



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Eric J. Holcomb
Governor

Brian C. Rockensuess
Commissioner

April 25, 2024

John H. Jessen
Jessen Manufacturing Co., Inc.
c/o Mr. John F. Huldin
Taft Stettinius & Hollister LLP
One Indiana Square, Suite 3500
Indianapolis, Indiana 46204-2023

Re: **Notice of Liability and Information Request**

Jessen Manufacturing Co., Inc.
1409 West Beardsley Avenue,
Elkhart, Elkhart County
State Cleanup Site #0001221

Dear Mr. Huldin

This letter notifies you of the potential environmental liability that Jessen Manufacturing Co., Inc. may have incurred with regard to the property located at 1409 West Beardsley Avenue, Elkhart, Indiana (Property), including all areas to which contamination has migrated (collectively referred to as the Site). The Indiana Department of Environmental Management (IDEM) has determined that a release or the threat of a release of hazardous substances has occurred at the Site. Based on information presently available to IDEM, IDEM has determined that the entity or individual listed above is a Potentially Responsible Person (PRP) as defined under Indiana Code (IC) 13-11-2-192. A Responsible Person is liable, pursuant to IC 13-25-4-8, IC 13-25-4-9, as well as Section 107(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 United States Code (U.S.C.) 9607(a), for the costs of response action incurred by IDEM with respect to this Site (including, but not limited to, past and future costs associated with IDEM's oversight of Site-related response action), and for undertaking response action with respect to this Site at the Responsible Person's own expense.

This Notice serves the following basic functions:

- 1) Providing general and Site-specific information contained in the administrative record to assist you in your consideration of your potential liability;
- 2) Serving as a demand for implementation of response actions; and



Visit on.IN.gov/survey or scan the QR code to provide feedback.

We appreciate your input!



- 3) Serving as a formal demand for reimbursement of IDEM's costs incurred to date in investigating this Site and for reimbursement of costs that IDEM will incur in the oversight and administration of the Site.

BACKGROUND

IDEM has conducted an investigation to identify current and past owners of the Property and current and past operators of facilities at this Property. The Property is depicted generally on the map included as Attachment A. Records indicate that Jessen Manufacturing Co., Inc. has owned and/or operated at the Site from 1929 to present and is therefore a PRP.

IDEM also conducted an investigation to locate any records that indicate that during the time of ownership and/or operation at the Property, past owners and/or operators purchased, used, handled, stored, and/or disposed of products containing the hazardous substances discovered in the soil or groundwater at the Site. IDEM has located documents or has reason to believe that documents exist that demonstrate that the past owners and/or operators named above did use materials containing the hazardous substances found at the Site during the time of ownership and/or operation and that such owners and/or operators contributed to the contamination of the Site. Hazardous waste records indicate the Site was a Small Quantity Generator (EPA #IND005080114) of listed hazardous waste including spent halogenated solvents (F001). A Limited Subsurface Investigation conducted by August Mack Environmental Inc revealed tetrachloroethylene (PCE) and trichloroethylene (TCE) in groundwater above IDEM Risk-Based Closure Guide (R2) Residential Groundwater Published Levels (PLs). Impacts were identified on the north and east portion of the property and likely extend off-Site.

IDEM has established an administrative record of the documents and information that serve as the basis for IDEM's determination of liability for each PRP. IDEM will also include additional relevant information that it receives in the record. The record may be found on the Virtual File Cabinet (VFC) at <https://vfc.idem.in.gov/> under Site #0001221.

DEMAND FOR RESPONSE ACTIONS

This Notice is an official demand for the PRPs to undertake response action with respect to the release(s) and/or threatened release(s) of hazardous substances that have occurred at the Site. **The PRPs shall undertake such response action in accordance with the provisions, including the scheduling provisions, of the Statement of Work (SOW) provided in Attachment B. PRPs shall submit work plans and reports for IDEM's approval pursuant to the timelines provided in the SOW.**

FAILURE TO MEET DEADLINES

IDEM has a number of actions it may take if PRPs fail to complete the response actions as outlined in the attached SOW. Those actions include, but are not limited to, the following:

- 1) Seek a Commissioner's Order pursuant to IC 13-25-4-9, and/or IC 13-14-2, compelling PRPs to undertake appropriate response actions;
- 2) Perform investigation(s) pursuant to IC 13-25-4-6 to determine the extent of contamination, and implement actions necessary to remediate the Site pursuant to IC 13-25-4-9(a). PRPs must reimburse IDEM for all response costs incurred by IDEM, pursuant to IC 13-25-4-8 and IC 13-25-4-10; and
- 3) Refer the Site to the U.S. EPA for performance of an emergency response action and possible listing as a Superfund site on the National Priorities List, pursuant to CERCLA § 105, 42 U.S.C. 9605.

DEMAND FOR REIMBURSEMENT

IDEM has spent public funds in conducting the investigation of this Site and will continue to spend public funds in overseeing response actions at this Site. IDEM demands reimbursement of its costs incurred to date, and of its future costs to be incurred in the oversight and administration of response actions at this Site. IDEM oversight costs to be paid by PRPs will include costs associated with site specific review of environmental investigation, remediation, and closure documentation, including site visits, data collection, meetings, technical review, and legal review.

IDEM oversight costs will be billed on a monthly basis at a rate of \$75 per hour. PRPs shall pay IDEM project oversight costs to the Hazardous Substances Response Trust Fund as provided in IC 13-25-4-2, and shall pay in full before receiving No Further Action status from IDEM for this Site. Failure to pay these costs within 90 calendar days from the initial due date shown on the invoice may result in IDEM pursuing legal action through the Office of the Indiana Attorney General to compel payment of outstanding project oversight costs. The oversight cost hourly rate may change. IDEM will provide PRPs with 60 days advance notice of any change in the oversight cost hourly rate.

