



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

LU-16J

Via E-mail and Certified Mail 7009 1680 0000 7671 2323
RETURN RECEIPT REQUESTED

August 30, 2018

Mr. Joseph M. Bianchi
Group EHS Manager
Amphenol Corporation
40-60 Delaware Avenue
Sidney, NY 13838

Mr. Matt Kupcak
Director, Global Environmental Programs
BorgWarner Inc.
3850 Hamlin Road
Auburn Hills, MI 48326

Subject: Franklin Power Products, Inc./Amphenol Corporation
Request for Vapor Intrusion Investigation
Administrative Order on Consent, Docket # R8H-5-99-002
EPA ID# IND 044 587 848

Dear Mr. Bianchi and Mr. Kupcak:

Under Section VIII, Paragraph N (Additional Work) of the RCRA 3008(h) Administrative Order on Consent dated November 24, 1998 (Order), EPA has determined that Respondents Amphenol Corporation and Franklin Power Products, Inc. (FPP/Amphenol), must perform Additional Work at the facility at 980 Hurricane Road in Franklin, Indiana ("Facility" or "Site"). The Additional Work described in this letter is necessary to meet the purposes of the Order, including but not limited to, assuring the selected corrective measures address the actual and potential threats to human health and the environment presented by the actual and potential releases of hazardous wastes or hazardous constituents at or from the Facility.

Summary of Requested Work

EPA met with Amphenol Corp. on August 7 and 8, 2018 to outline the approach to the overall vapor intrusion (VI) investigation in the off-Site Study Area (see below and enclosure), to be proposed to EPA in a Work Plan. The purpose of this investigation is to evaluate the potential for vapors to enter indoor spaces through volatilization from groundwater or *via* direct entry from sewer lines. The Work Plan must propose field and

analytical approaches to measuring VOCs in environmental media, including indoor air, and propose measures to mitigate unacceptable exposures and protect human health.

As discussed during the August 7 and 8 meetings, exterior soil gas samples will be taken along rights-of-ways (ROWS) within the Study Area to expedite the investigation. Amphenol Corp. met with City of Franklin representatives to discuss an access agreement soon after the meeting with EPA and later, on August 20, 2018, Amphenol Corp. attended a City of Franklin Public Works Board Meeting and formally requested a blanket ROW access agreement for the Study Area.

By September 17, 2018, EPA requests that you submit a Vapor Intrusion Investigation Work Plan (“Work Plan”) to investigate potential vapor intrusion (VI) in the Study Area. Respondents must investigate whether a complete pathway of volatile constituents is present from historical solvent releases at the Site to off-Site receptors. Primary migration pathways of concern include storm and sanitary sewers, and groundwater to soil. The Work Plan must be consistent with EPA guidance found in *OSWER Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air* (EPA OSWER, 2015).

Respondents and EPA will coordinate closely during plan development with the objective of Work Plan execution upon approval.

Purpose of Sampling Event

The primary objective of the requested investigation is to determine whether potential Study Area vapor intrusion requires mitigation measures to protect human health.

Study Area

The investigation will focus on the Study Area where VOCs were historically present in groundwater, soil gas, and sewer gas downgradient of the Site at elevated levels. EPA evaluated historical environmental data provided under the Corrective Action order (circa 1990’s) to guide the planning and scope of the investigation. The Study Area boundary was based on historical data and current remedial operations reports: the remedial facility investigation; corrective measures study; and (ongoing) corrective measures implementation phases of the corrective action work. Data from the VI investigation will be used to inform next steps, including a need to expand the Study Area, and to determine a need for additional remedial measures.

The Study Area includes portions of streets that are near and downgradient of the former facility: Hurricane Road, Hamilton Avenue, Forsythe Street, Glendale Drive, and Ross Court (figure provided by Amphenol Corp. enclosed).

Please provide a draft Conceptual Site Model (CSM) with the investigation report using the collected data for evaluating conditions and informing next steps. In a subsequent work plan request, EPA will require that current groundwater conditions be delineated. This work will update the CSM and inform decisions regarding a need to expand the Study Area.

Work Plan

The Work Plan must describe the general approach to collecting VOC samples for evaluating potential soil vapor intrusion pathways in the Study Area and provide the field and analytical SOPs for completing the work.

Following the demonstration of a complete exposure pathway of VOCs in indoor air, determinations will be made regarding the need for mitigation in individual homes and remediation in areas of preferential pathways. To the extent practical, investigations within buildings and on individual properties should ensue with the goal of limiting return visits, which can cause disruption and inconvenience for building occupants and owners. EPA recognizes potential delays with obtaining formal access to homes/buildings and the potential need for more than one mobilization.

