



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Eric J. Holcomb
Governor

Brian C. Rockensuess
Commissioner

October 31, 2024

Mr. Ron St. John
St. John-Mittelhauser & Associates,
A Terracon Company
1401 Branding Avenue, Suite 315
Downers Grove, IL, 60515

Re: Chlorinated Volatile Organic Compounds
Interim Remediation Work Plan
Former Contact Metals Welding Facility
70 South Gray Street
Indianapolis, IN
State Cleanup #0000-00-396
Voluntary Remediation #6000101
AI #13387

Dear Mr. St. John:

The Indiana Department of Environmental Management (IDEM) reviewed the *Interim Remediation Work Plan (Interim RWP)* (St. John-Mittelhauser & Associates (SM&A)), July 2, 2024) for the former Contact Metals Welding (CMW) site located at 70 South Gray Street in Indianapolis, Indiana.

The *Interim RWP* was uploaded to the IDEM Virtual File Cabinet (VFC) as document #83661912 under State Cleanup Program (SCP) and Voluntary Remediation Program (VRP) site numbers #0000-00-396 and #6000101, respectively. Related documents to the above CMW site have previously been uploaded to the IDEM VFC under the same site numbers listed above. Further site history can be found in the VFC located on the IDEM website www.idem.in.gov.

The purpose of this technical letter is to provide a brief background summary including comments generated during our review of the above-mentioned interim work plan and to update the public file.

Background

The former CMW (former PR Mallory) site is located on approximately 4.9 acres and surrounded by mixed industrial, commercial, and residential areas. The adjacent properties include the Purdue Polytechnic High School (north), the CSX railroad (south of Building A) residential homes (east and west), and the Battery Properties, Inc property (west and southwest).



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According to the *Interim RWP*, the former P.R. Mallory & Co., Inc. (PR Mallory) began development of the Indianapolis manufacturing operation in the late 1920's. The former PR Mallory site operated on several parcels and CMW later leased a portion of the property in 1978 and then purchased in 1983. In addition, CMW reportedly operated in each of the Buildings A through G on the CMW site starting in 1978. The eventual demolition of Building D (former Plating Department) occurred in 1993 and was later followed by the demolition of Buildings C, E, F and G in 2006 to 2008, and Buildings A and B were demolished in 2019. CMW operated up until it went into receivership and went out of business in February 2014. IDEM issued a Special Notice of Liability letter dated September 17, 2014, to CMW and Evergreen Holdings as State Cleanup site #0000-00-396. In 2023, the CMW portion was sold to Graymor Properties, LLC. The Battery Properties, Inc. (BPI) is the current entity of the former PR Mallory, and the surrounding parcels of the former PR Mallory property are owned by entities controlled by the Englewood Community Development Corporation.

Past operations at the site(s) consisted of metal machining, plating, press operations, and parts degreasing. According to previous reporting, trichloroethene (TCE), 1,1,1-trichloroethane (1,1,1-TCA), and carbon tetrachloride (CT) were used in the degreasing operations. The previous reports indicated that metals, semi-volatile organic compounds (SVOC), polychlorinated biphenyls (PCB) and pesticides were also present at the site. The site operations included delivery of chemicals and waste disposal through an on-site loading dock to a nearby catch basin within the dock. The former PR Mallory operation reportedly used TCE into the mid-1970's. It is reported that historically, TCA was used in the degreasers at the CMW facility (Former Buildings A, B, C, D, E, F, and G) from 1978 through early 1992. Several investigations were conducted at the former CMW facility between 2014 and 2020 to complete a Conceptual Site Model (CSM) characterization. The contamination at the CMW site included chlorinated volatile organic compounds (VOC) impacting soil, groundwater, and vapor intrusion (VI) pathways and exceeded regulatory cleanup criteria. Based on the data collected, TCE appeared to be the most prevalent release related chemical detected at the source areas (i.e. former drum storage areas, former degreaser areas, and plating areas).