In the event that you declare bankruptcy after you receive this Notice, you must include IDEM as a creditor and provide notice of the bankruptcy to IDEM, because IDEM has a potential claim against you. IDEM reserves the right to file a proof of claim or an application for administrative expenses in any bankruptcy proceedings.

If you own the Property, you must notify IDEM of any transfer (voluntary or involuntary) of ownership in the Property (excluding mortgages or liens). You must notify IDEM within 30 days of the transfer and include: (a) a copy of the instrument conveying any interest in any portion of the Property (e.g. deed); and, (b) the name and business address of the transferee. If you are a business entity (e.g. a corporation or LLC), you must notify IDEM of any transfer of ownership in the business entity. You must notify IDEM within 30 days of the transfer and include a description of the nature of the transfer and the name and business address of the new or additional owners of the business entity.

Some or all of the costs associated with this Notice may be covered by current or past insurance policies that were in effect at the time of ownership of the Site or during the period of operation of the facility by the PRP or its predecessor companies. Most insurance companies require notice to the carrier of a claim in a timely manner based upon receipt of this Notice. To evaluate whether you have coverage, you may want to review current and past policies. Coverage depends on many factors such as the language of the policy and which state's laws will apply. **Not having insurance or not having coverage under a policy does not prevent you from being a PRP responsible for all response actions. Furthermore, IDEM will not excuse delays associated with third parties, such as delays caused by negotiations between a PRP and its insurance carriers.**

AGREED ORDER

According to IC 13-25-4-23, IDEM may, under certain circumstances, enter into an administrative Agreed Order (AO) with one or more of the PRPs who agree to conduct a response action.

If you are willing and able to complete all required response activities at the Site in a timely manner, then you may be eligible to enter into an AO with IDEM that specifies how and when response actions will be conducted. Such an agreement will also require you to reimburse IDEM for all past and future oversight costs. If you are interested in entering into an AO with IDEM, please contact the assigned Project Manager listed below.

DEFENSES/EXCEPTIONS TO LIABILITY

A PRP who believes it has a valid defense under IC 13-25-4-8(a) and CERCLA § 107(a), 42 U.S.C. 9607(a), or that it meets exceptions to liability under IC 13-25-4-8, and/or CERCLA § 107, 42 U.S.C. 9607, and/or meets the definition of a Bona Fide Prospective Purchaser (BFPP) pursuant to CERCLA § 101(40), 42 U.S.C. 9601(40), must submit a written briefing regarding the defenses and exceptions that the PRP is claiming, along with all supporting documentation, to the IDEM attorney listed below within 60 days after the date of this Notice. If the PRP is claiming that it meets the BFPP exception, and a determination (typically a Comfort Letter) has been obtained from the Indiana Brownfields Program that the PRP does have BFPP status, such determination should be included with the PRP's submission. It is your burden to prove any landowner liability protections afforded by law, and to maintain any such defense you must also provide full cooperation, assistance and access to IDEM, or to EPA or any other person authorized to conduct environmental response actions on the Property. 42 USC 9601(40); 42 USC 9607(q)(1)(A)(iv); 42 USC 9601(35). IDEM requests your full cooperation and assistance. If IDEM determines that no legitimate defense or exception has been demonstrated, IDEM may issue a Commissioner's Order to compel the PRP to undertake response action with respect to the Site pursuant to IC 13-25-4-9, IC 13-14-2.

NO FURTHER ACTION LETTER

A person who implements or completes an approved hazardous substance response action may not be held liable for claims or for contribution from third parties concerning matters addressed in the hazardous substance response action, pursuant to IC 13-25-4-27. This statutory immunity from liability, will be provided to you in a No Further Action letter upon approved completion of the remediation.

IDEM CONTACTS

IDEM State Cleanup Project Manager Contact

Reports, work plans, and general correspondences or technical documents are to be submitted through the State Cleanup e-Submission Portal (ESP). To request access to the ESP, complete State Agency Form 57103, at idem.in.gov/myesubmission. Any technical questions, clarifications, and requests for meetings to discuss technical issues (please indicate whether an attorney will be present) should be directed to the Project Manager, Ms. Nora Kayden, at:

nkayden@idem.in.gov
317-232-2667

IDEM Office of Legal Counsel Contact

Submittal of executed AOs, any written briefing regarding defenses and exceptions to liability that the PRP is claiming, and other legal documents and general legal questions shall be directed to the Office of Legal Counsel attorney assigned to this matter at:

Indiana Department of Environmental Management
Office of Legal Counsel
Attn: Kyle Tucker
100 N. Senate Avenue, 13th Floor
Indianapolis, IN 46204

[katucker@idem.in.gov]
[317-233-6039]

Please note that the options, legal authorities, and remedies identified in this letter are not exclusive, and IDEM reserves the right to take any action it deems necessary to protect human health and the environment. Any of the IDEM personnel identified in this letter may be reached toll-free by calling (800) 451-6027, pressing 0, and asking for that person.

Sincerely,

A handwritten signature in black ink, appearing to read "R. L. Groves", with a long horizontal flourish extending to the right.

