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2025R01039
MATTHEW S. EGGERS
CLERK & RECORDER
BUREAU COUNTY, IL
RECORDED ON
04/03/2025 10:59 AM
RHSP FEE 18.00
RECORDING FEE 75.00
PAGES: 175

This instrument was prepared by:

Name: Philip Tannian
Address: 17440 College Parkway
Livonia, Michigan
48152

Please return this instrument to:

Name: Doug Long
Address: P.O. Box 206
Sheffield, Illinois
61361

ENVIRONMENTAL COVENANT

1. This Environmental Covenant is made this 1st day of April, 2025, by and among US Ecology Illinois, Inc., a California corporation as successor by amendment to US Ecology, Inc., a California corporation, and Nuclear Engineering Company, Inc., a California corporation, (Grantor) and the Holders/Grantees further identified in paragraph 3 below pursuant to the Uniform Environmental Covenants Act, 765 Illinois Compiled Statutes (ILCS) 122 (UECA) for the purpose of subjecting the Restricted Area, in whole or in part, to activity and use limitations, as described herein.

2. **Restricted Area and Grantor.**

A. **Restricted Area.** The real property subject to this Environmental Covenant is located at 13279 350 E Street in Sheffield, Bureau County, Illinois and includes the entirety of the real property owned by Grantor as is legally described in Appendix A and depicted in the map attached as Appendix B, hereinafter referred to as the "Restricted Area." The Restricted Area is currently assigned property index numbers (PINs) 13-27-100-007, 13-27-300-005, 13-27-300-001, 13-27-300-004, 13-27-200-006, 13-27-300-002, 13-27-400-003, 13-28-400-004, and 13-34-100-003, in Bureau County, Illinois, and identified as LPC No. 0110950003.

B. **Grantor.** US Ecology Illinois, Inc. is the current fee owner of the Restricted Area and is the "Grantor" of this Environmental Covenant. The mailing address of the Grantor is P.O. Box 206, Sheffield, Illinois, 61361.

3. **Holders (and Grantees for purposes of indexing).**

A. The Illinois Environmental Protection Agency (Illinois EPA) is a Holder (and Grantee for purposes of indexing) of this Environmental Covenant pursuant to its authority under Section 3(b) of UECA. The mailing address of the Illinois EPA is 2520 West Iles Avenue, P.O. Box 19276, Springfield, Illinois 62794-9276.

B. US Ecology Illinois, Inc. is a Holder (and Grantee for purposes of indexing) of this Environmental Covenant pursuant to UECA. The mailing address of US Ecology Illinois, Inc. is P.O. Box 206, Sheffield, Illinois, 61361. Regardless of any future transfer of the Restricted Area, US Ecology Illinois, Inc. shall remain a Holder of this Environmental Covenant. US Ecology Illinois, Inc. is to be identified as both Grantee and Grantor for purposes of indexing.

4. **Agencies.** The Illinois EPA and the United States Environmental Protection Agency (U.S. EPA) are "Agencies" within the meaning of Section 2 of UECA. The Agencies have approved the environmental response project described in Paragraph 6 below. The Agencies may enforce this Environmental Covenant pursuant to Section 11 of UECA.

5. **Owner**. An "Owner" is any person, individual, partnership, co-partnership, firm, company, limited liability company, corporation, association, joint stock company, joint venture, trust, estate, political subdivision, unit of government, school district, or other entity holding fee title to the Restricted Area or a portion thereof.

6. **Environmental Response Project and Administrative Record.**

A. This Environmental Covenant arises under an environmental response project as defined in Section 2 of UECA.

B. A portion of the Restricted Area, namely the portion known as the US Ecology Sheffield Facility ("Facility"), which, as depicted on Appendix C, is comprised of the entirety of the real property legally described in Appendix A currently assigned PINs 13-27-300-001 and 13-27-300-005, is undergoing environmental remediation pursuant to an Administrative Order on Consent dated September 22, 2020 (RCRA Docket No. RCRA-05-2020-0016), "Order") issued under Section 3008(h) of the Solid Waste Disposal Act, commonly referred to as the Resource Conservation and Recovery Act of 1976 (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984.

The Facility, designated as U.S. EPA RCRA ID No. ILD045063450, is a 46-acre permitted hazardous waste facility that operated from 1968 to 1983. The Facility includes two hazardous waste landfills referred to as the Old Chem Site and New Chem Site. During operations, the Facility accepted industrial, laboratory and agricultural hazardous wastes. Approximately 165,000 cubic yards (cy) of waste were reportedly disposed at the two landfills (93 percent at the New Chem Site). The Old Chem Site consists of six disposal trenches covering about 6 acres. The New Chem Site consists of 19 clay-lined burial cells covering approximately 40 acres.

Corrective actions included containment of remaining on-site waste, and groundwater extraction and treatment to address a contaminated groundwater plume in the shallow aquifer beneath the Facility. To contain the waste, portions of the landfill were isolated by constructing subsurface barrier walls to divert groundwater away from the cells, followed by capping the landfill surface. After the initial source control actions, additional groundwater remediation systems were installed in several phases including groundwater extraction and treatment, and in situ treatment. More than 25 years of groundwater monitoring data have been collected since the initial remedial systems were installed, with volatile organic compounds (VOCs) comprising the primary contaminants of concern. VOC concentrations have declined over time, demonstrating that natural attenuation is occurring.

The Order provides for the performance of long-term stewardship through monitoring and maintenance activities, as well as completion of additional corrective action activities at or in connection with the Facility, if deemed necessary. The Order also requires the Grantor to execute this Environmental Covenant, granting the right of access described in Paragraph 9 below and the right to enforce the activity and use restrictions required under the Order and incorporated in Paragraph 8 below.

C. Grantor wishes to cooperate fully with the Agencies in the implementation, operation, and maintenance of all response actions at the Facility. Grantor further wishes to cooperate fully with the Agencies in the implementation and enforcement of this Environmental Covenant at the Restricted Area.

D. The Administrative Record for the environmental response project at the Facility is maintained online at https://www.epa.gov/foia. For other information concerning the Site, persons may also contact the Illinois EPA FOIA Officer, 2520 West Iles Avenue, P.O. Box 19276, Springfield, Illinois 62794-9276, or submit the FOIA request using Illinois EPA's web-site at https://epa.illinois.gov/foia.html.

7. Grant of Covenant. Covenant Runs with the Land. Grantor creates this Environmental Covenant pursuant to UECA so that the Activity and Use Limitations and associated terms and conditions set forth herein shall "run with the land" in accordance with Section 5(a) of UECA and shall be binding on Grantor, its successors and assigns, and on all present and subsequent owners, occupants, lessees, transferees, or other persons acquiring an interest in the Restricted Area or any portion thereof.

8. Activity and Use Limitations. The following activity and use limitations apply to use of the Restricted Area:

A. Restricted Access to the Restricted Area. The Grantor and any subsequent Owner shall restrict unauthorized access to the portion of the Restricted Area comprised of the entirety of the real property legally described in Appendix A currently assigned PINs 13-27-100-007, 13-27-300-005, 13-27-300-001, 13-27-300-004, 13-27-200-006, 13-27-300-002, 13-27-400-003, and 13-34-100-003, as depicted on attached Appendix D. This obligation includes but is not limited to inspecting the physical integrity and condition of the boundary fence, signage, and

gates in accordance with the LTSP (defined below) and repairing or replacing, as necessary, said fence, signage, and gates.

B. **Restricted Groundwater Use.** Except as required as part of a U.S. EPA approved monitoring or response activity, construction of wells and activities that extract, consume, or otherwise use any groundwater are prohibited on or at the Restricted Area. For the purpose of this restriction, "groundwater" shall have the same meaning as in the RCRA regulations (See 40 CFR § 260.10).

C. **No Disturbance of Impermeable Landfill Cover(s) or Wastes.** Except as provided in a plan approved in writing by U.S. EPA, the following activities are prohibited in the waste cover areas of the Restricted Area, which are comprised of the entirety of the real property legally described in Appendix A currently assigned PINs 13-27-300-001,13-27-300-004, 13-27-300-005, and 13-27-100-007, as depicted on attached Appendix E: i) any excavation or other intrusive activity that could affect the integrity of the cover or covers; ii) any disturbance or exposure of the waste, soil, or other material underneath the cover or covers; and/or iii) any interference with or covering of any permanent markers placed at the boundaries of the covers at the locations identified in Appendix E or subsequently installed at the Restricted Area. Owner may disturb the cover(s) to treat or remediate the contaminated waste or soil underneath the cover(s) or to perform necessary repairs to the cover(s) provided such treatment, remediation, and/or repairs are performed in accordance with applicable laws, including but not limited to those set forth in Subparagraph 8 G below, plans approved in writing by U.S. EPA and the below defined LTSP.

D. **Restricted Land Use.** All uses of the Restricted Area except those compatible with industrial land use are prohibited. Prohibited land uses include but are not limited to residential uses; occupancy on a 24-hour basis; and uses to house, educate, or provide care for children, the elderly, the infirm, or other sensitive subpopulations. Examples of such prohibited land uses include, but are not limited to single family homes, duplexes, townhomes, multiplexes, apartments, condominiums, schools, retirement homes, and senior/child-care facilities.

E. **No interference with a Remedial Action or Component**. Except as provided in a written plan approved in writing by U.S. EPA, within the portion of the Restricted Area comprised of the entirety of the real property legally described in Appendix A currently assigned PINs 13-27-100-007, 13-27-300-005, 13-27-300-001, 13-27-300-004, 13-27-200-006, 13-27-300-002, 13-27-400-003, and 13-34-100-003, as depicted on attached Appendix D, there shall be no use or any activity that interferes or could interfere with or adversely affect or impair the integrity or protectiveness of, the remedial action, remedial measure, or environmental response action implemented at said portion of the Restricted Area (depicted on Appendix D), or the operation, maintenance, or monitoring of any remedial action component, including, but not limited to any of the covers as described in Subparagraph 8 C above, the fencing, signage, site access controls, barriers, liners, stormwater ditches, leachate risers and sumps, or other components of the containment system, leachate collection, storage, and/or disposal system, wells, or monitoring systems or other action or activity provided for under the LTSP (defined below). Figure 2 of the LTSP (defined below) depicts monitoring well location.

F. **Long-term Stewardship Plan.** Grantor and any subsequent Owner shall comply with the terms and conditions of the Long-term Stewardship Plan dated July 28, 2020, prepared by GeoEngineers, Inc., a copy of which is attached hereto and incorporated herein as Appendix F, and any amendments thereto, provided such amendments are approved by the U.S. EPA in writing (LTSP). Grantor and any subsequent Owner shall maintain a copy of the most current and approved version of the LTSP and provide a copy of said LTSP to any proposed transferee, in accordance with Paragraph 12 below.

G. **Health and Safety Plan.** Any person or entity seeking to conduct activities in the subsurface of the Restricted Area shall develop and implement a Health and Safety Plan to address possible exposures for workers conducting such intrusive activities that may involve contact with soils or groundwater (e.g., excavation, trenching, drilling). Any such Health and Safety Plan shall be consistent with the National Institute for Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities, the Occupational Safety and Health Administration regulations at 29 CFR, particularly 29 CFR Parts 1910 and 1926, and any other applicable federal, state, or local regulations or guidance. Soil that is removed from the ground at the Restricted Area shall be handled, managed, and disposed of in accordance with the LTSP and applicable laws.

9. **Right of Access.** Grantor and any subsequent Owner shall provide to officers, employees, contractors, and authorized representatives of the Holders, Illinois EPA and U.S. EPA continued access at reasonable times to the Restricted Area for the following purposes:

A. Implementing, operating and maintaining the environmental response project described in Paragraph 6 above;

B. Monitoring inspection, and conducting periodic reviews of the environmental response project described in Paragraph 6 above including without limitation, sampling of air, water, groundwater, sediments and soils;

C. Verifying any data or information submitted to U.S. EPA or Illinois EPA by Grantor and Holders;

D. Verifying that no action is being taken on or at the Restricted Area in violation of the terms of this instrument, the environmental response project described in Paragraph 6 above or of any federal or state environmental laws or regulations;

E. Verifying compliance with the Order, LTSP, and Health and Safety Plan;

F. Conducting investigations regarding contamination at or near the Restricted Area;

G. Assessing the need for, planning, or implementing additional corrective action activities at or near the Restricted Area;

H. Assessing implementation of quality assurance and quality control practices as defined by the Order;

I. Inspecting and copying records, operating logs, contracts, or other documents maintained or generated at the Restricted Area;

J. Determining whether the Restricted Area is being used in a manner that is prohibited or restricted, or that may need to be prohibited or restricted under the Order;

K. Implementing, monitoring, maintaining, reporting on, and enforcing any land, water, or other resource use restrictions and Institutional Controls; and

L. Conducting any other activity as otherwise provided under the Order or LTSP.

Nothing in this document shall limit or otherwise affect U.S. EPA or Illinois EPA's rights of entry or access or U.S. EPA's or Illinois EPA's authority to take response actions or any other right or authority under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), RCRA or other Federal or State law.

10. **Reserved rights of Grantor**. Grantor hereby reserves unto itself, its successors, and assigns, including lessees, transferees, and occupants, all rights and privileges in and to the use of the Restricted Area that are not incompatible with the activity and use limitations identified herein.

11. **No Public Access and Use**. No right of access or use by the general public to any portion of the Restricted Area is conveyed by this instrument.

12. **Future Transfers, Notice and Reservation**.

As used herein, "transfer" shall mean to sell, assign, convey, lease, mortgage, or grant a security interest in, or where used as a noun, a sale, assignment, conveyance, or other disposition of any interest by operation of law or otherwise.

As used herein, "transferee" shall mean any person or entity obtaining an interest in the Restricted Area or any portion thereof by means of a transfer.

A. Grantor and any subsequent Owner shall include in any future instrument transferring any interest in any portion of the Restricted Area, including but not limited to deeds, leases and mortgages, a notice and reservation which is in substantially the following form:

THE INTEREST CONVEYED HEREBY IS SUBJECT TO AND GRANTOR SPECIFICALLY RESERVES THE ENVIRONMENTAL COVENANT EXECUTED UNDER THE UNIFORM ENVIRONMENTAL COVENANTS ACT (UECA) AT 765 ILCS 122 RECORDED IN THE OFFICIAL PROPERTY RECORDS OF BUREAU COUNTY, ILLINOIS ON _____ AS DOCUMENT NO. _____, IN FAVOR OF AND ENFORCEABLE BY GRANTOR AS A UECA

HOLDER, THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY AS A UECA HOLDER AND AGENCY, AND THE U.S. ENVIRONMENTAL PROTECTION AGENCY AS A UECA AGENCY.

B. Grantor and any subsequent Owner shall, prior to entering into a contract to transfer any portion of the Restricted Area, or 60 days prior to transferring any portion of the Restricted Area, whichever is earlier:

i. Notify the proposed transferee that U.S. EPA has determined that corrective action activities are needed within the Restricted Area and that Grantor has entered into an order requiring implementation of such corrective action activities;

ii. Provide to the proposed transferee copies of this Environmental Covenant and the most current and approved version of the LTSP; and

iii. Notify U.S. EPA and Illinois EPA of the name and address of the proposed transferee and provide U.S. EPA and Illinois EPA with a copy of the notice that it provided to the proposed transferee pursuant to Paragraph 12.B.i. above.

C. Grantor and any subsequent Owner shall provide written notice to Illinois EPA and U.S. EPA within 30 days after any transfer of any portion of the Restricted Area. The notice shall identify the name and contact information of the transferee and the portion of the Restricted Area conveyed to that transferee.

D. Grantor and any subsequent Owner shall provide to any contractors and sub-contractors that may perform work within the Restricted Area copies of this Environmental Covenant and the most current and approved version of the LTSP at least 30 days in advance of initiation of work within the Restricted Area by the contractor or sub-contractor.

13. Enforcement and Compliance.

A. Civil Action for Injunction or Equitable Relief. This Environmental Covenant may be enforced through a civil action for injunctive or other equitable relief for any violation of any term or condition of this Environmental Covenant, including violation of the Activity and Use Limitations under Paragraph 8 and denial of Right of Access under Paragraph 9. Such an action may be brought individually or jointly by:

i. The Illinois EPA;
ii. The Holders of the Environmental Covenant;
iii. The Owner; and
iv. The U.S. EPA.

B. **Other Authorities Not Affected. No Waiver of Enforcement.** All remedies available hereunder shall be in addition to any and all other remedies at law or in equity, including CERCLA and RCRA. Nothing in this Environmental Covenant affects U.S. EPA or Illinois EPA's authority to take or require performance of response actions to address releases or threatened releases of hazardous substances, pollutants, contaminants, or wastes at or from the Restricted Area, or to enforce a consent order, consent decree or other settlement agreement entered into by U.S. EPA or Illinois EPA. Enforcement of the terms of this instrument shall be at the discretion of the Holders, the U.S. EPA and Illinois EPA and any forbearance, delay or omission to exercise its rights under this instrument in the event of a breach of any term of this instrument shall not be deemed to be a waiver by the Holders, U.S. EPA or Illinois EPA of such term or of any subsequent breach of the same or any other term, or of any of the rights of the Holders, U.S. EPA or Illinois EPA.

C. **Former Owners and Interest Holders Subject to Enforcement.** An Owner, or other person that holds any right, title or interest in or to the Restricted Area remains subject to enforcement with respect to any violation of this Environmental Covenant by the Owner or other person that occurred during the time when the Owner or other person was bound by this Environmental Covenant regardless of whether the Owner or other person has subsequently conveyed the fee title, or other right, title or interest, to another person.

14. **Waiver of certain defenses**. This Environmental Covenant may not be extinguished, limited, or impaired through issuance of a tax deed, foreclosure of a tax lien, or application of the doctrine of adverse possession, prescription, abandonment, waiver, lack of enforcement, or acquiescence, or similar doctrine as set forth in Section 9 of UECA.

15. **Representations and Warranties**. Grantor hereby represents and warrants to the Illinois EPA, U.S. EPA and any other signatories to this Environmental Covenant that, at the time of execution of this Environmental Covenant, that the Grantor is lawfully seized in fee simple of the Restricted Area, that the Grantor has a good and lawful right and power to sell and convey it or any interest therein, that the Restricted Area is free and clear of encumbrances except those noted on Appendix G, and that the Grantor will forever warrant and defend the title thereto and the quiet possession thereof. After recording this instrument, Grantor will provide a copy of this Environmental Covenant to all holders of record of the encumbrances including those entities noted on Appendix G.

16. **Amendment or Termination**. Except the Illinois EPA and U.S. EPA, all Holders and other signers waive the right to consent to an amendment or termination of the Environmental Covenant. This Environmental Covenant may be amended or terminated by consent only if the amendment or termination is signed by the Illinois EPA, U.S. EPA, and, unless waived by the agencies, the current owner of the fee simple of the Restricted Area. If Grantor no longer owns the Restricted Area at the time of proposed amendment or termination, Grantor waives the right to consent to an amendment or termination of the Environmental Covenant.

17. **Notices**. Any notice, demand, request, consent, approval, or communication that a party desires or is required to give to another party or parties shall be in writing and shall either be served personally, sent by first class mail, postage prepaid, or by e-mail addressed as follows:

To Grantor:

US Ecology Illinois, Inc.
PO Box 206
Sheffield, Illinois 61361
doug.long@usecology.com

With a Copy to:

Republic Services, Inc.
18500 North Allied Way
Phoenix, Arizona 85054
Attention: Legal Department
JGeorge4@republicservices.com

To Holders:

US Ecology Illinois, Inc.
PO Box 206
Sheffield, Illinois 61361
doug.long@usecology.com

With a Copy to:

Republic Services, Inc.
18500 North Allied Way
Phoenix, Arizona 85054
Attention: Legal Department
JGeorge4@republicservices.com

Illinois Environmental Protection Agency
Division of Legal Counsel
Attn: Deputy General Counsel, Land Regulatory Unit
2520 West Iles Avenue
P.O. Box 19276
Springfield, Illinois 62794-9276
EPA.DLC@illinois.gov

To Agencies:

United States Environmental Protection Agency
Division Director
Land, Chemicals and Redevelopment
77 West Jackson Boulevard
Chicago, Illinois 60604
patel.shilpa@epa.gov

Illinois Environmental Protection Agency
Division of Legal Counsel
Attn: Deputy General Counsel, Land Regulatory Unit
2520 West Iles Avenue
P.O. Box 19276
Springfield, Illinois 62794-9276
EPA.DLC@illinois.gov

Any Party may from time to time designate by written notice a substitute address, email address, and/or person to whom such notices shall be sent. Unless otherwise provided herein, all notices shall be effective upon receipt.

18. Recording and Notice of Environmental Covenant, Amendments and Termination.

A. The Original Environmental Covenant. This Environmental Covenant must be recorded in the Office of the Recorder or Registrar of Titles of the county in which the property that is the subject of the Environmental Covenant is located. Within 30 days after the Illinois EPA and U.S. EPA (whichever is later) sign and deliver to Grantor this Environmental Covenant, the Grantor shall record this Environmental Covenant in the office of the County Recorder or Registrar of Titles for the County in which the Restricted Area is located.

B. Termination, Amendment or Modification. Within 30 days after Illinois EPA and U.S. EPA (whichever is later) sign and deliver to the Owner any termination, amendment or modification of this Environmental Covenant, the Owner shall record the amendment, modification, or notice of termination of this Environmental Covenant in the office of the County Recorder or Registrar of Titles in which the Restricted Area is located.

C. Providing Notice of Covenant, Termination, Amendment or Modification. Within 30 days after recording this Environmental Covenant, the Grantor shall transmit a copy of the Environmental Covenant in recorded form to:

i. The Illinois EPA;
ii. The U.S. EPA;
iii. Each person holding a recorded interest in the Restricted Area, including those interests in Appendix G;
iv. Each person in possession of the Restricted Area; and
v. Each political subdivision in which the Restricted Area is located.

Within 30 days after recording a termination, amendment or modification of this Environmental Covenant, the Owner shall transmit a copy of the document in recorded form to the persons listed in items i to v above.

19. Compliance Reporting. The Owner shall submit to U.S. EPA and Illinois EPA reports that include confirmation of compliance with the Activity and Use Limitations provided in

Paragraph 8 herein. The Owner shall notify the U.S. EPA and Illinois EPA as soon as possible of any actions or conditions that would constitute a breach of the Activity and Use Limitations contained in Paragraph 8 herein. Additionally, the Owner is required to submit to Illinois EPA, on an annual basis on the date of recording of this instrument, the following certification statement:

> "I certify under penalty of law, to the best of my knowledge and belief based upon reasonable inquiry during the compliance reporting period, including a visual inspection of the Restricted Area conducted within the three months preceding the signing of this certification statement and any required monitoring, that the specific Activity and Use Limitations identified in Paragraph 8 of the Environmental Covenant for the US Ecology Illinois, Inc. Restricted Area (ILD045063450; LPC No. 0110950003) remain in place. I am aware that any person who knowingly makes a false, fictitious, or fraudulent material statement to the Illinois EPA, either orally or in writing, commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony (415 ILCS 5/44(h)(8))."

The reporting and notification requirements set forth in this Paragraph 19 are in addition to any requirements imposed under the Order and applicable existing laws.

20. General Provisions.

A. Controlling law. This Environmental Covenant shall be construed according to and governed by the laws of the State of Illinois and the United States of America.

B. Liberal construction. Any general rule of construction to the contrary notwithstanding, this instrument shall be liberally construed in favor of the establishment of activity and use limitations that run with the land to effect the purpose of this instrument and the policy and purpose of the environmental response project and its authorizing legislation. If any provision of this instrument is found to be ambiguous, an interpretation consistent with the purpose of this instrument that would render the provision valid shall be favored over any interpretation that would render it invalid.

C. No Forfeiture. Nothing contained herein will result in a forfeiture or reversion of Grantor's title in any respect.

D. Joint Obligation. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

E. Captions. The captions in this instrument have been inserted solely for convenience of reference and are not a part of this instrument and shall have no effect upon construction or interpretation.

F. Authority: Each individual signing this Environmental Covenant represents and warrants that he/she has the requisite power and authority to execute and deliver this Environmental Covenant on behalf of the party he/she is signing for and to bind said party to the terms and conditions hereof.

G. **Counterparts.** This Agreement may be executed in several counterparts each of which shall be an original and all of which shall constitute one and the same instrument.

H. **Severability:** If any provision of this Environmental Covenant is found to be unenforceable in any respect, the validity, legality, and enforceability of the remaining provisions shall not in any way be affected or impaired.

21. **Effective Date.** This Environmental Covenant is effective on the date of acknowledgement of the signature of the Illinois EPA and U.S. EPA, whichever is later.

22. **List of Appendices.**

Appendix A - Legal Description of the Restricted Area

Appendix B - Map of the Restricted Area

Appendix C – Map Depicting the 46-acre permitted hazardous waste facility.

Appendix D - Map Depicting Portion of the Restricted Area upon which the Boundary Fence and other Remedial Action Components are Located

Appendix E - Map Depicting the Waste Cover Areas

Appendix F - Long-term Stewardship Plan

Appendix G - List of Encumbrances of Record

[Signature Pages to Follow]

IN WITNESS WHEREOF, THIS INSTRUMENT HAS BEEN EXECUTED ON THE DATES INDICATED BELOW:

FOR THE GRANTOR:

US Ecology Illinois, Inc.

By _____ (signature)

[Name of signer] Scott Binder (print)

[Title] Area President (print)

State of Illinois)
) SS.
County of Cook)

On October 22, 2024, this instrument was acknowledged before me by, Scott Binder, Vice President, on behalf of US Ecology Illinois Inc.

_____ (signature)
Notary Public
My Commissioner Expires 12.22.2024

AMANDA MAREK
Notary Public - State of Michigan
County of Wayne
My Commission Expires Dec 22, 2024
Acting in the County of _____

FOR THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

By _____ (signature)

James Jennings, Acting Director
Illinois Environmental Protection Agency

State of Illinois)
)SS.
County of Sangamon)

This instrument was acknowledged before me on March 10, 2025, by James Jennings, Acting Director of the Illinois Environmental Protection Agency, a state agency, on behalf of the State of Illinois.

_____ (signature)
Notary Public
My Commission Expires 3-21-25

OFFICIAL SEAL
DAWN A. HOLLIS
NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION EXPIRES 03-21-2025

FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

On behalf of the Administrator of the
United States Environmental Protection Agency

By: _____
Edward Nam
Director
Land, Chemicals and Redevelopment Division

STATE OF ILLINOIS)
) SS.
COUNTY OF COOK)

The foregoing instrument was acknowledged before me this 1st day of April, 2025, by Edward Nam, Director, Land, Chemicals, and Redevelopment Division, Region 5 of the United States Environmental Protection Agency.

Yesenia Ortiz (signature)
Notary Public
My Commission Expires 8/3/25

Official Seal
Yesenia Ortiz
Notary Public State of Illinois
My Commission Expires 8/3/2025

US Ecology Illinois, Inc.

Environmental Covenant List of Appendices

PDF Page #

Appendix A –
Legal Description of the Restricted Area

APPENDIX A

INDEX OF LEGAL DESCRIPTIONS

The legal description and deed for each parcel were obtained via Stewart Title Guaranty Company (See Appendix G). Parcel numbers for the corresponding deeds were confirmed via the Bureau County Clerk and Recorders Office.

Parcel 13-27-100-007
(Parcel 1)

Legal Description

THE SOUTH 843 FEET OF THE NORTHWEST 1/4 OF SECTION 27, TOWNSHIP 16 NORTH, RANGE 6 EAST OF THE FOURTH PRINCIPAL MERIDIAN, BUREAU COUNTY, ILLINOIS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A FOUND IRON MONUMENT AT THE SOUTHEAST CORNER OF THE NORTHWEST 1/4 OF SECTION 27, TOWNSHIP 16 NORTH, RANGE 6 EAST OF THE FOURTH PRINCIPAL MERIDIAN, BUREAU COUNTY, ILLINOIS; THENCE SOUTH 89 DEGREES 01 MINUTES 25 SECONDS WEST, AN ASSUMED BEARING, ALONG THE SOUTH LINE OF SAID NORTHWEST 1/4, A DISTANCE OF 2673.77 FEET TO THE SOUTHWEST CORNER OF SAID NORTHWEST 1/4; THENCE NORTH 0 DEGREES 21 MINUTES 56 SECONDS WEST ALONG THE WEST LINE OF SAID NORTHWEST 1/4, A DISTANCE OF 843.00 FEET TO AN IRON MONUMENT; THENCE NORTH 89 DEGREES 01 MINUTES 24 SECONDS EAST, A DISTANCE OF 2672.59 FEET TO THE EAST LINE OF SAID NORTHWEST 1/4, BEING MARKED BY AN IRON MONUMENT; THENCE SOUTH 0 DEGREES 26 MINUTES 44 SECONDS EAST, ALONG THE EAST LINE OF SAID NORTHWEST 1/4, A DISTANCE OF 843.00 FEET TO THE POINT OF BEGINNING.

A copy of the Deed is attached.

WARRANTY DEED

RECORDED

1987 AUG 19 PM 3:29

Tom Velon
COUNTY CLERK & RECORDER
BUREAU COUNTY, ILL.

This space for use of Recorder

STATE OF ILLINOIS }
Bureau County, } RECORDER'S OFFICE

Document Number 87-3398

Book 687 Page 365

THE GRANTORS JERRY R. HOCHSTATTER and JOYCE G. HOCHSTATTER, husband and wife,

of the Village of Sheffield County of Bureau State of Illinois
for and in consideration of other good and valuable consideration and One and no/100 ($1.00)
Dollars in hand paid, Convey and Warrant to

US ECOLOGY, INC.
of the City of Louisville County of Jefferson State of Kentucky
the following described Real Estate, to-wit:

The South 843 feet of the Northwest Quarter (NW¼) of Section 27, Township 16 North, Range 6 East of the 4th Principal Meridian, Bureau County, Illinois, more particularly described as follows:
Beginning at a found iron monument at the Southeast Corner of the Northwest Quarter of Section 27, Township 16 North, Range 6 East of the 4th Principal Meridian, Bureau County, Illinois; thence South 89° 01' 25" West, an assumed bearing, along the south line of said Northwest Quarter, a distance of $2673.77 feet to the Southwest Corner of said Northwest Quarter; thence North 0° 21' 56" West along the west line of said Northwest Quarter, a distance of 843.00 feet to an iron monument; thence North 89° 01' 24" East, a distance of 2672.59 feet to the east line of said Northwest Quarter, being marked by an iron monument; thence South 0° 26' 44" East, along the east line of said Northwest Quarter, a distance of 843.00 feet to the point of beginning; containing 51.73 acres, more or less,

BUREAU COUNTY
TAX PAID 00.00
Tom Velon

BUREAU CO. NO. 006 001495

STATE OF ILLINOIS
REAL ESTATE TRANSFER TAX
P.B. 10775 AUG 19 '87 ★★★ DEPT. OF REVENUE 00.00

situated in the County of Bureau in the State of Illinois, hereby releasing and waiving all rights under and by virtue of the Homestead Exemption Laws of the State of Illinois.

Dated this 18th day of August, A. D. 19 87

Jerry R. Hochstatter (SEAL) Joyce G. Hochstatter (SEAL)
Jerry R. Hochstatter Joyce G. Hochstatter
(SEAL) (SEAL)
(SEAL) (SEAL)
(SEAL) (SEAL)

NOTE: PLEASE TYPE OR PRINT NAME BELOW ALL SIGNATURES

MAIL TAX BILL TO:
Name US Ecology, Inc.
Address P. O. Box 7246
City Louisville, KY 40207

AFFIX TRANSFER TAX STAMP
OR
"Exempt under provisions of Paragraph ....., Section 4, Real Estate Transfer Tax Act.

Date Buyer, Seller or Representative

BOOK 687 PAGE 365

FIOLAR & CHAMBERS CO., MOLINE, ILLINOIS

STATE OF ILLINOIS, }ss.
County of Bureau }

I, MATHEW A. MALONEY

a Notary Public in and for the said County, in the State aforesaid, do hereby certify that Jerry R. Hochstatter and Joyce G. Hochstatter, husband and wife,

personally known to me to be the same persons whose name s are subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that they signed, sealed and delivered the said instrument as their free and voluntary act, for the uses and purposes therein set forth, including the release and waiver of the right of homestead.

Given under my hand and notarial seal, this 18th day of August A.D. 19 87.

My Commission expires: , 19

Notary Public.

"OFFICIAL SEAL"
Mathew Alexander Maloney
Notary Public State of Illinois
My Commission Expires 12-18-87

This instrument was prepared by:

Name Pierson, Maloney & Rayfield
Address 620 S. Main Street
Princeton, IL 61356

Return Document to:

Name Pierson, Maloney & Rayfield
Street 620 S. Main Street
City Princeton
State Illinois Zip 61356

Parcel 13-27-400-003
(Parcel 2 Tract A)

Legal Description

A PART OF THE SOUTHEAST 1/4 OF SECTION 27, TOWNSHIP 16 NORTH, RNAGE 6 EAST OF THE FOURTH PRINCIPAL MERIDIAN, BUREAU COUNTY, ILLINOIS, DESCRIBED AS FOLLOWS:

BEGINNING AT AN IRON MONUMENT AT THE NORTHWEST CORNER OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 27; THENCE NORTH 88 DEGREES 34 MINUTES 46 SECONDS EAST, 1328.03 FEET TO A PIN AT THE NORTHEAST CORNER OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 27; THENCE CONTINUING NORTH 88 DEGREES 34 MINUTES 46 SECONDS EAST, 274.52 FEET TO A PIN; SAID PIN BEING THE PLACE OF BEGINNING OF THE HEREINAFTER DESCRIBED TRACT OF LAND; THENCE NORTH 0 DEGREES 26 MINUTES 44 SECONDS WEST, 259.91 FEET TO A PIN; THENCE NORTH 52 DEGREES 35 MINUTES 18 SECONDS EAST, 177.67 FEET TO A PIN; THENCE NORTH 73 DEGREES 34 MINUTES 38 SECONDS EAST, 402.27 FEET TO A PIN; THENCE NORTH 1 DEGREES 04 MINUTES 55 SECONDS WEST, 146.35 FEET TO AN IRON PIN; THENCE NORTH 69 DEGREES 30 MINUTES EAST, 411 FEET TO A POINT; THENCE NORTH 89 DEGREES 40 MINUTES EAST, 145 FEET TO A PIONT ON THE EAST LINE OF SAID SECTION 27; THENCE SOUTH 0 DEGREES 14 MINUTES 22 SECONDS EAST, 748 FEET TO A POINT; THENCE NORTH 88 DEGREES 34 MINUTES 46 SECONDS WEST, 1056 FEET TO A POINT, BEING THE PLACE OF BEGINNING.

A copy of the Deed is attached.

APPENDICES

GeoEngineers

APPENDIX A
IEPA Post-Closure Plan (revised 2020)

US Ecology Sheffield

Post-Closure Plan

Illinois EPA's regulations require that post-closure care of hazardous waste management facilities include environmental monitoring and reporting, and the maintenance and monitoring of waste containment systems. The time frame for post-closure monitoring for hazardous waste landfills extends for 30 years from the date of closure. For US Ecology Sheffield, the post-closure care period began in 1996 when closure was certified to the Illinois EPA. The post-closure care period may be lengthened by the IEPA Director in order to ensure protection of human health and the environment.

Environmental Monitoring

The facility's environmental monitoring plan is included as Attachment A.

The facility is an interim status site, which has demonstrated that there is a low potential for migration of hazardous waste or hazardous waste constituents from the facility via the uppermost aquifer to water supply wells or to surface water. This demonstration is contained within the facility's application for a post-closure permit. Therefore, all or part of the interim status groundwater monitoring requirements may be waived.

As a consequence of this demonstration, the Illinois EPA has established a groundwater management zone that encompasses the full extent of the property owned by US Ecology. The groundwater underlying the property is classified as Class IV due to prior coal strip-mining activities and is unusable as drinking water. The compliance boundary is set at the facility property line, and concentration limits are set for individual groups of monitoring points.

Monitoring is conducted at a series of wells and surface monitoring points to assure that:

- Any changes in groundwater flow paths or constituent concentration trends are detected,
- No contaminated groundwater migrates beyond the compliance boundary,
- Groundwater concentrations in the vicinity of the strip mine pit continue to remain below modeled limits which are protective of aquatic resources and human health.
- No changes in surface water quality are occurring, and
- Groundwater contaminant concentrations do not rise.

Monitoring points are divided into the following categories:

- Boundary Wells assure that contaminated groundwater is not migrating towards the compliance boundary.
- Observation Wells substantiate trends in groundwater quality improvement.
- Guard Wells assure that groundwater contamination levels do not exceed modeled standards which are protective of human health and aquatic resources.
- Surface Water sampling assures that surface water quality is not affected by the facility.

Landfill Maintenance

The integrity and effectiveness of the final cover is primarily maintained through routine site inspections. The landfill covers are inspected monthly and inspections are documented using the form shown in Figure 1. If settling, subsidence, erosion, animal burrowing, or other events are detected, these will be remedied as soon as is practicable.

A series of 59 leachate sumps are located at the facility. These sumps are inspected and maintained per the plan included as Attachment B.

Due to the age of the facility, no leak detection system is in place.

Stormwater run-on and run-off are addressed in the storm water pollution prevention plan, which has been approved by Illinois EPA. No portions of the former waste disposal areas are subject to inundation from run-on. Positive drainage is maintained to channel water away from the facility. The storm water control plan identifies potential pollution sources and lists best management practices for preventing contaminated run-off.

There is no historical record of flooding of streams near the site. Based on the Federal Emergency Management Agency's Flood Insurance Rate Map, Community-Panel No. 170729 0175 A, none of map Section 27, which contains the site, is in the 100-year flood plain.

Additional Site Inspections

Other portions of the facility are also inspected:

- Containers, tanks and containment devices in the Waste/Leachate Accumulation Building are inspected daily whenever waste or leachate are present in the building to check for leaks and for deterioration caused by corrosion or other factors.
- Fire Extinguishers are inspected monthly.
- Site Safety Inspection is completed monthly.

The waste/leachate accumulation building inspection form shown in Figure 2 is used to document inspections.

Fire extinguishers are inspected monthly using the form shown in Figure 3.

Site safety equipment is inspected monthly using the form shown in Figure 4.

Site Security

Site security is maintained by a combination of active and passive security. The facility perimeter is completely fenced with barbed wire. The perimeter is posted with signs warning individuals that trespassing is prohibited and identifying the site as a hazardous waste management facility. The signs are in English and are legible from a distance of more than 25 feet. All gated entrances carry the same warning signage. Routine facility inspections also check for signs of trespass and check to ensure that fences are in good repair and signage is present.