In 2022 and 2023, additional soil and groundwater sampling activities were conducted to update the CSM, and a *Site Characterization Report* (SM&A, April 9, 2024) (VFC 83629481) was submitted in 2024. The *Site Characterization Report* listed several former Solid Waste Materials Units (SWMU) at the CMW site that included the Degreaser #1, Degreaser #2, Degreaser #3, Plating Shop, Plating Solution Storage, Waste Drum Storage, Former Drum Storage Area / Railroad Spur Area, and Sewer System(s). The characterization report also summarized previous investigation data for soil, groundwater, and vapor sampling obtained prior to 2022 and the more recent data from the site characterization activities to further characterize the chlorinated VOC impacts. The *Site Characterization Report* also listed four main areas of concern as the Loading Dock Area, Ultra Sonic Degreaser, In Drive / Plating Shop and Settling Pits.

The proposed *Interim RWP* included a summary of the previous investigation data, targeted source areas, and detailed interim remedial options to address contamination of the chlorinated VOCs in soil, groundwater, and soil gas. The vapor migration pathway to the sewer systems has been controlled since May 2022 by a vapor extraction system temporarily mitigating vapors to nearby residential structures. The proposed *Interim RWP* remedy is anticipated to hydraulically contain the groundwater plume from impacting the combined storm and sanitary sewer system under South Gray Street. In addition, the *Interim RWP* indicated that the current sewer vapor extraction system is costly to operate and requires significant operation and maintenance (O&M). According to the *Interim RWP*, addressing the chlorinated VOCs in the targeted areas is the primary remedial goal at this time. Any remaining release related chemicals (SVOCs, PCBs, and Metals) will be addressed in a final *RWP*, which will be submitted later.

The following comments were generated during IDEM's review of the *Chlorinated VOC In-Situ Thermal Remediation Report* (SM&A, July 2, 2024). The comments are organized by the following titles: clarifications and path forward, purpose and objectives of in-situ thermal remediation, scope of work and remedy components, soil, groundwater, and vapor intrusion evaluations, data quality assurance, and conclusions.

Clarifications and Path Forward

- 1.) According to the *Interim RWP* introduction and background summary, it is stated that "*IDEM has previously voiced some confusions related to which portions of the former PR Mallory site are currently the environmental responsibility of BPI and which are CMW. The BPI and CMW parcels are clearly defined on Figure 1-1 from the SCR. Figure 1.4-1 shows the location and development date of each of the PR Mallory buildings on the property that was taken over by CMW.*"

IDEM acknowledges the former CMW, and former PR Mallory site ownership, operation, and/or site boundaries as illustrated on Figure 1.4.-1. However, IDEM's ongoing concerns are based more on the continued unresolved issues between the responsible parties, other entities, and stakeholders of the former CMW and PR Mallory site(s), and progress toward a sitewide remedy. IDEM continues to receive and review reports and correspondence from all parties involved seemingly challenging each sides findings of facts. In the meantime, there remains a significant lack of a sitewide remedy since the early 2000s and more recently over the past ten years (approximately 2014 to 2024). As such, IDEM continues to utilize limited time and resources attempting to get all parties involved to implement a viable sitewide remedy at the CMW site. In addition, according to a recent letter (VFC #83715308) to IDEM dated September 19, 2024, site access to CMW is now being denied by the current owner. The recent access denial by the current owner only adds to the ongoing uncertainty and progress going forward of implementing a viable remedy at the CMW site. Please provide an update on progress toward gaining site access from the current property owner to implement the proposed

scope of work and clarification on an anticipated path forward. If necessary, IDEM is available to assist with site access.

- 2.) In addition, the *Interim RWP* indicated that “*The scope of the Certificate of Completion and Covenant Not-to-Sue that CMW seeks through this CIRWP [Chlorinated Interim RWP] covers the release and threatened release of the volatile organic compounds (VOCs) surface soil and subsurface soil from the Site are listed in Table 1.2-1. Groundwater that remains impacted by the remaining CVOCs will be addressed in a RWP to be issued later.*”