Ryan L. Groves, Chief
State Cleanup Section
Office of Land Quality

RLG:NK

ATTACHMENTS:

Attachment A - Property Map

Attachment B - Response Actions Statement of Work

cc: IDEM Site #0001221

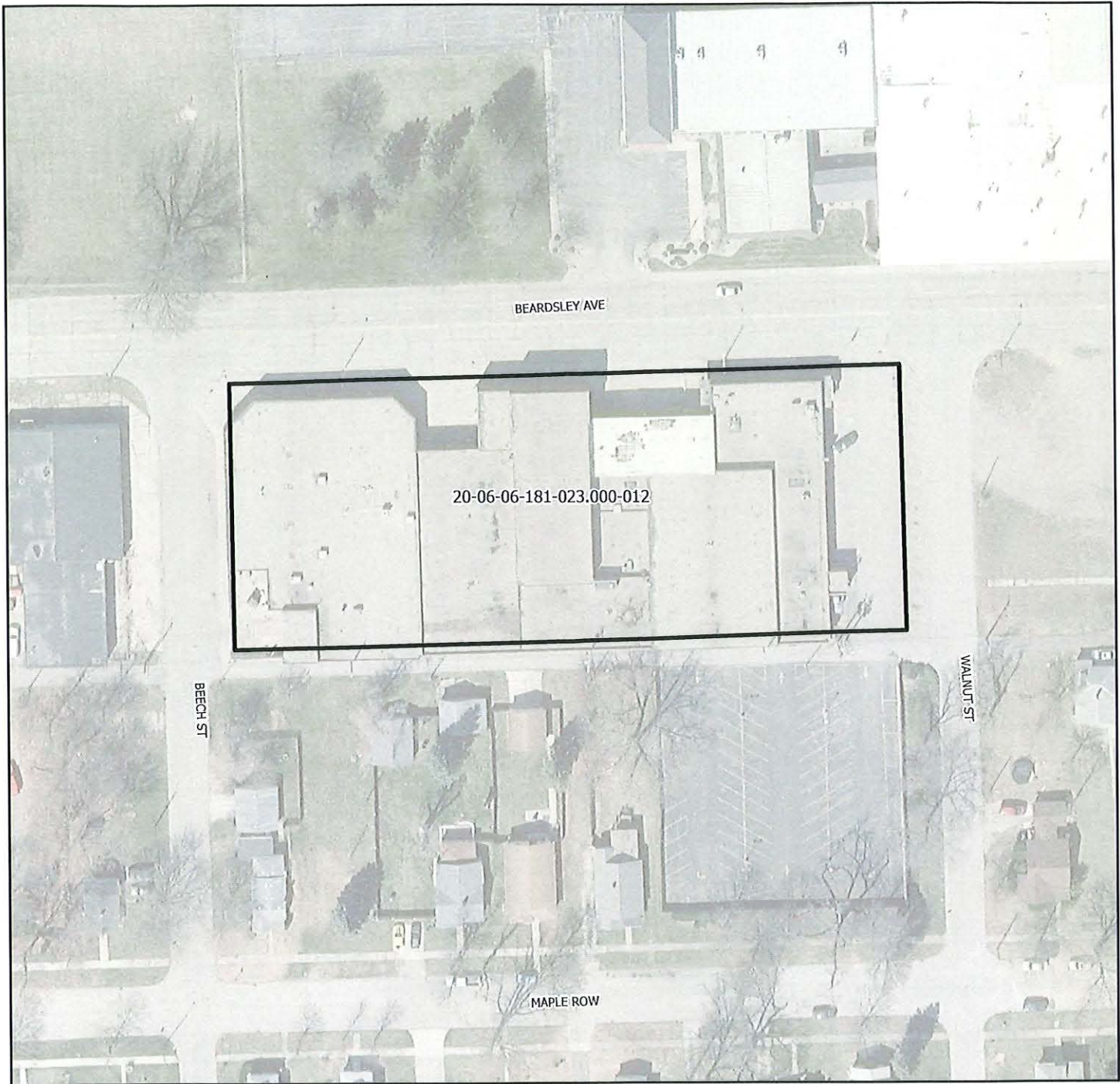
Ms. Nora Kayden, IDEM State Cleanup Program

Mr. Tyler Zschiedrich, August Mack Environmental
Elkhart County Health Department

ATTACHMENT A

PROPERTY MAP

**Attachment A-Property Map (IDEM State Cleanup Site #0001221)
1409 West Beardsley Avenue, Elkhart, Indiana 46514
Jessen Manufacturing Company**



Mapped By: HC Abramo, IDEM, Office of Land Quality, Science Services Branch, GIS Services, January 8, 2024

Parcel#: 20-06-06-181-023.000-012


Orthophoto Info: GIS Layer Name: Imagery\BestAvailable
State of Indiana Best Available Orthophotography(2017-2019)



Source Info: State of Indiana Geographic Information Office Library
Parcel Data obtained via IDHS
http://maps.macog.com/Html5Viewer/Index.html?configBase=http://maps.macog.com/Geocortex/Essentials/Ess443/REST/sites/MACOG_HTML5Viewers/MACOG/virtuakirectory/Resources/Config/Default

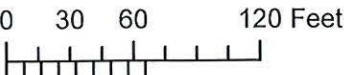
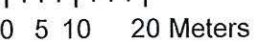
PLSS Info: Section 6, T37N, R5E
Concord Township
Elkhart, IN

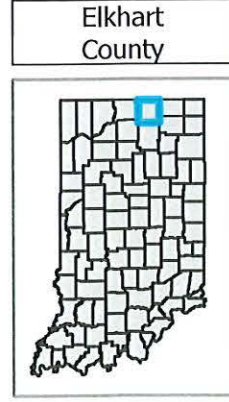
Property: 1409 West Beardsley Avenue, Elkhart, Indiana

Disclaimer: This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.


Jessen Manufacturing Company



ATTACHMENT B

INFORMATION REQUEST

ATTACHMENT B

INFORMATION REQUEST

Per 42 United States Code (USC) 101(40)(E), 42 USC 9607(q)(1)(A)(iv), and 42 USC 101(35)(A)(iii), to claim landowner liability protections afforded by law, you must provide full cooperation, assistance and access to IDEM, to the U.S. EPA, or to any other person authorized to conduct environmental response actions on the Property.

“Person” and “You” refer to All Legal Entities. Indiana’s environmental laws define “person” to include an individual as well as other entities such as “a partnership, a co-partnership, a firm, a company, a corporation, an association, a joint stock company, a trust, an estate . . .”, per Indiana Code (IC) 13-11-2-158. IDEM is asking you about the person(s) and entity(ies) that owned and operated on the Property.