Visitors are required to sign the visitor log book and provided with a copy of the "Visitor/Contractor On-Site Authorization Form" and directed to read it and sign it. Copies of signed forms are kept on site. (See Figure 5.)

Contingency Plan

The Facility's Contingency Plan is included as Attachment C.

Figure 1: Facility Inspection Form

US ECOLOGY SHEFFIELD LANDFILL INSPECTION FORM
(Inspect Landfill Monthly)

Date: _____ Time: _____ Weather: _____

Site Conditions: _____

Inspector's Signature: _____

Items Inspected:	Satisfactory Yes	No
1. Facility Fence and Signs	_____	_____
2. Landfill Covers and Barrier Wall	_____	_____
3. Storm Water Ditches	_____	_____
4. Leachate Risers	_____	_____
5. Benchmarks	___	___

Explain any items marked "No" and identify corrective action to be taken. Attach documentation (work orders, photographs, field notes, etc.) to this form to verify how and when corrective action was completed. Maintain inspection forms and attached documentation in the facility operating record.

Remarks/Corrective Action: _____

_____

_____

_____

_____

_____

_____

Figure 2: Waste/Leachate Building Inspection Form

LEACHATE & WASTE ACCUMULATION BUILDING
(Inspect Daily If Leachate or Waste Are Present)

DATE:_____ TIME:_____

Inspector's Signature: _____

Items Inspected:	Satisfactory? Yes	No
1. Tote tank levels	_____	_____
2. Construction materials of tanks	_____	_____
3. Flooring and dikes	_____	_____
4. Drum accumulation area	_____	_____
5. Building integrity	_____	_____

Explain any items marked "No" and identify corrective action to be taken. Attach documentation (work orders, photographs, field notes, etc.) to this form to verify how and when corrective action was completed. Maintain inspection forms and attached documentation in the facility operating record.

Remarks/Corrective Action: _____

Figure 3: Fire Extinguisher Inspection Form

MONTHLY FIRE EXTINGUISHER INSPECTIONS

Location	Number of Extinguishers	Seal Integrity Sat/UnSat	Pressure Indication Sat/UnSat	Physical Condition Sat/UnSat	Inspection Card Sat/UnSat	Inspectors Initals
Leachate Building	2					
Storage Building	2					
Open Shed	2					
Oil Shed	1					
Shop Building	9					
John Deere 6415 Tractor	1					
John Deere Backhoe	1					
John Deere 5065E Tractor	1					
Waldon Forklift	1					

Comments: _____

_____

Reviewed By: _____

Figure 4: Safety Inspection Form

US ECOLOGY SHEFFIELD MONTHLY SAFETY INSPECTION FORM

Date: _____ Time: _____

Inspector's Signature: _____

Items Inspected:	Satisfactory Yes	No
1. Facility Housekeeping	_____	_____
2. Communication Equipment	_____	_____
3. Respirators	_____	_____
4. Personal Protective Equipment	_____	_____
5. Confined Space Entry Equipment	___	_____

Explain any items marked "No" and identify corrective action to be taken. Attach documentation (work orders, photographs, field notes, etc.) to this form to verify how and when corrective action was completed. Maintain inspection forms and attached documentation in the facility operating record.

Remarks/Corrective Action: _____

_____

_____

_____

_____

_____

_____

Figure 5: Site Access Authorization Form

US ECOLOGY SHEFFIELD
VISITOR/CONTRACTOR ON-SITE ACCESS AUTHORIZATION

As a visitor/contractor, you must adhere to US Ecology security, safety, and emergency procedures at all times while on the facility.

Facility Security
Visitors/contractors must sign in and sign out every time you visit.

You will be escorted at all times while on the facility unless otherwise authorized by the facility manager.

For Your Safety
Safety equipment will be issued by the facility manager to you as needed.

Wear your seat belt.

The speed limit is 15 mph.

No smoking is allowed unless authorized by the facility manager.

In Case of Emergency
If you notice a fire or other emergency condition, immediately notify facility personnel and follow their instructions.

Report all accidents/injuries immediately to the facility manager.

_____, _____,
Name (Please Print) Address

I agree to follow these procedures.

SIGNED: _____

DATE: _____

Attachment A

Environmental Monitoring Plan

2008 (with 2020 updates)

Groundwater Monitoring Plan

1. Responsibilities

The US Ecology Sheffield Facility Groundwater Monitoring Program is the responsibility of the facility manager.

2. Sampling Procedures

Equipment

The following equipment is required to conduct groundwater sampling:

- Field Log Book;
- Groundwater Well Monitoring Log;
- Sample bottles with required labels and preservatives as supplied by the laboratory;
- An electronic water level measuring tape or equivalent;
- Portable pH, conductivity and temperature meters;
- Laboratory grade detergent (Liquinox);
- Deionized water;
- Submersible pumps for each well; Individual dedicated bailers/rope for those wells, which will not accept a submersible pump or have low yield/slow recovery;
- Plastic for ground to prevent cross-contamination of bailer rope;
- Ice chests and ice for transport of samples to the laboratory;
- Containers for well evacuation water storage;
- Clear glass beaker;
- Disposable gloves and rags;

Precautions

- Do not eat/drink/smoke during well sampling.
- All monitoring shall begin at the upgradient well and end with the most-contaminated down-gradient well.
- All sample bottles shall be inspected for cleanliness and flaws prior to use.

WARRANTY DEED

RECORDED

1983 JUN 15 PM 2:34

Tom Velon
COUNTY CLERK & RECORDER
BUREAU COUNTY, ILL.

This space for use of Recorder

STATE OF ILLINOIS)
Bureau County.)

RECORDER'S OFFICE

83- 2453

Document Number

Book 627 Page 593

THE GRANTOR ROBERT T. BOCKEL

of the City of Orland Park County of State of Illinois
for and in consideration of $1.00 and other good and valuable consideration
Dollars in hand paid, Convey s and Warrant s to US ECOLOGY, INC.,
a California corporation , having its principal place of business
in Louisville, Kentucky ~~County~~ ~~State~~
the following described Real Estate, to-wit:

A part of the Southeast Quarter of Section 27, Township 16 North, Range 6 East of the Fourth Principal Meridian, Bureau County, Illinois, described as follows:

Beginning at an iron monument at the Northwest corner of the Southwest Quarter of the Southeast Quarter of said Section 27; thence North 88° 34' 46" East 1328.03 feet to a pin at the Northeast corner of the Southwest Quarter of the Southeast Quarter of said Section 27; thence continuing North 88° 34' 46" East 274.52 feet to a pin; said pin being the place of beginning of the hereinafter described tract of land; thence North 0° 26' 44" West 259.91 feet to a pin; thence North 52° 35' 18" East 177.67 feet to a pin; thence North 73° 34' 38" East 402.27 feet to a pin; thence North 1° 04' 55" West 146.35 feet to an iron pin; thence North 69° 40' East 411 feet to a point; thence North 89° 40' East 145 feet to a point on the East line of said Section 27; thence South 0° 14' 22" East 748 feet to a point; thence North 88° 34' 46" West 1056 feet to a point, being the place of beginning; containing 13.35 acres, more or less, excepting all of the oil and gas rights in and under the Northeast Quarter of the Southeast Quarter of said Section 27, provided that such reservation shall not be construed as including any oil, gas or other product that may be processed, manufactured, extracted or otherwise obtained from coal mined upon the premises.

Grantor warrants that above described property is not homestead property of the Grantor nor of Grantor's spouse.

situated in the County of Bureau in the State of Illinois, hereby releasing and waiving all rights under and by virtue of the Homestead Exemption Laws of the State of Illinois.

Dated this 24th day of MARCH, A. D. 1983

(SEAL) Robert T. Bockel (SEAL)

(SEAL) (SEAL)

(SEAL) (SEAL)

(SEAL) (SEAL)

NOTE: PLEASE TYPE OR PRINT NAME BELOW ALL SIGNATURES

MAIL TAX BILL TO:

Name Grantee

Address P. O. Box 7246

City Louisville, Kentucky 40207

AFFIX TRANSFER TAX STAMP
OR
"Exempt under provisions of Paragraph ..... Section 4, Real Estate Transfer Tax Act.

Date Buyer, Seller or Representative

BOOK 627 PAGE 593

STATE OF ILLINOIS, } ss.
County of Cook

I, Anthony Grecco

a Notary Public in and for the said County, in the State aforesaid, do hereby certify that

Robert T. Bockel

personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed, sealed and delivered the said instrument as his free and voluntary act, for the uses and purposes therein set forth, including the release and waiver of the right of homestead.

ANTHONY GRECCO NOTARY PUBLIC COOK COUNTY, ILL.

Given, under my hand and notarial seal, this 2nd day of March A.D. 1983

My Commission expires: Oct 28, 1986

Anthony Grecco
Notary Public.

BUREAU COUNTY
TAX PAID 13.00
Tom Velon

STATE OF ILLINOIS
REAL ESTATE TRANSFER TAX
BUREAU CO. NO. 006
0 3 4 4 5 9
JUN 15'83
DEPT. OF REVENUE
13.00
P.B. 10792

This instrument was prepared by:

Name Trimble, Angel, Hornbaker & Isaacson

Address 111 Park Avenue East
Princeton, IL 61356

Return Document to:

Name U.S. Ecology, Inc

Street P.O. Box 7246

City Louisville, 1

State Kentucky Zip 40207

Parcel 13-27-200-006
(Parcel 2 Tracts B, C, D)

Legal Description

Tract B

A PART OF THE EAST 1/2 OF SECTION 27, TOWNSHIP 16 NORTH, RNAGE 6 EAST OF THE FOURTH PRINCIPAL MERIDIAN, BUREAU COUNTY, ILLINOIS, MORE PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS:

COMMENCING AT A FOUND IRON MONUMENT AT THE SOUTHWEST CORNER OF THE SOUTHEAST QUARTER OF SECTION 27, TOWNSHIP 16 NORTH, RANGE 6 EAST, FOURTH PRINCIPAL MERIDIAN, BUREAU COUNTY, ILLINOIS; THENCE NORTH 0° 26' 44" WEST, AN ASSUMED BEARING, ALONG THE WEST LINE OF SAID SOUTHEAST QUARTER, ALSO BEING THE LANDS COMMON TO THE NUCLEAR ENGINEERING CO., INC. (BOOK 4 58, PAGE 560) AND HAROLD H. SCHIELER (BOOK 490, PAGE 387), A DISTANCE OF 1341.34 FEET TO AN IRON MONUMENT, AT THE NORTHWEST CORNER OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER O F SAID SECTION 27, ALSO BEING THE POINT OF BEGINNING FOR THE TRACT TO BE DESCRIBED, THENCE CONTINUING NORTH 0 DEGREES 26' 44" WEST ALONG THE LANDS COMMON TO THE NUCLEAR ENGINEERING CO., INC. (BOOK 458, PAGE 560), JERRY AND JOYCE HOCHSTATTER (BOOK 591, PAGE 403), AND ROBERT T. BOCKEL (BOOK 597, PAGE 624), A DISTANCE OF 3987.98 FEET TO AN IRON MONUMENT AT THE NORTHWEST CORNER OF THE NORTHEAST QUARTER OF SAID SECTION 27, THENCE NORTH 89° 08' 02" EAST, ALONG THE NORTH LINE OF SAID SECTION 27, A DISTANCE OF 633.97 FEET TO AN IRON MONUMENT; THENCE SOUTH 0° 26 ' 44" EAST, A DISTANCE OF 420.82 FEET TO AN IRON MONUMENT; THENCE SOUTH 66° 17' 11" EAST, A DISTANC E OF 221.71 FEET TO AN IRON MONUMENT; THENCE SOUTH 82° 41' 46" EAST, A DISTANCE OF 144.02 FEET TO A N IRON MONUMENT; THENCE SOUTH 47° 23' 07" EAST, A DISTANCE OF 161.52 FEET TO AN IRON MONUMENT; THENCE SOUTH 10° 53' 53" EAST, A DISTANCE OF 434.17 FEET TO AN IRON MONUMENT; THENCE SOUTH 23° 36 ' 05" EAST, A DISTANCE OF 239.44 FEET TO AN IRON MONUMENT; THENCE SOUTH 44° 57' 14" EAST, A DISTANC E OF 119.25 FEET TO AN IRON MONUMENT; THENCE NORTH 87° 53' 56" EAST, A DISTANCE OF 120.68 FEET TO AN IRON MONUMENT; THENCE NORTH 47° 11' 40" EAST, A DISTANCE OF 355.75 FEET TO AN IRON MONUMENT; THENCE NORTH 62° 17' 10" EAST, A DISTANCE OF 393.24 .FEET TO AN IRON MONUMENT; THENCE SOUTH 20° 20' 25" EAST, A DISTANCE OF 157.28 FEET TO AN IRON MONUMENT; THENCE SOUTH 66° 44' 38" WEST, A DISTANCE OF 158.69 FEET TO AN IRON MONUMENT; THENCE SOUTH 22° 40' 22" EAST, A DISTANCE OF 47.09 FEET TO AN IRON MONUMENT; THENCE SOUTH 38° 39' 11" WEST, A DISTANCE OF 229.27 FEET TO AN IRON MONUMENT; THENCE SOUTH 46° 08' 37" WEST, A DISTANCE OF 129.20 FEET TO AN IRON MONUMENT; THENCE SOUTH 47° 35' 58" WEST, A DISTANCE OF 211.43 FEET TO AN IRON MONUMENT; THENCE SOUTH 78° 05' 02" WEST, A DISTANCE OF 167.68 FEET TO AN IRON MONUMENT; THENCE NORTH 88° 46' 28" WEST, A DISTANCE OF 206.92 FEET TO AN IRON MONUMENT; THENCE SOUTH 31° 16' 35" WEST, A DISTANCE OF 144.63 FEET TO AN IRON MONUMENT; THENCE SOUTH 3° 03' 27" WEST, A DISTANCE OF 106.62 FEET TO AN IRON MONUMENT; THENCE SOUTH 19° 52' 03" WEST, A DISTANCE OF 440.01 FEET TO AN IRON MONUMENT; THENCE SOUTH 31° 08' 53" WEST, A DISTANCE OF 159.75 FEET TO AN IRON MONUMENT; THENCE SOUTH 42° 49' 40" WEST, A DISTANCE OF 369.34 FEET TO AN IRON MONUMENT; THENCE SOUTH 9° 46' 01" WEST, A DISTANCE OF 142.06 FEET TO AN IRON MONUMENT; THENCE SOUTH 13° 27' 09" EAST, A DISTANCE OF 323.65 FEET TO AN IRON MONUMENT; THENCE SOUTH 34° 44' 45" EAST, A DISTANCE OF 153.94 FEET TO AN IRON MONUMENT; THENCE SOUTH 53° 18' 53" EAST, A DISTANCE OF 277.01 FEET TO AN IRON MONUMENT; THENCE SOUTH 70° 08' 03" EAST, A DISTANCE OF 226.14 FEET TO AN IRON MONUMENT; THENCE NORTH 79° 50' 04" EAST, A DISTANCE OF 107.39 FEET TO AN IRON MONUMENT; THENCE NORTH 7° 53' 13" EAST, A DISTANCE OF 93.30 FEET TO AN IRON MONUMENT; THENCE SOUTH 78° 17' 49" EAST, A DISTANCE OF 193.98 FEET TO AN IRON MONUMENT; THENCE NORTH 63° 12' 29" EAST, A DISTANCE OF 220.09 FEET TO AN IRON MONUMENT; THENCE NORTH 86° 18' 41" EAST, A DISTANCE OF 306.34 FEET TO AN IRON MONUMENT; THENCE SOUTH 81° 11' 41" EAST, A DISTANCE OF 78.41 FEET TO AN IRON MONUMENT; THENCE SOUTH 1° 04' 55" EAST, A DISTANCE OF 146.35 FEET TO AN IRON MONUMENT; THENCE SOUTH 73° 34' 38" WEST, A DISTANCE OF 402.27 FEET TO AN IRON MONUMENT; THENCE SOUTH 52° 35' 18" WEST, A DISTANCE OF 177.67 FEET TO AN IRON MONUMENT, THE LAST THIRTY-SIX COURSES BEING THE NORTHERLY AND EASTERLY TOP OF BANK OF AN EXISTING STRIP MINE LAKE; THENCE SOUTH 0° 26' 44" EAST, A DISTANCE OF 259.91 FEET TO AN IRON MONUMENT ON THE NORTH LINE OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 27; THE LAST THIRTY EIGHT COURSES LOCATING A PROPERTY LINE FENCE TO BE BUILT ALONG THE TOP OF BANK OF SAID LAKE; THENCE SOUTH 88° 34' 46" WEST, ALONG THE NORTH LINE OF THE SOUTH HALF OF THE SOUTHEAST QUARTER OF SAID SECTION 27, ALSO BEING THE NORTHERLY LINE OF THE LANDS OF HAROLD H. SCHIELER (BOOK 490, PAGE 387) AND PAUL L. MANTHE (BOOK 594, PAGE 138), A DISTANCE 1602.55 FEET TO THE POINT OF BEGINNING.

Parcel 13-27-200-006
(Parcel 2 Tracts B, C, D)
cont'd

Legal Description

Tract C

A PART OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 27, TOWNSHIP 16 NORTH, RANGE 6 EAST OF THE FOURTH PRINCIPAL MERIDIAN, BUREAU COUNTY, ILLINOIS, MORE PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS:

COMMENCING AT A FOUND IRON MONUMENT AT THE SOUTHWEST CORNER OF THE SOUTHEAST QUARTER OF SECTION 27, TOWNSHIP 16 NORTH, RANGE 6 EAST OF THE FOURTH PRINCIPAL MERIDIAN, BUREAU COUNTY, ILLINOIS; THENCE NORTH 0° 26' 44" WEST, AN ASSUMED BEARING, ALONG THE WEST LINE OF SAID SOUTHEAST QUARTER, A DISTANCE OF 1341.34 FEET TO THE NORTHWEST CORNER OF THE SOUTHWEST QUARTER OF SAID SOUTHEAST QUARTER BEING MARKED BY AN IRON MONUMENT, SAID NORTHWEST CORNER ALSO BEING THE POINT OF BEGINNING FOR THE TRACT TO BE DESCRIBED; THENCE NORTH 88° 34' 46" EAST, ALONG THE NORTH LINE OF THE SOUTHWEST QUARTER OF SAID SOUTHEAST QUARTER, A DISTANCE OF 1328.03 FEET TO THE NORTHEAST CORNER OF THE SOUTHWEST QUARTER OF SAID SOUTHEAST QUARTER BEING MARKED BY AN IRON MONUMENT; THENCE SOUTH 0° 20' 36" EAST ALONG THE EAST LINE OF THE SOUTHWEST QUARTER OF SAID SOUTHEAST QUARTER, A DISTANCE OF 400.00 FEET TO AN IRON MONUMENT; THENCE SOUTH 74° 37' 17" WEST, A DISTANCE OF 1373.51 FEET TO THE WEST LINE OF SAID SOUTHEAST QUARTER, BEING MARKED BY AN IRON MONUMENT; THENCE NORTH 0° 26' 44" WEST, ALONG THE WEST LINE OF SAID SOUTHEAST QUARTER, A DISTANCE OF 731.34 FEET TO THE POINT OF BEGINNING.

Tract D

A PART OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 27, TOWNSHIP 16 NORTH, RANGE 6 EAST OF THE FOURTH PRINCIPAL MERIDIAN, BUREAU COUNTY, ILLINOIS, PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS:

COMMENCING AT A FOUND IRON MONUMENT AT THE SOUTHWEST CORNER OF THE SOUTHEAST QUARTER OF SECTION 27, TOWNSHIP 16 NORTH, RANGE 6 EAST OF THE FOURTH PRINCIPAL MERIDIAN, BUREAU COUNTY, ILLINOIS; THENCE NORTH 0 DEGREES 26' 44" WEST, AN ASSUMED BEARING, ALONG THE WEST LINE OF SAID SOUTHEAST QUARTER, A DISTANCE OF 1341.34 FEET TO THE NORTHWEST CORNER OF THE SOUTHWEST QUARTER OF SAID SOUTHEAST QUARTER BEING MARKED BY AN IRON MONUMENT; THENCE NORTH 88 DEGREES 34' 46" EAST, ALONG THE NORTH LINE OF THE SOUTHWEST QUARTER OF SAID SOUTHEAST 1/4, A DISTANCE OF 1328.03 FEET TO THE NORTHEAST CORNER OF THE SOUTHWEST QUARTER OF SAID SOUTHEAST QUARTER BEING MARKED BY AN IRON MONUMENT, SAID NORTHEAST CORNER ALSO BEING THE POINT OF BEGINNING FOR THE TRACT TO BE DESCRIBED; THENCE CONTINUING NORTH 88 DEGREES 34' 46" EAST, ALONG THE NORTH LINE OF THE SOUTHEAST QUARTER OF SAID SOUTHEAST QUARTER, A DISTANCE OF 374.52 FEET TO AN IRON MONUMENT; THENCE SOUTH 42 DEGREES 16' 08" WEST, A DISTANCE OF 553.08 FEET TO AN IRON MONUMENT; THENCE NORTH 0 DEGREES 20' 36" WEST, ALONG THE WEST LINE OF THE SOUTHEAST QUARTER OF SAID SOUTHEAST QUARTER, A DISTANCE OF 400.00 FEET TO THE POINT OF BEGINNING.

Copies of the Deeds are attached.

RECORDED

WARRANTY DEED BOOK 621 PAGE 772

1982 DEC 23 PM 3:21

STATE OF ILLINOIS)
BUREAU COUNTY,) RECORDER'S OFFICE

Document Number 82- 3799

Tom Velon
COUNTY CLERK & RECORDER
BUREAU COUNTY, ILL.

Book 621 Page 772

This space for use of Recorder

THE GRANTORS, ROBERT T. BOCKEL

of Orland Park, State of Illinois

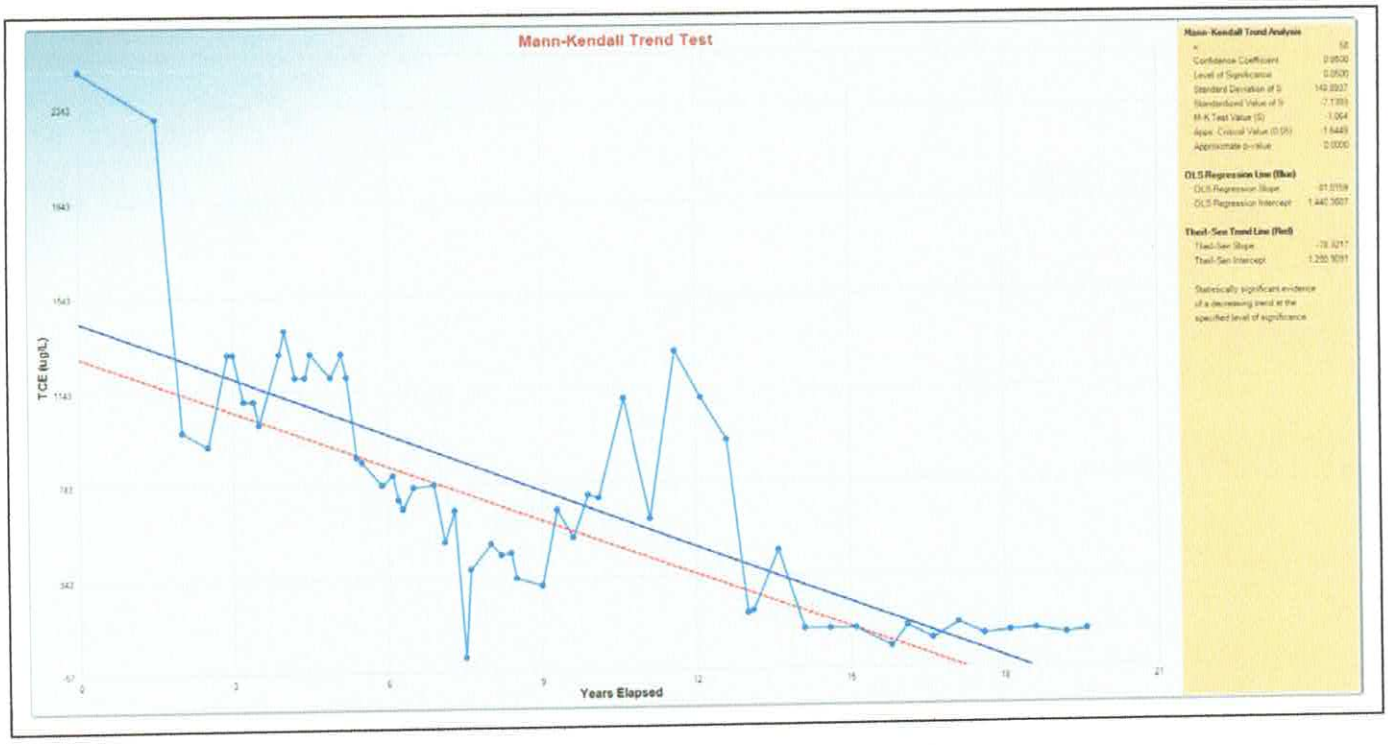
for and in consideration of One and no/100 Dollars and other good and valuable consideration in hand paid, Conveys and Warrants to US ECOLOGY, INC., A CALIFORNIA CORPORATION, having its principal place of business in Louisville, Kentucky,

the following described Real Estate, to-wit:

A part of the East Half of Section 27, Township 16 North, Range 6 East, Fourth Principal Meridian, Bureau County, Illinois, more particularly bounded and described as follows:

Commencing at a found iron monument at the Southwest corner of the Southeast Quarter of Section 27, Township 16 North, Range 6 East, Fourth Principal Meridian, Bureau County, Illinois; thence North 0° 26' 44" West, an assumed bearing, along the West line of said Southeast Quarter, also being the lands common to the Nuclear Engineering Co., Inc. (Book 458, Page 560) and Harold H. Schieler (Book 490, Page 387), a distance of 1341.34 feet to an iron monument, at the Northwest corner of the Southwest Quarter of the Southeast Quarter of said Section 27, also being the point of beginning for the tract to be described, thence continuing North 0° 26' 44" West along the lands common to the Nuclear Engineering Co., Inc. (Book 458, Page 560), Jerry and Joyce Hochstatter (Book 591, Page 403), and Robert T. Bockel (Book 597, Page 624), a distance of 3987.98 feet to an iron monument at the Northwest corner of the Northeast Quarter of said Section 27, thence North 89° 08' 02" East, along the North line of said Section 27, a distance of 633.97 feet to an iron monument; thence South 0° 26' 44" East, a distance of 420.82 feet to an iron monument; thence South 66° 17' 11" East, a distance of 221.71 feet to an iron monument; thence South 82° 41' 46" East, a distance of 144.02 feet to an iron monument; thence South 47° 23' 07" East, a distance of 161.52 feet to an iron monument; thence South 10° 53' 53" East, a distance of 434.17 feet to an iron monument; thence South 23° 36' 05" East, a distance of 239.44 feet to an iron monument; thence South 44° 57' 14" East, a distance of 119.25 feet to an iron monument; thence North 87° 53' 56" East, a distance of 120.68 feet to an iron monument; thence North 47° 11' 40" East, a distance of 355.75 feet to an iron monument; thence North 62° 17' 10" East, a distance of 393.24 feet to an iron monument; thence South 20° 20' 25" East, a distance of 157.28 feet to an iron monument; thence South 66° 44' 38" West, a distance of 158.69 feet to an iron monument; thence South 22° 40' 22" East, a distance of 47.09 feet to an iron monument; thence South 38° 39' 11" West, a distance of 229.27 feet to an iron monument; thence South 46° 08' 37" West, a distance of 129.20 feet to an iron monument; thence South 47° 35' 58" West, a distance of 211.43 feet to an iron monument; thence South 78° 05' 02" West, a distance of 167.68 feet to an iron monument; thence North 88° 46' 28" West, a distance of 206.92 feet to an iron monument; thence South 31° 16' 35" West, a distance of 144.63 feet to an iron monument; thence South 3° 03' 27" West, a distance of 106.62 feet to an iron monument; thence South 19° 52' 03" West, a distance of 440.01 feet to an iron monument; thence South 31° 08' 53" West, a distance of 159.75 feet to an iron monument; thence South 42° 49' 40" West, a distance of 369.34 feet to an iron monument; thence South 9° 46' 01" West, a distance of 142.06 feet to an iron monument; thence South 13° 27' 09" East, a distance of 323.65 feet to an iron monument; thence South 34° 44' 45" East, a distance of 153.94 feet to an iron monument; thence South 53° 18' 53" East, a distance of 277.01 feet to an iron monument; thence South 70° 08' 03" East, a distance of 226.14 feet to an iron monument; thence North 79° 50' 04" East, a distance of 107.39 feet to an iron monument; thence North 7° 53' 13" East, a distance of 93.30 feet to an iron monument; thence South 78° 17' 49" East, a distance of 193.98

TABLE IV. STATISTICAL OUTPUT EXAMPLE



2.1.1.4. Groundwater Flow

Groundwater levels will be measured in the monitoring program wells. The collected data will be used to contour groundwater flow direction and gradients to document changes in groundwater flow patterns over time. Shoreline well levels will be compared to lake elevations in the first 2 years of LTSP monitoring to confirm that Trout Lake gains/intercepts groundwater from the upland, as indicated previously.

2.1.2. Inspections and Maintenance

Inspections and maintenance activities will continue as performed currently. These activities include physical inspections and repairs; grounds maintenance and vegetation management; and leachate management and disposal.

2.1.2.1. Physical Inspections

Physical inspections are conducted regularly and include:

- Inspecting the physical integrity and condition of the boundary fence, stormwater drainage ditches, groundwater monitoring wells, leachate sumps and the landfill cell caps and slopes on a monthly basis as ground surface conditions allow (i.e., snow cover may prevent observation of certain components). The inspection will identify deficiencies in the landfill caps, including sinkholes, erosion, evidence of burrowing animals, and areas needing revegetation or vegetation controls. The inspection will also confirm the boundary fence is intact and groundwater wells and leachate sumps are undamaged, accessible and there is no evidence of tampering. Stormwater drainage away from the landfill cells will be maintained.

- Recording the results of each inspection in a maintenance log that documents the date, the personnel involved and a description of the findings, including items in need of repairs.
- Repairing physical deficiencies that may adversely affect the integrity of the remedy as soon as practicable.
- Documenting all related activities in an annual report.

2.1.2.2. Grounds Maintenance and Vegetation Management

Grounds maintenance and vegetation management will include:

- Mowing both New and Old Chem Sites in the spring and fall.
- Clearing monitoring well monuments and sumps using a weed trimmer at the same frequency as mowing.
- Removing invasive growth of large vegetation (including trees, etc.) that may impact the physical integrity of the caps and drainage ditches or affect the ability to inspect or monitor locations at the facility, on an as-needed basis.

2.1.2.3. Leachate Management

Leachate levels and pumping rates have decreased significantly since 1983, when the site stopped receiving waste materials for disposal. Many of the 59 sumps no longer yield pumpable quantities of leachate. Due to the small volumes of leachate generated at the site, the leachate sumps are monitored from July through October to check for the presence of liquids. Measurable leachate volumes are pumped out and stored on site until disposal off site. Removal volumes are recorded and reported on an annual basis. The specifics for the leachate system inspection and leachate removal are included in Appendix C.

2.1.3. Reporting

An annual report will be prepared at the end of each year and submitted to USEPA Region 5. The report will include the long-term groundwater and surface water monitoring data, a compliance assessment and trends evaluation, a summary of the inspections and repairs, and the leachate volume removed from the site.

Every 5 years, as part of the annual report, US Ecology will prepare a more comprehensive review of all monitoring data to evaluate the efficacy of the remedy, including data from the wells listed on Table II. This 5-year remedy review document will include statistical evaluation of groundwater trends and an evaluation of the natural recovery parameters. The site hydrogeology will be evaluated to confirm that groundwater flow conditions have remained consistent. An assessment will be made to determine if the Conceptual Site Model needs to be updated and if so, the updates will be included for USEPA review.

2.2. Institutional Controls and Deed Restrictions

Current institutional controls at the facility include restricted access to the waste facility site, as well as the entire US Ecology property. All visitors are escorted while on the site. The entire property is fenced and gated with limited ingress/egress points. Land use is restricted, and groundwater cannot be withdrawn from beneath the facility nor can other resources be extracted from the site. Deed restrictions for the facility were filed with Bureau County, Illinois in 1981 and were updated to include the entire US Ecology property in approximately 1995.

US Ecology will update the deed restrictions in coordination with the USEPA and IEPA. The following language revision is currently proposed :

> Specifically, because this property has been used to manage hazardous waste, post-closure use of the property on or in which hazardous wastes remain after partial or final closure must never be allowed to disturb the integrity of the final cover, liner(s) or other components of the containment system, or the function of the facility's monitoring systems, unless the agency finds that the disturbance:
>
> (a) is necessary to the proposed use of the property, and will not increase the potential hazard to human health or the environment; or
>
> (b) is necessary to reduce a threat to human health or the environment; and
>
> (c) Written notice and a plan submitted to [***appropriate regulatory agency]*** with a schedule of implementation setting forth worker health and safety requirements, access limitations during the completion of site work, and restoration of the property or other alternatives has been approved by the agency in writing prior to the commencement of site work.

US Ecology will provide an annual certification that institutional controls and deed restrictions remain in place.

2.3. Contingency Plan

US Ecology will develop response actions for adverse events that are identified during long-term monitoring or operations and maintenance of the site in collaboration with USEPA. Adverse events may include:

- Increasing chemical concentrations in plume or guard wells over time.
- Water quality criteria exceedances at the POC.
- Deterioration or erosion of the final landfill cap that may require regrading and/or reseeding.
- Breach or failure of a containment wall surrounding the disposal cells.
- A leachate release from the collection system.

Potential contingency actions and triggers are summarized in Table 2, Potential Contingency Plan Triggers and Response Actions.

US Ecology anticipates that contingency planning will be a collaborative, adaptive process that incorporates new information over time.

2.4. Financial Assurance

US Ecology currently provides financial assurance in the form of a trust for post-closure monitoring, operations and maintenance costs for the Sheffield site. The mechanism for providing financial assurances during long-term care will be in compliance with the agreed upon mechanism specified in the AOC.

3.0 REFERENCES

GeoEngineers. 2019. Conceptual Site Model. Sheffield Former Hazardous Waste Facility, Sheffield, IL. Prepared for US Ecology. December 2019.

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US Ecology, Inc. 2008. RCRA Post-Closure Permit Application. Hazardous Waste Management Facility, US Ecology, Inc. IEPA No. 0119050003; USEPA No. ILD 04-506-3450. October 2008.

US Environmental Protection Agency (USEPA). 1990. Response to comments for the US Ecology, Inc. Site, Sheffield, IL. October 1990.

US Environmental Protection Agency (USEPA). 2015. ProUCL Version 5.1.002. Statistical Software for Environmental Applications for Data Sets with and without Nondetect Observations—User Guide and Technical Guide. Prepared for USEPA Office of Research and Development, Washington, D.C. Prepared by A. Singh and R. Maichle, Lockheed Martin/SERAS. Edison, NJ. EPA/600/R-07/041. October 2015.

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Table 1

Summary of Proposed Post-Closure Care Monitoring Program and Rationale

US Ecology Former Hazardous Waste Facility

Sheffield, Illinois

Number	Monitoring Point Type	Water-Bearing Zone	Screened Interval Lithology	Current Monitoring Interval		Proposed Monitoring Interval	Current Analytes	Proposed Analytes/Measurements	Rationale
				VOCs	Metals and Indicators				
G145	Ambient Well	Bedrock	Shale, coal, shaley sandstone	Annually–fall	Semiannually-spring and fall	Water level measurements twice a year	Selected VOCs[1], selected metals[2], inorganic indicators[3] and water levels	Water levels only	Background/upgradient well; VOCs have not been detected
G186	Ambient Well	Bedrock	Highly weathered shale	Annually–fall	Semiannually-spring and fall	Water level measurements twice a year	Selected VOCs[1], selected metals[2], inorganic indicators[3] and water levels	Water levels only	Background/upgradient well; VOCs have not been detected except acetone in a 2009 sample and TCE in 2001, both at low concentrations
G434	Ambient Well	Unconsolidated Deposits	F-C sand, sand and silt loam, silty clay till	Annually–fall	Semiannually-spring and fall	Water level measurements twice a year	Selected VOCs[1], selected metals[2], inorganic indicators[3] and water levels	Water levels only	Background well upgradient of Trench 18EW; VOCs have not been detected
G105	Boundary Well	Bedrock	Shale	Annually–fall	Semiannually-spring and fall	Water level measurements twice a year	Selected VOCs[1], selected metals[2], inorganic indicators[3] and water levels	Water levels only	VOCs have not been detected; no exceedances of Class IV Groundwater Quality Standards.
G142	Boundary Well	Unconsolidated Deposits	Not available	Annually–fall	Semiannually-spring and fall	Chemical analysis every 5 years, in perpetuity to assess barrier wall integrity. Water level measurements twice a year.	Selected VOCs[1], selected metals[2], inorganic indicators[3] and water levels	Reduced VOCs[4], selected metals[2], inorganic indicators[3] and water levels	Assess integrity of Trench 18W slurry wall
G154	Boundary Well	Unconsolidated Deposits	Sand	Annually–fall	Semiannually-spring and fall	Water level measurements twice a year	Selected VOCs[1], selected metals[2], inorganic indicators[3] and water levels	Water levels only	In area where groundwater flow is minimal due to barrier walls; no VOCs detected; no exceedances of Class IV Groundwater Quality Standards).
G157	Boundary Well	Unconsolidated Deposits	Till, sand	Annually–fall	Semiannually-spring and fall	Water level measurements twice a year	Selected VOCs[1], selected metals[2], inorganic indicators[3] and water levels	Water levels only	In area where groundwater flow is minimal due to barrier walls; no VOCs detected; no exceedances of Class IV Groundwater Quality Standards).
G160	Boundary Well	Unconsolidated Deposits	Mine spoils	Annually–fall	Semiannually-spring and fall	Twice a year, with reductions in frequency if chemical trends stable or declining	Selected VOCs[1], selected metals[2], inorganic indicators[3] and water levels	Reduced VOCs4, selected metals[2], inorganic indicators[3] and water levels	Downgradient of historical source area
G162	Boundary Well	Unconsolidated Deposits	Mine spoils	Annually–fall	Semiannually-spring and fall	Twice a year, with reductions in frequency if chemical trends stable or declining	Selected VOCs[1], selected metals[2], inorganic indicators[3] and water levels	Reduced VOCs[4], selected metals[2], inorganic indicators[3] and water levels	Downgradient well
G191	Boundary Well	Bedrock	Coal	Annually–fall	Semiannually-spring and fall	Water level measurements twice a year	Selected VOCs[1], selected metals[2], inorganic indicators[3] and water levels	Water levels only	Upgradient of Trench 18EW. Several VOCs detected at low levels; no detects since 2005 (no exceedances of Class IV Groundwater Quality Standards).
G192	Boundary Well	Unconsolidated Deposits	Sandy silt, silt (Lacustrine)	Annually–fall	Semiannually-spring and fall	Chemical analysis every 5 years, in perpetuity to assess barrier wall integrity. Water level measurements twice a year.	Selected VOCs[1], selected metals[2], inorganic indicators[3] and water levels	Reduced VOCs[4], selected metals[2], inorganic indicators[3] and water levels	Assess integrity of Trench 18W slurry wall
G193	Boundary Well	Bedrock	Shale, coal	Annually–fall	Semiannually-spring and fall	Water level measurements twice a year	Selected VOCs[1], selected metals[2], inorganic indicators[3] and water levels	Water levels only	Upgradient of Trench 18EW. Benzene detected only once (2006) and was slightly above detection limit.
RIB-9	Boundary Well	Unconsolidated Deposits	Not available	Annually–fall	Semiannually-spring and fall	Water level measurements twice a year	Selected VOCs[1], selected metals[2], inorganic indicators[3] and water levels	Water levels only	VOCs have not been detected
G591	Guard Well	Unconsolidated Deposits	Glasford Fm, Toulon Mbr	Annually–fall	Semiannually-spring and fall	Twice a year, with reductions in frequency if chemical trends stable or declining	Selected VOCs[1], selected metals[2], inorganic indicators[3] and water levels	Reduced VOCs[4], selected metals[2], inorganic indicators[3] and water levels	Downgradient of historical plume; use to evaluate attenuation/concentrations trends based on Region IV surface water standards.
G592	Guard Well	Unconsolidated Deposits	Glasford Fm, Radnor Mbr	Annually–fall	Semiannually-spring and fall	Twice a year, with reductions in frequency if chemical trends stable or declining	Selected VOCs[1], selected metals[2], inorganic indicators[3] and water levels	Reduced VOCs[4], selected metals[2], inorganic indicators[3] and water levels	Downgradient of historical plume; use to evaluate attenuation/concentrations trends based on Region IV surface water standards.