IDEM acknowledges that the CMW site referenced in the *Interim RWP* is technically in the IDEM State Cleanup Program (SCP) under Special Notice Letter dated September 17, 2014, and release site number #0000-00-396. Therefore, referencing the Certificate of Completion (COC) and the Covenant Not To Sue (CNTS) specific language in the *Interim RWP* implied that the site is already in the Voluntary Remediation Program (VRP). The CMW site is in the VRP under site number #6000101 and signed Voluntary Remediation Agreement (VRA) between IDEM and Battery Properties Inc. (BPI); however, it remains unclear to IDEM which source areas are being addressed jointly or separately and/or if at all between the two CMW sites (i.e. CMW #0000-00-396 and CMW #6000101) and associated responsible parties, other entities and stakeholders. It has been stated to IDEM that all parties are/were negotiating terms of a mutually agreeable path forward and roles associated with a CMW sitewide remedy. IDEM continues to receive conflicting information of whether an agreeable path forward and a sitewide remedy are viable. Please provide additional clarification on the anticipated path forward. If necessary, IDEM may have to take other legal actions to initiate a workable path forward toward a viable sitewide remedy between the responsible parties.

- 3.) IDEM acknowledges that the *Interim RWP* proposed a remedy to treat soils in the unsaturated and saturated zones at select source areas of chlorinated VOCs. In addition, groundwater that remains impacted by the chlorinated VOCs will be addressed in a separate “*RWP to be issued later*”. A phased approach addressing soil and groundwater separately was previously agreed to by IDEM for the former PR Mallory site (VRP 6170902) in the VRP. However, the CMW site approach appears less clear while the *Interim RWP* also indicated that “*a final RWP*” will be submitted later addressing other potential release related chemicals and potentially proposing additional remedial options. It is unclear to IDEM whether the above mentioned RWP “to be issued later” and “a final RWP” will be two separate RWPs addressing different sources and media or one comprehensive RWP addressing all remaining source areas and media. Please clarify.
- 4.) In addition, it is stated in the *Interim RWP* that “*However, the predominant contaminants in the Plating Source Area are trichloroethylene (TCE) and carbon tetrachloride (CT). CMW did not operate the Plating Department during the short*

time that it used TCE. For these reasons, the Plating Department is the sole responsibility of BPI, and the investigations and extent of contamination was not further delineated for the SCR" [Site Characterization Report].

The above statement is an example of what IDEM views as an ongoing concern and continues to add uncertainty to the roles of the various responsible parties, other entities, and stakeholders in addressing all source areas and the successful implementation of the *Interim RWP* and future remedies going forward at the CMW site. Furthermore, based on the above statement it is unclear to IDEM whether the Plating Source Area is being addressed by the proposed *Interim RWP*. Please provide additional clarification on the Plating Source Area and an anticipated remediation path forward.

Purpose and Objectives of In-Situ Thermal Remediation

- 5.) According to the proposed *Interim RWP*, its purpose would be to obtain the following objectives:
- Establish site-specific, non-default chlorinated VOC cleanup objectives, Evaluate remedial alternatives to choose appropriate remedy for the chlorinated VOCs source areas,
 - Perform confirmation sampling upon implementation of the chosen remedial option, and
 - Conduct post-remedial groundwater monitoring.

The evaluation of the *Interim RWP* proposed objectives, remedial alternatives, selected remedy and proposed monitoring are acceptable to IDEM.

- 6.) The *Interim RWP* was submitted to initiate remedial efforts to provide a more complete control of chlorinated VOC migration from the CMW site to the combined sewer system under South Gray Street. The vapor migration pathway to the sewer system continues to be controlled by the vapor extraction system that withdraws vapors from the sewer. However, as stated previously, the sewer vapor extraction system is costly to operate and requires significant operation and maintenance. In addition, according to *Interim RWP* the extraction system also represents an ongoing potential long-term liability that should be addressed through contaminant removal instead of just exposure prevention. IDEM acknowledges the costly operation of the sewer vapor extraction system and that the proposed contaminant removal in addition to exposure prevention is an acceptable remedial approach.
- 7.) According to the *Interim RWP*, the only potentially complete contaminant exposure pathway from the site is the chlorinated VOC vapor migration to residential homes from the combined sewer system. However, upon redevelopment of the site, exposure to excavation workers and additional cost related to the handling and