Soil Gas Samples To expedite the investigation, exterior soil gas samples will be taken along rights-of-ways (ROWS) within the Study Area where Amphenol Corp. has formally requested a blanket access agreement with the City of Franklin. Sample results above EPA soil gas screening levels at the ROW locations near homes initiates the requirement for concurrent collection of sub-slab and indoor air samples at adjacent homes.

Sub-Slab and Indoor Air Samples The Work Plan must identify the approach to sub-slab and indoor air sampling and include a summary of the plan to obtain access to homes.

Sewer Gas VOC Samples The Work Plan should propose sample locations and describe the rationale for continuing the VI investigation along the pathway. Include the following locations in the work plan:

- 1) manholes within the streets identified in the Study Area;
- 2) lateral sewer lines if sewer gas exceeds EPA indoor air screening levels; and,

- 3) indoor samples in bathrooms if lateral sewer samples exceed EPA indoor air screening levels.

Where sewer gas levels exceed EPA indoor air screening levels, a sewer video survey should be completed to characterize conditions that could provide a pathway for entry of soil vapors from underlying soil or groundwater (cracks and other defects).

The Work Plan should include a table showing which sample type will be compared to which screening value for each chemical on the analyte list.

Groundwater Samples

As part of this investigation, you must sample groundwater any intact monitoring wells in the Study Area, and measure water levels.

Analyte List

Samples will be analyzed for these Site-related constituents identified in previous investigations and sampling events conducted under the AOCs: vinyl chloride (VC), trans-1,2-dichloroethylene (trans-1,2-DCE), 1,1-dichloroethane (1,1-DCA), cis-1,2-dichloroethylene (cis-1,2-DCE), 1,2-dichloroethane (1,2-DCA), methylene chloride, 1,1,1-trichloroethane (1,1,1 TCA), trichloroethylene (TCE), and tetrachloroethylene (PCE).

Third-party Validation

Analytical results must be validated by a qualified data validation that is independent of the project.

Quality Assurance

The Quality Assurance (QA) Plan must be consistent with EPA's QA/R-5, *EPA Requirements for Quality Assurance Project Plans* (EPA 2001) found at https://www.epa.gov/sites/production/files/2016-06/documents/r5-final_0.pdf. All samples must be analyzed by a laboratory with appropriate ELAP certification, as specified in the guidance. Please also refer to *Guidance for Quality Assurance Project Plans*, EPA QA/G-5 (EPA 2002) when developing the QA/Quality Control portions of the Work Plan.

Response Plan

Respondents' proposed Work Plan must include the proposed response measures for mitigating vapor entry into buildings from the soil column and terminating the potential migration of soil vapors into buildings via a sewer pathway. If the investigation results in additional VI pathways (along other utilities), then Respondents must propose corresponding remedial measures.

Potential On-Site Investigative Work

During the August 7 and 8, 2018 meeting and site visit, EPA and Amphenol Corp discussed the need for and approach to indoor air sampling in the occupied buildings on the former facility property. Respondents may include the on-Site VI work in the subject Work Plan. Alternatively, that investigation could be included in the second ambient air sampling event scheduled for this fall.

Schedule

The proposed Work Plan must include a schedule of activities from pre-work plan activities through final report submittal.

Next Steps - Other Corrective Action Work

When this investigation is completed, EPA will determine whether there is a need for additional VI investigation in an expanded area. EPA will require a groundwater investigation to determine whether a plume is present downgradient of the Site and whether Site constituents of concern (COCs) impact human health and the environment.

The plume will be defined two ways:

- 1) COCs exceeding EPA Maximum Contaminant Levels (MCLs) or Vapor Intrusion Screening Levels (VISLs); and,
- 2) COCs exceeding water quality standards at Hurricane Creek.

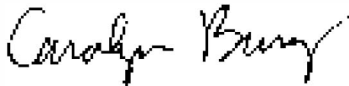
In addition, the extent of any source materials must be determined, including DNAPL or contaminated soils contributing to a groundwater plume related to Site activities. The extent of soil contamination will be determined by:

- 1) COCs exceeding Indiana's Residential Soil Migration to Groundwater Screening Levels (MTGSLs) in unsaturated soils; and,

- 2) Saturated soils exceeding a soil screening level calculated using EPA's *Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites* (EPA OSWER, 2002). See <https://semspub.epa.gov/work/HQ/175878.pdf>.

If you have any questions, please contact me at (312) 886-3020. Also, please feel free to contact Dr. Bhooma Sundar, EPA risk assessor, at (312) 886-1660 to assist you in Work Plan development.