Number	Monitoring Point Type	Water-Bearing Zone	Screened Interval Lithology	Current Monitoring Interval		Proposed Monitoring Interval	Current Analytes	Proposed Analytes/Measurements	Rationale
				VOCs	Metals and Indicators				
G600	Guard Well	Unconsolidated Deposits	Glasford Fm, Toulon Mbr	Annually–fall	Semiannually-spring and fall	Twice a year, with reductions in frequency if chemical trends stable or declining	Selected VOCs[1], selected metals[2], inorganic indicators[3] and water levels	Reduced VOCs[4], selected metals[2], inorganic indicators[3] and water levels	Downgradient of historical plume; use to evaluate attenuation/concentrations trends based on Region IV surface water standards.
G148	Plume Well	Unconsolidated Deposits	Glasford Fm, Toulon Mbr	None	None	Chemical analysis every 5 years, in perpetuity to assess barrier wall integrity. Water level measurements twice a year.	None	Reduced VOCs[4], selected metals[2], inorganic indicators[3] and water levels	Assess integrity of Old Chem Site barrier walls. Within historical plume.
G149	Plume Well	Unconsolidated Deposits	Glasford Fm, Toulon Mbr, Glacial Till	None	None	Chemical analysis every 5 years, in perpetuity to assess barrier wall integrity. Water level measurements twice a year.	None	Reduced VOCs[4], selected metals[2], inorganic indicators[3] and water levels	Assess integrity of Old Chem Site barrier walls. Within historical plume.
G155	Plume Well	Unconsolidated Deposits	Glasford Fm, Toulon Mbr	None	None	Chemical analysis every 5 years, in perpetuity to assess barrier wall integrity. Water level measurements twice a year.	None	Reduced VOCs[4], selected metals[2], inorganic indicators[3] and water levels	Assess integrity of Old Chem Site barrier walls. Within historical plume.
G156	Plume Well	Unconsolidated Deposits	Glasford Fm, Toulon Mbr	None	None	Chemical analysis every 5 years, in perpetuity to assess barrier wall integrity. Water level measurements twice a year.	None	Reduced VOCs[4], selected metals[2], inorganic indicators[3] and water levels	Assess integrity of Old Chem Site barrier walls. Within historical plume.
G165	Plume Well	Unconsolidated Deposits	Silty sand/sandy silt, clayey silt	Semiannually-spring and fall	Semiannually-spring and fall	Twice a year, with reductions in frequency if chemical trends stable or declining	Selected VOCs[1], selected metals[2], inorganic indicators[3] and water levels	Reduced VOCs[4], selected metals[2], inorganic indicators[3] and water levels	Within historical plume
G166	Plume Well	Bedrock	Highly weathered siltstone	Semiannually-spring and fall	Semiannually-spring and fall	Twice a year, with reductions in frequency if chemical trends stable or declining	Selected VOCs[1], selected metals[2], inorganic indicators[3] and water levels	Reduced VOCs[4], selected metals[2], inorganic indicators[3] and water levels	Only two VOCs have been detected (chloroform and methylene chloride) in one sampling event. Concentrations near detection limits
G167	Plume Well	Unconsolidated Deposit/Bedrock Transition[5]	Highly weathered siltstone	Semiannually-spring and fall	Semiannually-spring and fall	Water level measurements twice a year	Selected VOCs[1], selected metals[2], inorganic indicators[3] and water levels	Water levels only	A number of VOCs have been detected, similar to adjacent well G168. Proposing G166 to monitor groundwater in bedrock since this well appears to be in a transition zone
G168	Plume Well	Unconsolidated Deposits	Clayey silt	Semiannually-spring and fall	Semiannually-spring and fall	Twice a year, with reductions in frequency if chemical trends stable or declining	Selected VOCs[1], selected metals[2], inorganic indicators[3] and water levels	Reduced VOCs[4], selected metals[2], inorganic indicators[3] and water levels	Within historical plume
G547	Plume Well	Unconsolidated Deposits	Glasford Fm, Duncan Hills Mbr	Semiannually-spring and fall	Semiannually-spring and fall	Twice a year, with reductions in frequency if chemical trends stable or declining	Selected VOCs[1], selected metals[2], inorganic indicators[3] and water levels	Reduced VOCs[4], selected metals[2], inorganic indicators[3] and water levels	Within historical plume
G564	Plume Well	Unconsolidated Deposits	Glasford Fm, Toulon & Hulick Till Mbr	Semiannually-spring and fall	Semiannually-spring and fall	Twice a year, with reductions in frequency if chemical trends stable or declining	Selected VOCs[1], selected metals[2], inorganic indicators[3] and water levels	Reduced VOCs[4], selected metals[2], inorganic indicators[3] and water levels	Within historical plume
G575	Plume Well	Unconsolidated Deposits	Glasford Fm, Toulon Mbr	Semiannually-spring and fall	Semiannually-spring and fall	Twice a year, with reductions in frequency if chemical trends stable or declining	Selected VOCs[1], selected metals[2], inorganic indicators[3] and water levels	Reduced VOCs[4], selected metals[2], inorganic indicators[3] and water levels	Within historical plume
G594	Plume Well	Unconsolidated Deposits	Glasford Fm, Toulon Mbr	Semiannually-spring and fall	Semiannually-spring and fall	Twice a year, with reductions in frequency if chemical trends stable or declining	Selected VOCs[1], selected metals[2], inorganic indicators[3] and water levels	Reduced VOCs[4], selected metals[2], inorganic indicators[3] and water levels	Within historical plume

Number	Monitoring Point Type	Water-Bearing Zone	Screened Interval Lithology	Current Monitoring Interval		Proposed Monitoring Interval	Current Analytes	Proposed Analytes/Measurements	Rationale
				VOCs	Metals and Indicators				
211	Shoreline Well	Unconsolidated Deposits	Glasford Fm, Toulon Mbr	None	None	Twice a year, with reductions in frequency if chemical trends stable or declining	None	Reduced VOCs[4], selected metals[2], inorganic indicators[3] and water levels	Shoreline well downgradient of historical plume. Use to screen groundwater-surface water interactions.
212	Shoreline Well	Unconsolidated Deposits	Glasford Fm, Toulon Mbr	None	None	Four monitoring events to confirm gain/losses to Trout Lake		Water levels only	Answer outstanding question from EPA hydrogeologist
570	Shoreline Well	Unconsolidated Deposits	Glasford Fm, Toulon Mbr	None	None	Twice a year, with reductions in frequency if chemical trends stable or declining		Reduced VOCs[4], selected metals[2], inorganic indicators[3] and water levels	Shoreline well downgradient of historical plume. Use to screen groundwater-surface water interactions
572	Shoreline Well	Unconsolidated Deposits	Glasford Fm, Toulon Mbr	None	None	Four monitoring events to confirm gain/losses to Trout Lake		Water levels only	Answer outstanding question from EPA hydrogeologist
573	Shoreline Well	Unconsolidated Deposits	Glasford Fm, Toulon Mbr	None	None	Four monitoring events to confirm gain/losses to Trout Lake		Water levels only	Answer outstanding question from EPA hydrogeologist
574	Shoreline Well	Unconsolidated Deposits	Glasford Fm, Toulon Mbr	None	None	Four monitoring events to confirm gain/losses to Trout Lake		Water levels only	Answer outstanding question from EPA hydrogeologist
RIB-6	Shoreline Well	Unconsolidated Deposits	Glasford Fm, Toulon Mbr	None	None	Four monitoring events to confirm gain/losses to Trout Lake		Water levels only	Answer outstanding question from EPA hydrogeologist
RIB-11	Shoreline Well	Unconsolidated Deposits	Glasford Fm, Toulon Mbr	None	None	Four monitoring events to confirm gain/losses to Trout Lake		Water levels only	Answer outstanding question from EPA hydrogeologist
S309	Seep	Surface Water	Not applicable	Semiannually-spring and fall	Semiannually-spring and fall	None	Selected VOCs[1], selected metals[2] and inorganic indicators[3]	None	Concentrations are low and stable with no exceedances of Class IV Standards in recent years.
S501	Point of Compliance	Surface Water	Not applicable	Semiannually-spring and fall	Semiannually-spring and fall	Twice a year, with reductions in frequency if chemical trends stable or declining	Selected VOCs[1], selected metals[2] and inorganic indicators[3]	Reduced VOCs[4], selected metals[2], inorganic indicators[3]	Point of compliance. Compared to EPA Region IV screening levels for surface water.
S502	Point of Compliance	Surface Water	Not applicable	None	None	Twice a year, with reductions in frequency if chemical trends stable or declining	None	Reduced VOCs[4], selected metals[2], inorganic indicators[3]	Point of compliance east of guard wells. Compared to EPA Region IV screening levels for surface water.

Notes:

[1]Selected VOCs include 1,1-dichloroethane, 1,1-dichloroethene, 1,2-dichloroethane, 1,2-dichloropropane, 1,4-dioxane, benzene, chloroform, chloromethane, cis-1,2-dichloroethene, methacrylonitrile, methylene chloride, tetrachloroethene, trans-1,2-dichloroethene, trichloroethene, vinyl acetate and vinyl chloride.

[2]Selected metals include iron, magnesium and manganese, reported on both a dissolved and total basis.

[3]Selected conventional indicators include total and dissolved solids, chloride and sulfate.

[4]Reduced VOCs include 1,1-dichloroethane, 1,1-dichloroethene, 1,2-dichloroethane, 1,2-dichloropropane, benzene, chloroform, cis-1,2-dichloroethene, methylene chloride, tetrachloroethene, trans-1,2-dichloroethene, trichloroethene and vinyl chloride (omits 1,4-dioxane, chloromethane, methacrylonitrile and vinyl acetate, which have not been detected in the last 5 years).

[5]This well has been classified as being screened in both bedrock and glacial deposits in different documents. Boring logs indicate it is screened in highly weathered siltstone 2 feet below the glacial deposit noted in the adjacent well, G168. We are treating it as a transitional zone with some likely mixing with the overlying unconsolidated unit.

Table 2

Potential Contingency Plan Triggers and Response Actions

US Ecology Former Hazardous Waste Facility

Sheffield, Illinois

Long-Term Stewardship Program Element	Sampling/ Observation Point	Adverse Event	Trigger	Response
Physical Inspection				
Cap	Cap surface	Excessive consolidation or erosion	Observed deformation of cap	Assess need for additional stormwater controls. Potentially place additional material on cap surface.
		Damage to cap surface from invasive vegetation or burrowing animals	Observed significant disturbance of cap surface or presence of large, invasive shrubs or trees	Remove invasive vegetation. Trap animals and repair any damage to cap. Add exclusion devices.
Stormwater drainage	Ditches and culverts	Altered or blocked drainage including collapsed culverts	Observed ponding or flooding in vicinity of cap	Clear ditches, repair or replace culverts
Fencing and signage	Facility entrance and perimeter	Damage to fence, gates or signage	Observed damage or evidence of trespassers	Repair/replace damaged sections or signage
Chemical Monitoring				
Groundwater	Boundary well	Contaminated groundwater is migrating toward facility boundary	Groundwater COC concentrations exceed Region 4 surface water screening levels at one or more boundary wells	Evaluate short-term (5 year) COC concentration trends and variability in boundary well. If there appears to be a significant increase in concentration or variability exceeds the typical range, evaluate upgradient wells for similar trend along with any change in groundwater flow path. If exceedance is a function of a landfill source, evaluate integrity of source controls at landfill boundary (may include sampling historical wells); repair remedy element (cap, barrier wall) as needed. Continue monitoring according to scheduled interval.
	Plume well	Groundwater contamination trends change	Statistically significant increasing trend in COC concentration in plume detected	Evaluate guard well COC concentration trends. Continue monitoring at scheduled interval.
	Guard well	Contaminated groundwater is migrating toward lake	Groundwater COC concentrations exceed Region 4 surface water screening levels at one or more guard wells	Evaluate short-term (5 year) trend and variability in guard well. If there appears to be a significant increase in a COC concentration or variability exceeds the typical range, evaluate potential correlation with upgradient COC concentrations to determine potential source of increasing trend. Consider sampling additional historical wells to evaluate performance of upgradient barrier walls. Continue monitoring guard wells at scheduled interval.

Long-Term Stewardship Program Element	Sampling/ Observation Point	Adverse Event	Trigger	Response
Groundwater (continued)	GSI well	Groundwater at shoreline shows evidence of site-specific contamination	Site-specific COCs are detected in shoreline wells	Determine if Region 4 water quality screening levels are exceeded at GSI well. If yes, evaluate upgradient wells within the LTSP monitoring array to determine if there is correlative increase in COC concentrations and/or potential source of the increasing trend. Consider sampling additional historical wells. Consider evaluation of sediment porewater adjacent to the shoreline to determine if shoreline groundwater concentrations are attenuating prior to discharge to surface water (sediment-water interface). Consider an increase to monitoring frequency at GSI wells.
Surface water	Surface water points of compliance	Surface water becomes contaminated with site-specific contaminants of concern	Surface water COC concentrations exceed Region 4 surface water quality criteria	Resample points of compliance to confirm. If confirmed, evaluate groundwater concentrations in LTSP monitoring well array to determine likely source area. Consider sampling additional historical wells to evaluate distribution of contaminants near the POC. Determine the need for and type of corrective action needed based on likely risks to aquatic and water-dependent receptors. Consider an increase in monitoring frequency at POCs or locations within the lake.

Notes:

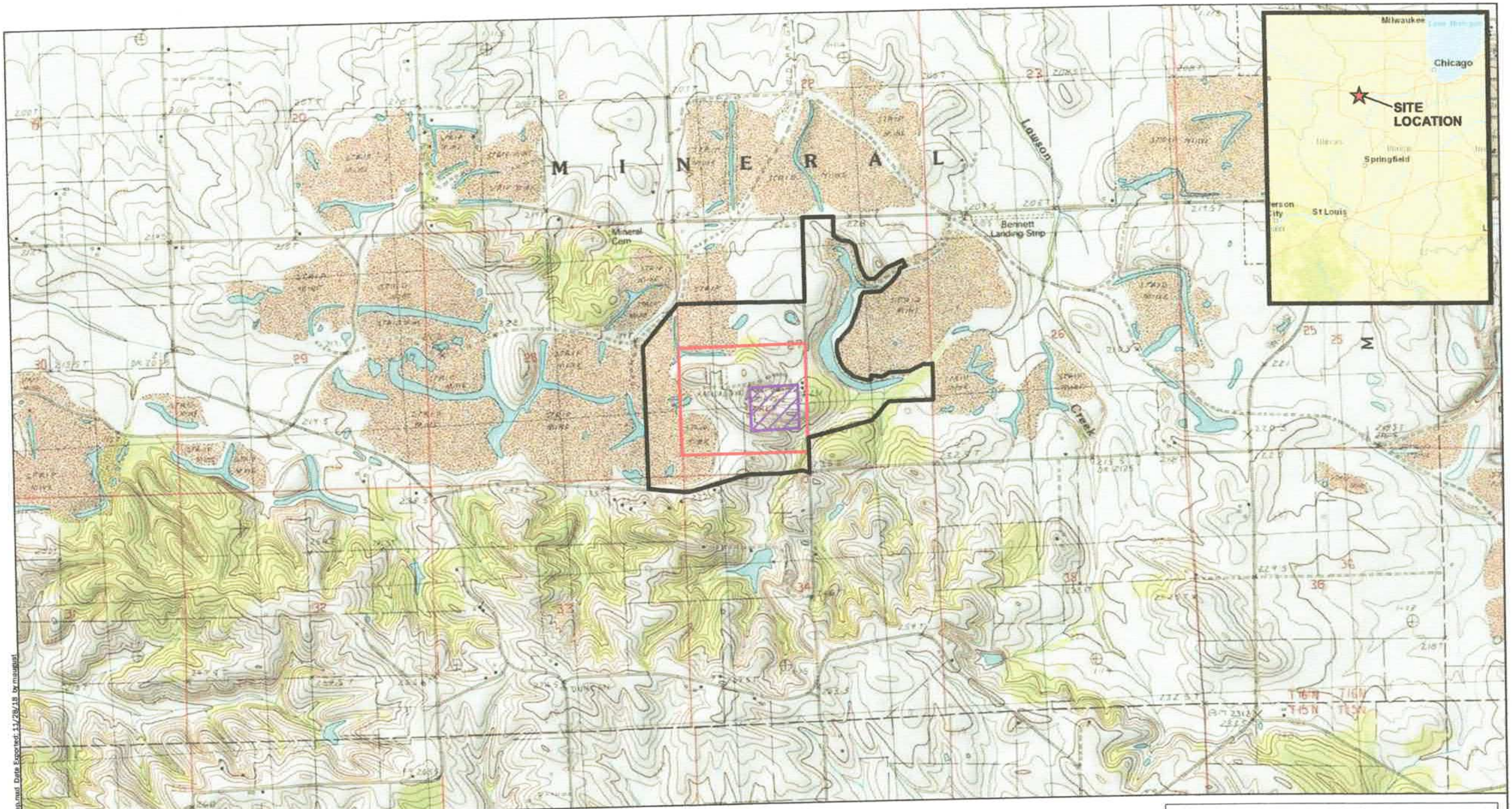
COC = chemical of concern

GSI = groundwater-surface water interaction

POC = point of compliance

FIGURES

GeoEngineers



Legend

- U.S. Ecology Sheffield Property Line
- Facility Legal Boundary
- Property Owned by State of Illinois

Notes:
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source:

Projection: NAD 1983 StatePlane Illinois West FIPS 1202 Feet

P:\19\1973002\GIS\MXD\197300200_VicinityMap.mxd Date Exported: 11/28/18 by maugust

Vicinity Map

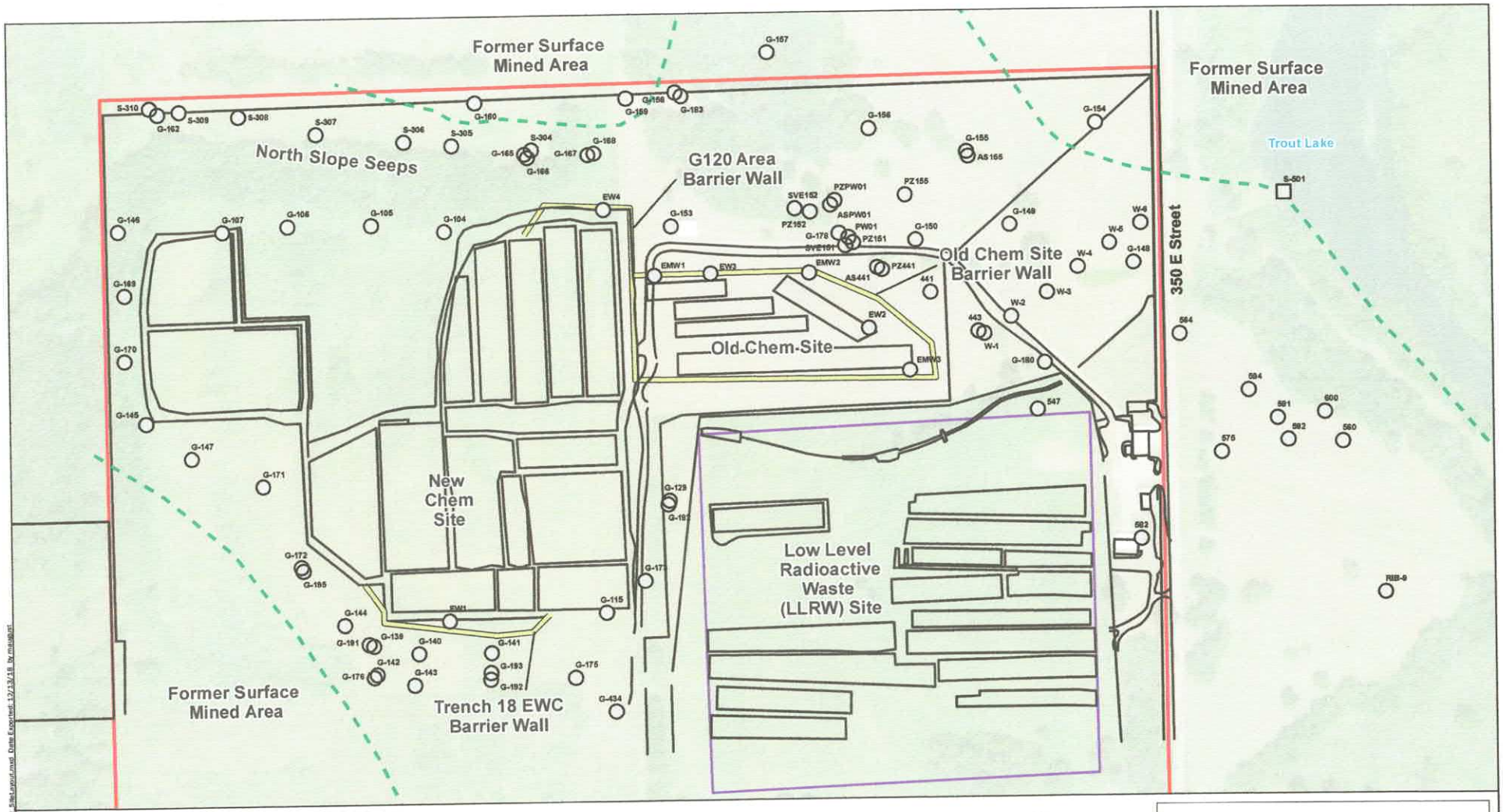
US Ecology Former Hazardous Waste Facility
Sheffield, Illinois

GEOENGINEERS

Figure 1

TABLES

GeoEngineers



Notes:
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source: PDC Technical Services, Inc., 2008.

Projection: NAD 1983 StatePlane Illinois West FIPS 1202 Feet

Legend

- Surface Water Sample Location
- Groundwater Monitoring Wells
- Facility Legal Boundary
- Property Owned by State of Illinois
- Barrier Walls
- Boundary of Former Surface Mining

N
W E
S

240 0 240
Feet

Site Layout

US Ecology Former Hazardous Waste Facility
Sheffield, Illinois

GeoEngineers

Figure 2

P:\19\19730002\GIS\MXD\19730002_Fig2_SiteLayout.mxd Date Exported: 12/13/18 by mauldurf

Notes:
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source: PDC Technical Services, Inc., 2008.

Projection: NAD 1983 StatePlane Illinois West FIPS 1202 Feet

Legend

- Boundary Well
- Plume Well
- Guard Well
- 5-Year Review Well
- Groundwater-Surface Interaction Well
- Surface Water Sample Location
- Other Wells
- Facility Legal Boundary
- Property Owned by State of Illinois
- Barrier Walls
- Screened in Glacial Deposits or Mine Spoils
- Screened in Pennsylvanian Bedrock

* Sediment in well 571 dry. Replaced with well 570.

N, W, E, S

300 0 300
Feet

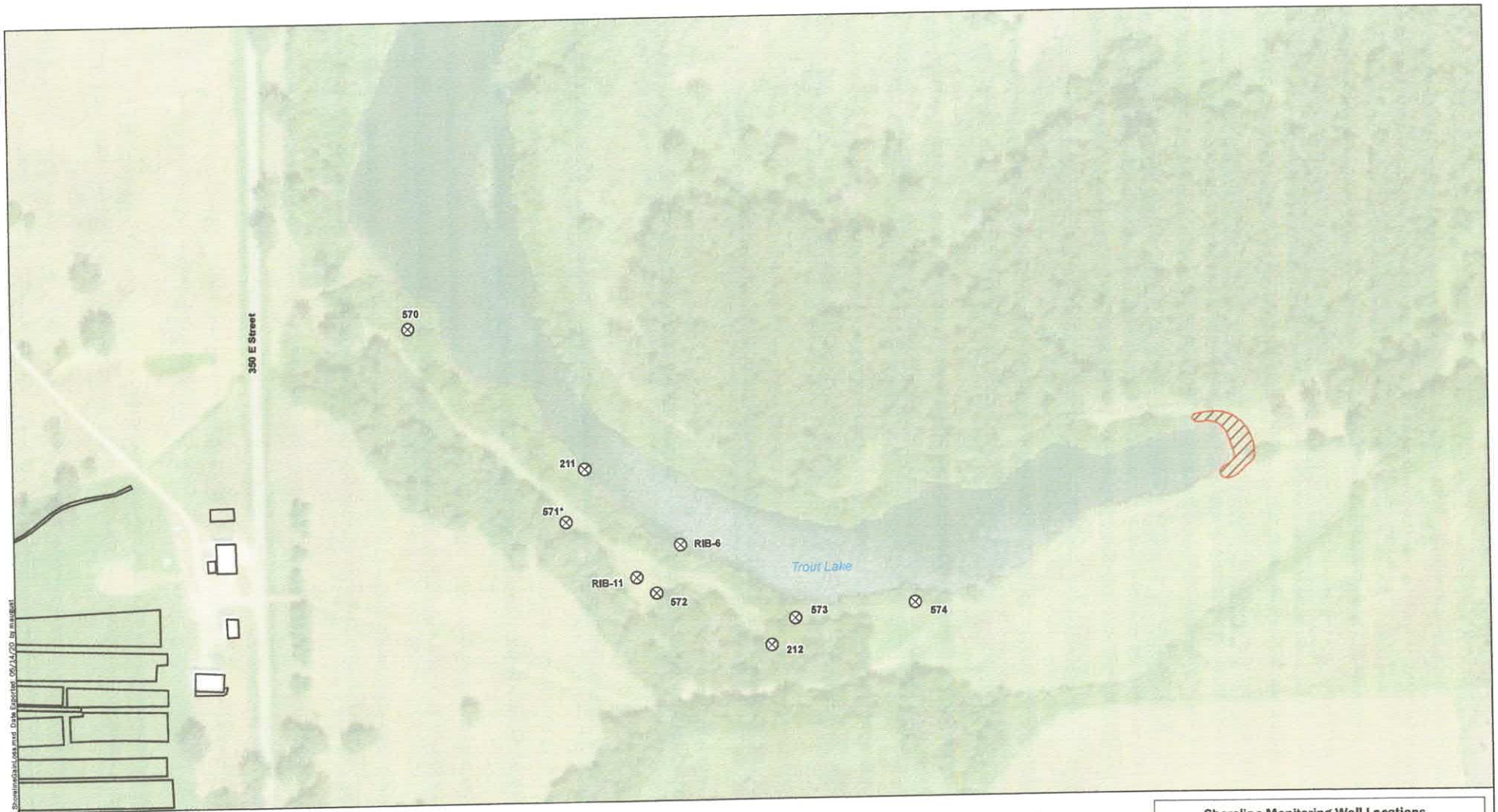
Long-term Stewardship Plan Monitoring Locations

U.S. Ecology Illinois
Sheffield, Illinois

GeoEngineers

Figure 3

P:\19\19730002\005\MXD\19730002_Fig2_LTSMonitoringNetwork_051120_new.mxd Date Exported: 05/14/20 by mauldust



Notes:
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
3. Potentiometric elevation data are in feet.

Data Source: Aerial from ESRI

Projection: NAD 1983 StatePlane Illinois West FIPS 1202 Feet

Legend

⊗ Water Level Measurement Well

Earthen Dam Approximate Location

* Sediment in well 571 dry. Replaced with well 570.

N W E S

200 0 200

Feet

Shoreline Monitoring Well Locations for Lake Gain/Loss Assessment

U.S. Ecology Illinois
Sheffield, Illinois

GeoEngineers

Figure 4

P:\GIS\1973000\2015\MXD\1973000200_Fig4_ShorelineGainLoss.mxd, Date Exported: 06/14/20, by mauldin

feet to an iron monument; thence North 63° 12' 29" East, a distance of 220.09 feet to an iron monument; thence North 86° 18' 41" East, a distance of 306.34 feet to an iron monument; thence South 81° 11' 41" East, a distance of 78.41 feet to an iron monument; thence South 1° 04' 55" East, a distance of 146.35 feet to an iron monument; thence South 73° 34' 38" West, a distance of 402.27 feet to an iron monument; thence South 52° 35' 18" West, a distance of 177.67 feet to an iron monument, the last thirty-six courses being the Northerly and Easterly top of bank of an existing strip mine lake; thence South 0° 26' 44" East, a distance of 259.91 feet to an iron monument on the North line of the Southeast Quarter of the Southeast Quarter of said Section 27; the last thirty-eight courses locating a property line fence to be built along the top of bank of said lake; thence South 88° 34' 46" West, along the North line of the South Half of the Southeast Quarter of said Section 27, also being the Northerly line of the lands of Harold H. Schieler (Book 490, Page 387) and Paul L. Manthe (Book 594, Page 138), a distance 1602.55 feet to the point of beginning, containing 103.614 acres, more or less, subject to the right-of-way of existing township roads for public road purposes along the most Westerly and most Northerly boundaries, and also subject to any easements of record; EXCEPTING the coal and minerals underlying the East Half of the Northwest Quarter of the Northeast Quarter of said Section 27, and the right to dig, mine and remove the same without entering upon or occupying any part of the surface thereof, FURTHER EXCEPTING all of the oil and gas rights in and under the Northeast Quarter of the Southeast Quarter of said Section 27 as previously reserved, provided that such reservation shall not be construed as including any oil, gas or other product that may be processed, manufactured, extracted or otherwise obtained from coal mined upon the premises;

SUBJECT TO the restriction that Grantee shall not use said real estate for the excavation or construction of a commercial shallow-land disposal site, or mechanical destruction site for refuse, wastes, toxic materials, hazardous wastes, nuclear wastes, or nuclear by-product materials;

AND FURTHER SUBJECT to the restriction that Grantee shall not unreasonably withhold the privilege of access to said real estate for the sole purpose of recreational use, which is expressly limited solely to the members of Grantor's immediate family, those being Robert T. Bockel, Colleen F. Bockel, Robert T. Bockel, Jr. and Allison Bockel, which restrictions shall continue for as long as Grantee owns said real estate;

The Grantor warrants that the above described property is not Homestead property of the Grantor nor of Grantor's spouse;

situated in the County of Bureau in the State of Illinois, hereby releasing and waiving all rights under and by virtue of the Homestead Exemption Laws of the State of Illinois.

Dated this 15th day of December, A.D. 1982.

Robert T. Bockel

Mail Tax Bill To:

Name Grantee

Address P. O. Box 7246

City Louisville, Kentucky 40207

Affix Transfer Tax Stamp
or
"Exempt under provisions of Paragraph , Section 4, Real Estate Transfer Tax Act."

Date

Buyer, Seller or Representative

STATE OF ILLINOIS)
) SS
COUNTY OF BUREAU)

I, Richard R. Hornbaker, a Notary Public in and for said County, in the State aforesaid, do hereby certify that Robert T. Bockel, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed, sealed and delivered the said instrument as his free and voluntary act, for the uses and purposes therein set forth.

Given under my hand and notarial seal, this 15th day of December, 1982.

Richard R. Hornbaker
Notary Public

My Commission expires:

May 9, 1986

NOTARY PUBLIC

BUREAU COUNTY
TAX PAID 104.00
Tom Velon

STATE OF ILLINOIS
REAL ESTATE TRANSFER TAX
DEC 23 '82
DEPT. OF REVENUE
★★★ 104.00

Prepared By:

Trimble, Angel, Hornbaker & Isaacson
111 Park Avenue East
Princeton, Illinois 61356

Return to:

Pierson & Maloney
620 South Main Street
Princeton, Illinois 61356

WARRANTY DEED

RECORDED

1987 MAR -5 PM 3: 11

Tom Velon
COUNTY CLERK & RECORDER
BUREAU COUNTY, ILL

This space for use of Recorder

STATE OF ILLINOIS
Bureau County, } RECORDER'S OFFICE

Document Number 87- 861

Book 679 Page 123

THE GRANTOR HAROLD H. SCHIELER

of the City of Kewanee County of Henry State of Illinois
for and in consideration of other good and valuable consideration and One and no/100 ($1.00)
Dollars in hand paid, Convey and Warrant to

US ECOLOGY, INC.

of the City of Louisville County of Jefferson State of Kentucky
the following described Real Estate, to-wit:

A part of the Southwest Quarter of the Southeast Quarter of Section 27, Township 16 North, Range 6 East of the 4th Principal Meridian, Bureau County, Illinois, more particularly bounded and described as follows:
Commencing at a found iron monument at the Southwest corner of the Southeast Quarter of Section 27, T. 16 N., R. 6 E., 4th P.M., Bureau County, Illinois; thence North 0° 26' 44" West, an assumed bearing, along the West line of said Southeast Quarter, a distance of 1341.34 feet to the Northwest corner of the Southwest Quarter of said Southeast Quarter being marked by an iron monument, said Northwest corner also being the point of beginning for the tract to be described; thence North 88° 34' 46" East, along the North line of the Southwest Quarter of said Southeast Quarter, a distance of 1328.03 feet to the Northeast corner of the Southwest Quarter of said Southeast Quarter being marked by an iron monument; thence South 0° 20' 36" East along the East line of the Southwest Quarter of said Southeast Quarter, a distance of 400.00 feet to an iron monument; thence South 74° 37' 17" West, a distance of 1373.51 feet to the West line of said Southeast Quarter, being marked by an iron monument; thence North 0° 26' 44" West, along the West line of said Southeast Quarter, a distance of 731.34 feet to the point of beginning; containing 17.237 acres, more or less, subject to the Right-of-Way of an existing township road for public road purposes along the westerly boundary.

This is not homestead property.

~~situated in the~~ ~~County of Bureau in the State of Illinois,~~ hereby releasing and waiving all rights under and by virtue of the Homestead Exemption Laws of the State of Illinois.

Dated this 25th day of February , A. D. 1987

..... (SEAL) Harold H. Schieler (SEAL)
Harold H. Schieler

..... (SEAL) ..... (SEAL)

..... (SEAL) ..... (SEAL)

..... (SEAL) ..... (SEAL)

NOTE: PLEASE TYPE OR PRINT NAME BELOW ALL SIGNATURES

MAIL TAX BILL TO:

Name US Ecology, Inc.

Address P.O. Box 7246

City Louisville, KY 40207

AFFIX TRANSFER TAX STAMP
OR
"Exempt under provisions of Paragraph ....., Section 4, Real Estate Transfer Tax Act.

....
Date Buyer, Seller or Representative

BOOK 679 PAGE 123

FIDLAR & CHAMBERS CO., MOLINE, ILLINOIS

BOOK 679 PAGE 124

STATE OF ILLINOIS, }ss.
County of HENRY }

I, Mona Kubiak

a Notary Public in and for the said County, in the State aforesaid, do hereby certify that

Harold H. Schieler

personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed, sealed and delivered the said instrument as his free and voluntary act, for the uses and purposes therein set forth, including the release and waiver of the right of homestead.

Given under my hand and notarial seal, this 25th day of February A.D. 19 97

My Commission expires: ....., 19.....

Mona Kubiak
Notary Public.

"OFFICIAL SEAL"
MONA KUBIAK
Notary Public, State of Illinois
Henry County
My Commission Expires 1-17-99

BUREAU COUNTY
TAX PAID 18.00
Tom Velon

BUREAU CO. NO. 006 001067

STATE OF ILLINOIS
REAL ESTATE TRANSFER TAX
P.B. 10775 MAR-5'87 ★★★ DEPT. OF REVENUE = 18.00

This instrument was prepared by:
Name Pierson, Maloney & Rayfield
Address 620 S. Main Street
Princeton, IL 61356

Return Document to:
Name Pierson, Maloney & Rayfield
Street 620 S. Main Street
City Princeton
State IL Zip 61356

RECORDED

87- 862

Document # 87- 862

1987 MAR -5 PM 3:13 Book 679 Page 125

Tom Velon
COUNTY CLERK & RECORDER
BUREAU COUNTY, ILL

TRUSTEE'S DEED

THIS INDENTURE, made this 23RD day of February, 1987, between ROBERT T. BOCKEL, not personally but solely as Trustee, under a Trust Agreement known as the Robert T. Bockel, M.D. Pension Plan and Trust, of the City of Orland Park in the County of Cook and the State of Illinois, First Party and US ECOLOGY, INC. of the City of Louisville in the County of Jefferson and the State of Kentucky, Second Party;

WITNESSETH, that the First Party in consideration of the sum of Four Thousand and no/100 ($4,000.00) Dollars, receipt whereof is hereby acknowledged, and in pursuance of the power and authority vested in the First Party as said Trustee, under and by virtue of the Trust Agreement known as the Robert T. Bockel, M.D. Pension Plan and Trust, and of every other power and authority the First Party hereunto enabling, does hereby convey and warrant unto the Second Party, in fee simple, the following described real estate, situated in the County of Bureau and the State of Illinois, to-wit:

A part of the Southeast Quarter of the Southeast Quarter of Section 27, Township 16 North, Range 6 East of the 4th Principal Meridian, Bureau County, Illinois, particularly bounded and described as follows: Commencing at a found iron monument at the southwest corner of the Southeast Quarter of Section 27, T.16 N., R.6 E., 4th P.M., Bureau County, Illinois; thence North 0° 26'44" West, an assumed bearing, along the west line of said Southeast Quarter, a distance of 1341.34 feet to the Northwest corner of the Southwest Quarter of said Southeast Quarter being marked by an iron monument; thence North 88° 34'46" East, along the north line of the Southwest Quarter of

BOOK 679 PAGE 125

said Southeast Quarter, a distance of 1328.03 feet to the northeast corner of the Southwest Quarter of said Southeast Quarter being marked by an iron monument, said northeast corner also being the point of beginning for the tract to be described; thence continuing North 88°34'46" East, along the north line of the Southeast Quarter of said Southeast Quarter, a distance of 374.52 feet to an iron monument; thence South 42°16'08" West, a distance of 553.08 feet to an iron monument; thence North 0°20'36" West, along the west line of the Southeast Quarter of said Southeast Quarter, a distance of 400.00 feet to the point of beginning; containing 1.719 acres, more or less, excepting and reserving, however, all of the oil and gas rights in and under the Southeast Quarter of said Southeast Quarter provided that such reservation shall not be construed as including any oil, gas, or other product that may be processed, manufactured, extracted or otherwise obtained from coal mined on said premises; as set forth in a plat of survey dated January 22, 1987 and certified January 23, 1987 by Douglas E. Mullen, Illinois Registered Land Surveyor No. 2628, Daily & Associates, Engineers, Inc., and recorded in Bureau County, Illinois,

together with the tenements, hereditaments and appurtenances thereunto belonging or in any wise appertaining. Grantor warrants that the above described property is not Homestead property.