disposal of hazardous waste soils may occur. The chlorinated VOC remedial objectives proposed in the *Interim RWP* take these exposures into consideration, as well as minimizing or eliminating soils that would need to be managed as hazardous waste if excavated. Soil source removal will additionally reduce the chance that long-term vapor intrusion remedies will be required. Although the soil contamination to be addressed is not believed to be contributing to off-site groundwater contamination to the west of the site, source removal will also curtail any long-term groundwater migration from the site. IDEM acknowledges the above remediation objectives and re-development considerations; however, it did not evaluate the *Interim RWP* regarding any future re-development requirements per current or future owner(s) redevelopment goals or plans. IDEMs review was based on current or future potential exposure risks and based on those evaluations found the *Interim RWP* approach acceptable.

8.) Based on discrete depths of impact to soil, the use of a 3D EVS contaminant model was selected, to evaluate the subsurface impact across the site. Per the model simulation, the estimated area is approximately 13,810 yds³ of source volume. In addition, the *Interim RWP* proposed to use two general types of remedial activities to address the chlorinated VOC impacts that exist in the chlorinated VOC source areas at the CMW Site. Both remedial activities will be completed by thermal conductive heating (TCH) (i.e. *In-situ Thermal Remedial*) as follows:

- The unsaturated zone soils to a depth of approximately 11-feet will be remediated to achieve TCE concentrations of less than 10 mg/kg.

The purpose of the type one (1) (objective of 10 mg/kg TCE) is to treat unsaturated zone soils to concentrations where the soil will no longer be characteristically hazardous and can be disposed of in Subtitle D landfill if necessary, during the excavation of basements at the site during redevelopment. Additionally, these soils will then be well below the IDEM, short-term direct contact screening level for an excavation worker of 100 mg/kg.

- The saturated zone soils will be remediated from approximately 11-feet in depth to a variable depth ranging from 18 to 36 feet based on soil sampling of the source volumes and generally where the dense, lower gray till occurs. Soils within the saturated zone volume will have all TCE concentrations at or greater than 100 mg/kg treated to less than 19 mg/kg.

The purpose of the type two (2) (objective of 19 mg/kg TCE) is to treat saturated zone soils for the removal of dense non-aqueous phase liquid (DNAPL). Saturated zone soils exhibiting TCE concentrations at or greater than 100 mg/kg (roughly 10% of the solubility limit of TCE) will be treated to less than 19 mg/kg (and likely much lower due to treatment by TCH). The removal of DNAPL zones within the groundwater system at the CMW Site

will likely result in shallow TCE groundwater concentrations being improved substantially.

The Thermal Treatment Zone (TTZ) area and volume is approximately 28,826.6 cubic yards in volume and 39,630 feet with varying depths of impact up to 32 feet below ground surface (ft. bgs.)

The proposed objectives of the thermal conductive heating of the unsaturated and saturated soil zones with an anticipated reduction of chlorinated VOCs in groundwater in the select source areas are acceptable to IDEM.

Scope of Work and Components of In-situ Thermal Remediation

9.) IDEM acknowledges the scope of work for the thermal conductive heating contractor, Environmental Remediation Group (ERG), for the CMW *In Situ Thermal Remediation* (ISTR) project summarized below:

- Completion of a Remedial Design to finalize the layout of the heating and extraction wells.
- Installation of heater borings, extraction wells, conveyance piping, electrical conduits, natural gas lines, gas distribution system(s), power delivery, equipment, and ex situ (aboveground) treatment equipment.
- Initiation and operation of the ISTR system for an estimated three-month heating period to bring the subsurface to the design temperature above the heteroazeotropic co-boiling point of the identified contaminants of concern (COCs) and water or soil moisture.
- Operation of the ISTR system for an estimated period of ~50-days at the design temperature to mobilize, extract, and treat the contaminants to the intended cleanup goals.
- Completion of performance monitoring during the heating and design temperature operation periods to assess temperatures, mass removal rates, extracted groundwater and vapor treatment effectiveness and electricity use, and ISTR system operation and energy use.
- Post-treatment soil sampling which will be performed by others, will be assessed in conjunction with the operational data to determine whether additional operation of the ISTR system, or parts of the ISTR system is warranted and, if so, how it will be optimized to complete the treatment process.
- Completion of a cool-down period, ISTR system decommissioning, and site restoration.