Identify Persons: The term “identify” means, with respect to a natural person, to set forth: (a) the person’s full name; (b) addresses and telephone numbers; (c) present or last known employer (include full name and address) with title, position or business. With respect to a corporation, partnership, or other business entity (including a sole proprietorship), please provide its full name, address, and affiliation with the individual and/or company to whom/which this request is addressed.

Identify the Information Sources for Each Answer: For each question, identify all the persons and documents that you rely on in producing your answer.

Identify Privileges: If you have objections to some or all the questions within the Information Request and cover letter, you are still required to respond to each of the questions. If you intend to claim any documents as privileged, please identify each document and the legal privileges against disclosure of each document.

Electronic Template: For ease of response, you may request a word template from the project manager at the email address identified on the cover letter to you.

Your Knowledge about the Property

Pursuant to 42 USC 101(35)(B), and 42 USC 101(40)(B), to claim the landowner liability protections afforded by law for properties purchased after 2002, you must demonstrate that you have performed all appropriate inquiry into the previous ownership and uses of the Property before purchasing the Property.

1. Identify the Potentially Responsible Party (PRP) for which you are answering and provide their contact information including mailing address, phone number, and email address.
2. Please identify any person(s) other than the PRP that are authorized to receive IDEM correspondences and/or invoices on behalf of the PRP, and provide their contact information including mailing address, phone number, and email address.
3. IDEM's cover letter to you identifies some of what IDEM knows about the Property located at and the person or entity you represent.
 - a. Is IDEM's information about you current, complete and correct? If not, please identify the facts that would make IDEM's information current, complete and correct.
 - b. Is there any other person or entity that owns(ed) or operates(ed) the Property with you? If so, please identify the persons and entities.
 - c. Who is your officer or individual responsible for compliance with environmental laws?
 - d. Is there any other person or entity responsible for your environmental compliance at the Property?
4. Do you have personal knowledge of the information you are providing? If not, please identify all persons from whom you gained such information along with their contact information. If you have relied upon documents to obtain the information, please provide copies of such documents. If you intend to claim any information or document as privileged, please identify each document and any the legal privileges against disclosure of each document.
5. Describe the businesses that were or are being conducted on the Property:
 - a. during your ownership or use of the Property, and
 - b. before your ownership or use of the Property.
6. Who operated each business? If the operator was someone other than you, please provide all relevant information you may have that pertains to the operator. If you are aware of a contact person for that operator please provide all contact information.
7. At the time you acquired or operated the Property, did you know or have reason to know that any hazardous substance, industrial chemical or petroleum product had been disposed of on or at the Property? Describe all investigations of the Property you

undertook prior to acquiring the Property and all of the facts on which you base the answer to the preceding question. Do you know of any Phase I or Phase II investigation of the Property? Please provide a copy, or if not available, identify who has the documents.

8. What do you know about the past or current uses of hazardous substances, industrial chemicals, or petroleum products on the Property?
 - a. What hazardous substances, industrial chemicals, or petroleum products have been used on the Property?
 - b. Who was responsible for the use on the Property?
9. Is there any portion of the Property where hazardous substances, industrial chemicals, or petroleum products have been released onto or into the ground or groundwater on the Property?
10. Provide a list of any hazardous substances used or produced in any manufacturing processes employed on the Property or in any sludges, liquids, or other production wastes or materials resulting from the manufacturing process. Summarize in a short narrative the equipment or process used to dispose of or treat such waste materials.

Your Regulated Use of the Property

11. On the Property, did you ever use, purchase, generate, store, treat, dispose, or otherwise handle any bulk hazardous substances, industrial chemicals or petroleum products? If so, please identify:
 - a. In general terms, the nature and quantity of the hazardous substances, industrial chemicals or petroleum products transported, used, purchased, generated, stored, treated, disposed, or otherwise handled.
 - b. Identify when each such hazardous substance, industrial chemical, or petroleum product was used, purchased, generated, stored, treated, transported, disposed or otherwise handled.
 - c. If you have any reason to believe that there may be persons able to provide a more detailed or complete response to any sub-question contained herein or who may be able to provide additional responsive documents, identify such persons and the additional information that they may have.
12. On the Property, please identify all leaks, spills, or releases into the environment of any hazardous substances, industrial chemicals or petroleum products that have occurred at or from the Property. Please identify:
 - a. What was released and approximately how much;
 - b. When such releases occurred;
 - c. Where the release occurred on the Property;

- d. Any and all investigations of the circumstances, nature, extent or location of each release or threatened release including, the results of any soil, water (ground and surface), or air testing undertaken; and,
 - e. All persons with information relating to these releases.
13. Inside any building on the Property, has there ever been a spill, leak, release or discharge of hazardous substances, industrial chemicals or petroleum products into any subsurface disposal system or floor drain inside or under the building? If so, please identify:
 - a. Where the disposal system or floor drains were located;
 - b. When the disposal system or floor drains were installed;
 - c. Whether the disposal system or floor drains were connected to pipes;
 - d. Where such pipes were located and emptied;
 - e. When such pipes were installed;
 - f. How and when such pipes were replaced, or repaired; and,
 - g. Whether such pipes ever leaked or in any way released hazardous substances into the environment.
 - h. The location of the spill, leak, release or discharge of hazardous substances into any subsurface disposal system or floor drain inside or under the building must also be documented on a Property map.
14. Has any contaminated soil ever been excavated or removed from the Property? If so, please identify:
 - a. Amount of soil excavated;
 - b. Location of excavation. The location of the excavation must also be documented on a Property map;
 - c. Manner and place of disposal and/or storage of excavated soil;
 - d. Dates of soil excavation;
 - e. Identity of persons who excavated or removed the soil;
 - f. Reason for soil excavation;
 - g. Whether the excavation or removed soil contained hazardous substances and why the soil contained such substances;
 - h. All analyses or tests and results of analyses of the soil that was removed from the Property;
 - i. All persons, including contractors, with information about (a) through (h) of this request.
15. Please provide copies of all reports, information or data related to soil, water (ground and surface), or air quality and geology/hydrogeology at and about the Property.
16. Please provide copies of any photographs that you may have regarding environmental conditions on the Property.