IN WITNESS WHEREOF, the First Party, as Trustee as aforesaid, hereunto set his hand and seal the day and year first above written.

Robert T. Bockel (Trustee)

ROBERT T. BOCKEL, as Trustee
as aforesaid

STATE OF ILLINOIS)
)ss.
COUNTY OF Bureau)

I, Richard K. Hornbaker, Notary Public in and for said County, in the State aforesaid, do hereby certify that Robert T. Bockel, as Trustee, under Trust Agreement known as the Robert T. Bockel M.D. Pension Plan and Trust, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that as Trustee as therein mentioned he signed, sealed and delivered the said instrument as his free and voluntary act, for the uses and purposes therein set forth.

Given under my hand and notarial seal this 23rd day of February, 1987.

Richard K Hornbaker
Notary Public

MAIL TAX BILL TO:
US Ecology, Inc.
P.O. Box 7246
Louisville, KY 40207

PREPARED BY:
Pierson, Maloney & Rayfield
620 South Main Street
Princeton, IL 61356

RETURN TO:
Same

BUREAU COUNTY
TAX PAID 2.00
Tom Velon

Parcel 13-27-300-001
(Parcel 3)

Legal Description

THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 27, TOWNSHIP 16 NORTH, RANGE 6 EAST OF THE FOURTH PRINCIPAL MERIDIAN, SITUATED IN THE COUNTY OF BUREAU AND STATE OF ILLINOIS.

A copy of the Deed is attached.

186-014

WARRANTY DEED (Statutory, Corp. to Ind.)

$4490

This Indenture Witnesseth, that the Grantor

PEABODY COAL COMPANY, a corporation created and existing under and by virtue of the laws of the State of Delaware duly authorized to transact business in the State of Illinois for the consideration of Twenty-eight Thousand ($28,000.00) Dollars and pursuant to authority given by the Board of Directors of said corporation, CONVEYS and WARRANTS unto NUCLEAR ENGINEERING COMPANY, INC., a California corporation

of the City of San Francisco, County of San Francisco and State of California the following described Real Estate, to wit:

The Northwest Quarter of the Southwest Quarter of Section 27, Township 16 North, Range 6 East of the Fourth Principal Meridian, situated in the County of Bureau and State of Illinois, ~~except the underlying coal and fireclay, together with the right to dig, mine and remove the same without entering upon or occupying any part of the surface thereof.~~

**Revenue Stamps to be affixed after Recording.

situate in the County of Bureau in the State of Illinois

In Witness Whereof, said Grantor has caused its corporate seal to be hereto affixed, and has caused its name to be signed to these presents by its Vice President, Land and attested by its Assistant Secretary, this 13th day of September A. D. 19 74.

PEABODY COAL COMPANY

By C. E. Stokes
Vice President - Land

Attest: Richard M. Yost
Assistant Secretary

STATE OF MISSOURI
CITY
~~COUNTY~~ OF ST. LOUIS } S.S.

I, Mary Ann Grow, a Notary Public

in and for said City, in the State aforesaid, DO HEREBY CERTIFY that C. E. Stokes personally known to me to be the Vice President ~~and~~ - Land of the PEABODY COAL COMPANY, a Delaware corporation, and Richard W. Metz personally known to me to be the Assistant Secretary of said corporation, and personally known to me to be the same persons whose names are subscribed to the foregoing instrument, appeared before me this day in person and severally acknowledged that as such Vice President Land and Assistant Secretary, they signed and delivered the said instrument as Vice President Land and Assistant Secretary of said corporation, and caused the corporate seal of said corporation to be affixed thereto, pursuant to authority, given by the Board of Directors of said corporation as their free and voluntary act, and as the free and voluntary act and deed of said corporation for the uses and purposes therein set forth.

GIVEN under my hand and seal this 17th day of September A. D., 1974

MARY ANN GROW NOTARY PUBLIC OF ST. LOUIS

Mary Ann Grow

My Commission Expires May 17, 1977. NOTARY PUBLIC

This deed prepared by C. E. Stokes, Attorney
St. Louis, Missouri

Send Tax Bills to Nuclear Engineering Co., Inc.
Sheffield, Illinois 61361

AFTER RECORDING
MAIL THIS INSTRUMENT TO

NAME Bureau County Title Co.
ADDRESS 720 S. Pleasant St. P.O. Box 129
CITY Princeton, Illinois 61356

DATE INITIALS

RECORDED
1974 SEP 20 PM 3:43
COUNTY CLERK & RECORDER
BUREAU COUNTY, ILL.

Warranty Deed
Corporation to Individual

FROM Peabody Coal Co.

TO Nuclear Engineering Co., Inc.

ADDRESS OF PROPERTY:

STATE OF ILLINOIS, Bureau County ss. No. 3091
Filed for record on this 20th day of Sept. A.D. 1974 at 3:43 o'clock P.M. and duly recorded in Vol. 517 of Records on page 288
Tom Weber
County Clerk & Recorder

20

Parcel 13-28-400-004
(Parcel 4)

Legal Description

A PART OF THE EAST HALF OF SECTION 28, TOWNSHIP 16 NORTH, RANGE 6 EAST OF THE FOURTH PRINCIPAL MERIDIAN, BUREAU COUNTY, ILLINOIS, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A RECOVERED CONCRETE MONUMENT AT THE SOUTHEAST CORNER OF THE SOUTHEAST QUARTER OF SAID SECTION 28; THENCE NORTH 0 DEGREES 21 INUTES 56 SECONDS WEST ALONG THE EAST LINE OF SAID SOUTHEAST QUARTER, 813.38 FEET TO THE POINT OF BEGINNING; THENCE SOUTH 89 DEGREES 38 MINUTES 04 SECONDS WEST, 844.50 FEET; THENCE NORTH 0 DEGREES 21 MINUTES 56 SECONDS WEST AND PARALLEL WITH THE EAST LINE OF THE SOUTHEAST QUARTER, 2064.00 FEET; THENCE NORTH 53 DEGREES 27 MINUTES 47 SECONDS EAST, 1046.14 FEET TO THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 28; THENCE SOUTH 0 DEGREES 21 MINUTES 56 SECONDS EAST ALONG THE EAST LINE OF SAID SECTION 28, A DISTANCE OF 2681.43 FEET TO THE POINT OF BEGINNING.

A copy of the Deed is attached.

WARRANTY DEED

RECORDED 89 MAR 21 PM 3: 13 Tom Velon COUNTY CLERK & RECORDER BUREAU COUNTY, ILL. This space for use of Recorder	STATE OF ILLINOIS } RECORDER'S OFFICE Bureau County, } Document Number 89- 1003 Book 711 Page 381

THE GRANTOR S, BRIAN R. HOCHSTATTER and JOYCE ELIZABETH HOCHSTATTER, Husband and Wife

of the City of Sterling County of Whiteside State of Illinois for and in consideration of other valuable consideration and Ten ($10.00) Dollars in hand paid, Convey and Warrant to U.S. ECOLOGY, INC., a corporation of the of County of Bureau State of Illinois the following described Real Estate, to-wit:

A part of the East Half of Section 28, Township 16 North, Range 6 East of the 4th Principal Meridian, Bureau County, Illinois, more particularly described as follows:

Commencing at a recovered concrete monument at the Southeast corner of the Southeast Quarter of said Section 28; thence North 0 degrees 21 minutes 56 seconds West along the East line of said Southeast Quarter, 813.38 feet to the point of beginning; thence South 89 degrees 38 minutes 04 seconds West, 844.50 feet; thence North 0 degrees 21 minutes 56 seconds West and parallel with the East line of the Southeast Quarter, 2064.00 feet; thence North 53 degrees 27 minutes 47 seconds East, 1046.14 feet to the East line of the Northeast Quarter of said Section 28; thence South 0 degrees 21 minutes 56 seconds East along the East line of said Section 28, a distance of 2681.43 feet to the point of beginning, containing 46.000 acres, more or less, and subject to any easements of record.

BUREAU COUNTY
TAX PAID 00.00
Tom Velon

BUREAU CO. NO. 006 0 3 5 0 7 5
STATE OF ILLINOIS
REAL ESTATE TRANSFER TAX
MAR 21 '89 DEPT. OF REVENUE = 0 0. 0 0
PB. 10775

situated in the County of Bureau in the State of Illinois, hereby releasing and waiving all rights under and by virtue of the Homestead Exemption Laws of the State of Illinois.

Dated this 21st day of March, A. D. 19 89

.... (SEAL) Brian R. Hochstatter (SEAL)
Brian R. Hochstatter
.... (SEAL) .... (SEAL)
.... (SEAL) Joyce E. Hochstatter (SEAL)
Joyce Elizabeth Hochstatter
.... (SEAL) .... (SEAL)

NOTE: PLEASE TYPE OR PRINT NAME BELOW ALL SIGNATURES

MAIL TAX BILL TO:

Name U.S. Ecology, Inc.

Address 9200 Shelbyville R, Ste. 300

City Louisville, KY 40222

AFFIX TRANSFER TAX STAMP
OR
"Exempt under provisions of Paragraph ...., Section 4, Real Estate Transfer Tax Act.

.... Date .... Buyer, Seller or Representative

BOOK 711 PAGE 381

STATE OF ILLINOIS, }ss.
County of Bureau }

I, John C. Hedrich

a Notary Public in and for the said County, in the State aforesaid, do hereby certify that Brian R. Hochstatter and Joyce Elizabeth Hochstatter, Husband and Wife, personally known to me to be the same person s whose name s are subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that t he y signed, sealed and delivered the said instrument as their free and voluntary act, for the uses and purposes therein set forth, including the release and waiver of the right of homestead.

OFFICIAL SEAL
JOHN C HEDRICH
NOTARY PUBLIC STATE OF ILLINOIS
MY COMM. EXP. SEPT. 12,1990

Given under my hand and notary seal, this 21st day of March A.D. 19 89

My Commission expires: 9/12, 19 90

John C. Hedrich
Notary Public.

This instrument was prepared by:

Name John C. Hedrich

Address 714 S. Pleasant
Princeton, IL 61356

Return Document to:

Name MATT MALONEY ~~U.S. Ecology, Inc.~~

Street 620 S. MAIN

City PRINCETON

State IL Zip 61356

Parcel 13-27-300-005
(Parcel 5 Tract A)

Legal Description

A PART OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 27, IN TOWNSHIP 16 NORTH, RANGE 6 EAST OF THE FOURTH PRINCIPAL MERIDIAN, BUREAU COUNTY, ILLINOIS, BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A FOUND IRON MONUMENT AT THE NORTHEAST CORNER OF THE SOUTHWEST 1/4 OF SAID SECTION 27; THENCE SOUTH 0 DEGREES 26 MINUTES 44 SECONDS EAST, AN ASSUMED BEARING, ALONG THE EAST LINE OF THE SOUTHWEST 1/4 OF SAID SECTION 27, A DISTANCE OF 446.04 FEET TO AN IRON MONUMENT; THENCE SOUTH 88 DEGREES 21 MINUTES 07 SECONDS WEST, A DISTANCE OF 1337.44 FEET TO AN IRON MONUMENT ON THE WEST LINE OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SAID SECTION 27; THENCE NORTH 0 DEGREES 24 MINUTES 21 SECONDS WEST ALONG THE WEST LINE OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SAID SECTION 27, A DISTANCE OF 461.72 FEET TO AN IRON MONUMENT ON THE NORTH LINE OF THE SOUTHWEST 1/4 OF SECTION 27; THENCE NORTH 89 DEGREES 01 MINUTES 25 SECONDS EAST ALONG THE NORTH LINE OF THE SOUTHWEST 1/4 OF SAID SECTION 27, A DISTANCE OF 1336.88 FEET TO THE POINT OF BEGINNING.

A copy of the Deed is attached.

WARRANTY DEED

RECORDED

1985 OCT 16 PM 3:21

Tom Velon
COUNTY CLERK & RECORDER
BUREAU COUNTY, ILL.

This space for use of Recorder

STATE OF ILLINOIS
Bureau County, } RECORDER'S OFFICE

Document Number 85- 3726

Book 654 Page 457

THE GRANTORS JERRY R. HOCHSTATTER and JOYCE G. HOCHSTATTER, husband and wife,

of the Village of Sheffield County of Bureau State of Illinois for and in consideration of other good and valuable consideration and One and no/100 ($1.00) Dollars in hand paid, Convey and Warrant to

US ECOLOGY, INC.
of the City of Louisville, County of Jefferson State of Kentucky

the following described Real Estate, to-wit:

A part of the Northeast Quarter of the Southwest Quarter of Section 27, in Township 16 North, Range 6 East of the Fourth Principal Meridian, Bureau County, Illinois, bounded and described as follows:
Beginning at a found iron monument at the Northeast corner of the Southwest Quarter of said Section 27, thence South 0° 26' 44" East, an assumed bearing, along the East line of the Southwest Quarter of said Section 27, a distance of 446.04 feet to an iron monument; thence South 88° 21' 07" West a distance of 1337.44 feet to an iron monument on the West line of the Northeast Quarter of the Southwest Quarter of said Section 27; thence North 0° 24' 21" West along the West line of the Northeast Quarter of the Southwest Quarter of said Section 27, a distance of 461.72 feet to an iron monument on the North line of the Southwest Quarter of said Section 27; thence North 89° 01' 25" East along the North line of the Southwest Quarter of said Section 27 a distance of 1336.88 feet to the point of beginning; containing 13.931 acres more or less,

BUREAU COUNTY
TAX PAID 14.00
Tom Velon

BUREAU CO. NO. 006 036344
P.B. 10792
STATE OF ILLINOIS
REAL ESTATE TRANSFER TAX
OCT 16'85
★★★ DEPT. OF REVENUE
14.00

situated in the County of Bureau in the State of Illinois, hereby releasing and waiving all rights under and by virtue of the Homestead Exemption Laws of the State of Illinois.

Dated this 16th day of October, A. D. 1985

Jerry R. Hochstatter (SEAL) — Jerry R. Hochstatter
Joyce G. Hochstatter (SEAL) — Joyce G. Hochstatter
(SEAL)
(SEAL)
(SEAL)
(SEAL)

NOTE: PLEASE TYPE OR PRINT NAME BELOW ALL SIGNATURES

MAIL TAX BILL TO:
Name US Ecology, Inc.
Address P. O. Box 7246
City Louisville, KY 40207

AFFIX TRANSFER TAX STAMP
OR
"Exempt under provisions of Paragraph ..... Section 4, Real Estate Transfer Tax Act.

Date Buyer, Seller or Representative

BOOK 654 PAGE 457

FIDLAR & CHAMBERS CO., MOLINE, ILLINOIS

STATE OF ILLINOIS, }
County of Bureau } ss.

I, _____

a Notary Public in and for the said County, in the State aforesaid, do hereby certify that _____

Jerry R. Hochstatter and Joyce G. Hochstatter, husband and wife,

personally known to me to be the same persons whose names are subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that they signed, sealed and delivered the said instrument as their free and voluntary act, for the uses and purposes therein set forth, including the release and waiver of the right of homestead.

PAT PORTER NOTARY PUBLIC BUREAU COUNTY, ILL.

Given under my hand and notarial seal, this 16th day of October A.D. 19 85.

My Commission expires: May 19, 1989

Pat Porter
Notary Public.

This instrument was prepared by:

Name Pierson, Maloney & Rayfield
Address 620 S. Main Street
Princeton, Illinois

Return Document to:

Name Pierson, Maloney & Rayfield
Street 620 S. Main Street
City Princeton
State Illinois Zip 61356

Parcel 13-27-300-004
(Parcel 5 Tract B)

Legal Description

TWENTY-SIX AND 67/100 (26.67) ACRES OFF OF THE SOUTH SIDE OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 27; AND ALSO THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 27, TOWNSHIP 16 NORTH, RANGE 6 EAST; EXCEPTING THEREFROM THE FOLLOWING DESCRIBED TRACT OF LAND:

COMMENCING AT A POINT 938 FEET NORTH AND 200 FEET WEST OF THE SOUTHEAST CORNER OF THE SOUTHWEST 1/4; THENCE NORTH 900 FEET; THENCE WEST 985 FEET; THENCE SOUTH 900 FEET; THENCE EAST 900 FEET.

A copy of the Deed is attached.

BOOK 458 PAGE 560

STATE OF ILLINOIS; Bureau County } ss: No. 323806

Filed for Record on this 29th day of October A.D. 19 68 at 11 o'clock a M. and duly recorded in Vol. 458 of Records Page 560

Leroy A. Ferguson
County Clerk & Recorder

STATE OF ILLINOIS)
COUNTY OF BUREAU) SS:

WARRANTY DEED

This Indenture Witnesseth that California Nuclear, Inc., a California corporation for good and valuable consideration, receipt of which is hereby acknowledged, Conveys and Warrants to Nuclear Engineering Company, Inc., a California corporation, the following described real estate in the County of Bureau, State of Illinois, to wit:

Twenty-six and 67/100 (26.67) acres off of the South side of the Northeast Quarter of the southwest Quarter of Section Twenty-seven (27); and also the Southeast Quarter of the Southwest Quarter of Section Twenty-seven (27), Township Sixteen (16) North, Range Six (6) East; EXCEPT: Commencing at a point Nine Hundred Thirty Eight (938) feet North and Two Hundred (200) feet West of the Southeast corner of said Southwest quarter; thence North Nine Hundred (900) feet; thence West Nine Hundred Eighty-five (985) feet; thence South Nine Hundred (900) feet; thence East Nine Hundred (900) feet, Containing after said exception Forty-six and 27/100 (46.27) acres, more or less.

Subject to the mortgage in favor of Citizens First National Bank, and current property taxes.

Witness the hand and corporate seal of the grantor, California Nuclear, Inc., a California corporation, this 28th day of June, 1968.

CALIFORNIA NUCLEAR, INC.

By Stuart McLain
Stuart McLain, President

Attest William K. Bennett
William K. Bennett, Secretary

CALIFORNIA NUCLEAR, INC. INCORPORATED MAY 1, 1963 CALIFORNIA

STATE OF NEW YORK)
SS:
COUNTY OF NEW YORK)

Before me, a Notary Public in and for said County and State this 28th day of June, 1968 personally appeared Stuart McLain and William K. Bennett, President and Secretary respectively of California Nuclear, Inc., a California corporation, and acknowledged the execution of the foregoing deed to be the voluntary act and deed of said California Nuclear, Inc.

Notary Public

JOHN A. YOUNG
Notary Public, State of New York
No. 24-4369000 Kings County
Certificate Filed in New York County
Commission Expires March 30, 1969

Parcel 13-27-300-002

and

Parcel 13-34-100-003

(Parcel 6 Tract A)

Legal Description

Tract A

THE SOUTHWEST 1/4 OF THE SOUTWEST 1/4 OF SECTION 27; AND THE NORTH 1/2 OF THE NORTHWEST 1/4 OF SECTION 34, EXCEPT THAT PART THEREOF WHICH LIES SOUTH OF THE TOWNSHIP ROAD, ALL IN TOWNSHIP 16 NORTH, RANGE 6 EAST OF THE FOURTH PRINCIPAL MERIDIAN, BUREAU COUNTY, ILLINOIS.

A copy of the Deed is attached.

WARRANTY DEED

RECORDED

1976 MAR -4 PM 3:34

Tom Velon
COUNTY CLERK & RECORDER
BUREAU COUNTY, ILL.

This space for use of Recorder

STATE OF ILLINOIS
Bureau County, } RECORDER'S OFFICE

Document Number 76- 805

Book 534 Page 65

THE GRANTORS ROY M. MOORE and MAYBELLE MOORE, his wife

of the Township of Mineral County of Bureau State of Illinois for and in consideration of other good and valuable considerations and sum of ONE Dollars in hand paid, Convey and Warrant to NUCLEAR ENGINEERING COMPANY, INC, a California corporation

of the City of Louisville County of Jefferson State of Kentucky the following described Real Estate, to-wit:

PARCEL A

The Southwest Quarter of the Southwest Quarter of Section 27; and the North Half of the Northwest Quarter of Section 34, except that part thereof which lies South of the Township Road;

All of said lands lying and being situated in Township 16 North, Range 6 East of the Fourth Principal Meridian, Bureau County, Illinois.

PARCEL B

The North Half of the Northwest Quarter of Section 34, except that part thereof which lies North of the Township Road, and also a piece or parcel of land described as follows, to-wit: Commencing at the Southeast corner of the Northwest Quarter of the Northwest Quarter of Section 34, running thence South 2 rods, thence East 80 rods, thence North 2 rods, thence West to the place of beginning

All of said lands lying and being situated in Township 16 North, Range 6 East of the Fourth Principal Meridian, Bureau County, Illinois.

situated in the Township of Mineral County of Bureau in the State of Illinois, hereby releasing and waiving all rights under and by virtue of the Homestead Exemption Laws of the State of Illinois.

Dated this 28th day of January, A. D. 1976

(SEAL) Roy M. Moore (SEAL)
ROY M. MOORE

(SEAL) (SEAL)

(SEAL) Maybelle Moore (SEAL)
MAYBELLE MOORE

(SEAL) (SEAL)

MAIL TAX BILL TO:

Name Nuclear Engineering Co., Inc.

Address P. O. Box 7246

City Louisville, Kentucky 40207

AFFIX TRANSFER TAX STAMP
OR
"Exempt under provisions of Paragraph ..... Section 4, Real Estate Transfer Tax Act.

Date Buyer, Seller or Representative

STATE OF ILLINOIS, }ss.
County of Bureau }

I, Donna Ericson

a Notary Public in and for the said County, in the State aforesaid, do hereby certify that ROY M. MOORE and MAYBELLE MOORE

personally known to me to be the same persons whose names are subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that they signed, sealed and delivered the said instrument as their free and voluntary act, for the uses and purposes therein set forth, including the release and waiver of the right of homestead.

Given under my hand and notarial seal, this 28th day of January A.D. 19 76

My Commission expires: ____, 19____

Donna Ericson
Notary Public.

DONNA ERICSON
Notary Public, Bureau County, Ill.
My Commission Expires May 29, 1977

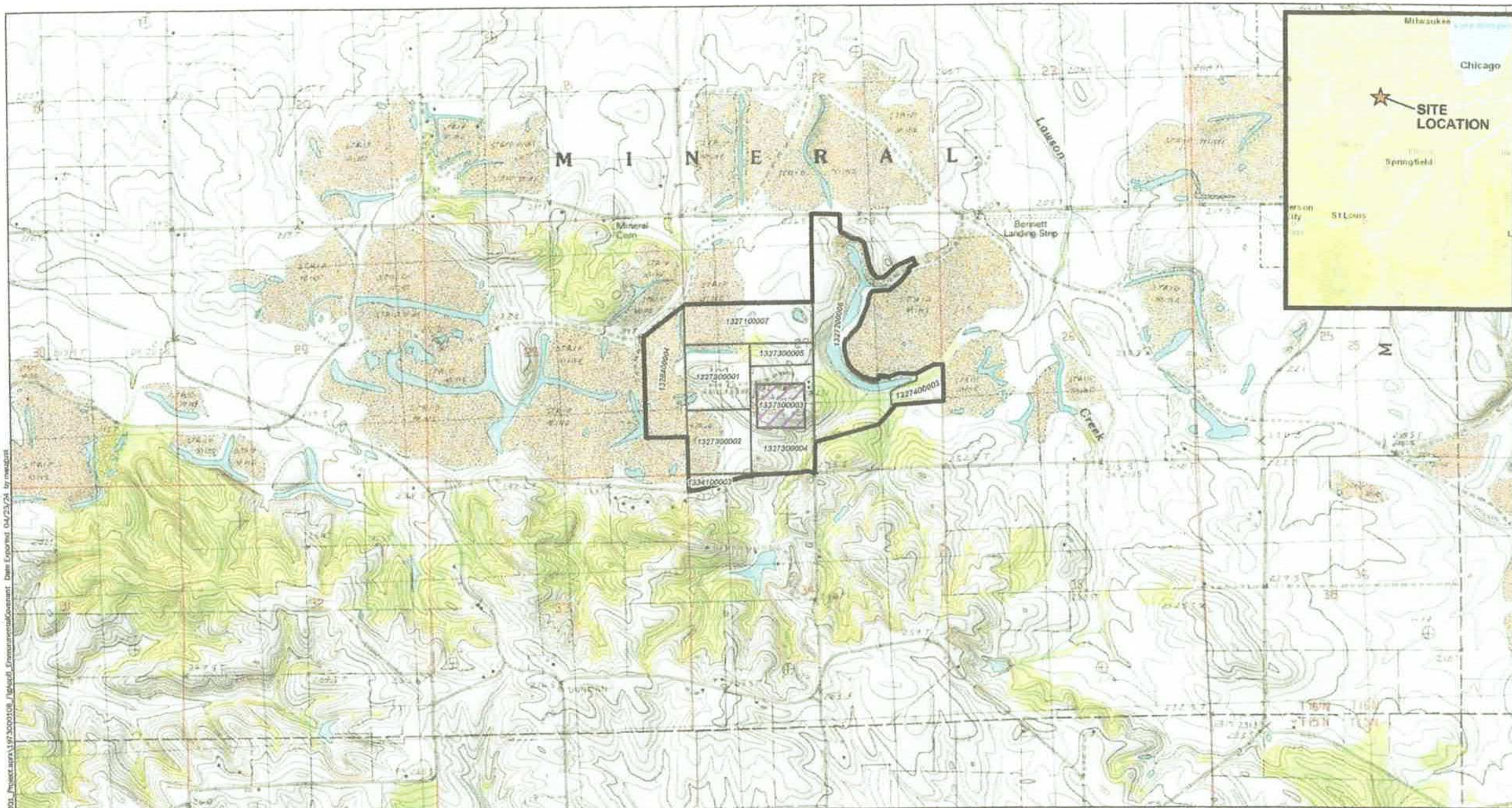
BUREAU CO. NO. 006 026580

STATE OF ILLINOIS
REAL ESTATE TRANSFER TAX
P.B. 10792 MAR-4'76 ★★★ DEPT. OF REVENUE 80.00

This instrument was prepared by:
Name Karl G. LaPinska
Address 2 Park Avenue West
Princeton, Illinois

Return Document to:
Name Matthew A. Maloney
Street 620 South Main Street
City Princeton,
State Illinois Zip 61356

Appendix B –
Map of the Restricted Area



Notes:
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source: ESRI, USGS.
Parcels from Bureau County GIS.

Projection: NAD 1983 StatePlane Illinois West FIPS 1202 Feet

Legend

- Environmental Covenant Restricted Area (Groundwater Use Restrictions Apply)
- Property Owned by State of Illinois (Not part of the Restricted Area; not subject to the Activity and Use Limitations set forth in the ERC)
- Fenced Parcel Boundary (with Bureau County Assessors' Parcel Numbers)

N

2,000 0 2,000
Feet

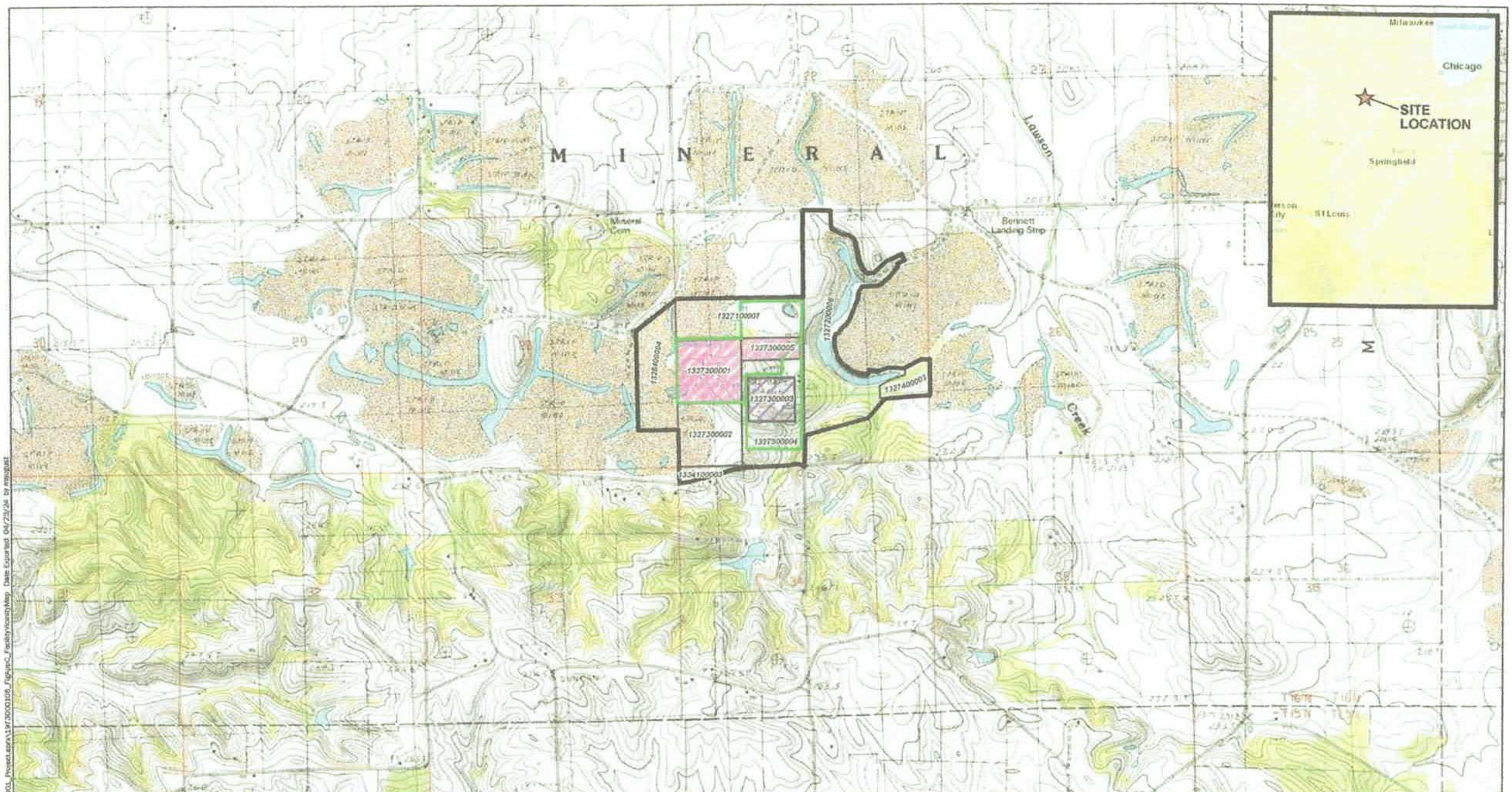
Environmental Covenant Restricted Area

U.S. Ecology Illinois
Sheffield, Illinois

GEOENGINEERS

Appendix B

Appendix C –
Map Depicting the 46-acre permitted hazardous waste facility.



Notes:
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source: ESRI, USGS.
Parcels from Bureau County GIS.

Projection: NAD 1983 StatePlane Illinois West FIPS 1202 Feet

Legend
- Environmental Covenant Restricted Area (Groundwater Use Restrictions Apply)
- Property Owned by State of Illinois (Not part of the Restricted Area; not subject to the Activity and Use Limitations set forth in the ERC)
- Fenced Parcel Boundary (with Bureau County Assessors' Parcel Numbers)
- 46-Acre Hazardous Waste Facility
- Hazardous Waste Facility and Radiation Site Fencing

N

2,000 0 2,000
Feet

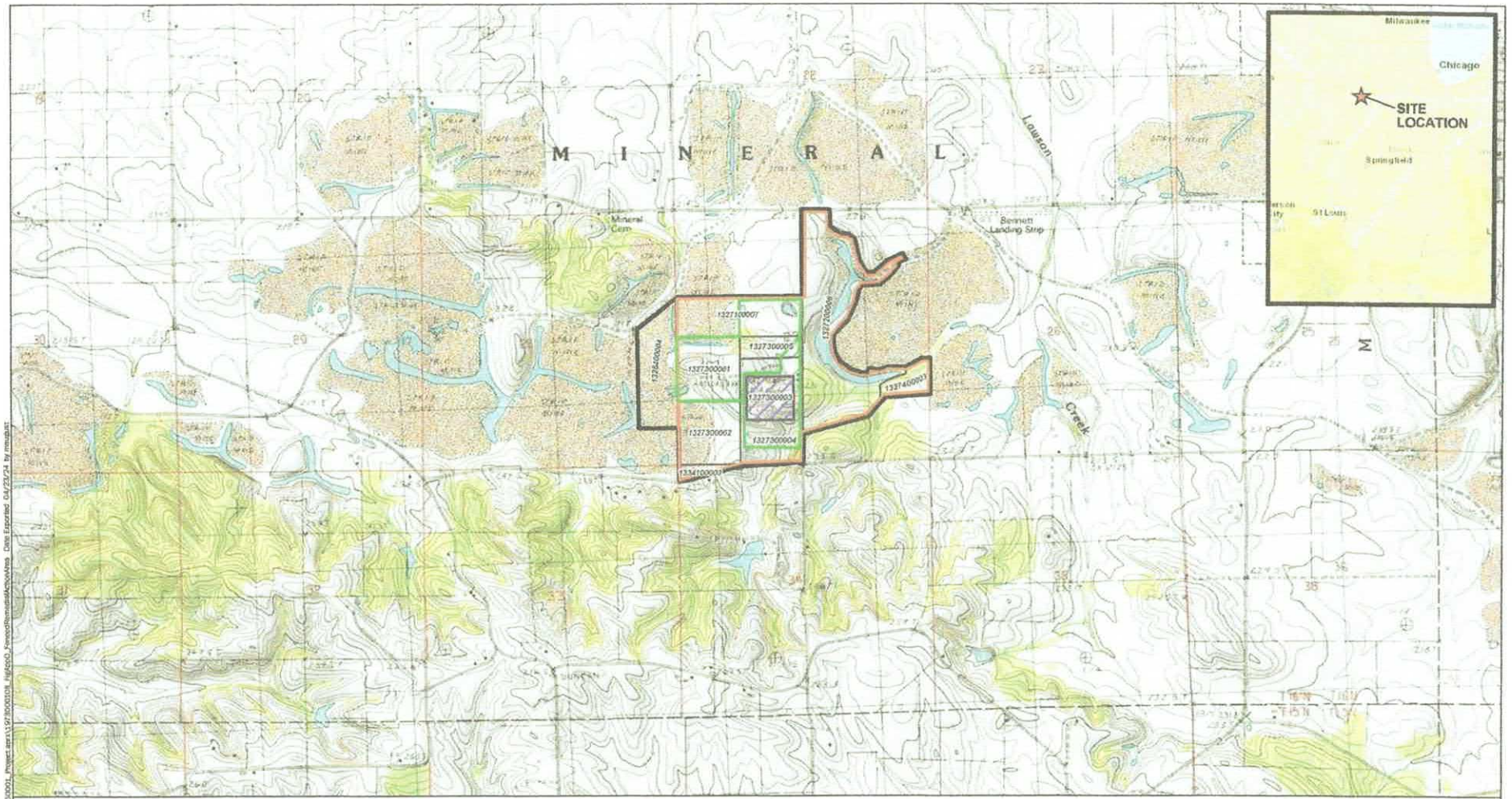
Sheffield Hazardous Waste Facility Map

U.S. Ecology Illinois
Sheffield, Illinois

GEOENGINEERS

Appendix C

Appendix D –
Map Depicting Portion of the Restricted Area upon which the Boundary Fence and other Remedial Action Components are Located



Notes:
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source: ESRI, USGS.
Parcels from Bureau County GIS.