The above proposed scope of work and the system components are acceptable to IDEM.

In-Situ Thermal Remediation - Treatment Wellfield

- 10.) The total *In-situ Thermal Remediation* project treatment wellfield consists of 302 TCH heater wells placed ~between 12.5 and 14-ft on center (Depending on starting TCE impacts, hydrogeologic conditions, spatial considerations and cleanup criteria). TCH wells, are designed to heat from ground surface, top of Saturated Zone, or a minimum of 3-ft above the top of impacts, to ~5-ft below the bottom of the TTZ in all areas. Sixty-three (63) multi-phase extraction (MPE) wells will be used as primary extraction points, targeting vapor and liquid phase removal of chlorinated VOCs below the groundwater table, and helping maintain hydraulic control during thermal operations. These wells will also serve to create pathways for deep volatilized contaminants to be more efficiently removed during the thermal treatment process. Sixty-nine (69) soil vapor extraction (SVE) wells will be used as additional shallow vapor extraction points, maintaining pneumatic control throughout operations.

An additional forty-five (45) vertical vapor control points (VCPs) screened 1-ft above and 1-ft below the Sewer Line(s) and spaced every ~5 to 10-ft along the line where it intersects the TTZ to mitigate heat impacts, contaminant vapor infiltration and migration, and to allow the existing SVE system to continue operations unimpacted during *In-situ Thermal Remediation* treatment. An insulating assembly designed to meet an insulative value of R-8 using lightweight air entrained concrete will be placed over the entire TTZ where heating extends to ground surface, minimizing unnecessary heat loss, ensuring adequate heating in the shallow Vadose, and acting as a tertiary engineering control to mitigate any fugitive emissions potentials. The *In-situ Thermal Remediation* treatment wellfield design and anticipated operation is acceptable to IDEM.

- 11.) A main component of the thermal treatment operation is the wellfield treatment system that consists of Vapor Treatment unit(s) (VTUs) to cool, and condition extracted off-gas prior to treatment/abatement using vapor phase granular activated carbon (VGAC). The VTU system(s) produce a combined wellfield extraction flow rate of ~2,000-SCFM at 12" Hg (1800 at 16" Hg), which provide a conservative >10-pore volumes per day (PV/day) of extraction throughout the heated volume. The liquid Treatment system consists of a bag filter skid, density separation tanks, and LGAC vessels/media. The thermal treatment operation of the system, and pore volume extraction rate are acceptable to IDEM.
- 12.) The *In-situ Thermal Remediation* treatment application will operate as a single-phase treatment plan for approximately 131 days, and 10-days of post-treatment cooling after the system shutdown. The thermal treatment system designed to remediate the source area of contamination is an appropriate remedy to minimize the on-site contamination leaching to the groundwater and potential off-site vapor

exposure pathways. Additionally, except for minor soil excavation at the former Settling Basins, no additional soil is anticipated to be excavated for off-site disposal. The thermal treatment wellfield layout design and anticipated operation is acceptable to IDEM.

Soil Confirmation Sampling and Monitoring Evaluation

- 13.) To determine the progress of *In-situ Thermal Remediation* treatment remedy, confirmatory soil samples are planned to be collected from the in-situ treatment area to monitor temperature, thermal input and off-gas concentrations. Figure 5.3-2 showed approximately 227 confirmation soil sampling locations within the array of 302 TCH wells. Figure 5.3-1 showed each of the confirmation sample locations, generally located at the center point of each triangle formed by three TCH wells, where temperature monitoring points are also located. Upon completing the final design of the thermal treatment system, potential confirmation sampling location plans will be submitted for IDEM's review. Providing the proposed in-situ treatment area confirmatory soil sampling plans for IDEM's review is acceptable.

