Unit - Drawings - Volume II OF II	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0234	QA_Ready	05-534613-2017 Fourth Five-Year Review Report (Signed) - Douglas Road Landfill	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0237	QA_Ready	05-2002709 - May 1, 2014 IDEM Letter RE: Environmental Restrictive Ordinance Notification	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0238	QA_Ready	05-2002708 - February 23, 2016 KERAMIDA - Fourth Quarter 2015 Operation and Maintenance Report	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0239	QA_Ready	05-2002707 - January 26, 2015 IDEM Letter RE: Temporary Suspension of Extraction System	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0240	QA_Ready	05-2002706 - June 24, 2016 KERAMIDA - Quality Assurance Project Plan (QAPP)	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0241	Metadata_Ready	05-2002705 - September 12, 2016 KERAMIDA - SAMPLING AND ANALYSIS PLAN	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0243	Metadata_Ready	05-2002704 - December 16, 2019 PATRIOT ENGINEERING - ANNUAL GROUNDWATER SAMPLING REPORT - ANNUAL EVENT 4TH QUARTER 2019	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0244	Metadata_Ready	05-2002703 - January 1, 2020 PATRIOT ENGINEERING - OPERATIONS AND MAINTENANCE (O&M) REPORT REV 1.0 4TH QUARTER 2019	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0245	Metadata_Ready	05- 2002711 - January 23, 2013 KERAMIDA - 2012 FOURTH QUARTER AND ANNUAL OPERATION AND MAINTENANCE REPORT	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0246	Metadata_Ready	05-2002712 - June 30, 2011 US EPA LETTER RE: STATE ASSUMPTION OF LTRA ACTIVITIES AT OU2	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0247	Metadata_Ready	05-2002710 - January 7, 2015 KERAMIDA - FOURTH QUARTER 2014 OPERATION AND MAINTENANCE REPORT	SUPPORTING & RELATED MATERIALS

EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0248	Metadata_Ready	05- 2002737 - January 1, 1997 REMEDIAL DESIGN LANDFILL OPERABLE UNIT VOLUME II OF II - DRAWINGS	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0249	Metadata_Ready	05-2002736 - January 1, 1997 OU2 REMEDIAL DESIGN DRAWINGS	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0250	Metadata_Ready	05-2002735 - September 1, 2000 INTERIM REMEDIAL ACTION REPORT VOLUME 1 (SIGNED) - PAGES 6-17 MISSING	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0251	Metadata_Ready	05-2002734 - September 1, 2000 INTERIM REMEDIAL ACTION REPORT: VOLUME 1 (UNSIGNED)	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0252	Metadata_Ready	05-2002733 - September 1, 200 CH2M HILL - INTERIM REMEDIAL ACTION REPORT: VOLUME 2	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0253	Metadata_Ready	05-2003732 - October 1, 2000 O&M MANUAL	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0254	Metadata_Ready	05-2002731 - April 17, 2007 US EPA LETTER RE: OPERATIONAL AND FUNCTIONAL DATE FOR DOUGLAS ROAD LANDFILL	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0255	Metadata_Ready	05-2002730 - January 23, 2002 REVISED LONG-TERM REMEDIAL ACTION 2001 PERFORMANCE REPORT	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0256	Metadata_Ready	05-2002729 - January 1, 2003 LONG-TERM REMEDIAL ACTION 2002 PERFORMANCE REPORT	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0257	Metadata_Ready	05-2002728 - February 20, 2003 EPA LETTER RE: REQUEST FOR IDEM TO ASSUME O&M OF LANDFILL CAP SYSTEM (OU1)	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0258	Metadata_Ready	05-2002727 - November 6, 2003 IDEM LETTER RE: ASSUMPTION OF OPERATION & MAINTENANCE ACTIVITIES FOR THE LANDFILL OPERABLE UNIT	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0259	Metadata_Ready	05-2002726 - September 1, 2003 LONG-TERM REMEDIAL ACTION 2003 PERFORMANCE REPORT	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0260	Metadata_Ready	05-2002724 - January 1, 2005 LONG-TERM REMEDIAL ACTION 2004 PERFORMANCE REPORT	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0261	Metadata_Ready	05-2002725 - March 1, 2006 LONG-TERM REMEDIAL ACTION 2005 PERFORMANCE REPORT	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0262	Metadata_Ready	05-2002723 - December 31, 2005 IDEM TECHNICAL STATUS REPORT FOURTH QUARTER AND ANNUAL REPORT FOR 2005	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0263	Metadata_Ready	05-2002722 - December 30, 2006 IDEM TECHNICAL STATUS REPORT FOURTH QUARTER AND ANNUAL REPORT FOR 2006	SUPPORTING & RELATED MATERIALS

EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0264	Metadata_Ready	05-2002721 - September 18, 2008 LONG-TERM REMEDIAL ACTION PERFORMANCE REPORT 2006 THROUGH 2007 OPERATING YEAR	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0265	Metadata_Ready	05-2002720 - December 29, 2007 IDEM TECHNICAL STATUS REPORT FOURTH QUARTER AND ANNUAL REPORT FOR 2007	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0266	Metadata_Ready	05-2002719 - September 30, 2008 LONG-TERM REMEDIAL ACTION PERFORMANCE REPORT 2007 THROUGH 2008 OPERATING YEAR	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0267	Metadata_Ready	05-2002718 - September 19, 2008 SULTRAC MEMO RE: MAY 2008 GEOPROBE INVESTIGATION	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0268	Metadata_Ready	05-2002717 - February 5, 2010 FOURTH QUARTER AND ANNUAL OPERATION AND MAINTENANCE REPORT FOR 2009	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0269	Metadata_Ready	05-2002716 - February 25, 2010 IDEM - LANDFILL GAS MONITORING PLAN	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0270	Metadata_Ready	05-2002715 - March 18, 2011 2010 FOURTH QUARTER AND ANNUAL OPERATION AND MAINTENACE REPORT	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0271	Metadata_Ready	05-2002714 - July 13, 2011 IDEM LETTER RE: ASSUMPTION AND COMMENCEMENT OF GROUNDWATER REMEDIAL COMPONENT OPERATION AND MAINTENANCE	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0272	Metadata_Ready	05-2002713 - February 2, 2012 2011 FOURTH QUARTER ANNUAL OPERATION AND MAINTENANCE REPORT	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0273	Metadata_Ready	05-2002712 - June 30, 2011 US EPA LETTER RE: STATE ASSUMPTION OF LTRA ACTIVITIES AT OU2	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0274	Metadata_Ready	05-2002711 - January 23, 2013 KERAMIDA - 2012 FOURTH QUARTER AND ANNUAL OPERATION AND MAINTENANCE REPORT	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0281	Metadata_Ready	05-2002754 - May 12, 2020 IDEM Letter RE: Partial Deletion of OU1 - Landfill Cap Area, Douglas Road Landfill Superfund Site, EPA-HQ- SFUND-1989-0008, Mishawaka, IN	SUPPORTING & RELATED MATERIALS
EPA-HQ-SFUND-1989-0008	Proposed Rule	7	EPA-HQ-SFUND-1989-0008- DRAFT-0283	Metadata_Ready	05-2002780 - June 1, 2020 US EPA MEMO RE: HEADQUARTERS CONCURRENCE ON THE DOUGLAS ROAD/UNIROYAL SUPERFUND SITE NOTICE OF INTENT TO PARTIALLY DELETE W/CHECKLIST	SUPPORTING & RELATED MATERIALS
ADD:						I

FINAL PARTIAL DELETION JUSTIFICATION REPORT NEWSPAPER AD