Projection: NAD 1983 StatePlane Illinois West FIPS 1202 Feet

Legend
- Environmental Covenant Restricted Area (Groundwater Use Restrictions Apply)
- Property Owned by State of Illinois (Not part of the Restricted Area; not subject to the Activity and Use Limitations set forth in the ERC)
- Fenced Parcel Boundary (with Bureau County Assessors' Parcel Numbers)
- Fenced Restricted Area
- Hazardous Waste Facility and Radiation Site Fencing

N

2,000 0 2,000
Feet

Fenced Remedial Action Area Boundary

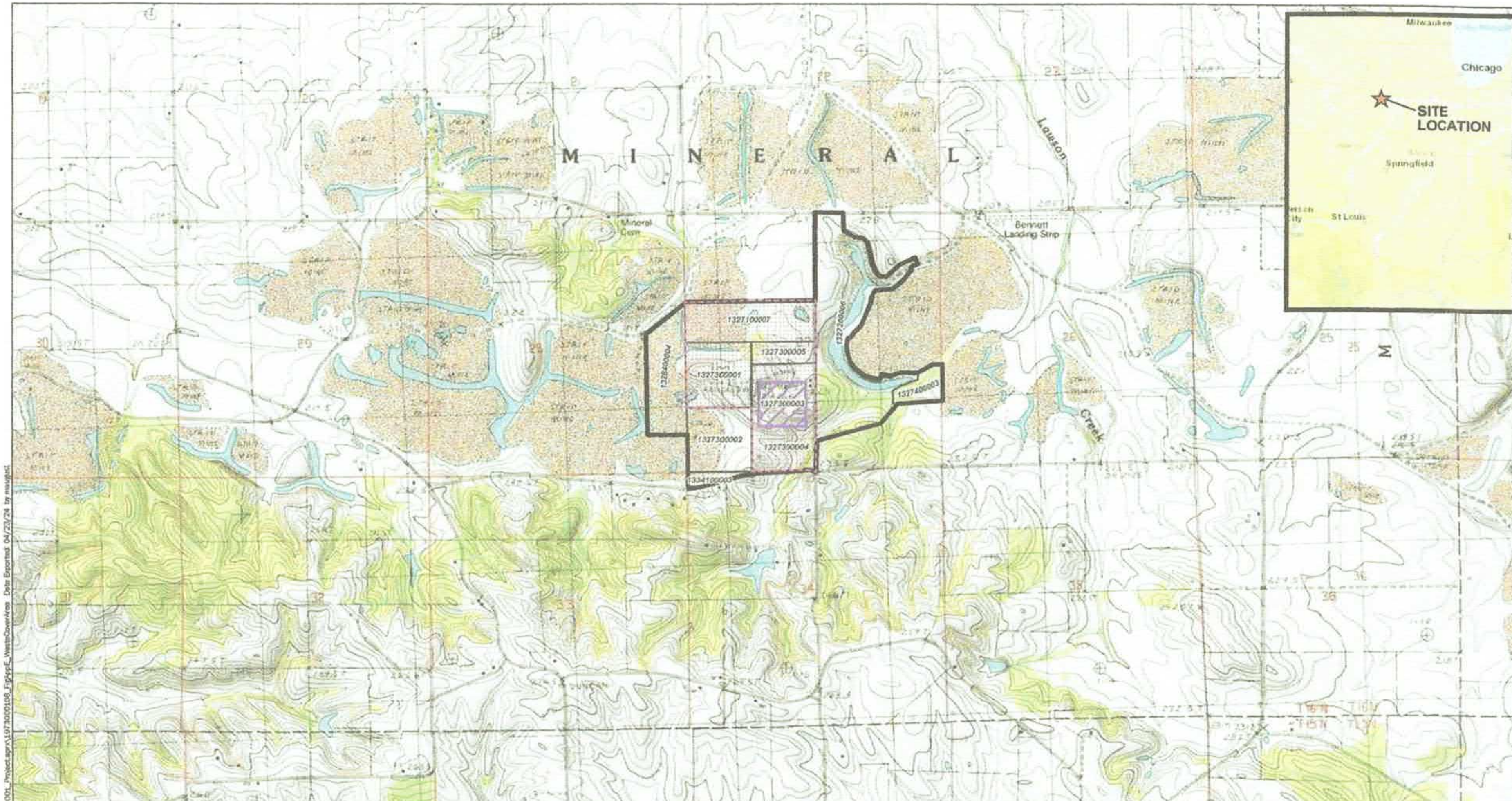
U.S. Ecology Illinois
Sheffield, Illinois

GeoEngineers

Appendix D

P:\19\73\001\GIS\19730001_ProjectArea\19730001_FencedRemedialActionArea Date Exported: 04/23/24 by mstuart

Appendix E –
Map Depicting the Waste Cover Areas



Notes:
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source: ESRI, USGS.
Parcels from Bureau County GIS.

Projection: NAD 1983 StatePlane Illinois West FIPS 1202 Feet

Legend

- Environmental Covenant Restricted Area (Groundwater Use Restrictions Apply)
- Property Owned by State of Illinois (Not part of the Restricted Area; not subject to the Activity and Use Limitations set forth in the ERC)
- Fenced Waste Cover Area (No disturbance of impermeable landfill Cover(s) or Waste restrictions)
- Parcel Boundary (with Bureau County Assessors' Parcel Number)

N

2,000 0 2,000
Feet

Waste Cover Area

U.S. Ecology Illinois
Sheffield, Illinois

GeoEngineers

Appendix E

Appendix F –
Long-term Stewardship Plan

Long-term Stewardship Plan
Final

Sheffield Former Hazardous Waste Facility
Sheffield, Illinois

for
US Ecology

July 28, 2020

GeoEngineers
Earth Science + Technology

Long-term Stewardship Plan
Final

Sheffield Former Hazardous Waste Facility
Sheffield, Illinois

for
US Ecology

July 28, 2020

GeoEngineers

412 East Parkcenter Boulevard, Suite 305
Boise, Idaho 83706
208.433.8098

Long-term Stewardship Plan
Final

Sheffield Former Hazardous Waste Facility
Sheffield, Illinois

File No. 19730-002-00

July 28, 2020

Prepared for:

US Ecology
PO Box 206
Sheffield, Illinois 61316

Attention: Doug Long

Prepared by:

GeoEngineers, Inc.
412 East Parkcenter Boulevard, Suite 305
Boise, Idaho 83706
208.433.8098

Andrew P. Provant, PG (Idaho)
Senior Geologist

Nancy A. Musgrove
Senior Scientist

Dustin G. Wasley, PE (Washington)
Principal

APP:NAM:DGW:mce

Table of Contents

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APPENDICES

1.0 INTRODUCTION

The Long-term Stewardship Plan (LTSP) represents the approach to be used for managing subsurface contamination at the US Ecology Sheffield facility near Sheffield, Illinois (Figure 1, Vicinity Map). The LTSP follows corrective actions completed under a US Environmental Protection Agency (USEPA) Administrative Order by Consent (AOC) (USEPA 1985). This LTSP describes the ongoing monitoring, evaluation, maintenance and periodic repairs that will be conducted at the facility and also lays out a framework for decision-making should further corrective action be needed for the remaining contamination.

1.1. Site Description and Regulatory History

The US Ecology Sheffield site is a 46-acre permitted hazardous waste facility that operated from 1968 to 1983. The facility includes two hazardous waste landfills referred to as the Old Chem Site and New Chem Site (Figure 2, Site Layout). A closed 20-acre, low-level radioactive waste (LLRW) facility owned and monitored by the state of Illinois is adjacent to the facility and lies within the property owned by US Ecology but is not considered a part of this LTSP. During operations, the US Ecology facility accepted industrial, laboratory and agricultural hazardous wastes. Approximately 165,000 cubic yards (cy) of waste were reportedly disposed at the two landfills (93 percent at the New Chem Site). The Old Chem Site consists of six disposal trenches covering about 6 acres. The New Chem Site consists of 19 clay-lined burial cells covering approximately 40 acres.

In 1985, the facility was subject to an AOC administered by the USEPA under the Resource Conservation and Recovery Act (RCRA). The AOC required (1) investigation of potential site releases that could adversely affect human or environmental health through exposure to hazardous contaminants (primarily volatile organic compounds [VOCs]); (2) evaluation of alternatives to address exposure pathways; and (3) implementation of corrective actions that would protect people and the environment.

Subsequent corrective actions included containment of remaining on-site waste, and groundwater extraction and treatment to address a contaminated groundwater plume in the shallow aquifer beneath the facility. To contain the waste, portions of the landfill were isolated by constructing subsurface barrier walls to divert groundwater away from the cells, followed by capping the landfill surface in 1994. After the initial source control actions, additional groundwater remediation systems were installed in several phases including groundwater extraction and treatment, and in situ treatment by an air-sparging/soil vapor-extraction (AS/SVE) system. Various modifications were made to the remediation systems over the years to optimize performance. In 2006, an injection system was added around some of the AS/SVE wells to further degrade VOC compounds present in groundwater. In 2009, an AS/SVE system was installed to address ongoing regulatory exceedances in seeps along the north side of the landfill.

US Ecology applied for a post-closure permit with Illinois EPA (IEPA) on October 24, 2008. IEPA and USEPA agreed that all future post-closure activities would be carried out under the 1985 USEPA AOC (January 21, 2010 correspondence from USEPA); however, IEPA issued a post-closure permit to US Ecology on March 18, 2010. The IEPA permit required preparation of a post-closure plan for the site and ongoing environmental monitoring for at least 30 years from the September 30, 1996 closure certification date. The IEPA permit also required the facility to follow the post-closure plan associated with the September 30, 1985 AOC between USEPA and US Ecology.

The post-closure groundwater and surface water monitoring program was approved by the USEPA on July 1, 2009 following inclusion of additional groundwater monitoring wells identified in USEPA's response-to-comments (RTC) document for the facility dated October 1990. This program has been conducted from 2009 to the present and forms the basis of the post-closure plan (Appendix A) also required under the IEPA permit.

More than 25 years of groundwater monitoring data have been collected since the initial remedial systems were installed, with VOCs comprising the primary contaminants of concern (COCs). VOC concentrations have declined over time, demonstrating that natural attenuation is occurring, and leading to decommissioning of the on-site wastewater treatment plant in 2013. Other treatment systems were decommissioned as corrective action goals were achieved.

Investigations of site-specific geological conditions have shown the shallow, contaminated aquifer is sufficiently isolated from the deeper water-bearing zone which provides regional drinking water. Site hydrogeology is well known with most of the shallow groundwater discharging to a local surface water feature (Trout Lake) formed by historical coal mining activity. Surface water monitoring results have shown the contaminated groundwater plume does not appear to be impacting Trout Lake, which serves as the point of compliance (POC) for this LTSP.

In 2019, a conceptual site model (CSM) was prepared at USEPA's request for the Sheffield facility to support USEPA decisions regarding long-term site management (GeoEngineers 2019). The information presented in the CSM set the stage for current negotiations between USEPA and US Ecology regarding the elements of an AOC that will govern the long-term care of the facility. This LTSP will be required by the AOC and describes:

- How the facility will be cared for over time,
- How remedy performance will be gauged and problems identified,
- How additional corrective actions would be developed, and
- What those actions may entail.

2.0 LONG-TERM STEWARDSHIP PROGRAM

Long-term stewardship incorporates monitoring of engineering controls and certifying institutional controls to ensure continued performance and site integrity. Environmental monitoring is conducted to demonstrate the effectiveness of existing source controls and support site management decisions regarding performance. Inspections, maintenance and minor repairs are performed to maintain site integrity. Deed restrictions have been filed with the county to ensure the continued land use associated with the landfill.

2.1. Engineering Controls

Engineering controls (i.e., source controls) are designed to control releases of remaining primary or secondary contamination at the facility. Primary contamination is the original waste material contained in the disposal cells and trenches; secondary contamination represents contaminated environmental media (e.g., groundwater) that may migrate from the disposal cells and trenches or former treatment areas.

Engineering/source controls at the facility include:

- Vegetated landfill caps
- Containment/barrier walls
- Leachate collection system
- Stormwater drainage
- Fencing and site-access controls

These elements are managed by (1) long-term monitoring and (2) regular inspections and maintenance, as described in further detail below:

2.1.1. Long-term Monitoring

Long-term monitoring references the current IEPA post-closure program (Appendix A), with modifications discussed in the following sections. The monitoring program will support:

- Identifying contaminated groundwater migration beyond the facility boundary,
- Evaluating groundwater plume stability through COC attenuation,
- Mapping changes to the groundwater flow path,
- Assessing surface water quality at the POCs in Trout Lake,
- Confirming integrity of the engineering/source controls,
- Certifying institutional controls and deed restrictions, and
- Planning contingency actions.

The monitoring program will include collecting and analyzing groundwater and surface water samples, measuring static water level and mapping groundwater contours. In addition, the monitoring program will support USEPA oversight activities including observation of sampling activities, independent collection of samples and inspection of engineering/source controls.

2.1.1.1. Groundwater and Surface Water Chemical Monitoring

The long-term groundwater monitoring program will use portions of the current IEPA post-closure program well array in addition to some wells monitored by other programs. Two surface sampling locations in Trout Lake comprise the POC for the groundwater monitoring program.

Groundwater and surface water sampling protocols will be the same as those followed under the current IEPA post-closure monitoring program with minor modifications. The proposed groundwater and surface water monitoring program approach and rationale is provided in the attached Table 1, Summary of Proposed Post-Closure Care Monitoring Program and Rationale. Monitoring well locations are shown in Figure 3, Long-term Stewardship Program Monitoring Locations. The sampling locations and well type designations are described below.

- Twelve wells (identified in the IEPA post-closure program as boundary, guard and plume wells) will be sampled for the LTSP monitoring program along with two Trout Lake shoreline wells (part of the State

of Illinois' radiologic monitoring program). The well designations are discussed below and are included in Table I, Monitoring Well Designations shown below.

- Boundary wells are situated downgradient of the Old Chem and New Chem landfill units to assess whether site-generated contamination is migrating towards the facility boundaries. Note: In general, shallow groundwater flows from south to north; however, the presence of the subsurface barrier walls diverts and splits this northerly flow to the northwest and east.
- Guard wells are located to the east between the disposal cells and Trout Lake and are intended to provide an early warning of contaminant migration towards and possible impacts to the lake.
- Plume wells are located within the historical path of the VOC plume. Analytical data are used to evaluate plume stability and concentration trends.
- The two shoreline wells will be used to monitor groundwater-surface water interactions downgradient of the guard wells.
- The wells will be sampled in the spring and fall of each year (an approximate sampling schedule will be provided to USEPA in advance of sampling). The frequency may be reduced if contaminant concentrations continue to decline or remain stable. Sampling frequency will be evaluated each year during the annual report preparation and a request for a reduction, if warranted, will be made in the annual reporting process.

TABLE I. MONITORING WELL DESIGNATIONS

Boundary Well	Guard Well	Groundwater-Surface Water Interaction Well	Plume Well
G-160	591	211	G-165
G-162	592	570	G-166
–	600	–	G-168
–	–	–	547
–	–	–	564
–	–	–	575
–	–	–	594

- Six additional wells from historical investigations will be monitored as part of a 5-year review cycle to assess the long-term effectiveness of the original corrective actions. These wells, shown on Figure 3 and in Table II, 5-year Cycle Monitoring Wells, shown below, have historically had few, if any, COC criteria exceedances. The locations were selected to be close to various source control structures and will be used to confirm the effectiveness of these source controls provided by the original corrective actions.

TABLE II. 5-YEAR CYCLE MONITORING WELLS

Upgradient of Trench 18	Downgradient of Old Chem Site
G-142	G-148
G-192	G-149
–	G-155
–	G-156

- Water level measurements will be collected in each well sampled during a given monitoring event.
- To assess whether Trout Lake gains/intercepts groundwater or loses water into the surrounding sediments, eight established monitoring wells located along the shoreline and used in the Illinois Emergency Management Agency (IEMA) radiological monitoring program were surveyed and added to the current monitoring well network for static water level measurements in the spring and fall (Figure 4, Shoreline Monitoring Well Locations for Lake Gain/Loss Assessment). Preliminary water levels measured on June 26, 2019 indicate that upland groundwater is discharging to the lake (i.e., the lake level is lower than the well elevations). This single observation will be confirmed by four additional measurements during scheduled monitoring events (i.e., 2 years of data). Once the gain/loss is confirmed, static water level measurements in shoreline wells will cease, except for those that undergo chemical monitoring.
- Trout Lake surface water will continue to be sampled as the facility POC. An additional sampling location (S-502) along the shoreline southeast of S-501 will be added to the program to confirm continued compliance. The two surface water sampling locations are shown on Figure 3.
- The groundwater and surface water samples will be analyzed for COCs, indicator chemicals and metals provided below. Indicator chemicals and metals will be used to potentially discern the presence of landfill waste; however, many of the indicator chemicals may also be present due to the historical coal mining. Details of the laboratory analytical protocol are discussed in the Quality Assurance Project Plan (QAPP) included in Appendix B. Analyses will include:
    - VOCs (1,1-dichloroethane, 1,1-dichloroethene, 1,2-dichloroethane [EDC], 1,2-dichloropropane, benzene, chloroform, cis-1,2-dichloroethene, methylene chloride, tetrachloroethene [PCE], trans-1,2-dichloroethene, trichloroethene [TCE] and vinyl chloride – USEPA Method 8260B
    - Metals (iron, magnesium, manganese) — USEPA Method 6020A
    - Total solids – SM 254B-1991
    - Dissolved solids — SM 2540C
    - Chloride and sulfate – USEPA Method 300.0
- In addition, physical parameters such as pH and turbidity will be measured to help with monitoring data interpretation.
- Inorganic parameters will be reported on both a total (i.e., results for a whole sample) and dissolved concentration basis. Organic COCs will be analyzed on whole water samples. Total concentrations of COCs will be used for compliance and in trends analyses. The evaluation approach is described in the next section.

US Ecology recognizes that emerging COCs (e.g., perfluoroalkyl substances) may be present at the site. As the methods and technologies to detect and monitor new contaminants are developed and approved for regulatory use, additional COCs may be measured at the POC. However, given the containment of historical sources, attenuation of the groundwater plume and lack of VOC detections at the POC in the lake since 2003 (and never any exceedances), it is unlikely that an emerging contaminant of concern would impact the lake, should they be present in the plume.

2.1.1.2. Evaluation Approach

Groundwater and surface water monitoring data will be evaluated in different ways, depending on the purpose (i.e., compliance, source control effectiveness, rates of natural attenuation, groundwater-surface

water interactions) of the sampling locations described below. Contaminant trends will be evaluated using statistical techniques to determine the presence and significance of change in contaminant concentrations over time.

- Trout Lake Point of Compliance

  Analytical results detected within a given monitoring event from surface water samples will be directly compared to USEPA Region 4 surface water screening values, as provided in Table III, Surface Water Screening Levels, shown below. Contaminants of concern have rarely been detected in surface water, so trends analysis will not be performed for these samples.

TABLE III. SURFACE WATER SCREENING LEVELS

Contaminant of Concern	Region 4 Surface Water Screening Values (µg/L)
Benzene	160
Chloroform	140
1,1-Dichloroethane	410
1,1-Dichloroethene	130
EDC	2,000
cis-1,2-Dichloroethene	620
trans-1,2-Dichloroethene	558
1,2-Dichloropropane	520
Methylene chloride (aka dichloromethane)	1,500
PCE	53
TCE	220
Vinyl chloride	930

Note:
µg/L = micrograms per liter

- Boundary and Guard Wells

  Analytical results from boundary and guard wells detected above their respective practical quantitation limit will be directly compared to USEPA Region 4 surface water screening values. COCs exceeding screening levels for more than two consecutive monitoring events will be evaluated for trends over time.

  Concentrations of PCE and TCE have varied over time in the guard wells such that trends will continue to be evaluated. Trends in indicator chemicals and metals at each well and correlations among COCs and other chemical and physical parameters will also be evaluated to interpret changes in PCE and TCE trends, as needed. However, the site exists within a former coal mining area, which may have affected typical groundwater conditions and thus relationships among chemical parameters.

- Plume Wells

  Concentrations reported from whole/total sample analyses will continue to be evaluated using monitoring data compiled since 1999 to evaluate ongoing attenuation trends in these wells.

These trends will be used to evaluate the long-term effectiveness of the corrective actions and support site management decisions, including the need for additional corrective actions.

- Groundwater-Surface Water Interaction (GSI) Sampling Locations

  Collection of GSI samples is a new component of the LTSP. Data collected at wells 570, 211 and surface water compliance sampling points S-501 and S-502 will be tracked over time. When sufficient data are available, correlation and regression analyses may be performed for COCs detected at both the GSI wells and the POCs in Trout Lake to determine if upland groundwater is impacting surface water quality.

The significance of trends at individual sampling locations will be evaluated as described in the next section.

2.1.1.3. Trends Analysis

Concentration trends for TCE and PCE (at a minimum) will be evaluated in guard wells and plume wells, based on monitoring data compiled since 1999 following the Interstate Technology and Regulatory Council (ITRC) 2013 guidance on statistical analysis of trends in groundwater. More recent periods (e.g., the last 5 or 10 years) may also be evaluated. Trends analyses will have two components: graphical and statistical. Concentrations over time will be plotted for TCE and PCE in each guard or plume well for a visual assessment of trends using graphical tools in USEPA's ProUCL version 5.1 statistical software. Statistical techniques will be used to establish the significance of trends over time; the Trends Analysis module in ProUCL will be used for this analysis.

An example output is provided below and provides several different methods for determining significance. Site data are unlikely to be normally distributed; both Mann-Kendall and Theil-Sen statistics do not assume an underlying distribution of the data and will be used (the Theil-Sen trend line is shown as a red line in the graphic below). The ordinary least squares (OLS) regression (which assumes time as the independent variable) assumes a linear relationship but can be used to infer the presence and significance of a slope (displayed as the blue line in the example below). The Trends Analysis module also provides a graphical display of the data as part of its output.

- ☐ Prior to sampling, calibrate the conductivity meter and standardize the pH meter per manufacturer's operating instruction. Complete the calibration log.
- ☐ A new pair of gloves must be worn when sampling each well.

Water Level Measurement

- ☐ Inspect the well to ensure that it has not been tampered with or damaged.
- ☐ Unlock the well.
- ☐ Rinse the water level measuring device with laboratory grade detergent and deionized water and allow to air dry.
- ☐ Lower the measuring device into the well until water is detected (positive indication on the meter). The distance from the top of the well casing to water is the depth to water in feet and inches. Log this level in the Field Log Book

Well Purging

Calculate Casing Volume as follows:

- ☐ For each well, subtract the depth to water measurement from the total depth listed in Attachment 1-1.
- ☐ For wells with 4-inch diameter casings, multiply the result of the above calculation by 2. This number represents three times the volume of water present in the well casing (in gallons). This is the volume to be purged prior to sampling.
- ☐ (Total Depth - Depth to Water) x 2 = Volume to be purged
- ☐ For wells with 2- or 3-inch diameter casings, multiply the result of the calculation by 0.5 or 1.1, respectively. This number represents the volume (in gallons) to be purged prior to sampling at that well.
- ☐ (Total Depth - Depth to Water) x 0.5 or 1.1 = Volume to be purged
- ☐ Perform water level measurements and casing volume calculations at all wells before proceeding to purge the well. Note: All measurements should be in feet.
- ☐ Bail two casing volumes from the well using the wells' dedicated submersible pump. If using a dedicated bailer and rope, do not allow the bailer rope to

touch the ground by using a figure eight rope recovery technique. We have one well (600), which is low yielding and only one case volume will be removed.

- ☐ The bailed water from wells with prior positive detections of hazardous chemicals will be managed in accordance with the generator rules as outlined in 35 Ill. Adm. Code 722, as amended. Bailed water from wells that have never had any hazardous chemicals detected in groundwater is released to the ground.
- ☐ After two casing volumes have been removed, fill a glass beaker with water and examine for indication of immiscible layers by checking for multiple phases (layers of liquid in the water). Note the results in the Field Log Book.
- ☐ Remove a third casing volume.

Sample Collection

Inspect all sample bottles and other equipment for cleanliness and for flaws before use. Each bottle shall have a tag or label for recording location, date, time, analysis to be performed, preservatives and sampler.

- ☐ Fill all sample bottles until each bottle is full. VOC sample VOAs will be filled such that no air is observed in the filled vial. Fill the pH-conductivity sample bottles last. Samples to be filtered will be collected in a common bottle for subsequent filtration. The samples should be taken in the order of their volatility. Cap each sample bottle securely, and complete the labeling of the bottles. The following information shall be noted:
    1. Date of sample:
    2. Time of sample:
    3. Analysis:
    4. Well number:
    5. Sampler's signature.

- ☐ Place all samples in an ice chest with ice, to assure samples are maintained near 4 degrees C. Protect samples to eliminate the chance of breakage during

shipment. As the samples are packed, the sample type, number, time, date, sample tech signature, and analysis to be performed shall be recorded on the chain of custody form. When all the samples have been packed, the ice chest shall be security sealed, with the seal number recorded on the chain of custody form.

pH and Conductivity Measurement (Field Measurement)

- Analyze for conductivity as follows:

  1. Rinse the probe with DI water. Insert the probe into the sample.
  2. Hold the probe vertically and at least 1/2 inch from the surface of the beaker.
  3. Turn the selection switch to the scale. Allow five minutes for equilibrium. Note the conductivity in the Field Log Book and Groundwater Monitoring Log. Turn off the meter, remove the probe from the sample and rinse.

- Analyze for pH as follows:

  1. Rinse the probe with DI water and insert the probe into the sample.
  2. Holding the probe vertically and at least 1/2 inch from all surfaces of the beaker, turn on the pH meter. Allow the reading to stabilize and record the temperature and pH results in the Field Log Book and Groundwater Monitoring Log.
  3. Rinse the probe in DI water and store.
  4. Dump the sample water into the water saved from well purging.

3. Quality Assurance/Quality Control

Blanks

Each of the following field blanks will be prepared and analyzed for all of the required monitoring parameters. The bottles filled with the blank should be handled and transported to the laboratory.

Trip Blank - Fill one of each type of sample bottle with reagent grade water, transport to the site, handle like a sample and return to the laboratory for analysis. One trip blank per sampling event will be collected.

Equipment Blank - To ensure that the non-dedicated water level device or the filtration apparatus has been effectively cleaned (in the laboratory or field), rinse the device with reagent grade water, transfer to sample bottle(s), and return to the laboratory for analysis. One equipment blank for measurement device and filtration apparatus for each groundwater monitoring well sampling event will be collected.

Field Blank - Transport one of each type of sample bottle to the sample area. Fill each bottle with demineralized water, handle like a sample and return to the laboratory for analysis. One field blank per sampling event will be collected.

Sample Packaging and Shipment

Groundwater monitoring samples must be sent to the laboratory within 24 hours of sampling. On-site testing should be done as soon as possible. Samples for transport should be stored at 4 degrees C.

All preserved samples should be clearly marked with the type of preservative. All samples should be stabilized in a refrigerator or cooler with ice or dry ice, then packed into a cooler(s) and sealed with tape to ensure they stay at 4 degrees C.

Containers

All containers shall be sealed/stored in a clean environment immediately after cleaning or upon receipt from an outside laboratory to prevent any accumulation of dust or other contaminants.

Store inverted or capped with aluminum foil. Attachment 1 addresses the proper sample containers, preservation and handling for the parameters which will be tested

for in groundwater samples. If a parameter is to be analyzed which is not listed in these attachments, contact the laboratory for the proper sample container, preservative and holding time.

Groundwater Monitoring Log

The groundwater monitoring log shall contain the following information:

- Well identification number;
- Date and time of inspection;
- Depth to water/Depth to bottom;
- pH;
- Temperature (water);
- Specific conductance;
- Odor; and
- Appearance/Samplers Initials.

The Field Log Book Contains

- Identification of well;
- Well depth;
- Static water level depth;
- Static water elevations:
- Well depth to bottom;
- Date and time of collection;
- Well sampling sequence;
- Field analysis data, temp, pH, spec conductivity;
- Name of collector;
- Climatic conditions/temp;
- Sufficient information to reconstruct the sampling event without reliance on memory. The Field Log Book shall be protected and filed when complete.

Sample Labels

Preprinted, gummed labels are applied to the sample container before sampling. The sample label must contain the following information:

- Well number;
- Name of sampling collector;
- Date and time of sampling;
- Preservatives used; and
- Type of analysis to be performed.

Chain of Custody Record

The Chain of Custody Record identifies each person who has custody of the sample from the time it is sampled until all analyses have been completed. Each custodian's signature certifies that the sample was secure from tampering during the custody period. Apply a security seal to the sample cooler so that the seal must be broken when the cooler is opened. Record the security seal number on the Chain of Custody Record to be checked by laboratory personnel. If the seal has been broken, or the numbers do not match, the sample will be discarded.

The Chain of Custody Record accompanies the sample to the laboratory.

File one copy of the record and seal the original in the sample shipping container. When the sample is received at the laboratory, the Chain of Custody Record will be signed and stamped with the laboratory control number. A copy of the record will then be sent to the facility to confirm that the sample arrived intact.

Shipment

No person may offer or accept a hazardous material for transportation in commerce within the United State unless that material is properly classed, described, packaged, marked, labeled and in the condition for shipment.

Laboratory QA/QC

Use a laboratory which has a documented QA/QC program. Request and maintain current copies of laboratory certifications and available audits.

Decontamination Procedures for Monitoring Equipment

Since dedicated equipment may not be used for water level measurement or for all well sampling, avoid cross contamination of sampling points. Dissemble and clean equipment as follows:

Inorganic/Organic Constituent Procedure

1. Disassemble equipment to the extent possible;
2. Wash equipment with a nonphosphate detergent/soap mixture;
3. Rinse with distilled water;
4. Rinse with reagent grade distilled water;
5. Allow to air dry and reassemble; and
6. Store in an uncontaminated area.

ATTACHMENTS

1 Sample Containerization, Preservation and Handling

2 Typical Sample Label

3 Wells Requiring Sampling (Reserved)

4 Analysis Required (Reserved)

ATTACHMENT 1

(Note—the following information in this attachment has been replaced by the Quality Assurance Project Plan in Appendix B)

SAMPLING AND PRESERVATION PROCEDURES

Parameter	Container	Preservation[b]	Holding Time	Minimum Require Volume
Indicators of Groundwater Contamination (a)				
pH	T,P,G	None	Field determined	25 mL
Specific conductance	T,P,G	None	Field determined	25 mL
TOC	G (amber), T-lined cap	Cool (4°C)[c];H_2SO_4 to pH<2	28 days	40 mL
TOX	G (amber), T-lined septa or cap	Cool (4°C);H_2SO_4 to pH<2	28 days	250 mL
Groundwater Quality Characteristics				
Chloride	T,P,G	Cool (4°C);	28 days	50 mL
Iron	T,P	HNO_3 to pH<2	6 months	200 mL
Manganese	T,P	HNO_3 to pH<2	6 months	200 mL
Phenols	G	Cool (4°C);H_2SO_4 to pH<2	28 days	250 mL
Sulfate	P,G	Cool (4°C)	28 days50 mL	
EPA Interim Drinking Water Characteristics				
Arsenic	P,G	HNO_3 to pH<2	6 months	200 mL
Barium	P,G	HNO_3 to pH<2	6 months	200 mL
Cadmium	P,G	HNO_3 to pH<2	6 months	200 mL
Chromium	P,G	HNO_3 to pH<2	6 months	200 mL
Lead	P,G	HNO_3 to pH<2	6 months	200 mL
Mercury	P,G	HNO_3 to pH<2	28 days	200 mL
Selenium	P,G	HNO_3 to pH<2	6 months	200 mL
Silver	P,G	HNO_3 to pH<2	6 months	200 mL
Fluoride	P,G	Cool (4°C)	28 days	200 mL
Nitrate	P,G	Cool (4°C)	2 days	100 mL
Cyanide	P,G	Cool (4°C)	14 days[d]	500 mL
Other Contaminants of Concern				
Semi- or non-volatile organics	T,G	Cool (4°C)	7 days to extract	2,500 mL
Volatile organics	G, T-lined	Cool (4°C); NaOH to pH>12	14 days	40 mL
Dissolved metals	P,G	HNO_3 to pH<2	6 months	200 mL
Dissolved mercury	P,G	HNO_3 to pH<2	28 days	200 mL
Bicarbonate/carbonate	P,G	None	Field determined	100 mL
Pesticides/PCBs	G,Teflon-lined	Cool (4°C)	7 days to extraction; 40 days after extraction	2,500 mL
Orthophosphate	P,G	Cool (4°C)	48 hours	150 mL

References:

Test Methods for Evaluating Solid Waste- Physical/ Chemical Methods, SW-846 (2nd Edition, 1982).

Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020

Standard Methods for the Examination of Water and Wastewater, (16th Edition, 1985)

Container Types:
P = Plastic (polyethylene)
G = Glass
T = Fluorocarbon resins (PTFE, Teflon, FEP, PPA, etc.)

(a) EPA requirements for detection monitoring (40 CFR 265.93), require the owner/operator to collect a sufficient volume of groundwater to allow for the analysis of four separate replicates.

(b) Shipping containers (cooling chest with ice or ice pack) should be certified as to the 4°C temperature at time of sample placement into these containers. Preservation of samples requires that the temperature of collected samples be adjusted to the 4°C and maintained at 4°C immediately after collection. Shipping coolers must be at 4°C and maintained at 4°C upon placement of sample and during shipment. Maximum/minimum thermometers are to be placed into the shipping chest to check temperature history.

(c) Do not allow any head space in the container.

(d) Maximum holding time is 24 hours when sulfide is present. Optionally, all samples may be tested with lead acetate paper before the pH adjustment in order to determine if sulfide is present. If sulfide is present, it can be removed by addition of admium nitrate powder until a negative spot-test is obtained. The sample is filtered and then NaOH is added to pH 12.

Attachment 2

Sample Label Provided by Laboratory

Field Sample #_____

Sample ID: _____

Analysis: _____

Facility Location: _____

Date and Time: _____

Sample Collector: _____

Preservative: _____

Attachment 3
Wells to be Sampled
(Reserved)

Please see the Long-term Stewardship Plan for wells that will be included in the monitoring program

Attachment 4

Sampling Frequency
And Analytes

(Reserved)

Please see the Long-term Stewardship Plan for sampling frequency and analyses that will be included in the monitoring program

ATTACHMENT B

LEACHATE RECOVERY PROCEDURES

Leachate Recovery Procedures

Background

Sump risers consist of PVC or steel pipe and are clearly visible in the field as they rise above the landfill cover. Each sump is equipped with a cap and security seal to provide evidence of tampering. For field identification, a long-lasting, non-rusting, metal plate stamped with the sump number has been permanently affixed to the riser pipe.

There are fifty-nine leachate monitoring sumps at the facility. Leachate levels and pumping rates have decreased significantly since 1983 due to sump pumping and the positive effects of the final cap system. Daily pumping rates decreased from 198 gallons per day in December 1983 to the current rate of less than 3,800 gallons per year. A total of 47,912 gallons of leachate have been collected by sumps since 1995. See Table B.1.

Table B.1: Leachate Production 1995 to 2019

Year	Total Leachate Pumped	Total Annual Precipitation
1995	2,390	32.14
1996	2,133	30.62
1997	1,268	31.93
1998	1,123	45.73
1999	1,793	43.47
2000	1,980	37.10
2001	2,595	36.70
2002	1,715	35.97
2003	980	35.24
2004	1,080	34.44
2005	900	19.84
2006	990	37.11
2007	1,180	36.75
2008	1,550	49.20
2009	3,920	53.25
2010	2,580	34.25
2011	1,520	42.40
2012	1,280	28.97
2013	1,050	44.64
2014	1,000	43.47
2015	1,750	38.68
2016	3,223	39.87
2017	2,615	42.33
2018	3,611	49.15
2019	3686	41.92
	47,912	

Sump Inspections & Pumping

1.0 Leachate collection sumps in closed trenches will be monitored annually for depth of liquids. At the time of inspection, the date, depth of liquid, depth to bottom of the sump (both measured from top of casing) and name and signature of the inspector will be entered on the sump log.

If the depth of liquid (depth to bottom minus depth to liquid) is one foot or greater above the primary liner system, leachate will be pumped from the sump until all liquid which can be practically removed has been removed. The total amount of liquid removal will be recorded on the sump log.

2.0 When required to pump sumps, the following safety and operational procedures will be followed:

2.0.1 Dedicated 12 volt electric sump pumps will be used for all sumps.

2.0.2 Chemical resistant boots, tyvek coveralls, nitrile gloves and a half-face air purifying respirator with combination cartridges will be worn when pumping sumps.

2.0.3 Each sump will be pumped into a mobile transfer tank.

2.0.4 PCB caution and hazardous waste labels will be placed on the transfer tank.

2.0.5 Absorbent material will be available during the sump pumping and transporting, in the event that a leak develops or a spill occurs.

2.0.6 When the transfer tank is full or when the sump pumping operations are completed that day, the liquids will be transported to the Leachate Accumulation Building for packaging and off-site disposal.

2.0.7 All contaminated rags, tyvek clothing and gloves will be placed in an open head DOT approved drum and accumulated in the leachate accumulation building with a PCB caution and hazardous waste labels affixed. Open head drums will be closed at all times except when adding solid waste.) Before the drum has reached its 90-day accumulation period, the drum will be shipped to an approved disposal facility.

3.0 When pumping leachate into the storage totes located inside the leachate accumulation building, the following safety and operational procedures will be followed:

3.0.1 Personnel will wear chemical resistant tyvek suits and gloves, safety glasses with side shields or chemical splash goggles, steel-toed boots with chemical resistant rubber pull-over boots, FM two-way radios, and respirators with organic vapor, acid gas dust, fume mist combination cartridges.

3.0.2 A pump dedicated to the leachate accumulation building will be used for pumping leachate from the portable collection tank to the totes.

3.0.3 The level in the totes will be checked prior to filling in order to prevent any overtopping of the totes.

3.0.4 Absorbent material will be placed under the hose to catch any liquid which may leak or drip while pumping.

3.0.5 Chemical resistant boots, tyvek coveralls, nitrile gloves and a respirator with combination cartridges will be worn while pumping leachate, or working on containers and/or associated equipment.

3.0.6 A record will be generated stating the amount of leachate treated and pumped in the totes during each filling. The 90-day accumulation period begins when leachate is first pumped into the totes.

3.0.7 All contaminated disposal clothing, gloves, rags and absorbent material will be placed in an open-head DOT approved drum along with all other contaminated disposal articles and absorbent materials. Open-head drums will be closed at all times except when adding waste.

4.0 Pre-Operation / Safety Training

The facility manager is responsible for ensuring that all personnel on site are informed of safety and operational procedures associated with leachate sump management.

5.0 Personnel and Work Area

Personnel allowed in work area are as follows:

a. Facility manager

b. Site employees designated by the facility manager.

c. Regulatory agency representatives.

d. Escorted site visitors.

6.0 Operations

6.0.1 The facility manager is responsible for all work.

6.0.2 Persons in the work area shall wear assigned protective equipment.

7.0 Decontamination and Cleanup

7.1 All materials and equipment shall be stored inside the leachate building.

7.2 If necessary, decontamination will be completed within the leachate building and any wash water will be pumped into the totes for off-site disposal and materials kept in storage until disposed.

ATTACHMENT C

CONTINGENCY PLAN

Contingency Plan
US ECOLOGY SHEFFIELD

General Information

US Ecology Sheffield, IEPA No. 0110950003 and U.S. EPA No. ILD04-506-3450, is located near Sheffield, Illinois, and is owned and maintained by US Ecology, Inc. The site is located in western Bureau County in northwestern Illinois, approximately three miles southwest of the town of Sheffield (latitude 89°47'47", longitude 41°20'28"). See Figure C-1.

The site was operated as a hazardous and industrial waste disposal facility from 1968 to 1983. During this period, the site disposed of approximately 160,000 cubic yards of waste in 24 disposal trenches covering approximately 19 acres in a portion of the facility called the New Chem Site and on 5.8 acres in an adjacent portion of the site called the Old Chem Site.

Emergency Coordinator

The facility manager is the primary emergency coordinator. In the event that the contingency plan is initiated, the emergency coordinator will have full authority to commit all necessary resources to implement the plan and carry it out until complete recovery from the contingency is achieved. The Contingency Plan Notification List contains all emergency numbers.