Groundwater Confirmation Sampling and Monitoring Evaluation

- 14.) All groundwater monitoring wells installed at the site are constructed of PVC. Prior to start-up of the TCH, the network of six monitoring and eight piezometer wells (CMW-3, CMW-4, CMW-6, CMW-8, CMW-17, PRMW-7, PZ-15, PZ-17, PZ-18, PZ-20 to PZ-22, and PZ-25) will be abandoned, otherwise the wells reportedly would melt during the thermal treatment operations. Following the completion of remediation in the source areas, monitoring wells CMW-3, CMW-4, CMW-6, CMW-8, CMW-17, and PRMW-7 will be replaced by new wells constructed of stainless steel to avoid the potential for PVC wells being compromised by the subsurface temperatures. The proposed monitoring well replacement of the above listed wells is acceptable to IDEM.
- 15.) Three months after the completion of the TCH remediation and depending on the temperature of the groundwater within the wells, groundwater samples will be collected from 18 monitoring wells using passive diffusion bags (PDBs). If the groundwater is determined to still be too hot after three months completion of TCH for PDBs to be used, stainless steel bailers will likely be used for sampling. The proposed groundwater sampling strategy is acceptable to IDEM.
- 16.) As previously stated, the proposed replacement of the above-mentioned wells is acceptable to IDEM. In addition, per 312 IAC 13-10-2 requirement, well abandonment forms should be submitted to IDEM and Indiana Department of Natural Resources (IDNR).

Vapor Confirmation Sampling / Monitoring and Wellfield Capture Evaluation

- 17.) IDEM acknowledges that the *In-Situ Thermal Remediation* treatment remedy is proposed to address the identified unsaturated and saturated source areas. Both baseline soil and groundwater sampling prior to and confirmatory soil and groundwater sampling during implementation of the remedy is planned, as well as post-remedial groundwater sampling. However, there is no indication of any vapor monitoring during or after implementation of this interim remedy.

A major concern to IDEM is the continued potential vapor intrusion at nearby residences from the sewer system along Gray and Moore Streets. Currently this is being addressed by the interim sewer vapor extraction system. According to the *Interim RWP*, the *In-situ Thermal Remediation* treatment, when completed, will make the sewer vapor extraction system no longer necessary. During treatment, the *Interim RWP* indicates that vapor recovery wells will be installed to the top of the sewer lines on-site and under Gray Street in all areas where heating will take place. There is no indication as to whether the sewer vapor extraction system and associated confirmatory monitoring of the effectiveness of the system will take place during the implementation of the thermal remedy. IDEM requests that the sewer vapor extraction system remains operational with associated monitoring throughout the *In-situ Thermal Remediation* treatment project. The monitoring results may also be adequate for assessing any in-sewer migration of thermal treatment vapors.

- 18.) The network of TCH wells and vapor recovery wells will be installed at varying depths (Figure 5.2-3) of impacted subsurface, to potentially heat approximately 36,000 yds³ of the treatment zone. Additionally, to capture the VOCs emanating from the sewer lines, sewer vapor extraction system will be installed on top of the combined sewer lines on-site and beneath South Gray Street. The proposed vapor capture above the sewer and beneath the South Gray Street is acceptable to IDEM.
- 19.) However, additional details should be provided for the vapor control points (VCP), to clarify parameters being measured by VCPs. Although the VCP capabilities are unclear, the VCPs may serve as adequate additional vapor sampling points. Currently, the VCPs are located only along the sewer conduit, and not necessarily along building receptor pathways. Please provide the additional details for the vapor control points.
- 20.) In addition, during the sewer vapor extraction system operation, additional sampling locations should be placed in the transport pathway between the perimeter of the target treatment zone and potential building or utility conduit receptors.