Your Affiliation with Other Owners, Operators or Tenants

17. Are you affiliated, either by marriage, family relationship or common business relationships, with any other owner, operator or tenant on the Property?
18. Are you affiliated, either by marriage, family relationship or common business relationships, with any other persons named in the cover letter? If so, please explain the relationship in detail.
19. Did you or any of the other persons named in the cover letter ever lease the Property to any person or entity? If so, please provide a list of lessees, type of business operations and time periods for each lease. Please provide contact information for the lessee if available.
20. Provide IDEM with the name(s) of any party or parties of which you are aware that are not named in the cover letter that may have information regarding the contamination or may have contributed to the contamination of the Property and any associated groundwater plume.

Insurance Information

21. Please list and provide copies of all casualty, liability and/or pollution insurance policies, and any other insurance contracts referencing you, the Property or facility (including, but not limited to, Environmental Impairment Liability, Pollution Legal Liability, Cleanup Cost Cap or Stop Loss Policies, Institutional Controls and Post Remediation Care Insurance). Include any and all policies providing you with liability insurance relating to the Property since you first owned and operated the Property.
22. To the extent not provided in response to the question above, please list and provide copies of all insurance policies that may potentially provide you or other owners, operators or tenants with insurance for bodily injury, property damage and/or environmental contamination in connection with the Property and/or business operations.
23. Identify any person or organization that required you to produce evidence of your casualty, liability and/or pollution insurance coverage for the Property, including the nature of the insurance requirement and the years when the evidence was required.
24. If there are any such policies of which you are aware but neither possess copies, nor are able to obtain copies, identify each such policy to the best of your ability by identifying:
 - a. The name and address of each insurer and of the insured;
 - b. The type of policy and policy numbers;
 - c. The per occurrence policy limits of each policy; and,
 - d. The effective dates for each policy.

25. Identify all insurance brokers or agents who placed insurance for you or other owners, operators or tenants of the Property, and identify the time period during which such broker or agent acted in this regard.

26. Identify all previous settlements by you or other owners, operators or tenants of the Property with any insurer which relates in any way to environmental liabilities on the Property, including:
 - a. The date of the settlement;
 - b. The scope of release provided under such settlement;
 - c. The amount of money paid by the insurer pursuant to such settlement.Provide copies of all such settlement agreements.

27. Identify all communications and provide copies of all documents that evidence, refer, or relate to claims made by you or on your behalf, or by any other owner, operator or tenant under any insurance policy which relates in any way to environmental liabilities on the Property. Include any responses from the insurer with respect to any claims.

ATTACHMENT C

RESPONSE ACTIONS STATEMENT OF WORK

ATTACHMENT C

RESPONSE ACTIONS STATEMENT OF WORK

1. Potentially Responsible Parties (PRPs) shall designate a project manager responsible for overseeing the implementation of the work required by this Response Actions Statement of Work (SOW) and notify IDEM, in writing, of its decision within thirty (30) days of the date of the Notice Letter. PRPs shall also notify IDEM, in writing, of the name, title, and qualifications of all qualified persons and of any contractors to be used in carrying out the terms of this SOW. All Response Action (the "Work") to be performed by PRPs pursuant to this SOW shall be performed under the direction and supervision of qualified person(s) with expertise in hazardous substance site investigation and remediation.
2. All Work performed and documents submitted shall be in accordance with all applicable laws, regulations and with IDEM's [State Cleanup Program Guide](#) and [Risk-based Closure Guide](#) (RCG), and their respective subsequent versions. Any Work that varies from or is inconsistent with the applicable guidance must be demonstrated by the PRPs to be consistent with the remediation objectives of [Indiana Code \(IC\) 13-25-5-8.5](#).
3. All work plans and reports related to the practice of geology required by this SOW shall be designed and implemented under the direction and supervision of a Licensed Professional Geologist (LPG) licensed in Indiana with expertise in hazardous substance site investigation and remediation. If the Work requires a designed remediation system or engineered barrier, the work will be done under the direction and supervision of a Professional Engineer (PE) with expertise in hazardous substance site investigation and remediation.
4. PRPs shall use quality assurance, quality control, and chain of custody procedures for any environmental data field collection and laboratory analysis. The PRPs shall incorporate required elements of a Quality Assurance Project Plan (QAPP) into any required work plan or sample collection and analysis. QAPP elements to be incorporated in a work plan or sample collection activity shall be in accordance with the following:
 - a. The QAPP elements shall detail the standard operating procedures to be employed to collect and analyze data. The QAPP shall also document the systematic process that will be used to ensure and verify the quality of the data collected. At a minimum, the QAPP shall include the following:
 - i. A description of project management structure and key personnel.
 - ii. A written Conceptual Site Model, including background and history of the Facility.
 - iii. Specific procedures for collecting historical operational documents and records.
 - iv. Goals and objectives for data collection and analysis.