Plan Distribution and Modification

The facility manager will distribute the Contingency Plan and Notification List to the following agencies and consult with these agencies to assure they are familiar with the contingency plan and the site layout:

- Sheffield Fire Department
- Kewanee Public Hospital
- Bureau County Hospital
- Buda Fire Department
- Buda Rescue Unit
- Sheffield Rescue Unit
- Bureau County Sheriff
- Illinois Environmental Protection Agency

The Contingency Plan may be modified by the Facility Manager as needed. In addition, the Contingency Plan will be reviewed and amended, if necessary, whenever:

- The facility permit is revised
- The plan fails in an emergency
- Improvements are recognized during contingency drills which would enhance effective response
- The list of emergency coordinators changes
- The list of response agencies changes

Contingency Plan and Notification List

US Ecology, Sheffield, Illinois Facility

US Ecology Facility Office----------815/454-2342

American Ecology Corporate Office----------208/331-8400

Primary Coordinator	Doug Long	101 East Center St Neponset, IL. 61345	309-854-1096 cell
First Alternate	R. Shawn Long	101 East Center St Neponset, IL. 61345	309-854-1500 cell
US Ecology, Inc. (Corporate Office)	Andrew Marshall	101 S. Capitol Blvd. Suite 1000 Boise, ID. 83702	208-331-8400

Mineral & Gold Twp. Fire District ----------309/228-3341

Sheffield Fire District----------815/454-2341

Sheffield Rescue Unit ----------815/45-42715

Neponset Fire Unit ----------309/594-2341

Bureau County Sheriff ----------815/875-3344

Illinois Emergency Response----------217/782-7860

Any person may initiate the Contingency Plan by notifying the Emergency Coordinator or alternate upon identifying:

1. **Fire, explosion**
2. **Release of hazardous materials to the air, soil, surface**
3. **Injured or ill personnel requiring immediate medical assistance**
4. **Intrusion of unauthorized personnel**
5. **Any imminent hazard to personnel, facilities, or the environment.**

If unable to contact the Emergency Coordinator or alternative, please contact the Bureau County Sherriff's Department at 815 875 3344.

Reports

After initiation of the Contingency Plan, the Emergency Coordinator will record the time, date, and details of the incident and provide 24 hour oral notification and 5 day written report to the Illinois EPA Regional Administrator after the incident.

The Emergency Coordinator will direct all on-scene US Ecology response efforts unless relieved by law enforcement agencies. The Emergency Coordinator will:

1. Insure personnel are evacuated to a safe area.
2. Establish personal protection requirements
3. Provide all necessary respiratory and personal protective equipment
4. Monitor affected areas for changes in the emergency condition.
5. Limit or restrict the use of motor vehicles in the affected areas as needed.
6. Remove or isolate, if practical, any waste materials.
7. Control all discharges from the facility, through the construction of temporary barrier walls or dikes with heavy equipment such as bull dozers and front-end loaders
8. Collect emergency response equipment for decontamination.
9. Initiate remedial clean-up operations when the incident has been brought under full control and no longer presents a threat to human health or the environment
10. Comply with all Federal and State regulatory requirements for immediate and supplementary notification.

Evacuation Plan

The Emergency Coordinator is responsible for determining if facility evacuation is required. In the event that this determination is made, the following action will be taken:

1. All persons on site will immediately leave, while minimizing potential exposure.
2. No one will re-enter the facility unless specifically authorized by the Emergency Coordinator.

The Emergency Coordinator will account for all facility personnel, visitors and contractors.

APPENDIX B
Quality Assurance Project Plan

Appendix B
Quality Assurance Project Plan

Sheffield Former Hazardous Waste Facility
Sheffield, Illinois

for
US Ecology

July 28, 2020

GeoEngineers

412 East Parkcenter Boulevard, Suite 305
Boise, Idaho 83706
208.433.8098

Table of Contents

LIST OF TABLES

APPENDIX B
QUALITY ASSURANCE PROJECT PLAN

This Quality Assurance Project Plan (QAPP) was developed to support field sampling activities at the Sheffield Former Hazardous Waste Facility to conform with United States Environmental Protection Agency (USEPA) groundwater and surface water sampling guidelines (USEPA 2001; USEPA 2002a). The QAPP covers Quality Assurance/Quality Control (QA/QC) procedures for long-term monitoring.

The QAPP serves as the primary guide for the integration of QA and QC functions into monitoring activities. The QAPP presents the objectives, procedures, organization, functional activities, and specific QA and QC activities designed to achieve data quality goals established for the project. This QAPP is based on USEPA guidelines for data quality assessment (USEPA 2006b; USEPA 2017a; USEPA 2017b).

Throughout the project, environmental measurements will be conducted to produce data that are scientifically valid, of known and acceptable quality, and meet established objectives. QA/QC procedures will be implemented so that precision, accuracy, representativeness, completeness and comparability (PARCC) of data generated meet the specified data quality objectives.

Project Objective

This QAPP establishes qualitative and quantitative measures so that data of acceptable quality are collected and to ascertain that project-specific data quality objectives (DQOs) are met. DQOs include:

- Generating data able to withstand scientific scrutiny and are suitable for their intended use;
- Generating data using controlled, approved field sampling procedures, chain-of-custody (COC) record keeping and laboratory analysis; and
- Using collection and analytical methods to produce data of known precision and accuracy.

Data quality will be evaluated by how well the final data meet the established objectives. Specific QA elements have been established from "*Guidance on Systematic Planning Using the Data Quality Objectives Process*" (EPA 2006a) to verify that data quality objectives are met, and field and analytical procedure elements are outlined in the following sections. This information has been compiled based on the anticipated work to be performed. Changes to procedures or unexpected difficulties in the field may require amendment of this QAPP. Changes in the QAPP will be brought to the attention of USEPA for review and approval.

Supporting Documentation

This QAPP provides supporting information in the form of table attachments that detail analytical data and technical procedures needed to successfully complete field and laboratory actions. Attached Table B-1, Test Methods, Sample Containers, Preservation and Holding Time, provides a summary of analytical methods with water sample collection requirements. Attached Table B-2, Measurement Quality Objectives, lists measurement quality objectives. Attached Table B-3, Water Analytical Methods and Target Reporting Limits, provide potential site contaminant analyte lists, laboratory method detection limits (MDLs) and practical quantitative limit/method reporting limits (PQLs/MRLs) for comparison to USEPA Region 4 screening levels. Attached Table B-4, Water Laboratory Precision and Accuracy Limits, provide laboratory

accuracy and precision criteria. Table B-5, Quality Control Sample Type and Frequency, lists quality control sample type and frequency. Control limits related to analytes listed in the tables are associated with data validation requirements as stated in the National Functional Guideline documents (USEPA 2017a, 2017b).

DISTRIBUTION LIST

Key project personnel and their responsibilities are defined in Table I below. The final approved QAPP will be distributed to the following personnel and analytical laboratory contacts.

TABLE I. PROJECT DISTRIBUTION LIST

Name	Project Affiliation	Organization and Location	Contact Number
Michael Takacs	Groundwater Program Manager	US Ecology, Livonia, MI	734.521.8179
Doug Long	Site Manager	US Ecology, Sheffield, IL	815.454.2342
Kurt Stepping	Laboratory Project Manager	PDC Laboratories, Peoria, IL	309.683.1719

Project Organization and Responsibility

Descriptions of the responsibilities, lines of authority, and communication for the key positions for QA and QC are provided below. The project organization facilitates the efficient performance of project work, allows for an independent quality review and permits resolution of any QA issues before submittal.

Project Leadership and Management

The Site Manager's duties consist of providing concise technical work statements for project tasks, selecting project team members, determining subcontractor participation, establishing budgets and schedules, adhering to budgets and schedules, providing technical oversight, and providing overall production and review of project deliverables. The Site Manager is responsible for coordinating with the USEPA regarding the sampling schedule, site access for oversight activities and split sampling requests. Doug Long is the Site Manager for activities at the Sheffield facility. The LTSP for the facility is conducted as part of, and supported by, the Groundwater Management Program within US Ecology.

Field Coordinator

The Field Coordinator is assigned by the Site Manager and is responsible for the daily management of activities in the field. Specific responsibilities include the following:

- Develops schedules and allocates resources for field tasks.
- Coordinates data collection activities to be consistent with information requirements.
- Collects field data and submits samples to laboratory.
- Assures that data are correctly and completely reported.
- Implements field sampling in accordance with the LTSP and QAPP.
- Schedules sample delivery to the analytical laboratory.
- Assures that appropriate sampling, testing and measurement procedures are followed.

- Participates in QA corrective actions, as required.

The Field Coordinator for the LTSP will be determined at the time of field activities.

Quality Assurance Leader

The Quality Assurance Leader is responsible for the project's overall QA and will be assigned by the Site Manager. The Project QA Leader is responsible for coordinating QA/QC activities as they relate to the acquisition of field data. The QA Leader has the following responsibilities:

- Serves as the official contact for laboratory data QA concerns.
- Responds to laboratory data, QA needs, resolves issues, and answers requests for guidance and assistance.
- Reviews the implementation of the QAPP and the adequacy of the data generated from a quality perspective.
- Maintains the authority to implement corrective actions, as necessary.
- Reviews and approves the laboratory QA Plan.
- Evaluates the laboratory's final QA report for any condition that adversely impacts data generation.
- Ensures that appropriate sampling, testing and analysis procedures are followed and that correct quality control checks are implemented.
- Monitors laboratory compliance with data quality requirements.

Laboratory Management

The laboratory's QA Coordinator administers the Laboratory QA Plan and is responsible for QC. Specific responsibilities of this position include:

- Ensures implementation of the QA Plan.
- Serves as the laboratory point of contact.
- Activates corrective action for out-of-control events.
- Issues the final QA/QC report.
- Administers QA sample analysis.
- Complies with the specifications established in the project plans as related to laboratory services.
- Participates in QA audits and compliance inspections.
- Coordinates with the USEPA regarding requests for laboratory access.

The chemical analytical laboratory QA Coordinator will be determined by the laboratory (PDC Laboratories, Inc. in Peoria, Illinois, a National Environmental Accreditation Program [NELAP]-accredited lab).

Data Quality Objectives

The QA objective for technical data is to collect environmental monitoring data of known, acceptable and reportable quality. The QA objectives established for the project are:

- Implement the procedures outlined herein for field sampling, sample custody, equipment operation and calibration, laboratory analysis, and data reporting that will facilitate consistency and thoroughness of data generated.
- Achieve the acceptable level of confidence and quality required so that data generated are scientifically valid and of known and documented quality. This will be performed by establishing criteria for PARCC parameters and by testing data against these criteria.

The sampling design, field procedures, laboratory procedures and QC procedures are set up to provide high-quality and defensible data for use in this project. Specific data quality factors that may affect data usability include quantitative factors (precision, bias, accuracy, completeness and reporting limits) and qualitative factors (representativeness and comparability). The measurement quality objectives (MQO) associated with these data quality factors are summarized in Table B-2.

Analytes

Groundwater and surface water samples will be submitted for chemical analysis of one or more of the following:

- Volatile Organic Compounds (VOCs) by USEPA Method 8260B;
- Total and dissolved iron, magnesium and manganese by USEPA Method 6020A;
- Chloride and sulfate by USEPA Method 300.0 Rev 2.1;
- Total Solids by SM 2540B-1991;
- Total Dissolved Solids by SM 2540C; and
- Perfluoroalkyl Substances (PFAS) by USEPA Method 8327

Detection Limits

Analytical methods have quantitative limitations at a given statistical level of confidence that are often expressed as MDL. Individual instruments often can detect but not accurately quantify compounds at concentrations lower than the MDL, referred to as the instrument detection limit (IDL). Although results reported near the MDL or IDL provide insight to site conditions, quality assurance dictates that analytical methods achieve a consistently reliable level of detection known as the practical quantitation limit (PQL) or reporting limit (RL). The analytical laboratory will provide numerical results for all analytes and report them as detected above the RL or undetected at the RL.

Achieving a stated detection limit for a given analyte is helpful in providing statistically useful data. Intended data uses, such as comparison to numerical criteria or risk assessments, typically dictate specific project target reporting limits (TRLs) necessary to fulfill stated objectives. For this project, the TRLs are less than or equal to USEPA Region 4 screening levels. The project analytes, applicable screening levels, and laboratory TRLs are shown in Tables B-3 and B-5 for water, respectively. The TRLs were obtained from PDC Laboratories in Peoria, Illinois. The analytical methods and processes selected will provide RLs less than the TRLs under ideal conditions. Therefore, a particular TRL is considered a target because several factors may influence final RLs. Data users must be aware that high non-detect values, although correctly reported, can bias statistical summaries. Careful interpretation is required to correctly characterize site conditions.

Precision

Precision is the measure of agreement among replicate or duplicate measurements of an analyte from the same sample and applies to field duplicate or split samples, replicate analyses, duplicate spiked environmental samples (matrix spike duplicates) and laboratory control duplicates. The closer the measured values are to each other, the more precise the measurement process. Precision error may affect data usefulness. Good precision is indicative of relative consistency and comparability between different samples. Precision will be expressed as the relative percent difference (RPD) for spike sample comparisons and field duplicate comparisons. This value is calculated by:

$$RPD\,(\%) = \frac{|\,D_1 - D_2\,|}{(D_1 + D_2)/2}\,X\,100,$$

Where:

RPD = relative percent difference

D_1 = sample analytical result

D_2 = duplicate sample analytical result

The RPD will be calculated for appropriate sample sets and compared to the applicable criteria. Persons performing the evaluation must review one or more pertinent documents (USEPA, 2017a; USEPA, 2017b) that address criteria exceedances and courses of action. Relative percent difference goals for this effort are 35 percent in water for all analyses, unless either the sample or duplicate values are within 5 times the reporting limit. In this case, the absolute difference is used instead of the RPD. The absolute difference control limit for water is equal to the lowest reporting limit of the two samples.

Accuracy

Accuracy is a measure of bias in the analytic process. The closer the measurement value is to the true value, the greater the accuracy. This measure is defined as the difference between the reported value versus the actual value and is often measured with the addition of a known compound to a sample. The amount of known compound reported in the sample, or percent recovery, assists in determining the performance of the analytical system in correctly quantifying the compounds of interest.

Since most environmental data collected represent one point spatially and temporally rather than an average of values, accuracy plays a greater role than precision in assessing the results. In general, if the percent recovery is low, non-detect results may indicate that compounds of interest are not present when in fact these compounds are present. Detected compounds may be biased low or reported at a value less than actual environmental conditions. The reverse is true when recoveries are high. Non-detect values are considered accurate while detected results may be higher than the true value.

Accuracy will be expressed as the percent recovery of a surrogate compound (also known as "system monitoring compound"), a matrix spike result, or from a standard reference material where:

$$Recovery\,(\%) = \frac{Sample\ Result}{Spike\ Amount}\,X\,100$$

Persons performing the evaluation must review one or more pertinent documents (USEPA 2017a; USEPA 2017b) that address criteria exceedances and courses of action. Accuracy criteria for surrogate spikes, matrix spikes and laboratory control spikes are found in Table B-2.

Representativeness, Completeness and Comparability

Representativeness expresses the degree to which data accurately and precisely represent the actual site conditions. The determination of the representativeness of the data will be performed by completing the following:

- Comparing actual sampling procedures to those delineated within this QAPP.
- Comparing analytical results of field duplicates to determine the variations in the analytical results.
- Invalidating non-representative data or identifying data to be classified as questionable or qualitative. Only representative data will be used in subsequent data reduction, validation and reporting activities.

Completeness establishes whether a sufficient number of valid measurements was obtained to meet project objectives. The number of samples and results expected establishes the comparative basis for completeness. Completeness goals are 90 percent useable data for samples/analyses planned. If the completeness goal is not achieved, an evaluation will be made to determine if the data are adequate to meet study objectives.

Comparability expresses the confidence with which one set of data can be compared to another. Although numeric goals do not exist for comparability, a statement on comparability will be prepared to determine overall usefulness of data sets, following the determination of both precision and accuracy.

SAMPLE COLLECTION, HANDLING AND CUSTODY

Sample Containers and Labeling

The Field Coordinator will establish field protocol to manage field sample collection, handling and documentation. Water samples obtained during this study will be placed in appropriate laboratory-prepared containers. Sample containers and preservatives are listed in Table B-1.

Sample containers will be labeled with the following information at the time of collection:

- Project name and number;
- Sample name, which will include a reference to depth if appropriate; and
- Date and time of collection.

Sample collection activities will be noted in the field logbooks. The Field Coordinator will monitor consistency between the QAPP, sample containers/labels, field logbooks and the COC.

Split Sampling

The USEPA can request split samples during any sampling event. The Site Manager will coordinate such requests with the USEPA and the Field Coordinator. Split sample collection and handling will be consistent

with protocol specified in this QAPP. The USEPA can also collect samples as part of their oversight; split samples will be made available to US Ecology for analysis for any samples collected by the USEPA.

Sample Storage

Samples will be placed in a cooler with "blue ice" or double-bagged "wet ice" immediately after they are collected; the objective being to attain a sample temperature of 4 ± 2 degrees Celsius. Holding times will be observed during sample storage. Holding times for the project analyses are summarized in Table B-1.

Sample Shipment

The samples will be delivered to the analytical laboratory in the coolers as soon as practical. Field personnel will ship samples to PDC Laboratories, Inc. in Peoria, Illinois for analysis.

Measures will be implemented to minimize the potential for sample breakage, which includes packaging materials and placing sample bottles in the cooler in a manner intended to minimize damage. Sample bottles will be appropriately wrapped with bubble wrap or other protective material before being placed in coolers.

Chain-of-Custody Records

Field personnel are responsible for the security of samples from the time the samples are collected until the samples have been received by the analytical laboratory or shipping service company. A COC form will be completed at the end of the field day for samples being shipped to the laboratory. Information to be included on the chain-of-custody form includes:

- Project name and number;
- Sample identification numbers;
- Date and time of sampling;
- Sample matrix and number of containers from each sampling point, including preservatives used;
- Analyses to be performed or samples to be archived; and
- Names of sampling personnel and transfer of custody acknowledgment spaces.

The original COC record will be signed by the field collector and bear a unique tracking number. Field personnel shall retain carbon copies and place the original and remaining copies in a plastic bag, placed within the cooler or taped to the inside lid of the cooler before sealing the container for transport. This record will accompany the samples during transit by the field team member or shipping service company to the analytical laboratory.

Laboratory Custody Procedures

The laboratory will follow their standard operating procedures (SOPs) to document sample handling from time of receipt (sample log-in) to reporting. Documentation will include at a minimum, the analysts name or initial, and the time and date of receipt.

Field Documentation

Field documentation provides important information about potential problems or special circumstances surrounding sample collection. Field personnel will maintain daily field logs while on site. The field logs will be prepared on field report forms or in a bound logbook. Entries in the field logs and associated sample documentation forms will be made in waterproof ink, and corrections will consist of line-out deletions that are initialed and dated. Individual logbooks will become part of the project files after the site characterization field explorations. Sampling activities also will be photo-documented at the site.

At a minimum, the following information will be recorded during the collection of each sample:

- Sample location and description
- Site or sampling area sketch showing sample location and measured distances. Sample locations might be logged with a GPS capable device instead of measured and sketched by hand
- Sampler's name(s)
- Date and time of sample collection
- Designation of sample as composite or discrete
- Type of sample matrix
- Type of sampling equipment used
- Field instrument readings
- Field observations and details that are pertinent to the integrity/condition of the samples (e.g., weather conditions, performance of the sampling equipment, sample depth control, sample disturbance, etc.)
- Preliminary sample descriptions (e.g., lithologies, noticeable odors, colors, field-screening results)
- Sample preservation
- Shipping arrangements (overnight air bill number)
- Name of recipient laboratory

In addition to the sampling information, the following specific information also will be recorded in the field log for each day of sampling:

- Team members and their responsibilities
- Time of arrival/entry on site and time of site departure
- Weather conditions
- Other personnel present at the site
- Summary of pertinent meetings or discussions with regulatory agency or contractor personnel
- Deviations from sampling plans, site safety plans and QAPP procedures
- Changes in personnel and responsibilities with reasons for the changes
- Levels of safety protection

- Calibration readings for any equipment used and equipment model and serial number

The handling, use and maintenance of field logbooks are the field coordinator's responsibilities.

Sampling Equipment

Disposable sampling equipment will be used whenever possible. Disposable sampling equipment shall not require decontamination prior to sampling; however, field personnel will carefully inspect equipment and maintain cleanliness prior to use.

Laboratory instrument/equipment testing, inspection and maintenance will be performed and documented by the laboratory. Procedures and schedules for sampling equipment preventive maintenance are the laboratory's responsibility. Each instrument or item of laboratory equipment will be maintained periodically to ensure accuracy. These procedures and performance frequency are designated in the individual instrument manuals. A copy of the laboratory Quality Assurance Manual was received by US Ecology and has been placed in the project file for reference.

CALIBRATION PROCEDURES

Field Instrumentation

Equipment and instrumentation calibration facilitate accurate and reliable field measurements. Field and laboratory equipment used on the project will be calibrated and adjusted in general accordance with the manufacturer's recommendations. Methods and intervals of calibration and maintenance will be based on the type of equipment, stability characteristics, required accuracy, intended use and environmental conditions.

Laboratory Instrumentation

For analytical chemistry, calibration procedures will be performed in general accordance with the methods cited and laboratory standard operating procedures. Calibration documentation will be retained at the laboratory and readily available for a period of six months.

DATA REPORTING AND LABORATORY DELIVERABLES

The laboratory will report data in a digital form acceptable to US Ecology. Analytical laboratory measurements will be recorded in standard formats that display, at a minimum, the field sample identification, the laboratory identification, reporting units, qualifiers, analytical method, analyte tested, analytical result, extraction and analysis dates and detection limit (RL only). Each sample delivery group will be accompanied by sample receipt forms and a case narrative identifying data quality issues.

Laboratory electronic data deliverables (EDD) will be established by US Ecology with the analytical laboratory. Final results will be sent to the Site Manager. US Ecology will submit analytical results to the USEPA as part of the annual reporting for the Long-term Stewardship program.

INTERNAL QUALITY CONTROL

Table B-5 summarizes the types and frequency of QC samples to be collected, including both field QC and laboratory QC samples. The following sections describe field and laboratory QC samples.

Field Quality Control

Field QC samples serve as a control and check mechanism to monitor the consistency of sampling methods. The following sections provide a description of field QC samples.

Field Duplicates

In addition to replicate analyses performed in the laboratory, field duplicates also serve as measures for precision. Under ideal field conditions, field duplicates are created when a volume of the sample matrix is thoroughly mixed, placed in separate containers and identified as different samples. This tests both the precision and consistency of laboratory analytical procedures and methods, and the consistency of the sampling techniques used by field personnel.

One sample for every 10 samples collected will be analyzed for the same analytes as the primary sample.

Trip Blanks

Trip blanks (typically for volatile analysis) are placed with samples during shipment and travel with samples from the laboratory to the field and back to the laboratory. One trip blank will be placed in each cooler that contains samples to be analyzed for VOCs.

Laboratory Quality Control

Laboratory quality control procedures will be evaluated through a formal data validation process. The analytical laboratory will follow standard method procedures that include specified QC monitoring requirements. These requirements will vary by method but generally include:

- Method blanks
- Internal standards
- Calibrations
- Matrix spike/matrix spike duplicates (MS/MSD)
- Laboratory control spikes/spike duplicates (LCS/LCSD)
- Laboratory replicates or duplicates
- Surrogate spikes

Laboratory Blanks

Laboratory procedures employ the use of several types of blanks, but the most commonly used blank for QA/QC assessments are method blanks. Method blanks are laboratory QC samples that consist of either a soil-like material having undergone a contaminant destruction process or high-performance liquid chromatography (HPLC) water. Method blanks are extracted and analyzed with each batch of environmental samples undergoing analysis. Method blanks are particularly useful during volatiles analysis since VOCs can be transported in the laboratory through the vapor phase. If a substance is found in the method blank, then one (or more) of the following occurred:

- Measurement apparatus or containers were not properly cleaned and contained contaminants.
- Reagents used in the process were contaminated with a substance(s) of interest.
- Contaminated analytical equipment was not properly cleaned.
- Volatile substances in the air with high solubility or affinities toward the sample matrix contaminated the samples during preparation or analysis.

It is difficult to determine which of the above scenarios occurred if blank contamination occurs. However, it is assumed that the conditions that affected the blanks also likely affected the project samples. Given method blank results, validation rules assist in determining which substances in samples are considered "real," and which ones are attributable to the analytical process. Furthermore, USEPA guidelines (2017b) state, "There may be instances where little or no contamination was present in the associated blank, but qualification of the sample is deemed necessary. Contamination introduced through dilution water is one example."

Calibrations

Several types of calibrations are used, depending on the method, to determine whether the methodology is "in control" by verifying the linearity of the calibration curve and to assure that the sample results reflect accurate and precise measurements. The main calibrations used are initial calibrations, daily calibrations and continuing calibration verifications.

Matrix Spike/Matrix Spike Duplicates (MS/MSD)

MS/MSD samples are used to assess influences or interferences caused by the physical or chemical properties of the sample itself. MS/MSD data is reviewed in combination with other QC monitoring data to determine matrix effects. In some cases, matrix effects cannot be determined due to dilution and/or high levels of related substances in the sample. A matrix spike is evaluated by spiking a known amount of one or more of the target analytes ideally at a concentration of 5 to 10 times higher than the sample result. A percent recovery is calculated by subtracting the sample result from the spike result, dividing by the spiked amount, and multiplying by 100.

The field samples for the MS and MSD analyses should be collected from a sampling location that is believed to exhibit low-level contamination. A sample from an area of low-level contamination is needed because the objective of MS/MSD analyses is to determine the presence of matrix interferences, which can best be achieved with low levels of contaminants. Additional sample volume will be collected for these analyses. The MS/MSD samples will be a composite to achieve a level of representativeness and reproducibility in the data. For this long-term monitoring, the MS/MSD samples will be collected at the discretion of the Field Coordinator.

Laboratory Control Spikes/Laboratory Control Spike Duplicates (LCS/LCSD)

Also known as blanks spikes, LCS samples are similar to MS samples in that a known amount of one or more of the target analytes are spiked into a prepared media and a percent recovery of the spiked substances are calculated. The primary difference between a MS and LCS is that the LCS spike media is considered "clean" or contaminant free. For example, HPLC water is typically used for LCS water analyses. The purpose of an LCS is to help assess the overall accuracy and precision of the analytical process including sample preparation, instrument performance and analyst performance. LCS data must be reviewed in context with other controls to determine if out-of-control events occur.

Laboratory Replicates/Duplicates

Laboratories often utilize MS/MSDs, LCS/LCSDs and/or replicates to assess precision. Replicates are a second analysis of a field-collected environmental sample. Replicates can be split at varying stages of the sample preparation and analysis process, but most commonly occur as a second analysis on the extracted media.

Surrogate Spikes

The purposes of using a surrogate are to verify the accuracy of the instrument being used and extraction procedures. Surrogates are substances similar to, but not one of, the target analytes. A known concentration of surrogate is added to the sample and passed through the instrument, noting the surrogate recovery. Each surrogate used has an acceptable range of percent recovery. If a surrogate recovery is low, sample results may be biased low and depending on the recovery value, a possibility of false negatives may exist. Conversely, when recoveries are above the specified range of acceptance a possibility of false positives exist, although non-detected results are considered accurate.

Holding Times

Holding times are defined as the time between sample collection and extraction, sample collection and analysis, or sample extraction and analysis. Some analytical methods specify a holding time for analysis only. Holding times for the analyses in this project are shown in Table B-1.

DATA REDUCTION AND ASSESSMENT PROCEDURES

Data Reduction

Data reduction involves the conversion or transcription of field and analytical data to a useable format. The laboratory personnel will reduce the analytical data for review by the QA Leader and Site Manager.

Field Measurement Evaluation

Field data will be reviewed at the end of each day by following the QC checks outlined below. Field data documentation will be checked against the applicable criteria as follows:

- Sample collection information
- Field instrumentation and calibration
- Sample collection protocol
- Sample containers, preservation and volume
- Field QC samples collected at the frequency specified
- Sample documentation and chain of custody protocols
- Sample delivery

Cooler receipt forms and sample condition forms provided by the laboratory will be reviewed for out-of-control incidents. If anything is found to be out-of-control, the Site Manager will implement corrective actions to ensure that additional out-of-control incidents do not occur. The final report will contain what effects, if any, the out-of-control incident may have on data quality. Sample collection information will be reviewed for correctness before inclusion in a final report.

Field Quality Control Evaluation

A field QC evaluation will be conducted by reviewing field logs and daily reports, discussing field activities with staff and reviewing field QC samples (trip blanks and field duplicates). Trip blanks will be evaluated using the same criteria as method blanks.

Laboratory Data Quality Control Evaluation

The laboratory data assessment will consist of a formal review of the following QC parameters:

- Holding times
- Method blanks
- Matrix spike/spike duplicates
- Laboratory control spikes/spike duplicates
- Surrogate spikes
- Replicates

In addition to these QC mechanisms, other documentation such as cooler receipt forms and case narratives will be reviewed to fully evaluate laboratory QA/QC.

DATA QUALITY REVIEW AND VALIDATION PROCEDURES

Analytical data shall first be compiled by the analytical laboratory and reduced to include the specified deliverable elements. PDC Laboratories will conduct an internal review of analytical data prior to data report submission to US Ecology. Data reports must be signed by laboratory personnel responsible for production and analytical data review. Once received, the data will be validated by QA/QC Leader assigned by US Ecology in compliance with existing validation guidelines prior to submitting to the Site Manager for data assessment.

ASSESSMENT AND RESPONSE ACTIONS

Project QAPP assessment will be performed by reviewing field notes, laboratory reports, and by conducting field and laboratory audits where possible and as resources allow. This assessment will be completed or directed by the US Ecology Site Manager. Errors or inconsistencies identified in the field notes will be investigated and corrected to ensure data integrity, and conformance to the QAPP and associated field sampling procedures. Laboratory internal QA reviews, audits, surveillances or other types of assessment will also be reviewed. If unexpected analytical results are reported, the US Ecology Site Manager will contact the laboratory to perform a review of the questionable data. A note to the file regarding follow-up QA activities will be included with the field notes and laboratory reports, if warranted.

The US Ecology Site Manager will review the QAPP to ascertain if the document continues to meet the data user(s) needs. If the QAPP or SAP requires revision as a result of the audit or review, the corrections will be made, and the revised QAPP submitted to USEPA and the original signatories for preapproval prior to implementation.

DATA MANAGEMENT

Data management consists of routing and storing incoming data and project correspondence to facilitate security, access and compliance with project goals.

Analytical Data Management

PDC Laboratories will provide data to US Ecology in an electronic format. Electronic data will be sent to the US Ecology QA/QC Leader for validation. The electronic data will be processed into an analytical database and/or Microsoft Excel spreadsheet for reporting.

Data Review, Verification and Validation

Data Review

Data review is performed by the Site Manager to verify that project data has been recorded, transmitted and processed correctly.

Data Verification

Data verification follows data review and is performed to evaluate data completeness, correctness, conformance and compliance against QAPP-specified method, procedural or contractual requirements. Data verification evaluates actual project performance against QAPP established requirements.

Data Validation

Data validation is conducted by the QA/QC Leader, or qualified expert not otherwise assigned to the project or data generating activities. Validation follows the data review and verification process and is an analyte- and sample-specific process that determines specific data quality with respect to project objectives. Data validation efforts shall include reviewing a minimum of 90 percent of all project data.

Project data validation must be equivalent, or at a minimum to USEPA Stage 1 and Stage 2A verification and validation checks as outlined in the guidance (USEPA 2009). These checks include verifying the following:

- Documentation identifying sample-receiving analytical laboratory for samples submitted for analyses
- Requested analytical methods performed and analysis dates
- Requested target analyte results reported with original laboratory data qualifiers and data qualifier definitions
- Requested target analyte units are reported
- Requested reporting limits for samples are present and results at or below the reporting limits are identified
- Documentation of sample collection dates and times; date and time of laboratory sample receipt; and sample conditions upon receipt by laboratory
- Sample results are evaluated by comparing sample conditions upon receipt by the laboratory and sample characteristics to the requirements and guidelines present in national or regional data validation documents or analytical method(s)

- Required handling, preparation, cleanup and analytical methods are performed
- Method dates for handling preparation, cleanup and analysis are present, as appropriate
- Sample-related QC data and QC acceptance criteria (e.g. method blanks, surrogate recoveries, laboratory control sample recoveries, duplicate analyses, matrix spike, and matrix spike duplicate recoveries, serial dilutions, post-digestion spikes, standard reference materials) are provided and linked to the reported field samples
- Requested spike analytes or compounds are added, as appropriate
- Sample holding times are evaluated
- Frequency of laboratory QC samples is checked for appropriateness
- Sample results are evaluated by comparing holding times and sample-related QC data to the requirements and guidelines present in national or regional validation documents or analytical method(s)

Potential unacceptable departures from the project QAPP requirements will be noted during the data validation process. If the QA/QC Leader determine the data do not meet the project needs, or the QAPP DQOs and/or conclusions drawn from the data do not appear reasonable, they shall immediately report such findings to the Site Manager to address necessary corrective actions. Such findings and activities shall be documented and maintained in the project files.

Non-direct Measurements and Data

Non-direct measurements and data acquisition refer to data obtained for project use from existing data sources, obtained or produced by others, and not directly measured or generated in this project scope. Once existing data has been received, reviewed and validated referencing EPA QA/G-8 (USEPA 2002b) it may be incorporated into an annual report.

Corrective Action

Any deviation from the established criteria will be documented and the data will be qualified, as appropriate. If significant quality assurance problems are encountered, appropriate corrective action as determined by the Site Manager and/or the analytical laboratory will be implemented as appropriate.

REFERENCES

U.S. Environmental Protection Agency (USEPA). 2001. Requirements for Quality Assurance Project Plans, USEPA QA/R-5, Office of Environmental Information, EPA/240/B-01/003. March 2001.

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USEPA. 2019. Proposed Method 8327 for Per- and Polyfluoroalkyl Substances (PFAS) using External Standard Calibration and Multiple Reaction Monitoring (MRM) Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS). June 2019.

Table B-1

Test Methods, Sample Containers, Preservation and Holding Time[1]

US Ecology Former Hazardous Waste Facility

Sheffield, Illinois

Analysis	Matrix	Method	Minimum Sample	Sample Containers	Sample Preservation	Holding Times
Volatile Organic Compounds (VOCs)	Water	8260B	40 mL	3 x 40 mL amber VOA vial, PFTE septa cap, no headspace	pH<2 with HCl, Cool to 4±2°C	14 days
Metals (Total and Dissolved)		6020A	100 mL	250-mL HDPE	Total-pH<2 with HNO_3, Cool to 4±2°C Dissolved - Field filter into a separate 250-mL HDPE	6 months
Chloride and Sulfate		300.0 Rev 2.1	50 mL	125-mL HDPE	Cool to 4±2°C	28 days
Total Solids		SM2540B-1991	200 mL	500-mL HDPE	Cool to 4±2°C	7 days
Total Dissolved Solids		SM2540C	1000 mL	1-L HDPE	Cool to 4±2°C	7 days
Perfluoroalkyl Substances (PFAS)		8327	5 mL	15 mL-HDPE	Cool to 4±2°C	28 days

Notes:

[1]Holding times are based on elapsed time from date of collection.

HCl = Hydrochloric acid

HDPE = High-density Polyethylene

HNO3 = Nitric acid

PFTE = Polytetrafluoroethylene

VOA = volatile organic analysis

mL = milliliter; L = Liter; C = Celsius

Table B-2

Measurement Quality Objectives

US Ecology Former Hazardous Waste Facility

Sheffield, Illinois

Laboratory Analysis	Reference Method	Surrogate Standards (SS) %R Limits[1,2,3]	Check Standard (LCS) %R Limits[2,3]	Matrix Spike %R Limits[3]	MSD Samples or Lab Duplicate RPD Limits[4]	Field Duplicate Samples RPD Limits[4]
		Water	Water	Water	Water	Water
Volatile Organic Compounds (VOCs)	8260B	72.4%-124%	70.1%-139%	13.8%-200%	≤40%	≤35%
Metals (Total and Dissolved)	6020A	NA	80%-120%	75%-125%	≤20%	≤35%
Chloride and Sulfate	300.0 Rev 2.1	NA	NA	80%-120%	≤20%	≤35%
Total Solids	SM2540B-1991	NA	NA	NA	≤5%	≤35%
Total Dissolved Solids	SM2540C	NA	67.9%-132%	NA	≤5%	≤35%
Perfluoroalkyl Substances (PFAS)	8327	70%-130%	70%-130%	70%-130%	≤30%	≤35%

Notes:

[1]Individual surrogate recoveries are compound specific.

[2]Recovery Ranges are estimates. Actual ranges will be provided by the laboratory when contracted.

[3]Percent Recovery Limits are expressed as ranges based on laboratory control limits. Limits will vary for individual analytes.

[4]RPD control limits are only applicable if the concentration is greater than 5 times the method reporting limit (MRL). For results less than 5 times the MRL, the difference between the sample and duplicate must be less than the lowest reporting limit of the two samples.

Method numbers refer to EPA SW-846 Analytical Methods recommended analytical methods.