Quality Assurance (QA) / Quality Control (QC)

- 21.) The *Interim RWP* proposes to collect confirmation soil samples using EPA Method 5035A for the analysis of VOCs using EPA Method 8260B. The TCH soil confirmation sampling discussed in sections 5.3.3, 5.3.3.1, 5.3.3.2 and analyses methodologies are acceptable to IDEM.
- 22.) The *Interim RWP* does not propose the type of QA/QC that will be submitted with confirmation soil and groundwater samples. All results should be submitted with laboratory reports with QA/QC documentation which meet the R2 Level II elements (MDDRs). The IDEM QA/QC documentation recommendations can be found in Section 2.2.9 (Table 2-B) of the R2. The same information can be found on the web at: https://www.in.gov/idem/files/nrpd_waste-0046-r2_attch.pdf.
- 23.) Groundwater samples for VOCs should be collected and analyzed using EPA Method 8260. If stainless steel bailers are used, an equipment blank should be collected following decontamination to evaluate potential cross-contamination from the non-dedicated sampling equipment. In addition, groundwater sample temperatures at the time of collection need to be noted and provided to IDEM for evaluation.

Conclusions

Based on previously submitted site characterization data for soil, groundwater, soil gas vapor, the delineation appears adequate for the implementation of the proposed interim remedy.

IDEM acknowledges that the *In-situ Thermal Remediation* remedy is a complex treatment requiring several hundred thermal conductive heating wells, several vapor recovery wells, a carbon filter vapor treatment system, and associated infrastructure. In addition, the proposed implementation of *In-situ Thermal Remediation* treatment system is designed to remediate the chlorinated VOC impacted source areas of soil, groundwater and to mitigate the vapors emanating from the combined sewer. As such, the proposed *Interim RWP* and associated thermal treatment remedy is acceptable to IDEM. However, the *Interim RWP* approval is pending further detail regarding continued operation of the sewer vapor extraction system and associated monitoring during implementation of the thermal treatment system.

In addition, IDEM acknowledges that recent access denial by the current owner adds to the ongoing uncertainty and progress going forward with a viable remedy at the CMW site. IDEM is available to assist with site access. IDEM also continues to have concerns regarding the ability of the responsible parties, other entities, and shareholders involved to mutually and successfully implement the *Interim RWP* and any future CMW

site remedies going forward. If necessary, IDEM may have to take other legal actions to initiate a workable path forward toward a viable sitewide remedy between the responsible parties. However, as state above, the *Interim RWP* and the proposed *In-situ Thermal Remediation* treatment is an acceptable interim remedy.

Please respond within 60 days from the receipt of this letter to address the above comments that require a response. If you have any questions, please contact me at (317) 234-0970, (800) 451-6027, or at jkavanaugh@idem.in.gov.

Sincerely,



Jeffrey J. Kavanaugh
Senior Environmental Manager
State Cleanup Program /
Voluntary Remediation Program
Office of Land Quality

cc: IDEM State Cleanup Site #0000396 and IDEM VRP Site # 6000101
Thomas Baker, Hatchett & Hauck, 150 W. Market St., Suite 200, Indpls., IN 46204
David Gillay, Barnes & Thornburg, 11 South Meridian St., Indpls., IN 46204
David Guevara, Taft Law, One Indiana Square, Suite 3500, Indpls., IN 46204
Kyle Amberger, GHD, 6520 Corporate Drive, Indpls., IN 46278
Nick Hill, Enviroforensics, 825 N. Capitol Ave., Indpls., IN 46204
Lisa McCoy, IDEM Office of Legal Counsel (all via electronic email)

It is the goal of IDEM to enable remediation sites to move forward in a timely manner. If an impasse has been reached over technical issues, a Technical Review Panel of non OLQ scientists is available to review and offer a non-binding opinion to help resolve technical disagreements with the VRP and State Cleanup Program project managers. The goal is to facilitate progress at your site. This review process is available immediately. If you would like to request a review by the Panel, please contact Kevin Davis, Branch Chief of Office of Land Quality at (317) 232-4535 or kdavis@idem.in.gov.

Any decision produced by the Technical Review Panel is not an agency action as defined in IC § 4-21.5-1-4 or an order as defined in IC §4-21.5-1-9. This decision is not subject to administrative review because it is not a determination of any legal rights, duties, privileges, immunities, or other legal interests, and because it is issued pursuant to an informal procedure for dispute resolution as allowed by IC 4-21.5-3-34 (a).