- v. Specific methods and procedures that will be utilized for collecting environmental data.
 - vi. Data quality objectives and measurement performance criteria.
 - vii. The standard procedures for sample handling that will be used during the Work.
 - viii. Analytical methodologies and laboratory quality control procedures.
 - ix. Project specific quality assurance responsibilities and procedures.
 - x. Data management procedures.
5. PRPs shall provide IDEM's Project Manager a minimum of fourteen (14) days of notice prior to conducting sampling and analysis under this SOW, unless emergency conditions prohibit such notice or shorter notice is agreed to by IDEM in writing. To provide quality assurance and maintain quality control of field sample collection and laboratory analysis, the PRPs shall do the following:
- a. Ensure that all sampling and analyses are performed according to [U.S. EPA SW-846 methods](#), the QAPP elements included in specific IDEM approved work plans, or other methods deemed satisfactory by IDEM.
 - b. Ensure that any laboratories used by the PRP for analyses participate in a documented Quality Assurance/Quality Control (QA/QC) program that complies with U.S. EPA guidance documents. As part of such a program, and upon request by IDEM, arrange for the laboratories to perform analyses of samples provided by IDEM to demonstrate the quality of analytical data for each such laboratory.
 - c. Ensure that data quality objectives, sample analysis methodologies and field screening methodologies allow sampling and analysis to achieve screening and investigation goals. This includes ensuring that laboratory detection limits are at least as stringent as the [most current residential published levels](#), unless less stringent detection limits are approved by IDEM upon request of the PRP.
 - d. Ensure that all laboratory data submittal packages include the information necessary to meet IDEM's minimum data documentation requirements (MDDRs) and full QA/QC data quality objectives. These requirements can be found in [Table 2-B of the RCG](#), and are incorporated by reference into this SOW.
 - e. Maintain and submit to IDEM detailed sample collection field sheets and field notes.
 - f. Upon IDEM's request, perform confirmatory sampling for specified contaminants.
6. Reports and work plans must be submitted to the IDEM Project Manager via the State Cleanup e-Submission Portal (ESP) in accordance with the [Document Submittal Guidelines](#) for Electronic Documents. Access to the ESP will be granted upon completion of the [IDEM e-Submission Enrollment Form](#). A copy of all sampling results must also be formatted in accordance with the [Electronic Data File Submittal Guidelines](#) and submitted to IDEM's sample database at olqdata@idem.in.gov.

7. IDEM may reject, require re-sampling, and/or require that the PRPs utilize a different laboratory if any data gathered is not consistent with the requirements listed in Paragraphs 4 through 6.
8. PRPs shall make the results of all sampling, including raw data, and/or tests or other data generated by PRPs, or on PRPs' behalf, available to IDEM. PRPs shall not make any claim of confidentiality or privilege with respect to analytical data generated.
9. Upon IDEM's request, PRPs shall provide to IDEM and/or its authorized representative the opportunity to split or duplicate any samples collected by the PRP pursuant to the implementation of this SOW.
10. PRPs shall submit the following plans and reports to IDEM:
 - a. Initial Site Investigation (ISI) Report
 - b. Vapor Intrusion (VI) Work Plan
 - c. VI Assessment Reports
 - d. Annual Progress Reports
 - e. Further Site Investigation (FSI) Work Plan
 - f. FSI Report
 - g. FSI Work Plan Addendum
 - h. FSI Report Addendum
 - i. Remediation Work Plan (RWP)
 - j. RWP Implementation/Completion Report
 - k. Remediation Progress/Quarterly Monitoring Reports
11. Reports and plans submitted to IDEM in accordance with Paragraph 10 of this SOW shall satisfy the following requirements:
 - a. **Initial Site Investigation (ISI) Report:**
 - i. The goal of the ISI Report is to provide a screening level assessment of soil, groundwater, surface water, sediment or soil gas contaminant sources, preferential pathways for contaminant migration, contaminant extent and exposure pathway evaluation.
 - ii. The ISI Report shall include any previously collected or historically collected environmental data such as, but not limited to:
 1. Phase I Environmental Site Assessments
 2. Phase II Environmental Site Assessments
 3. Data collected under an environmental permit
 4. Past release reports and data
 5. Data collected during disposal of a solid or hazardous waste

b. Vapor Intrusion (VI) Work Plan:

- i. The goal of the VI Work Plan shall be to evaluate any potentially complete VI pathways, including an evaluation of preferential pathways, soil gas, and indoor air as warranted per the [IDEM RCG](#), and incorporated by reference into this SOW.
- ii. At a minimum, the VI Work Plan shall:
 - a. Specify the objectives for the investigation.
 - b. Include an assessment of risks posed by the hazardous substances of concern.
 - c. Take into consideration the expected future use of the Facility and measurable risks posed by the hazardous substances of concern and measurable risks to human health, natural resources and the environment, in accordance with [IC 13-25-5-8.5](#).
 - d. Include the QAPP elements required in paragraph 4, above.
 - e. Include appropriate maps to document current or historic source areas, subsurface utilities or structures, proposed sample locations, and any sensitive environments or receptors.
 - f. An updated Conceptual Site Model.

c. VI Assessment Reports:

- i. The VI Assessment Report shall be developed and submitted to IDEM to evaluate the completeness of contaminant vapor migration into residential dwellings or commercial/industrial buildings.
- ii. The VI assessment shall incorporate sampling of any residential dwelling and/or commercial/industrial building in accordance with current guidance (e.g., any buildings within 100 feet of chlorinated volatile organic compound concentrations exceeding the residential soil gas published level).
- iii. The VI Assessment Report shall detail and provide written analysis of the data collected to evaluate the completeness of contaminant vapor migration into residential dwellings or commercial/industrial buildings.
- iv. The VI Assessment Report shall follow the requirements of [Section 2.2.6](#), [2.3.6](#), and [2.3.7](#) of the RCG, which are incorporated by reference into this SOW; and
 1. A completed IDEM [Indoor Air Building Survey Checklist](#) for each dwelling or commercial/industrial building sampled.
 2. Other sample collection field sheets showing beginning and ending pressure readings from VI sample canisters used.
- v. Appropriate maps depicting the relationship of the source and the extent of the contaminated groundwater to potential receptor residential or commercial buildings must be submitted.
- vi. Appropriate maps and tables must also be submitted depicting the results of VI sampling.

d. Annual Progress Reports:

- i. The Annual Progress Report shall follow the outline included in the [Remediation Services Annual Report, Indiana State Form 57108](#) which is incorporated by reference into the SOW.
- ii. At a minimum, with respect to the preceding year, these reports shall:
 1. Describe the actions that have been taken to comply with this SOW during the preceding year.
 2. Describe any data gaps and the delineation status of soil, groundwater, and vapor.
 3. Describe any potentially completed exposure pathways that may require a remedy or control.
 4. Describe any remedies or controls planned or already in place.
 5. Describe any work planned for the following year.
 6. Describe all problems encountered, any anticipated problems or delays, and the solutions developed to address the problems or delays.

e. Further Site Investigation (FSI) Work Plan:

- i. The goal of the FSI Work Plan shall be to determine the complete nature and location of contaminant releases and source areas, delineate the extent of contamination in soil, groundwater, soil gas/indoor air, surface water and sediment to the IDEM RCG residential screening levels or other IDEM approved site specifically derived screening levels.
- ii. At a minimum, the FSI Work Plan shall:
 - a. Specify the objectives for the investigation and delineation of the extent and migration of hazardous waste, hazardous substances or hazardous constituents, petroleum, petroleum substances or constituents.
 - b. Be based on background levels of contaminants that occur naturally at the Facility.
 - c. Include an assessment of risks posed by the hazardous substances of concern.
 - d. Take into consideration the expected future use of the Facility and measurable risks posed by the hazardous substances of concern and measurable risks to human health, natural resources and the environment, in accordance with [IC 13-25-5-8.5](#).
 - e. Include the QAPP elements required in paragraph 4, above.
 - f. Include appropriate maps to document current or historic source areas, subsurface utilities or structures, proposed sample locations and any sensitive environments or receptors.
 - g. An updated Conceptual Site Model.

f. FSI Report:

- i. The FSI report, at a minimum, shall include the following:
 - a. A summary of historical operations, hazardous substance use and management, and potential source areas of the Facility.
 - b. An updated Conceptual Site Model, including a detailed discussion of the fate and transport of contaminants and migratory pathways of contaminants at the Facility.
 - c. An evaluation and description of subsurface geology.
 - d. An evaluation and description, including locations and depths, of subsurface utilities and drains.
 - e. Engineering survey of longitude, latitude and elevation of each soil boring, monitoring well and utility on the Facility.
 - f. A determination of groundwater flow direction.
 - g. Appropriately scaled figures depicting known or potential source areas, utilities, potentiometric surface maps, locations of buildings and structures, locations of all soil borings, locations of all monitoring wells, locations of any other sample locations and well construction diagrams.
 - h. Contaminant distribution maps.
 - i. Geologic cross-sectional maps that include analytical results, borings, wells (with screened areas and water levels), excavated areas, tanks, contaminant distribution, and subsurface utilities.
 - j. 3-dimensional maps depicting vertical and horizontal contaminant distribution and fate and transport.
 - k. Sampling data summary tables.
 - l. Boring logs and groundwater well construction reports
 - m. Field notes.
 - n. Laboratory analytical reports.
 - o. Historic environmental reports, Sanborn maps, city directory information, ownership records, Safety Data Sheets (SDS) sheets, hazardous substance disposal records and hazardous substance generation records.
 - p. Investigation and sampling for indoor air as indicated by sampling results in accordance with the IDEM's guidance in the applicable guidance.
- ii. If a certain element is not applicable to complete the Work at the Facility, the completed report should indicate and provide an explanation of why that element was not included.

g. FSI Work Plan Addendum:

- i. If additional investigation and delineation of the nature and extent of the release of Hazardous Substances at or from the Facility is required an FSI Work Plan Addendum shall be prepared.
- ii. This work plan shall outline and detail the additional investigation that will be completed following IDEM's review and approval of the work plan.
- iii. This document shall address the comments and concerns that IDEM indicates remain following the completion of the FSI.
- iv. Shall incorporate all of the elements required in paragraph 11(e), above.
- v. Shall incorporate all past results of environmental investigation.

h. FSI Report Addendum:

- i. The FSI Addendum shall contain the results of any additional investigation and delineation completed at the Site in accordance with the IDEM approved FSI Work Plan Addendum.
- ii. Based on the results of the FSI and/or the FSI Report Addendum, IDEM may require additional FSI Work Plan Addendums and FSI Report Addendums as necessary to complete the delineation of the nature and extent of contamination.
- iii. All FSI Work Plans and FSI Reports submitted for the Facility are subject to IDEM's review and approval.
- iv. Shall incorporate all of the elements required in paragraph 11(f), above.
- v. Shall incorporate all past results of environmental investigation.

i. Remediation Work Plan (RWP):

- i. The RWP shall describe and evaluate possible options to prevent, minimize, or mitigate the release.
- ii. The plan shall include the proposed response action(s) and a rationale for the proposed action(s).
- iii. The proposed response action(s) must be protective of human health and be consistent with the remedial objectives set forth in [IC 13-25-5-8.5](#).
- iv. The RWP shall follow the outline included in the [Remediation Work Plan Completeness Checklist, Indiana State Form 53413](#) and incorporated by reference into the SOW.
- v. The RWP shall additionally include, at a minimum, the following:
 1. Any land use assumptions made by the Respondent.
 2. Evidence of how the Site is zoned (if applicable).
 3. A description of any engineering barriers or institutional controls that form the basis of the proposed response actions.
 4. If any institutional controls are proposed, the Proposed Response Plan must include an analysis of the durability, reliability and

effectiveness of the proposed institutional controls, including a discussion of who will be responsible for monitoring and enforcing the controls.