%R = percent recovery; LCS = Laboratory Control Sample; MS/MSD = Matrix Spike/Matrix Spike Duplicate; RPD = Relative Percent Difference; NA = Not applicable

Table B-3

Water Analytical Methods and Target Reporting Limits

US Ecology Former Hazardous Waste Facility

Sheffield, Illinois

Analyte	EPA Analytical Method	Method Detection Limit (µg/L)	Practical Quantitation Limit (µg/L)	Region 4 Surface Water Screening Values - Freshwater (µg/L)
Volatile Organic Compounds (VOCs)				
1,1-Dichloroethane	8260B	0.80	1.0	410
1,1-Dichloroethene		0.70	1.0	130
1,2-Dichloroethane		0.20	1.0	2,000
1,2-Dichloropropane		0.40	1.0	520
Benzene		0.80	1.0	160
Chloroform		0.20	1.0	140
cis-1,2-Dichloroethene		0.60	1.0	620
Methylene chloride		0.40	1.0	1,500
Tetrachloroethene		0.70	1.0	53
trans-1,2-Dichloroethene		0.90	1.0	558
Trichloroethene		0.80	1.0	220
Vinyl chloride		0.80	1.0	930
Metals				
Total iron	6020A	1.1	2.0	1,000
Dissolved iron		0.50	2.0	1,000
Total magnesium		3.8	20	82,000
Dissolved magnesium		0.40	20	82,000
Total manganese		0.11	0.20	93
Dissolved manganese		0.011	0.20	93
Conventionals				
Total solids	SM2540B-1991	NA	17,000	NE
Total dissolved solids	SM2540C	NA	17,000	NE
Chloride	300.0 Rev 2.1	72	1,000	NE
Sulfate		62	1,000	NE
Perfluoroalkyl Substances (PFAS)				
Perfluorooctanoic acid (PFOA)	8327	NA	0.002	NE
Perfluorooctanesulfonic acid (PFOS)		NA	0.00	NE

Notes:

µg/L = micrograms per Liter

NE = Not established

NA = Not applicable

Table B-4

Water Laboratory Precision and Accuracy Limits

US Ecology Former Hazardous Waste Facility

Sheffield, Illinois

Analyte	EPA Analytical Method	Precision Difference (%)	Accuracy Limit (%)
Volatile Organic Compounds (VOCs)			
1,1-Dichloroethane	8260B	40	72.4-124
1,1-Dichloroethene		40	68.8-169
1,2-Dichloroethane		40	72.4-124
1,2-Dichloropropane		40	72.4-124
Benzene		40	72.4-124
Chloroform		40	69.4-138
cis-1,2-Dichloroethene		40	72.4-124
Methylene chloride		40	72.4-124
Tetrachloroethene		40	71.6-128
trans-1,2-Dichloroethene		40	72.4-126
Trichloroethene		40	13.8-200
Vinyl chloride		40	70.1-139
Metals			
Total iron	6020A	20	75-125
Dissolved iron		20	75-125
Total magnesium		20	75-125
Dissolved magnesium		20	75-125
Total manganese		20	75-125
Dissolved manganese		20	75-125
Conventionals			
Total solids	SM2540B-1991	5	NA
Total dissolved solids	SM2540C	5	67.9-132
Chloride	300.0 Rev 2.1	20	80-120
Sulfate		20	80-120
Perfluoroalkyl Substances (PFAS)			
Perfluorooctanoic acid (PFOA)	8327	30	70-130
Perfluorooctanesulfonic acid (PFOS)		30	70-130

Notes:

% = Percent

NA = Not applicable

Table B-5

Quality Control Sample Type and Frequency

US Ecology Former Hazardous Waste Facility

Sheffield, Illinois

Parameter	Field QC		Laboratory QC			
	Field Duplicates	Trip Blanks	Method Blanks	LCS	MS / MSD	Lab Duplicates
VOCs	1/every 10 samples	1/batch	1/batch	1/batch	1/batch	NA
Metals	1/every 10 samples	NA	1/batch	1/batch	1/batch	1/batch
Chloride and Sulfate	1/every 10 samples	NA	1/batch	NA	1/batch	NA
Total Solids	1/every 10 samples	NA	1/batch	NA	NA	1/batch
Total Dissolved Solids	1/every 10 samples	NA	1/batch	1/batch	NA	1/batch
Perfluoroalkyl Substances (PFAS)	1/every 10 samples	NA	1/batch	1/batch	1/batch	NA

Notes:

No more than 20 field samples can be contained in one batch.

LCS = Laboratory control sample

MS = Matrix spike sample

MSD = Matrix spike duplicate sample

NA = Not applicable

QC = Quality control

VOCs = volatile organic compounds

APPENDIX C
Leachate Collection, Storage and Disposal Protocol

Appendix C. Leachate Collection and Disposal Procedures

There are 59 leachate monitoring sumps at the facility. Leachate levels and pumping rates have decreased significantly since 1983 when the site stopped receiving waste materials for disposal. Many locations no longer yield pumpable quantities of leachate.

Due to the small volumes of leachate generated at the site, the leachate sumps are monitored from July through October to check for the presence of liquids. Leachate sump risers consist of polyvinyl chloride (PVC) or steel pipe and are clearly visible in the field, as they rise above the landfill cover. Each sump is equipped with a cap and security seal to provide evidence of tampering. For field identification, a long-lasting, non-rusting, metal plate stamped with the sump number has been permanently affixed to the riser pipe. The specifics for the leachate system inspection and leachate removal are provided below.

- At the time of inspection, the date, depth of liquid, depth to bottom of the sump (both measured from top of casing) and the initials of the inspector will be entered on the sump log.
- If the depth of liquid (depth to bottom minus depth to liquid) is 1 foot or greater, leachate will be pumped from the sump until all liquid is removed. The total amount of liquid removed will be recorded on the sump log.
- Sumps that are essentially dry (less than 1 foot of leachate on the liner) in July will be sealed and not accessed until the following year.
- Any sumps that have 1 foot or greater of leachate will be pumped and monitored regularly until there is less than 1 foot for two consecutive months. At that time, these sumps will be sealed and monitored again the following year.

When required to pump sumps, these operational procedures are followed:

- 12-volt electric sump pumps will be used for all sumps.
- Each sump will be pumped into a mobile transfer tank.
- Polychlorinated biphenyl (PCB) caution and hazardous waste labels will be placed on the transfer tank.
- When the transfer tank is full or when the sump pumping operations are completed that day, the liquids will be transported to the Leachate Accumulation Building for transfer and packaging for off-site disposal.

The Leachate Accumulation Building containment area is an 18- by 40-foot area surrounded by a 12-inch-high berm. All leachate is transferred to 250-gallon totes that sit inside the containment area. Spill management equipment (oil dry, absorbent pads, shovels, empty drums and liners) is stored in the building and all personnel are trained in spill response protocol.

When pumping leachate into the storage totes located inside the Leachate Accumulation Building, these operational procedures will be followed:

- A pump dedicated to the leachate accumulation building will be used for pumping leachate from the portable collection tank to the totes.

- The leachate level in the totes will be checked prior to filling to control overfill.
- Absorbent material will be placed under the hose to catch any liquid that may leak or drip while pumping.
- The amount of leachate pumped in the totes during each filling will be recorded. The 90-day accumulation period begins when leachate is first pumped into the totes.
- Persons in the work area wear assigned protective equipment.
- All materials and equipment are stored inside the Leachate Accumulation Building.
- When pumping sumps, transferring leachate, or packaging leachate for shipment, all personnel will be informed of and will follow safety and operational procedures as described below:
    - Personnel will wear chemical resistant Tyvek® suits and gloves, safety glasses with side shields or chemical splash goggles, boots with chemical resistant rubber pull-over boots, FM two-way radios, and respirators with organic vapor, acid gas dust, fume mist combination cartridges.
    - Absorbent material will be included in the field equipment in case a leak or a spill occurs.
    - All contaminated rags, Tyvek clothing and gloves will be placed in an open-head Department of Transportation (DOT)-approved drum and stored in the Leachate Accumulation Building with a polychlorinated biphenyl (PCB) caution and hazardous waste labels affixed. Open-head drums are closed except when adding solid waste. Before the drum has reached its 90-day accumulation period, the drum is shipped to an approved disposal facility.

Collected leachate is periodically hauled to a permitted disposal facility for hazardous materials. Leachate liquids are disposed at the Veolia facility in Baytown, Texas. Any hazardous solids are disposed at the US Ecology facility in Robstown, Texas.

GeoEngineers

Appendix G –
List of Encumbrances of Record

stewart

ALTA COMMITMENT FOR TITLE INSURANCE (07-01-2021)

ISSUED BY
STEWART TITLE GUARANTY COMPANY

NOTICE

IMPORTANT - READ CAREFULLY: THIS COMMITMENT IS AN OFFER TO ISSUE ONE OR MORE TITLE INSURANCE POLICIES. ALL CLAIMS OR REMEDIES SOUGHT AGAINST THE COMPANY INVOLVING THE CONTENT OF THIS COMMITMENT OR THE POLICY MUST BE BASED SOLELY IN CONTRACT.

THIS COMMITMENT IS NOT AN ABSTRACT OF TITLE, REPORT OF THE CONDITION OF TITLE, LEGAL OPINION, OPINION OF TITLE, OR OTHER REPRESENTATION OF THE STATUS OF TITLE. THE PROCEDURES USED BY THE COMPANY TO DETERMINE INSURABILITY OF THE TITLE, INCLUDING ANY SEARCH AND EXAMINATION, ARE PROPRIETARY TO THE COMPANY, WERE PERFORMED SOLELY FOR THE BENEFIT OF THE COMPANY, AND CREATE NO EXTRACONTRACTUAL LIABILITY TO ANY PERSON, INCLUDING A PROPOSED INSURED.

THE COMPANY'S OBLIGATION UNDER THIS COMMITMENT IS TO ISSUE A POLICY TO A PROPOSED INSURED IDENTIFIED IN SCHEDULE A IN ACCORDANCE WITH THE TERMS AND PROVISIONS OF THIS COMMITMENT. THE COMPANY HAS NO LIABILITY OR OBLIGATION INVOLVING THE CONTENT OF THIS COMMITMENT TO ANY OTHER PERSON.

COMMITMENT TO ISSUE POLICY

Subject to the Notice; Schedule B, Part I - Requirements; Schedule B, Part II - Exceptions; and the Commitment Conditions, STEWART TITLE GUARANTY COMPANY, a Texas corporation (the "Company"), commits to issue the Policy according to the terms and provisions of this Commitment. This Commitment is effective as of the Commitment Date shown in Schedule A for each Policy described in Schedule A, only when the Company has entered in Schedule A both the specified dollar amount as the Proposed Amount of Insurance and the name of the Proposed Insured.

If all of the Schedule B, Part I - Requirements have not been met within six months after the Commitment Date, this Commitment terminates and the Company's liability and obligation end.

Countersigned by:

STEWART TITLE GUARANTY COMPANY INCORPORATED 1908 TEXAS

Frederick H. Eppinger
President and CEO

David Hisey
Secretary

Stewart Title Guaranty Company
Commercial Services (Chicago)
10 South Riverside Plaza, Suite 1450
Chicago, IL 60606
Agent ID:
Prepared by: George Kintz

This page is only a part of a 2021 ALTA® Commitment for Title Insurance. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I - Requirements; and Schedule B, Part II - Exceptions; and a countersignature by the Company or its issuing agent that may be in electronic form.

COMMITMENT CONDITIONS

1. **DEFINITIONS**
   a. "Discriminatory Covenant": Any covenant, condition, restriction, or limitation that is unenforceable under applicable law because it illegally discriminates against a class of individuals based on personal characteristics such as race, color, religion, sex, sexual orientation, gender identity, familial status, disability, national origin, or other legally protected class.
   b. "Knowledge" or "Known": Actual knowledge or actual notice, but not constructive notice imparted by the Public Records.
   c. "Land": The land described in Item 5 of Schedule A and improvements located on that land that by State law constitute real property. The term "Land" does not include any property beyond that described in Schedule A, nor any right, title, interest, estate, or easement in any abutting street, road, avenue, alley, lane, right-of-way, body of water, or waterway, but does not modify or limit the extent that a right of access to and from the Land is to be insured by the Policy.
   d. "Mortgage": A mortgage, deed of trust, trust deed, security deed, or other real property security instrument, including one evidenced by electronic means authorized by law.
   e. "Policy": Each contract of title insurance, in a form adopted by the American Land Title Association, issued or to be issued by the Company pursuant to this Commitment.
   f. "Proposed Amount of Insurance": Each dollar amount specified in Schedule A as the Proposed Amount of Insurance of each Policy to be issued pursuant to this Commitment.
   g. "Proposed Insured": Each person identified in Schedule A as the Proposed Insured of each Policy to be issued pursuant to this Commitment.
   h. "Public Records": The recording or filing system established under State statutes in effect at the Commitment Date under which a document must be recorded or filed to impart constructive notice of matters relating to the Title to a purchaser for value without Knowledge. The term "Public Records" does not include any other recording or filing system, including any pertaining to environmental remediation or protection, planning, permitting, zoning, licensing, building, health, public safety, or national security matters.
   i. "State": The state or commonwealth of the United States within whose exterior boundaries the Land is located. The term "State" also includes the District of Columbia, the Commonwealth of Puerto Rico, the U.S. Virgin Islands, and Guam.
   j. "Title": The estate or interest in the Land identified in Item 3 of Schedule A.

2. If all of the Schedule B, Part I - Requirements have not been met within the time period specified in the Commitment to Issue Policy, this Commitment terminates and the Company's liability and obligation end.

3. The Company's liability and obligation is limited by and this Commitment is not valid without:
   a. the Notice;
   b. the Commitment to Issue Policy;
   c. the Commitment Conditions;
   d. Schedule A;
   e. Schedule B, Part I - Requirements;
   f. Schedule B, Part II - Exceptions; and
   g. a countersignature by the Company or its issuing agent that may be in electronic form.

4. **COMPANY'S RIGHT TO AMEND**
   The Company may amend this Commitment at any time. If the Company amends this Commitment to add a defect, lien, encumbrance, adverse claim, or other matter recorded in the Public Records prior to the Commitment Date, any liability of the Company is limited by Commitment Condition 5. The Company is not liable for any other amendment to this Commitment.

5. LIMITATIONS OF LIABILITY

a. The Company's liability under Commitment Condition 4 is limited to the Proposed Insured's actual expense incurred in the interval between the Company's delivery to the Proposed Insured of the Commitment and the delivery of the amended Commitment, resulting from the Proposed Insured's good faith reliance to:
   i. comply with the Schedule B, Part I - Requirements;
   ii. eliminate, with the Company's written consent, any Schedule B, Part II - Exceptions; or
   iii. acquire the Title or create the Mortgage covered by this Commitment.

b. The Company is not liable under Commitment Condition 5.a. if the Proposed Insured requested the amendment or had Knowledge of the matter and did not notify the Company about it in writing.

c. The Company is only liable under Commitment Condition 4 if the Proposed Insured would not have incurred the expense had the Commitment included the added matter when the Commitment was first delivered to the Proposed Insured.

d. The Company's liability does not exceed the lesser of the Proposed Insured's actual expense incurred in good faith and described in Commitment Condition 5.a. or the Proposed Amount of Insurance.

e. The Company is not liable for the content of the Transaction Identification Data, if any.

f. The Company is not obligated to issue the Policy referred to in this Commitment unless all of the Schedule B, Part I—Requirements have been met to the satisfaction of the Company.

g. The Company's liability is further limited by the terms and provisions of the Policy to be issued to the Proposed Insured.

6. LIABILITY OF THE COMPANY MUST BE BASED ON THIS COMMITMENT; CHOICE OF LAW AND CHOICE OF FORUM

a. Only a Proposed Insured identified in Schedule A, and no other person, may make a claim under this Commitment.

b. Any claim must be based in contract under the State law of the State where the Land is located and is restricted to the terms and provisions of this Commitment. Any litigation or other proceeding brought by the Proposed Insured against the Company must be filed only in a State or federal court having jurisdiction.

c. This Commitment, as last revised, is the exclusive and entire agreement between the parties with respect to the subject matter of this Commitment and supersedes all prior commitment negotiations, representations, and proposals of any kind, whether written or oral, express or implied, relating to the subject matter of this Commitment.

d. The deletion or modification of any Schedule B, Part II—Exception does not constitute an agreement or obligation to provide coverage beyond the terms and provisions of this Commitment or the Policy.

e. Any amendment or endorsement to this Commitment must be in writing and authenticated by a person authorized by the Company.

f. When the Policy is issued, all liability and obligation under this Commitment will end and the Company's only liability will be under the Policy.

7. IF THIS COMMITMENT IS ISSUED BY AN ISSUING AGENT

The issuing agent is the Company's agent only for the limited purpose of issuing title insurance commitments and policies. The issuing agent is not the Company's agent for closing, settlement, escrow, or any other purpose.

8. PRO-FORMA POLICY

The Company may provide, at the request of a Proposed Insured, a pro-forma policy illustrating the coverage that the Company may provide. A pro-forma policy neither reflects the status of Title at the time that the pro-forma policy is delivered to a Proposed Insured, nor is it a commitment to insure.

9. CLAIMS PROCEDURES

This Commitment incorporates by reference all Conditions for making a claim in the Policy to be issued to the Proposed Insured. Commitment Condition 9 does not modify the limitations of liability in Commitment Conditions 5 and 6.

10. CLASS ACTION

ALL CLAIMS AND DISPUTES ARISING OUT OF OR RELATING TO THIS COMMITMENT, INCLUDING ANY SERVICE OR OTHER MATTER IN CONNECTION WITH ISSUING THIS COMMITMENT, ANY BREACH OF A COMMITMENT PROVISION, OR ANY OTHER CLAIM OR DISPUTE ARISING OUT OF OR RELATING TO THE TRANSACTION GIVING RISE TO THIS COMMITMENT, MUST BE BROUGHT IN AN INDIVIDUAL CAPACITY. NO PARTY MAY SERVE AS PLAINTIFF, CLASS MEMBER, OR PARTICIPANT IN ANY CLASS OR REPRESENTATIVE PROCEEDING. ANY POLICY ISSUED PURSUANT TO THIS COMMITMENT WILL CONTAIN A CLASS ACTION CONDITION.

11. ARBITRATION

The Policy contains an arbitration clause. All arbitrable matters when the Proposed Amount of Insurance is $2,000,000 or less may be arbitrated at the election of either the Company or the Proposed Insured as the exclusive remedy of the parties. A Proposed Insured may review a copy of the arbitration rules at http://www.alta.org/arbitration.

STEWART TITLE GUARANTY COMPANY

All notices required to be given the Company and any statement in writing required to be furnished the Company shall be addressed to it at Stewart Title Guaranty Company, P.O. Box 2029, Houston, Texas 77252-2029.

ALTA COMMITMENT FOR TITLE INSURANCE (07-01-2021)
SCHEDULE A

ISSUED BY
STEWART TITLE GUARANTY COMPANY

Transaction Identification Data, for which the Company assumes no liability as set forth in Commitment Condition 5.e.:

Issuing Agent:	Stewart Title Guaranty Company
Issuing Office:	10 S. Riverside Plaza, Suite 1450, Chicago, IL 60606
Issuing Office's ALTA® Registry ID:	
Loan ID Number:	
Commitment Number:	23000140108
Issuing Office File Number:	23000140108
Property Address:	13279 - 350 E St., Sheffield, IL 61361
Revision Number:	

1. **Commitment Date:** May 18, 2023 at 8:00am

2. **Policy to be issued:** **Proposed Amount of Insurance**

   (a) 2021 ALTA® Owner's Policy $1,000.00

   Proposed Insured: Buyer yet to be determined

   (b) 2021 ALTA® Loan Policy

   Proposed Insured:

3. **The estate or interest in the Land at the Commitment Date is:**

   Fee Simple

4. **The Title is, at the Commitment Date, vested in:**

   US Ecology, Inc. as to Parcels 1, 2, 4, and 5 (Tract A)

   Nuclear Engineering Company, Inc., a California corporation as to Parcels 3, 5 (Tract B), and 6

5. **The Land is described as follows:**
   SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

STEWART TITLE GUARANTY COMPANY

This page is only a part of a 2021 ALTA® Commitment for Title Insurance. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I - Requirements; and Schedule B, Part II - Exceptions; and a countersignature by the Company or its issuing agent that may be in electronic form.

EXHIBIT "A"
LEGAL DESCRIPTION

PARCEL 1:

THE SOUTH 843 FEET OF THE NORTHWEST 1/4 OF SECTION 27, TOWNSHIP 16 NORTH, RANGE 6 EAST OF THE FOURTH PRINCIPAL MERIDIAN, BUREAU COUNTY, ILLINOIS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A FOUND IRON MONUMENT AT THE SOUTHEAST CORNER OF THE NORTHWEST 1/4 OF SECTION 27, TOWNSHIP 16 NORTH, RANGE 6 EAST OF THE FOURTH PRINCIPAL MERIDIAN, BUREAU COUNTY, ILLINOIS; THENCE SOUTH 89 DEGREES 01 MINUTES 25 SECONDS WEST, AN ASSUMED BEARING, ALONG THE SOUTH LINE OF SAID NORTHWEST 1/4, A DISTANCE OF 2673.77 FEET TO THE SOUTHWEST CORNER OF SAID NORTHWEST 1/4; THENCE NORTH 0 DEGREES 21 MINUTES 56 SECONDS WEST ALONG THE WEST LINE OF SAID NORTHWEST 1/4, A DISTANCE OF 843.00 FEET TO AN IRON MONUMENT; THENCE NORTH 89 DEGREES 01 MINUTES 24 SECONDS EAST, A DISTANCE OF 2672.59 FEET TO THE EAST LINE OF SAID NORTHWEST 1/4, BEING MARKED BY AN IRON MONUMENT; THENCE SOUTH 0 DEGREES 26 MINUTES 44 SECONDS EAST, ALONG THE EAST LINE OF SAID NORTHWEST 1/4, A DISTANCE OF 843.00 FEET TO THE POINT OF BEGINNING.

PARCEL 2:

TRACT A:

A PART OF THE SOUTHEAST 1/4 OF SECTION 27, TOWNSHIP 16 NORTH, RNAGE 6 EAST OF THE FOURTH PRINCIPAL MERIDIAN, BUREAU COUNTY, ILLINOIS, DESCRIBED AS FOLLOWS:

BEGINNING AT AN IRON MONUMENT AT THE NORTHWEST CORNER OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 27; THENCE NORTH 88 DEGREES 34 MINUTES 46 SECONDS EAST, 1328.03 FEET TO A PIN AT THE NORTHEAST CORNER OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 27; THENCE CONTINUING NORTH 88 DEGREES 34 MINUTES 46 SECONDS EAST, 274.52 FEET TO A PIN; SAID PIN BEING THE PLACE OF BEGINNING OF THE HEREINAFTER DESCRIBED TRACT OF LAND; THENCE NORTH 0 DEGREES 26 MINUTES 44 SECONDS WEST, 259.91 FEET TO A PIN; THENCE NORTH 52 DEGREES 35 MINUTES 18 SECONDS EAST, 177.67 FEET TO A PIN; THENCE NORTH 73 DEGREES 34 MINUTES 38 SECONDS EAST, 402.27 FEET TO A PIN; THENCE NORTH 1 DEGREES 04 MINUTES 55 SECONDS WEST, 146.35 FEET TO AN IRON PIN; THENCE NORTH 69 DEGREES 30 MINUTES EAST, 411 FEET TO A POINT; THENCE NORTH 89 DEGREES 40 MINUTES EAST, 145 FEET TO A PIONT ON THE EAST LINE OF SAID SECTION 27; THENCE SOUTH 0 DEGREES 14 MINUTES 22 SECONDS EAST, 748 FEET TO A POINT; THENCE NORTH 88 DEGREES 34 MINUTES 46 SECONDS WEST, 1056 FEET TO A POINT, BEING THE PLACE OF BEGINNING.

TRACT B:

A PART OF THE EAST 1/2 OF SECTION 27, TOWNSHIP 16 NORTH, RNAGE 6 EAST OF THE FOURTH PRINCIPAL MERIDIAN, BUREAU COUNTY, ILLINOIS, MORE PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS:

COMMENCING AT A FOUND IRON MONUMENT AT THE SOUTHWEST CORNER OF THE SOUTHEAST QUARTER OF SECTION 27, TOWNSHIP 16 NORTH, RANGE 6 EAST, FOURTH PRINCIPAL MERIDIAN, BUREAU COUNTY,

ISSUED BY
STEWART TITLE GUARANTY COMPANY

ILLINOIS; THENCE NORTH 0° 26' 44" WEST, AN ASSUMED BEARING, ALONG THE WEST LINE OF SAID SOUTHEAST QUARTER, ALSO BEING THE LANDS COMMON TO THE NUCLEAR ENGINEERING CO., INC. (BOOK 458, PAGE 560) AND HAROLD H. SCHIELER (BOOK 490, PAGE 387), A DISTANCE OF 1341.34 FEET TO AN IRON MONUMENT, AT THE NORTHWEST CORNER OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 27, ALSO BEING THE POINT OF BEGINNING FOR THE TRACT TO BE DESCRIBED, THENCE CONTINUING NORTH 0 DEGREES 26' 44" WEST ALONG THE LANDS COMMON TO THE NUCLEAR ENGINEERING CO., INC. (BOOK 458, PAGE 560), JERRY AND JOYCE HOCHSTATTER (BOOK 591, PAGE 403), AND ROBERT T. BOCKEL (BOOK 597, PAGE 624), A DISTANCE OF 3987.98 FEET TO AN IRON MONUMENT AT THE NORTHWEST CORNER OF THE NORTHEAST QUARTER OF SAID SECTION 27, THENCE NORTH 89° 08' 02" EAST, ALONG THE NORTH LINE OF SAID SECTION 27, A DISTANCE OF 633.97 FEET TO AN IRON MONUMENT; THENCE SOUTH 0° 26' 44" EAST, A DISTANCE OF 420.82 FEET TO AN IRON MONUMENT; THENCE SOUTH 66° 17' 11" EAST, A DISTANCE OF 221.71 FEET TO AN IRON MONUMENT; THENCE SOUTH 82° 41' 46" EAST, A DISTANCE OF 144.02 FEET TO AN IRON MONUMENT; THENCE SOUTH 47° 23' 07" EAST, A DISTANCE OF 161.52 FEET TO AN IRON MONUMENT; THENCE SOUTH 10° 53' 53" EAST, A DISTANCE OF 434.17 FEET TO AN IRON MONUMENT; THENCE SOUTH 23° 36' 05" EAST, A DISTANCE OF 239.44 FEET TO AN IRON MONUMENT; THENCE SOUTH 44° 57' 14" EAST, A DISTANCE OF 119.25 FEET TO AN IRON MONUMENT; THENCE NORTH 87° 53' 56" EAST, A DISTANCE OF 120.68 FEET TO AN IRON MONUMENT; THENCE NORTH 47° 11' 40" EAST, A DISTANCE OF 355.75 FEET TO AN IRON MONUMENT; THENCE NORTH 62° 17' 10" EAST, A DISTANCE OF 393.24 .FEET TO AN IRON MONUMENT; THENCE SOUTH 20° 20' 25" EAST, A DISTANCE OF 157.28 FEET TO AN IRON MONUMENT; THENCE SOUTH 66° 44' 38" WEST, A DISTANCE OF 158.69 FEET TO AN IRON MONUMENT; THENCE SOUTH 22° 40' 22" EAST, A DISTANCE OF 47.09 FEET TO AN IRON MONUMENT; THENCE SOUTH 38° 39' 11" WEST, A DISTANCE OF 229.27 FEET TO AN IRON MONUMENT; THENCE SOUTH 46° 08' 37" WEST, A DISTANCE OF 129.20 FEET TO AN IRON MONUMENT; THENCE SOUTH 47° 35' 58" WEST, A DISTANCE OF 211.43 FEET TO AN IRON MONUMENT; THENCE SOUTH 78° 05' 02" WEST, A DISTANCE OF 167.68 FEET TO AN IRON MONUMENT; THENCE NORTH 88° 46' 28" WEST, A DISTANCE OF 206.92 FEET TO AN IRON MONUMENT; THENCE SOUTH 31° 16' 35" WEST, A DISTANCE OF 144.63 FEET TO AN IRON MONUMENT; THENCE SOUTH 3° 03' 27" WEST, A DISTANCE OF 106.62 FEET TO AN IRON MONUMENT; THENCE SOUTH 19° 52' 03" WEST, A DISTANCE OF 440.01 FEET TO AN IRON MONUMENT; THENCE SOUTH 31° 08' 53" WEST, A DISTANCE OF 159.75 FEET TO AN IRON MONUMENT; THENCE SOUTH 42° 49' 40" WEST, A DISTANCE OF 369.34 FEET TO AN IRON MONUMENT; THENCE SOUTH 9° 46' 01" WEST, A DISTANCE OF 142.06 FEET TO AN IRON MONUMENT; THENCE SOUTH 13° 27' 09" EAST, A DISTANCE OF 323.65 FEET TO AN IRON MONUMENT; THENCE SOUTH 34° 44' 45" EAST, A DISTANCE OF 153.94 FEET TO AN IRON MONUMENT; THENCE SOUTH 53° 18' 53" EAST, A DISTANCE OF 277.01 FEET TO AN IRON MONUMENT; THENCE SOUTH 70° 08' 03" EAST, A DISTANCE OF 226.14 FEET TO AN IRON MONUMENT; THENCE NORTH 79° 50' 04" EAST, A DISTANCE OF 107.39 FEET TO AN IRON MONUMENT; THENCE NORTH 7° 53' 13" EAST, A DISTANCE OF 93.30 FEET TO AN IRON MONUMENT; THENCE SOUTH 78° 17' 49" EAST, A DISTANCE OF 193.98 FEET TO AN IRON MONUMENT; THENCE NORTH 63° 12' 29" EAST, A DISTANCE OF 220.09 FEET TO AN IRON MONUMENT; THENCE NORTH 86° 18' 41" EAST, A DISTANCE OF 306.34 FEET TO AN IRON MONUMENT; THENCE SOUTH 81° 11' 41" EAST, A DISTANCE OF 78.41 FEET TO AN IRON MONUMENT; THENCE SOUTH 1° 04' 55" EAST, A DISTANCE OF 146.35 FEET TO AN IRON MONUMENT; THENCE SOUTH 73° 34' 38" WEST, A DISTANCE OF 402.27 FEET TO AN IRON MONUMENT; THENCE SOUTH 52° 35' 18" WEST, A DISTANCE OF 177.67 FEET TO AN IRON MONUMENT, THE LAST THIRTY-SIX COURSES BEING THE NORTHERLY AND EASTERLY TOP OF BANK OF AN EXISTING STRIP MINE LAKE; THENCE SOUTH 0° 26' 44" EAST, A DISTANCE OF 259.91 FEET TO AN IRON MONUMENT ON THE NORTH LINE OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 27; THE LAST THIRTY EIGHT COURSES LOCATING A PROPERTY LINE FENCE TO BE BUILT ALONG THE TOP OF BANK OF SAID LAKE; THENCE SOUTH 88° 34' 46" WEST, ALONG THE NORTH LINE OF THE SOUTH HALF OF THE SOUTHEAST QUARTER OF SAID SECTION 27, ALSO BEING THE NORTHERLY LINE OF THE LANDS OF HAROLD H. SCHIELER (BOOK 490, PAGE 387) AND PAUL L. MANTHE (BOOK 594, PAGE 138), A DISTANCE 1602.55 FEET TO THE POINT OF BEGINNING.

ISSUED BY
STEWART TITLE GUARANTY COMPANY

TRACT C:

A PART OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 27, TOWNSHIP 16 NORTH, RANGE 6 EAST OF THE FOURTH PRINCIPAL MERIDIAN, BUREAU COUNTY, ILLINOIS, MORE PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS:

COMMENCING AT A FOUND IRON MONUMENT AT THE SOUTHWEST CORNER OF THE SOUTHEAST QUARTER OF SECTION 27, TOWNSHIP 16 NORTH, RANGE 6 EAST OF THE FOURTH PRINCIPAL MERIDIAN, BUREAU COUNTY, ILLINOIS; THENCE NORTH 0° 26' 44" WEST, AN ASSUMED BEARING, ALONG THE WEST LINE OF SAID SOUTHEAST QUARTER, A DISTANCE OF 1341.34 FEET TO THE NORTHWEST CORNER OF THE SOUTHWEST QUARTER OF SAID SOUTHEAST QUARTER BEING MARKED BY AN IRON MONUMENT, SAID NORTHWEST CORNER ALSO BEING THE POINT OF BEGINNING FOR THE TRACT TO BE DESCRIBED; THENCE NORTH 88° 34' 46" EAST, ALONG THE NORTH LINE OF THE SOUTHWEST QUARTER OF SAID SOUTHEAST QUARTER, A DISTANCE OF 1328.03 FEET TO THE NORTHEAST CORNER OF THE SOUTHWEST QUARTER OF SAID SOUTHEAST QUARTER BEING MARKED BY AN IRON MONUMENT; THENCE SOUTH 0° 20' 36" EAST ALONG THE EAST LINE OF THE SOUTHWEST QUARTER OF SAID SOUTHEAST QUARTER, A DISTANCE OF 400.00 FEET TO AN IRON MONUMENT; THENCE SOUTH 74° 37' 17" WEST, A DISTANCE OF 1373.51 FEET TO THE WEST LINE OF SAID SOUTHEAST QUARTER, BEING MARKED BY AN IRON MONUMENT; THENCE NORTH 0° 26' 44" WEST, ALONG THE WEST LINE OF SAID SOUTHEAST QUARTER, A DISTANCE OF 731.34 FEET TO THE POINT OF BEGINNING.

TRACT D:

A PART OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 27, TOWNSHIP 16 NORTH, RANGE 6 EAST OF THE FOURTH PRINCIPAL MERIDIAN, BUREAU COUNTY, ILLINOIS, PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS:

COMMENCING AT A FOUND IRON MONUMENT AT THE SOUTHWEST CORNER OF THE SOUTHEAST QUARTER OF SECTION 27, TOWNSHIP 16 NORTH, RANGE 6 EAST OF THE FOURTH PRINCIPAL MERIDIAN, BUREAU COUNTY, ILLINOIS; THENCE NORTH 0 DEGREES 26' 44" WEST, AN ASSUMED BEARING, ALONG THE WEST LINE OF SAID SOUTHEAST QUARTER, A DISTANCE OF 1341.34 FEET TO THE NORTHWEST CORNER OF THE SOUTHWEST QUARTER OF SAID SOUTHEAST QUARTER BEING MARKED BY AN IRON MONUMENT; THENCE NORTH 88 DEGREES 34' 46" EAST, ALONG THE NORTH LINE OF THE SOUTHWEST QUARTER OF SAID SOUTHEAST 1/4, A DISTANCE OF 1328.03 FEET TO THE NORTHEAST CORNER OF THE SOUTHWEST QUARTER OF SAID SOUTHEAST QUARTER BEING MARKED BY AN IRON MONUMENT, SAID NORTHEAST CORNER ALSO BEING THE POINT OF BEGINNING FOR THE TRACT TO BE DESCRIBED; THENCE CONTINUING NORTH 88 DEGREES 34' 46" EAST, ALONG THE NORTH LINE OF THE SOUTHEAST QUARTER OF SAID SOUTHEAST QUARTER, A DISTANCE OF 374.52 FEET TO AN IRON MONUMENT; THENCE SOUTH 42 DEGREES 16' 08" WEST, A DISTANCE OF 553.08 FEET TO AN IRON MONUMENT; THENCE NORTH 0 DEGREES 20' 36" WEST, ALONG THE WEST LINE OF THE SOUTHEAST QUARTER OF SAID SOUTHEAST QUARTER, A DISTANCE OF 400.00 FEET TO THE POINT OF BEGINNING.

PARCEL 3:

THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 27, TOWNSHIP 16 NORTH, RANGE 6 EAST OF THE FOURTH PRINCIPAL MERIDIAN, SITUATED IN THE COUNTY OF BUREAU AND STATE OF ILLINOIS.

ALTA COMMITMENT FOR TITLE INSURANCE (07-01-2021)
SCHEDULE A

ISSUED BY
STEWART TITLE GUARANTY COMPANY

PARCEL 4:

A PART OF THE EAST HALF OF SECTION 28, TOWNSHIP 16 NORTH, RANGE 6 EAST OF THE FOURTH PRINCIPAL MERIDIAN, BUREAU COUNTY, ILLINOIS, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A RECOVERED CONCRETE MONUMENT AT THE SOUTHEAST CORNER OF THE SOUTHEAST QUARTER OF SAID SECTION 28; THENCE NORTH 0 DEGREES 21 INUTES 56 SECONDS WEST ALONG THE EAST LINE OF SAID SOUTHEAST QUARTER, 813.38 FEET TO THE POINT OF BEGINNING; THENCE SOUTH 89 DEGREES 38 MINUTES 04 SECONDS WEST, 844.50 FEET; THENCE NORTH 0 DEGREES 21 MINUTES 56 SECONDS WEST AND PARALLEL WITH THE EAST LINE OF THE SOUTHEAST QUARTER, 2064.00 FEET; THENCE NORTH 53 DEGREES 27 MINUTES 47 SECONDS EAST, 1046.14 FEET TO THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 28; THENCE SOUTH 0 DEGREES 21 MINUTES 56 SECONDS EAST ALONG THE EAST LINE OF SAID SECTION 28, A DISTANCE OF 2681.43 FEET TO THE POINT OF BEGINNING.

PARCEL 5:

TRACT A:

A PART OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 27, IN TOWNSHIP 16 NORTH, RANGE 6 EAST OF THE FOURTH PRINCIPAL MERIDIAN, BUREAU COUNTY, ILLINOIS, BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A FOUND IRON MONUMENT AT THE NORTHEAST CORNER OF THE SOUTHWEST 1/4 OF SAID SECTION 27; THENCE SOUTH 0 DEGREES 26 MINUTES 44 SECONDS EAST, AN ASSUMED BEARING, ALONG THE EAST LINE OF THE SOUTHWEST 1/4 OF SAID SECTION 27, A DISTANCE OF 446.04 FEET TO AN IRON MONUMENT; THENCE SOUTH 88 DEGREES 21 MINUTES 07 SECONDS WEST, A DISTANCE OF 1337.44 FEET TO AN IRON MONUMENT ON THE WEST LINE OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SAID SECTION 27; THENCE NORTH 0 DEGREES 24 MINUTES 21 SECONDS WEST ALONG THE WEST LINE OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SAID SECTION 27, A DISTANCE OF 461.72 FEET TO AN IRON MONUMENT ON THE NORTH LINE OF THE SOUTHWEST 1/4 OF SECTION 27; THENCE NORTH 89 DEGREES 01 MINUTES 25 SECONDS EAST ALONG THE NORTH LINE OF THE SOUTHWEST 1/4 OF SAID SECTION 27, A DISTANCE OF 1336.88 FEET TO THE POINT OF BEGINNING.

TRACT B:

TWENTY-SIX AND 67/100 (26.67) ACRES OFF OF THE SOUTH SIDE OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 27; AND ALSO THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 27, TOWNSHIP 16 NORTH, RANGE 6 EAST; EXCEPTING THEREFROM THE FOLLOWING DESCRIBED TRACT OF LAND:

COMMENCING AT A POINT 938 FEET NORTH AND 200 FEET WEST OF THE SOUTHEAST CORNER OF THE SOUTHWEST 1/4; THENCE NORTH 900 FEET; THENCE WEST 985 FEET; THENCE SOUTH 900 FEET; THENCE EAST 900 FEET.

PARCEL 6:

ALTA COMMITMENT FOR TITLE INSURANCE (07-01-2021)
SCHEDULE A

ISSUED BY
STEWART TITLE GUARANTY COMPANY

THE SOUTHWEST 1/4 OF THE SOUTWEST 1/4 OF SECTION 27; AND THE NORTH 1/2 OF THE NORTHWEST 1/4 OF SECTION 34, EXCEPT THAT PART THEREOF WHICH LIES SOUTH OF THE TOWNSHIP ROAD, ALL IN TOWNSHIP 16 NORTH, RANGE 6 EAST OF THE FOURTH PRINCIPAL MERIDIAN, BUREAU COUNTY, ILLINOIS.