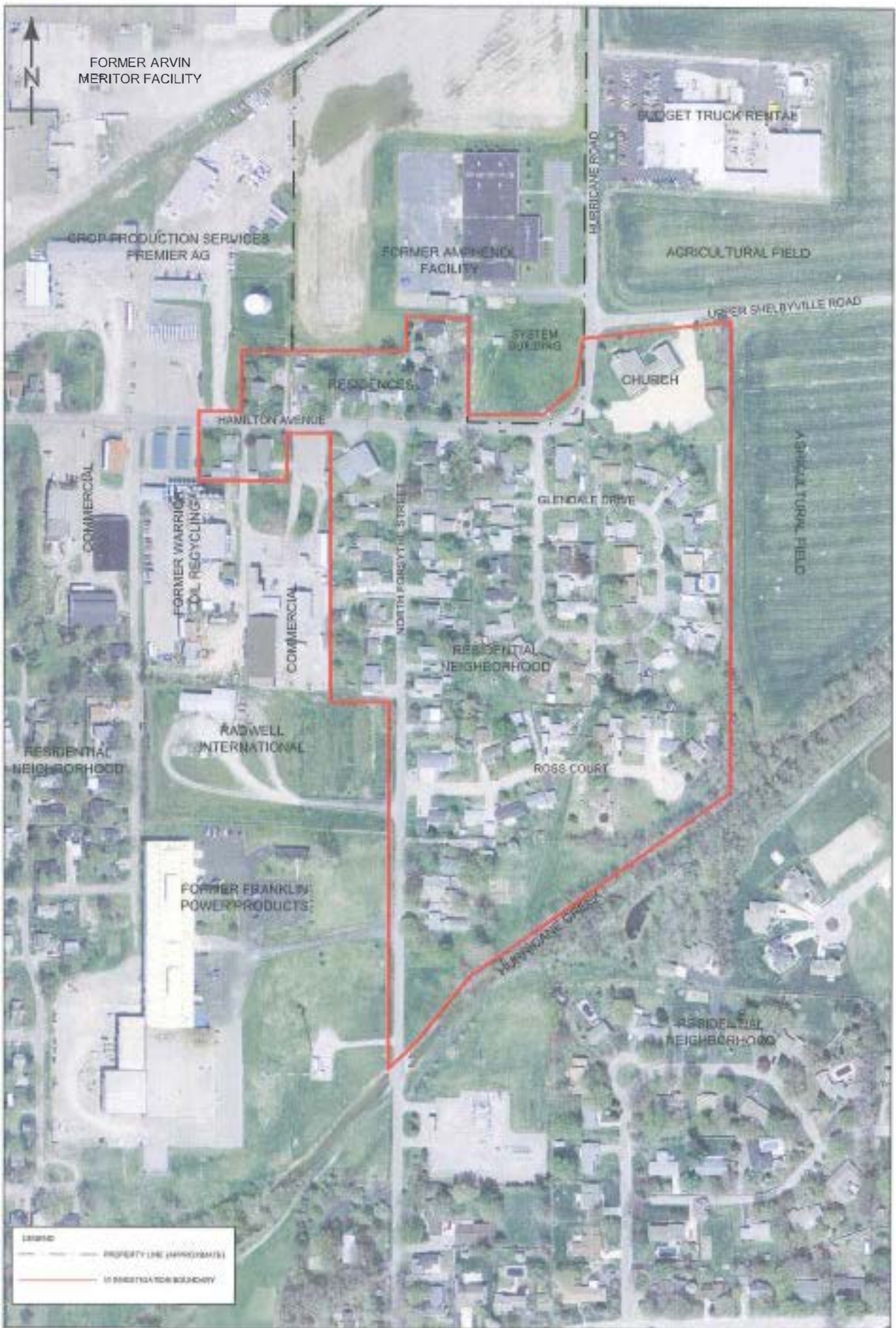
Sincerely,



Carolyn Bury
Project Manager
Corrective Action Section 2
Remediation and Re-use Branch

Enclosure

ecc: Brad Gentry, IWM Consulting Group, LLC.
Don Stiliz, IDEM
Bhooma Sundar, RRB CAS2
Conor Neal, RRB CAS2



LEGEND
 - - - - - PROPERTY LINE (APPROXIMATE)
 - - - - - 10 ENVIRONMENTAL BOUNDARY



DRAWN BY: L. STRUM
 DATE: 9/27/99
 REVISED: 03/21/2018
 HWP# 111291-01
 DWG. NO. 111291S1

FIGURE 1
 VI INVESTIGATION MAP

FORMER AMPHENOL RFI/CMS
 980 HURRICANE ROAD
 FRANKLIN, INDIANA