5. A detailed summary of long-term Operation and Maintenance requirements for any part of the remedy.
6. If Operation and Maintenance is required, an Operations, Maintenance and Monitoring (OM&M) Plan must be submitted as part of this Plan.
7. Any cost estimates developed concerning implementation of the proposed response action(s).

j. RWP Implementation/Completion Report:

- i. The RWP Implementation/Completion Report shall follow the outline included in the [Remediation Completion Report Completeness Checklist, Indiana State Form 54168](#) and incorporated by reference into this SOW.
- ii. The RWP Implementation/Completion Report shall include, at a minimum, the following:
 1. Documentation of the timeline and installation of the selected remedial option according to the IDEM-approved design specifications.
 2. Implementation of engineering or institutional controls.
 3. Remediation system start up.
 4. Initial performance measurements.

k. Remediation Progress/Quarterly Monitoring Reports:

- i. The goal of Remediation Progress Reports or Quarterly Monitoring Reports are to demonstrate that a chosen remedy is progressing towards the remedial objectives presented in the RWP. Remediation progress is typically shown through quarterly monitoring of release-related chemical concentrations and system evaluation (if applicable). Quarterly groundwater monitoring may also be warranted prior to remediation to evaluate seasonal variation for delineation, risk evaluation, or RWP development purposes.
- ii. Remediation Progress/Quarterly Monitoring Reports, at a minimum, shall include the following:
 - a. A summary of historical operations, hazardous substance use and management, and potential source areas of the Facility.
 - b. A synopsis of previous sampling events.
 - c. A summary and timeline of any implemented remedies, controls, or treatment activities.
 - d. Operational history of any treatment systems or vapor mitigation systems and description of any maintenance activities completed.

- e. Any changes to the OM&M Plan.
 - f. Total treatment or recovery volume, and disposal records.
 - g. An updated Conceptual Site Model, including a detailed discussion of the fate and transport of contaminants and migratory pathways of contaminants at the Facility.
 - h. An evaluation and description of subsurface geology.
 - i. A determination of groundwater flow direction.
 - j. Appropriate figures depicting known or potential source areas, utilities, groundwater flow direction, locations of buildings and structures, locations of all soil borings, locations of all monitoring wells, locations of any other sample or treatment locations.
 - k. Contaminant distribution maps.
 - l. Geologic cross-sectional maps with contaminant distribution and subsurface utilities.
 - m. 3-dimensional maps depicting vertical and horizontal contaminant distribution and fate and transport.
 - n. Sampling data summary tables.
 - o. Plume stability analysis.
 - p. Boring logs and groundwater well construction reports.
 - q. Field notes.
 - r. Laboratory analytical reports.
- iii. If a certain element is not applicable to complete the Work at the Facility, the completed report should indicate and provide an explanation of why that element was not included.

12. Documents required to be submitted to IDEM and Work required by this SOW shall be completed in accordance with the following schedule:

Task	Schedule of Work
A. ISI Report	Within 90 days after the Date of the Notice Letter.
B. and C. VI Assessment	VI Work Plan within 45 days of receiving any lab data indicating a potential VI risk. VI Report within 60 days after receiving IDEM's written approval of the VI Work Plan.
D. Annual Progress Reports	By January 31 st each year following the issuance of the Notice Letter, until a No Further Action status is reached.
E. FSI Work Plan	Submitted to IDEM within 60 days after the Date of IDEM's written request for the FSI.
F. FSI Report	Submitted to IDEM within 90 days after receiving IDEM's written approval of the FSI Work Plan.
G. and H. FSI Addenda To be completed as needed.	FSI addenda will be required if data of a previous FSI Report indicate nature and extent delineation has not been completed to appropriate IDEM residential screening levels. The schedule for FSI addenda will follow the schedule outlined above for Tasks E and F.
I. RWP	Within 90 days after IDEM approves the FSI Report and approves completion of contaminant nature and extent delineation.
J. RWP Implementation/Completion Report	Within 60 days after the Remediation Work Plan has been fully implemented or completed.
K. Remediation Progress/Quarterly Monitoring Reports To be conducted as needed in accordance with the following schedule:	First Quarter: <ul style="list-style-type: none"> • Conducted January 1st – March 31st • Report submitted by April 30th Second Quarter: <ul style="list-style-type: none"> • Conducted April 1st – June 30th • Report submitted by July 31st Third Quarter: <ul style="list-style-type: none"> • Conducted July 1st – September 30th • Report submitted by October 31st Fourth Quarter: <ul style="list-style-type: none"> • Conducted October 1st – December 31st • Report submitted by January 31st

Links:

State Cleanup Program Guide:

https://www.in.gov/idem/files/nrpd_waste-0076_attach.pdf

Risk-based Closure Guide (RCG):

https://www.in.gov/idem/files/nrpd_waste-0046-r2_attach.pdf

Indiana Code 13-25-5-8.5:

<http://iga.in.gov/legislative/laws/2021/ic/titles/013#13-25-5-8.5>

U.S. EPA SW-846 Methods: <https://www.epa.gov/hw-sw846>

Updated Published Level Tables (Table 1 of the RCG):

<https://www.in.gov/idem/cleanups/resources/technical-guidance-for-cleanups/idem-screening-and-closure-level-tables/>

Document Submittal Guidelines for Electronic Documents:

<https://www.in.gov/idem/landquality/resources/document-submittal-guidelines/>

IDEM e-Submission Enrollment Form: idem.in.gov/myesubmission

Electronic Data File Submittal Requirements: <http://www.in.gov/idem/landquality/2369.htm>

Submit Sampling Results/Electronic Data File to: olqdata@idem.in.gov

Vapor Remedy Selection and Implementation (VRSI):

www.in.gov/idem/cleanups/files/remediation_tech_guidance_vapor_remedy_selection.pdf

Remediation Work Plan Completeness Checklist, Indiana State Form 53413;

Remediation Completion Report Completeness Checklist, Indiana State Form 54168; and

Remediation Services Annual Report, Indiana State Form 57108:

https://www.in.gov/idem/forms/idem-agency-forms/#olq_vrp

Indoor Air Building Survey Checklist:

https://www.in.gov/idem/cleanups/files/remediation_tech_guidance_vi_investigation.pdf