ALTA COMMITMENT FOR TITLE INSURANCE (07-01-2021)
SCHEDULE B PART I

ISSUED BY
STEWART TITLE GUARANTY COMPANY

Requirements

File No.: 23000140108

All of the following Requirements must be met:

1. The Proposed Insured must notify the Company in writing of the name of any party not referred to in this Commitment who will obtain an interest in the Land or who will make a loan on the Land. The Company may then make additional Requirements or Exceptions.

2. Pay the agreed amount for the estate or interest to be insured.

3. Pay the premiums, fees, and charges for the Policy to the Company.

4. Documents satisfactory to the Company that convey the Title or create the Mortgage to be insured, or both, must be properly authorized, executed, delivered, and recorded in the Public Records.

5. Properly executed Deed from US Ecology, Inc., a [_____] corporation to said purchaser vesting Fee Simple title to the subject property.

6. Properly executed Deed from Nuclear Engineering Company, Inc., a California corporation to said purchaser vesting Fee Simple title to the subject property.

7. We should be furnished a statement that there is no property manager employed to manage the land, or, in the alternative, a final lien waiver from any such property manager.

8. The names of the proposed insured should be furnished, and this commitment is subject to such further exceptions, if any, which may be disclosed after a name search has been made for judgments and other matters of record.

9. The company has been informed that US Ecology, Inc., is a corporation. in that regard we will require the following information:

   A. Certificate of incorporation;

   B. Certificate of good standing;

   C. Certificate of foreign corporation (if applicable);

   D. Articles of incorporation;

   E. Bylaws;

   F. Corporate resolutions;

   G. Certificate of incumbency.

   Any changes in status must be furnished to the company prior to closing.

Requirements

10. The company has been informed that Nuclear Engineering Company, Inc., is a corporation. in that regard we will require the following information:

    A. Certificate of incorporation;

    B. Certificate of good standing;

    C. Certificate of foreign corporation (if applicable);

    D. Articles of incorporation;

    E. Bylaws;

    F. Corporate resolutions;

    G. Certificate of incumbency.

    Any changes in status must be furnished to the company prior to closing.

11. Information should be furnished establishing whether any written agreement has been entered into by and between any party or broker for the purposes of buying, selling, leasing, or otherwise conveying any interest in the land described herein, and, if any which agreement has been entered into, satisfactory evidence should be furnished establishing that the compensation agreed upon in such agreement has been paid and the broker's lien, or right to a lien, for such amount has been extinguished. in the event the evidence is not furnished, our policy or policies when issued will be subject to the following exception:

    Any lien or right to a lien, imposed by law under the provisions of the Commercial Real Estate Broker Lien Act, and not shown in the public records, for compensation agreed upon by a broker and the broker's client or customer under the terms of a written agreement entered into for the purposes of buying, selling, leasing, or otherwise conveying any interest in the land and described in Schedule "A".

12. Note: The legal description shown in Schedule A describes either unsubdivided land or a portion of subdivided land. If any conveyance of the land is exempt from the operation of the provisions of the Plat Act (765 ILCS 205/1 (a) et seq.), such deed may need to be accompanied by a plat act affidavit. if any proposed deed is not exempt, compliance should be had with the provisions of the Plat Act.

    Note: compliance with the provisions of the "Plat Act" Chapter 109, of the Illinois Revised Statutes, may be necessary prior to recording any conveyance of the land.

13. The standard exceptions shown in Paragraph 2 of Schedule B II will be waived from the loan policy upon review and acceptance of the following:

    a) land title survey certified to Stewart Title Guaranty Company showing the improvements on the land;

    b) a properly executed ALTA statement;

Requirements

Note: if new improvements are involved we will also require customary contractors' statements, lien waivers and a survey for structural additions.

Note: there will be an additional charge for this coverage.

14. Municipal real estate transfer tax stamps (or proof of exemption) must accompany any conveyance and certain other transfers of property located in said municipality. Please contact said municipality prior to closing for its specific requirements, which may include the payment of fees, an inspection or other approvals.

15. Transfer of controlling interest may be subject to state real estate transfer tax under 35ILCS-200/31-1 and county real estate transfer tax under 55 ILCS 5/5-1031. properly executed Illinois transfer declaration forms, PTAX-203, PTAX -203A, PTAX -203B and/or PTAX-NR should be submitted, if necessary.

16. The recording or filing of any deed or other instrument of conveyance may be subject to real estate transfer taxes imposed by the state of Illinois and by Bureau County. Therefore, all deeds presented to the Company for recording must have the appropriate transfer tax stamps affixed thereto, or by properly marked exempt, and be accompanied by the applicable state of Illinois transfer and county declaration or exemption forms properly executed.

17. Note: As of the date of this Commitment, the State of Illinois transfer tax rate is $.50 for each $500 of value or fraction thereof, and the County transfer tax rate is $.25 for each $500.00 of value or fraction thereof.

18. Note for information: The State of Illinois has enacted legislation that amends the title insurance act (215 ILCS 155/et al) to require that all parties of residential transactions, and non-residential real estate transactions of under $2,000,000.00, to receive closing protection letters.

    Rule-making promulgated in connection with the legislation, establishes minimum charges for the issuance of the closing protection letters, as follows:

    For all refinance transactions these charges will apply:
    lender(s) - $25.00; borrower - $50.00

    For all purchase transactions these charges will apply:
    lender(s) - $25.00; buyer - $25.00; seller - $50.00.

    This legislation is effective January 1, 2011. The charges mentioned above will apply to all transactions scheduled to close after December 31, 2010.

19. Effective June 1, 2009, pursuant to Public Act 95-988, satisfactory evidence of identification must be presented for the notarization of any and all documents notarized by an Illinois notary public. Until July 1, 2013, satisfactory identification documents are documents that are valid at the time of the notarial act; are issued by a state or federal government agency; bear the photographic image of the individual's face; and bear the individual's signature.

20. Be advised that the "Good Funds" section of the Title Insurance Act (215 ILCS 155/26) becomes effective 1-1-2010. This act places limitations upon the settlement agent's ability to accept certain types of deposits into escrow please contact your local Stewart Title office regarding the application of this new law to your transaction.

Requirements

21. The invoice generated with this commitment is an estimate only. based on the information available to us at the time of application, and is subject to re-billing when final requests for services, insurance and endorsements are made and all documents to be recorded have been received.

    The coverage afforded by this commitment and any policy issued pursuant thereto shall not commence prior to the date on which all charges properly billed to the company have been paid.

    **********Customer Information**********

    As of July 19, 1995, pursuant to bill, public act 87-1197, all documents recorded within the state of Illinois must meet the following requirements:

    **The document shall consist of one or more individual sheets measuring 8.5 inches by 11 inches, not permanently bound and not a continuous form. Graphic displays accompanying a document to be recorded that measures up to 11 inches by 17 inches shall be recorded without charging an additional fee;

    **The document shall be legibly printed in black ink, by hand, typewritten or computer generated, in at least 10 point type. signatures and dates may be in contrasting colors as long as they will reproduce clearly;

    **The document shall be on white paper of not less than 20 pound weight and have a clean margin of at least 1/2 inch on the top, bottom and each side. margins may be used only for non-essential notations which will not affect the validity of the document, including but not limited to form numbers, page numbers, and customer notations;

    **The first page shall contain a blank space in the upper right hand corner measuring at least 3 inches by 5 inches;

    **The document shall not have any attachment stapled, taped or otherwise affixed to any page.

    Note: The recorders offices throughout the State of Illinois will accept all documents for recordation. Those that do not meet the requirements of the bill will cost double the recording fee to record.

ALTA COMMITMENT FOR TITLE INSURANCE (07-01-2021)
SCHEDULE B PART II

ISSUED BY
STEWART TITLE GUARANTY COMPANY

Exceptions

File No.: 23000140108

Some historical land records contain Discriminatory Covenants that are illegal and unenforceable by law. This Commitment and the Policy treat any Discriminatory Covenant in a document referenced in Schedule B as if each Discriminatory Covenant is redacted, repudiated, removed, and not republished or recirculated. Only the remaining provisions of the document will be excepted from coverage.

The Policy will not insure against loss or damage resulting from the terms and conditions of any lease or easement identified in Schedule A, and will include the following Exceptions unless cleared to the satisfaction of the Company:

1. Any defect, lien, encumbrance, adverse claim, or other matter that appears for the first time in the Public Records or is created, attaches, or is disclosed between the Commitment Date and the date on which all of the Schedule B, Part I - Requirements are met.

2. Standard Exceptions:
   a. Rights or claims of parties in possession not shown by the public records.
   b. Easements, or claims of easements, not shown by the public records.
   c. Encroachments, overlaps, boundary line disputes or other matters which would be disclosed by an accurate survey and inspection of the premises.
   d. Any lien, or right to a lien, for services, labor, equipment or material heretofore or hereafter furnished, imposed by law and not shown by the public records.
   e. Rights of dower, homestead or other marital rights of the spouse, if any, of any individual insured.
   f. Any titles or rights asserted by anyone including but not limited to, persons, corporations, governments or other entities, to tide lands, or lands comprising the shores or bottoms of navigable rivers, lakes, bays, oceans or gulf, or lands beyond the line of the harbor or bulkhead lines as established or changed by the United States Government or water rights, if any.
   g. Taxes or special assessments which are not shown as existing liens by the public records.

3. General real estate taxes for the year(s) 2022, 2023 and subsequent years.

   Permanent Index Numbers:

   13-27-100-007 (Affects Parcel 1)
   13-27-400-003 (Affects Parcel 2, Tract A)
   13-27-200-006 (Affects Parcel 2, Tracts B, C and D)
   13-27-300-001 (Affects Parcel 3)
   13-28-400-004 (Affects Parcel 4)
   13-27-300-004 (Affects Parcel 5, Tract B)
   13-27-300-005 (Affects Parcel 5, Tract A)
   13-27-300-002 (Affects Parcel 6)
   13-34-100-003 (Affects Parcel 6)

   Note: The 2021 taxes are paid in the following amounts:

   13-27-100-007 $194.26
   13-27-400-003 $177.28
   13-27-200-006 $281.38

Exceptions

13-27-300-001	$158.44
13-28-400-004	$72.48
13-27-300-004	$939.26
13-27-300-005	$224.44
13-27-300-002	No amount due
13-34-100-003	No amount due

Note: The taxes for the year(s) 2022 and 2023 are not yet due and payable.

4. Covenants contained in the Corporation Special Warranty Deed recorded December 17, 1979 as document number 79-4978 made by Peabody Coal Company, a Delaware corporation, seller, to Jerry R. Hochstatter and Joyce G. husband and wife, buyer.

   (Affects Parcels 1, 5 and other property)

5. The interest of Midland Electric Coal Company, as disclosed by deeds recorded January 29, 1948 as document number 255059, recorded December 15, 1948 as document number 258074, recorded June 1, 1949 as document number 259666, recorded January 27, 1948 as document number 255037, recorded June 11, 1948 as document number 256438, recorded August 28, 1948 as document number 257139, recorded September 9, 1948 as document number 257251, recorded October 14, 1948 as document number 257563, recorded March 9, 1951 as document number 265480, recorded May 21, 1947 as document number 252578, recorded September 16, 1949 as document number 260586, recorded May 8, 1950 as document numbers 262577 and 262578, must be explained, and this Commitment is subject to additional exceptions that may be deemed necessary, if any.

   (Affects Parcels 1, 2, 3, 4 and 5)

6. Notice of Deed Restrictions was recorded May 8, 2000 as document number 002424, in Book 0981 Page 436, made by US Ecology, Inc., and the terms and conditions contained therein.

   (Affects Parcel 1)

7. Plat of Survey was recorded May 8, 2000 as document number 002428, in Book 0981 Page 445.

   (Affects Parcels 1 and 5)

8. Easement granted to Illinois Power Company, an Illinois corporation, its successors and assigns, by Easement and Agreement recorded December 29, 1966 as document number 316518, and the terms and conditions contained therein.

   (Affects Parcels 1, 5 and other property)

9. Application for Amended Authority to Transact Business in Illinois was recorded May 27, 2010 as document number 2010R02482.

10. Reservations as disclosed on the Warranty Deed recorded June 15, 1983 as document number 83-2453, and the terms and conditions contained therein.

Exceptions

(Affects Parcel 2, Tract A)

11. Reservations and restrictions as disclosed on the Warranty Deed recorded December 23, 1982 as document number 82-3799, and the terms and conditions contained therein.

(Affects Parcel 2, Tract B)

12. Reservations as disclosed on the Warranty Deed recorded May 10, 1984 as document number 84-1699 and on the Trustee's Deed recorded March 5, 1987 as document number 87-862, and the terms and conditions contained therein.

(Affects Parcel 2, Tract D)

13. Covenants and reservations contained in the Corporation Special Warranty Deed recorded February 28, 1980 as document number 80-652, made by Peabody Coal Company, a Delaware corporation, seller, to Paul L. Manthe, buyer, and the terms and conditions contained therein.

(Affects Parcel 2)

14. The interest of Clarence J. Weber and Clarence J. Weber, Jr., as Trustees of a Trust Agreement dated December 16, 1960 and known as Trust Number 2, as disclosed by Deed in Trust recorded January 9, 1961 as document number 296224, must be explained, and this Commitment is subject to additional exceptions that may be deemed necessary, if any.

Note: No deed was found in the public records from said trust conveying out the East 1/2 of the Northwest 1/4 of the Northeast 1/4 of Section 27.

(Affects Parcel 2, Tract B)

15. Covenants and reservations contained in the Corporation Special Warranty Deed recorded June 25 ,1980 as document number 80-1963, made by Peabody Coal Company, a Delaware corporation, seller, to Robert T. Bockel, and the terms and conditions contained therein.

(Affects Parcel 2)

16. Reservation by Frederick O. Steadry and Floy F. Steadry as disclosed by Warranty Deeds recorded September 9, 1948 as document numbers 257250 and 257251, and the terms and conditions contained therein.

Note: Quit Claim Deeds were recorded September 6, 1988 as document numbers 88-3315, 88-3316 and 88-3317 executed by Ann S. Gillies, Gretchen Steadry and Frederick A. Steadry, respectively, to US Ecology, Inc. for "All of the oil and gas rights in and under the East 1/2 of the Southeast 1/4 of Section 27, Township 16 North, Range 6 East of the Fourth Principal Meridian, except oil and gas which may be processed, manufactured, or otherwise obtained from coal mined upon said premises, provided that this reservation shall not restrict the mining operations of Midland Electric Coal Corporation in any manner".

(Affects Parcel 2)

Exceptions

17. Reservation by A.W. Dix, Laura W. Dix, Edward T. Olsson and Ada P. Olsson as disclosed by Warranty Deed recorded January 29, 1925 as document number 190609, and the terms and conditions contained therein.

    (Affects Parcel 2)

18. The interest of Sullivan F. Francis, as disclosed by Warranty Deed recorded as document number 181333, must be explained, and this Commitment is subject to additional exceptions that may be deemed necessary, if any.

    (Affects Parcel 2)

19. Plat of Survey was recorded March 5, 1987 as document number 87-863.

    (Affects Parcel 2, Tracts C and D)

20. Plat of Survey was recorded June 2, 1988 as document number 88-1861.

    (Affects Parcel 2, Tract A)

21. Plat of Survey was recorded June 2, 1988 as document number 88-1863.

    (Affects Parcel 2, Tract B)

22. Declaration of Covenants and Restrictions dated June 30, 1988 and recorded June 30, 1988 as document number 88-2345 made by US Ecology, Inc., Declarant, and the terms and conditions contained therein.

    (Affects Parcels 2 and 5)

23. Easement Agreement dated June 30, 1988 and recorded June 30, 1988 as document number 88-2346 made by and between the State of Illinois and US Ecology, Inc., and the terms and conditions contained therein.

    (Affects Parcels 2 and 5)

24. Easement Agreement dated June 30, 1988 and recorded July 1, 1988 as document number 88-2358 made by and between the State of Illinois and US Ecology, Inc., and the terms and conditions contained therein.

    (Affects Parcels 2 and 5)

25. Easement Agreement dated June 30, 1988 and recorded March 7, 1989 as document number 89-808 made by and between the State of Illinois and US Ecology, Inc., and the terms and conditions contained therein.

    (Affects Parcels 2 and 5)

26. Lease dated May 3, 1923 and recorded January 29, 1925 in Book 210, Page 2 made by and between A.W. Dix and Edward T. Olsson, lessors, and Edward D. Lamb, Gilbert Pollock and Charles Hotchkiss, lessees, and the terms and conditions contained therein.

    (Affects Parcel 2)

Exceptions

27. Gravel Pit Agreement dated November 1, 1938 and recorded November 3, 1938 as document number 223899 made by and between the County of Bureau, Illinois, and Addie Rowell and Agnes Rowell, and the terms and conditions contained therein.

    (Affects Parcel 2)

28. The interest of Carrie A. Sprague, as disclosed by Quit Claim Deed recorded April 24, 1930 as document number 203853, must be explained and this commitment is subject to additional exceptions that may be deemed necessary, if any.

    (Affects Parcels 3 and 5)

29. Truman Sprague, Janet Sprague, Bertha Sprague, Howard Sprague, Elva Sprague, Frank W. Sprague, and Edith A. Ellis, having no apparent interest in the Land, conveyed the Land to George T. Ellis by Quit Claim Deed recorded January 17, 1936 as document number 216033. This should be explained to the Company, and this Commitment is subject to additional exceptions that may be deemed necessary, if any.

    (Affects Parcels 3 and 5)

30. Ida Mae Brandts, Fred Brandt, Ida Mae Brandts FKA Ida Mae Franks, having no apparent interest in the Land, conveyed the Land to George T. Ellis by Quit Claim Deed recorded May 20, 1938 as document number 222701. This should be explained to the Company, and this Commitment is subject to additional exceptions that may be deemed necessary, if any.

    (Affects Parcels 3 and 5)

31. Paul Franks, Lura Franks, having no apparent interest in the Land, conveyed the Land to George T. Ellis by Quit Claim Deed recorded May 20, 1938 as document number 222702. This should be explained to the Company, and this Commitment is subject to additional exceptions that may be deemed necessary, if any.

    (Affects Parcels 3 and 5)

32. Plat of Survey was recorded August 25 ,1982 as document number 82-2534.

    (Affects Parcel 3)

33. Plat of Survey was recorded May 8, 2000 as document number 002429.

    (Affects Parcel 3)

34. Easement granted to Midland Electric Coal Corporation, an Indiana corporation, by instrument recorded September 30, 1948 as document number 257446, and the terms and conditions contained therein.

    (Affects Parcels 3 and 5)

35. Notice of Restriction was recorded May 11, 1981 as document number 81-1499, and the terms and conditions

Exceptions

contained therein.

(Affects Parcel 3)

36. Notice of Deed Restriction was recorded May 8, 2000 as document number 002426, in Book 0981, Page 440, and the terms and conditions contained therein.

(Affects Parcel 3)

37. Plat of Survey was recorded March 30, 1989 as document number 89-1116.

(Affects Parcel 4)

38. Plat of Survey was recorded June 2, 1988 as document number 88-1862.

(Affects Parcel 5)

39. Notice of Deed Restriction was recorded May 8, 2000 as document number 002425, in Book 0981, Page 438, and the terms and conditions contained therein.

(Affects Parcel 5, Tract A)

40. Notice of Deed Restriction was recorded May 8, 2000 as document number 002427, in Book 0981, Page 442, and the terms and conditions contained therein.

(Affects Parcel 5, Tract B)

41. Minerals of whatsoever kind, subsurface and surface substances, including but not limited to coal, lignite, oil, gas, uranium, clay, rock, sand and gravel in, on, under and that may be produced from the Land, together with all rights, privileges, and immunities relating thereto, whether or not appearing in the Public Records or listed in Schedule B. The Company makes no representation as to the present ownership of any such interests. There may be leases, grants, exceptions or reservations of interests that are not listed.

42. Rights of the public, State of Illinois and the municipality in and to that part of the Land taken or used for road purposes, if any.

43. Rights of way for drainage ditches, tiles, feeders and laterals, and other drainage easements, if any.

44. Rights of the adjoining owners to the uninterrupted flow of any stream which may cross the premises.

45. Title to accredited land, artificially filled lands, submerged lands and lands lying below the ordinary high water mark of any pond and/or lake.

STEWART TITLE GUARANTY COMPANY
PRIVACY NOTICE

This Stewart Title Guaranty Company Privacy Notice ("Notice") explains how Stewart Title Guaranty Company and its subsidiary title insurance companies (collectively, "Stewart") collect, use, and protect personal information, when and to whom we disclose such information, and the choices you have about the use and disclosure of your information. Pursuant to Title V of the Gramm-Leach Bliley Act ("GLBA") and other Federal and state laws and regulations applicable to financial institutions, consumers have the right to limit some, but not all sharing of their personal information. Please read this Notice carefully to understand how Stewart uses your personal information.

The types of personal information Stewart collects, and shares depends on the product or service you have requested.

Stewart may collect the following categories of personal and financial information from you throughout your transaction:

1. Identifiers: Real name, alias, online IP address if accessing company websites, email address, account name, unique online identifier, social security number, driver's license number, passport number, or other similar identifiers;

2. Demographic Information: Marital status, gender, date of birth.

3. Personal Information and Personal Financial Information: Name, signature, social security number, physical characteristics or description, address, telephone number, insurance policy number, education, employment, employment history, bank account number, credit card number, debit card number, credit reports, or any other information necessary to complete the transaction.

Stewart may collect personal information about you from:

1. Publicly available information from government records.
2. Information we receive directly from you or your agent(s), such as your lender or real estate broker;
3. Information about your transactions with Stewart, our affiliates, or others; and
4. Information we receive from consumer reporting agencies and/or governmental entities, either directly from these entities or through others.

Stewart may use your personal information for the following purposes:

1. To provide products and services to you or in connection with a transaction.
2. To improve our products and services.
3. To communicate with you about our, our affiliates', and others' products and services, jointly or independently.

Stewart may use or disclose the personal information we collect for one or more of the following purposes:

a. To fulfill or meet the reason for which the information is provided.
b. To provide, support, personalize, and develop our website, products, and services.
c. To create, maintain, customize, and secure your account with Stewart.
d. To process your requests, purchases, transactions, and payments and prevent transactional fraud.
e. To prevent and/or process claims.
f. To assist third party vendors/service providers who complete transactions or perform services on Stewart's behalf pursuant to valid service provider agreements.
g. As necessary or appropriate to protect the rights, property or safety of Stewart, our customers or others.
h. To provide you with support and to respond to your inquiries, including to investigate and address your concerns and monitor and improve our responses.
i. To help maintain the safety, security, and integrity of our website, products and services, databases and other technology-based assets, and business.
j. To respond to law enforcement or regulator requests as required by applicable law, court order, or governmental regulations.
k. Auditing for compliance with federal and state laws, rules and regulations.
l. Performing services including maintaining or servicing accounts, providing customer service, processing or fulfilling orders and transactions, verifying customer information, processing payments.
m. To evaluate or conduct a merger, divestiture, restructuring, reorganization, dissolution, or other sale or transfer of some or all of our assets, whether as a going concern or as part of bankruptcy, liquidation, or similar proceeding, in which personal information held by us is among the assets transferred.

Stewart will not collect additional categories of personal information or use the personal information we collected for materially different, unrelated, or incompatible purposes without providing you notice.

Disclosure of Personal Information to Affiliated Companies and Nonaffiliated Third Parties

Stewart does not sell your personal information to nonaffiliated third parties. Stewart may share your information with those you have designated as your agent throughout the course of your transaction (for example, a realtor, broker, or a lender). Stewart may disclose your personal information to a non-affiliated third party for a business purpose. Typically, when we disclose personal information for a business purpose, we enter in a contract that describes the purpose and requires the recipient to both keep that personal information confidential and not use it for any purpose except performing the contract.

We share your personal information with the following categories of third parties:

a. Non-affiliated service providers and vendors we contract with to render specific services (For example, search companies, mobile notaries, and companies providing credit/debit card processing, billing, shipping, repair, customer service, auditing, marketing, etc.)
b. To enable Stewart to prevent criminal activity, fraud, material misrepresentation, or nondisclosure.
c. Stewart's affiliated and subsidiary companies.
d. Non-affiliated third-party service providers with whom we perform joint marketing, pursuant to an agreement with them to jointly market financial products or services to you.
e. Parties involved in litigation and attorneys, as required by law.
f. Financial rating organizations, rating bureaus and trade associations.
g. Federal and State Regulators, law enforcement and other government entities to law enforcement or authorities in connection with an investigation, or in response to a subpoena or court order.

The law does not require your prior authorization or consent and does not allow you to restrict the disclosures described above. Additionally, we may disclose your information to third parties for whom you have given us authorization or consent to make such disclosure. We do not otherwise share your Personal Information or Browsing Information with non-affiliated third parties, except as required or permitted by law.

Right to Limit Use of Your Personal Information

You have the right to opt-out of sharing of your personal information among our affiliates to directly market to you. To opt-out of sharing to our affiliates for direct marketing, you may send an "opt out" request to Privacyrequest@stewart.com, or contact us through other available methods provided under "Contact Information" in this Notice. We do not share your Personal Information with nonaffiliates for their use to direct market to you without your consent.

How Stewart Protects Your Personal Information

Stewart maintains physical, technical and administrative safeguards and policies to protect your personal information.

Contact Information

If you have questions or comments about this Notice, the ways in which Stewart collects and uses your information described herein, your choices and rights regarding such use, or wish to exercise your rights under law, please do not hesitate to contact us at:

Phone:	Toll Free at 1-866-571-9270
Email:	Privacyrequest@stewart.com
Postal Address:	Stewart Information Services Corporation Attn: Mary Thomas, Chief Compliance and Regulatory Officer 1360 Post Oak Blvd., Ste. 100, MC #14-1 Houston, TX 77056

Effective Date: January 1, 2020
Updated: January 1, 2023

Privacy Notice at Collection for California Residents

Pursuant to the California Consumer Privacy Act of 2018 ("CCPA") and the California Privacy Rights Act of 2020, effective January 1, 2023 ("CPRA"), Stewart Information Services Corporation and its subsidiary companies (collectively, "Stewart") are providing this **Privacy Notice at Collection for California Residents** ("CCPA & CPRA Notice"). This CCPA & CPRA Notice supplements the information contained in Stewart's existing privacy notice and applies solely to all visitors, users, and consumers and others who reside in the State of California or are considered California Residents as defined in the CCPA & CPRA ("consumers" or "you"). All terms defined in the CCPA & CPRA have the same meaning when used in this Notice.

Personal and Sensitive Personal Information Stewart Collects

- Publicly available information from government records.
- Deidentified or aggregated consumer information.
- Certain personal information protected by other sector-specific federal or California laws, including but not limited to the Fair Credit Reporting Act (FCRA), Gramm Leach Bliley Act (GLBA) and California Financial Information Privacy Act (FIPA).

Specifically, Stewart has collected the following categories of **personal and sensitive personal information** from consumers within the last twelve (12) months:

Category	Examples	Collected
A. Identifiers	A real name, alias, postal address, unique personal identifier, online identifier, Internet Protocol address, email address, account name, Social Security number, driver's license number, passport number, or other similar identifiers	YES
B. Personal information categories listed in the California Customer Records statute (Cal. Civ. Code § 1798.80(e)).	A name, signature, Social Security number, physical characteristics or description, address, telephone number, passport number, driver's license or state identification card number, insurance policy number, education, employment, employment history, bank account number, credit card number, debit card number, or any other financial information, medical information, or health insurance information. Some personal information included in this category may overlap with other categories.	YES
C. Protected classification characteristics under California or federal law	Age (40 years or older), race, color, ancestry, national origin, citizenship, religion or creed, marital status, medical condition, physical or mental disability, sex (including gender, gender identity, gender expression, pregnancy or childbirth and related medical conditions), sexual orientation, veteran or military status, genetic information (including familial genetic information).	YES
D. Commercial information	Records of personal property, products or services purchased, obtained, or considered, or other purchasing or consuming histories or tendencies.	YES
E. Biometric information.	Genetic, physiological, behavioral, and biological characteristics, or activity patterns used to extract a template or other identifier or identifying information, such as, fingerprints, faceprints, and voiceprints, iris or retina scans, keystroke, gait, or other physical patterns, and sleep, health, or exercise data.	YES
F. Internet or other similar network activity.	Browsing history, search history, information on a consumer's interaction with a website, application, or advertisement.	YES

G. Geolocation data.	Physical location or movements.	YES
H. Sensory data.	Audio, electronic, visual, thermal, olfactory, or similar information.	YES
I. Professional or employment-related information.	Current or past job history or performance evaluations.	YES
J. Non-public education information (per the Family Educational Rights and Privacy Act (20 U.S.C. Section 1232g, 34 C.F.R. Part 99)).	Education records directly related to a student maintained by an educational institution or party acting on its behalf, such as grades, transcripts, class lists, student schedules, student identification codes, student financial information, or student disciplinary records.	YES
K. Inferences drawn from other personal information.	Profile reflecting a person's preferences, characteristics, psychological trends, predispositions, behavior, attitudes, intelligence, abilities, and aptitudes.	YES

Stewart obtains the categories of personal and sensitive information listed above from the following categories of sources:

- Directly and indirectly from customers, their designees, or their agents (For example, realtors, lenders, attorneys, brokers, etc.)
- Directly and indirectly from activity on Stewart's website or other applications.
- From third-parties that interact with Stewart in connection with the services we provide.

Use of Personal and Sensitive Personal Information

Stewart may use or disclose the personal or sensitive information we collect for one or more of the following purposes:

a. To fulfill or meet the reason for which the information is provided.
b. To provide, support, personalize, and develop our website, products, and services.
c. To create, maintain, customize, and secure your account with Stewart.
d. To process your requests, purchases, transactions, and payments and prevent transactional fraud.
e. To prevent and/or process claims.
f. To assist third party vendors/service providers who complete transactions or perform services on Stewart's behalf pursuant to valid service provider agreements.
g. As necessary or appropriate to protect the rights, property or safety of Stewart, our customers or others.
h. To provide you with support and to respond to your inquiries, including to investigate and address your concerns and monitor and improve our responses.
i. To personalize your website experience and to deliver content and product and service offerings relevant to your interests, including targeted offers and ads through our website, third-party sites, and via email or text message (with your consent, where required by law).
j. To help maintain the safety, security, and integrity of our website, products and services, databases and other technology-based assets, and business.
k. To respond to law enforcement or regulator requests as required by applicable law, court order, or governmental regulations.
l. Auditing for compliance with federal and state laws, rules and regulations.
m. Performing services including maintaining or servicing accounts, providing customer service, processing or fulfilling orders and transactions, verifying customer information, processing payments, providing advertising or marketing services or other similar services.
n. To evaluate or conduct a merger, divestiture, restructuring, reorganization, dissolution, or other sale or transfer of some or all of our assets, whether as a going concern or as part of bankruptcy, liquidation, or similar proceeding, in which personal information held by us is among the assets transferred.

Stewart will not collect additional categories of personal or sensitive information or use the personal or sensitive information we collected for materially different, unrelated, or incompatible purposes without providing you notice.

Disclosure of Personal Information to Affiliated Companies and Nonaffiliated Third Parties

Stewart does not sell your personal information to nonaffiliated third parties. Stewart may share your information with those you have designated as your agent throughout the course of your transaction (for example, a realtor, broker, or a lender). Stewart may disclose your personal information to a third party for a business purpose. Typically, when we disclose personal information for a business purpose, we enter into a contract that describes the purpose and requires the recipient to both keep that personal information confidential and not use it for any purpose except performing the contract.

We share your personal information with the following categories of third parties:

a. Service providers and vendors we contract with to render specific services (For example, search companies, mobile notaries, and companies providing credit/debit card processing, billing, shipping, repair, customer service, auditing, marketing, etc.)
b. Affiliated Companies.
c. Parties involved in litigation and attorneys, as required by law.
d. Financial rating organizations, rating bureaus and trade associations.
e. Federal and State Regulators, law enforcement and other government entities

In the preceding twelve (12) months, Stewart has disclosed the following categories of personal information for a business purpose:

Category A:	Identifiers
Category B:	California Customer Records personal information categories
Category C:	Protected classification characteristics under California or federal law
Category D:	Commercial Information
Category E:	Biometric Information
Category F:	Internet or other similar network activity
Category G:	Geolocation data
Category H:	Sensory data
Category I:	Professional or employment-related information
Category J:	Non-public education information
Category K:	Inferences

Your Consumer Rights and Choices Under CPPA and CPRA

Your Rights Under CCPA

The CCPA provides consumers (California residents as defined in the CCPA) with specific rights regarding their personal information. This section describes your CCPA rights and explains how to exercise those rights.

Access to Specific Information and Data Portability Rights

You have the right to request that Stewart disclose certain information to you about our collection and use of your personal information over the past 12 months. Once we receive and confirm your verifiable consumer request, Stewart will disclose to you:

- The categories of personal information Stewart collected about you.
- The categories of sources for the personal information Stewart collected about you.
- Stewart's business or commercial purpose for collecting that personal information.
- The categories of third parties with whom Stewart shares that personal information.
- The specific pieces of personal information Stewart collected about you (also called a data portability request).
- If Stewart disclosed your personal data for a business purpose, a listing identifying the personal information categories that each category of recipient obtained.

Deletion Request Rights

You have the right to request that Stewart delete any of your personal information we collected from you and retained, subject to certain exceptions. Once we receive and confirm your verifiable consumer request, Stewart will delete (and direct our service providers to delete) your personal information from our records, unless an exception applies.

Stewart may deny your deletion request if retaining the information is necessary for us or our service providers to:

1. Complete the transaction for which we collected the personal information, provide a good or service that you requested, take actions reasonably anticipated within the context of our ongoing business relationship with you, or otherwise perform our contract with you.
2. Detect security incidents, protect against malicious, deceptive, fraudulent, or illegal activity, or prosecute those responsible for such activities.
3. Debug products to identify and repair errors that impair existing intended functionality.

4. Exercise free speech, ensure the right of another consumer to exercise their free speech rights, or exercise another right provided for by law.
5. Comply with the California Electronic Communications Privacy Act (Cal. Penal Code § 1546 *seq.*)
6. Engage in public or peer-reviewed scientific, historical, or statistical research in the public interest that adheres to all other applicable ethics and privacy laws, when the information's deletion may likely render impossible or seriously impair the research's achievement, if you previously provided informed consent.
7. Enable solely internal uses that are reasonably aligned with consumer expectations based on your relationship with us.
8. Comply with a legal obligation.
9. Make other internal and lawful uses of that information that are compatible with the context in which you provided it.

Your Rights Under CPRA

CPRA expands upon your consumer rights and protections offered by the CCPA. This section describes your CPRA rights and explains how to exercise those rights.

Opt-Out of Information Sharing and Selling

Stewart does not share or sell information to third parties, as the terms are defined under the CCPA and CPRA. Stewart only shares your personal information as commercially necessary and in accordance with this CCPA & CPRA Notice.

Correction of Inaccurate Information

You have the right to request that Stewart correct any inaccurate information maintained about.

Limit the Use of Sensitive Personal Information

You have the right to limit how your sensitive personal information, as defined in the CCPA and CPRA is disclosed or shared with third parties.

Exercising Your Rights Under CCPA and CPRA

To exercise the access, data portability, deletion, opt-out, correction, or limitation rights described above, please submit a verifiable consumer request to us by the available means provided below:

1. Calling us Toll Free at 1-866-571-9270
2. Emailing us at Privacyrequest@stewart.com; or
3. Visiting http://stewart.com/ccpa.

Only you, or someone legally authorized to act on your behalf, may make a verifiable consumer request related to your personal information. You may also make a verifiable consumer request on behalf of your minor child, if applicable.

To designate an authorized agent, please contact Stewart through one of the methods mentioned above.

You may only make a verifiable consumer request for access or data portability twice within a 12-month period. The verifiable consumer request must:

- Provide sufficient information that allows us to reasonably verify you are the person about whom we collected personal information or an authorized representative.
- Describe your request with sufficient detail that allows us to properly understand, evaluate, and respond to it.

Stewart cannot respond to your request or provide you with personal information if we cannot verify your identity or authority to make the request and confirm the personal information relates to you.

Making a verifiable consumer request does not require you to create an account with Stewart.

Response Timing and Format

We endeavor to respond to a verifiable consumer request within forty-five (45) days of its receipt. If we require more time (up to an additional 45 days), we will inform you of the reason and extension period in writing.

A written response will be delivered by mail or electronically, at your option.

Any disclosures we provide will only cover the 12-month period preceding the verifiable consumer request's receipt. The response we provide will also explain the reasons we cannot comply with a request, if applicable. For data portability requests, we will select a format to provide your personal information that is readily useable and should allow you to transmit the information from one entity to another entity without hindrance.

Stewart does not charge a fee to process or respond to your verifiable consumer request unless it is excessive, repetitive, or manifestly unfounded. If we determine that the request warrants a fee, we will tell you why we made that decision and provide you with a cost estimate before completing your request.

Non-Discrimination

Stewart will not discriminate against you for exercising any of your CCPA and CPRA rights. Unless permitted by the CCPA or CPRA, we will not:

- Deny you goods or services.
- Charge you a different prices or rates for goods or services, including through granting discounts or other benefits, or imposing penalties.
- Provide you a different level or quality of goods or services.
- Suggest that you may receive a different price or rate for goods or services or a different level or quality of goods or services.

Record Retention

Your personal information will not be kept for longer than is necessary for the business purpose for which it is collected and processed. We will retain your personal information and records based on established record retention policies pursuant to California law and in compliance with all federal and state retention obligations. Additionally, we will retain your personal information to comply with applicable laws, regulations, and legal processes (such as responding to subpoenas or court orders), and to respond to legal claims, resolve disputes, and comply with legal or regulatory recordkeeping requirements

Changes to This CCPRA & CPRA Notice

Stewart reserves the right to amend this CCPA & CPRA Notice at our discretion and at any time. When we make changes to this CCPA & CPRA Notice, we will post the updated Notice on Stewart's website and update the Notice's effective date.

Link to Privacy Notice

Stewarts Privacy Notice can be found on our website at https://www.stewart.com/en/privacy.html.

Contact Information

If you have questions or comments about this notice, the ways in which Stewart collects and uses your information described herein, your choices and rights regarding such use, or wish to exercise your rights under California law, please do not hesitate to contact us at:

Phone:	Toll Free at 1-866-571-9270
Website:	http://stewart.com/ccpa
Email:	Privacyrequest@stewart.com
Postal Address:	Stewart Information Services Corporation Attn: Mary Thomas, Chief Compliance and Regulatory Officer 1360 Post Oak Blvd., Ste. 100, MC #14-1 Houston, TX 77056