STATE OF INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

PUBLIC NOTICE NO: 2015 – 6A – F DATE OF NOTICE: JUNE 2, 2015

The Office of Water Quality issues the following NPDES FINAL PERMIT.

MINOR - RENEWAL

RADIO MATERIALS CORP, Permit No. IN0063657, FOUNTAIN COUNTY, 1095 E Summit St, Attica, IN. This industrial facility discharges 0.187 million gallons daily of ground water remediation into Riley Lake tributary to the Wabash River. Contact Permit Manager: Miranda Hancock, 317/234-8129, MJHancoc@idem.IN.gov.

APPEAL PROCEDURES FOR FINAL PERMITS

The Final Permits are available for review & copies at IDEM, Indiana Government Center, North Bldg, 100 N Senate Ave, Indianapolis, IN, Rm 1203, Office of Water Quality/NPDES Permit Section, from 9 – 4, M - F (copies 10¢ per page). Each Final Permit is available at the respective, local County Health Department. See these sites for your rights & responsibilities: Public Participation: http://www.in.gov/idem/5474.htm; Citizen Guide: http://www.in.gov/idem/5474.htm; Citizen Guide: http://www.in.gov/idem/5903.htm. Please tell others you think would be interested in this matter

Appeal Procedure: Any person affected by the issuance of the Final Permit may appeal by filing a Petition for Administrative Review with the Office of Environmental Adjudication <u>within</u> eighteen (18) days of the date of this Public Notice. Any appeal request must be filed in accordance with IC 4-21.5-3-7 and must include facts demonstrating that the party requesting appeal is the applicant; a person aggrieved or adversely affected or is otherwise entitled to review by law.

Timely filing: The Petition for Administrative Review must be received by the Office of Environmental Adjudication (OEA) **within** 18 days of the date of this Public Notice; either by U.S. Mail postmark or by private carrier with dated receipt. This Petition for Administrative Review represents a request for an Adjudicatory Hearing, therefore must:

- > state the name and address of the person making the request;
- identify the interest of the person making the request;
- > identify any persons represented by the person making the request;
- > state specifically the reasons for the request;
- > state specifically the issues proposed for consideration at the hearing;
- identify the Final Permit Rule terms and conditions which, in the judgment of the person making the request, would be appropriate to satisfy the requirements of the law governing this NPDES Permit rule.

If the person filing the Petition for Administrative Review desires any part of the NPDES Final Permit Rule to be stayed pending the outcome of the appeal, a Petition for Stay must be included in the appeal request, identifying those parts to be stayed. Both Petitions shall be mailed or delivered to the address here: Phone: 317/232-8591.

Environmental Law Judge
Office of Environmental Adjudication
IGC – North Building- Rm 501
100 N. Senate Avenue
Indianapolis IN 46204

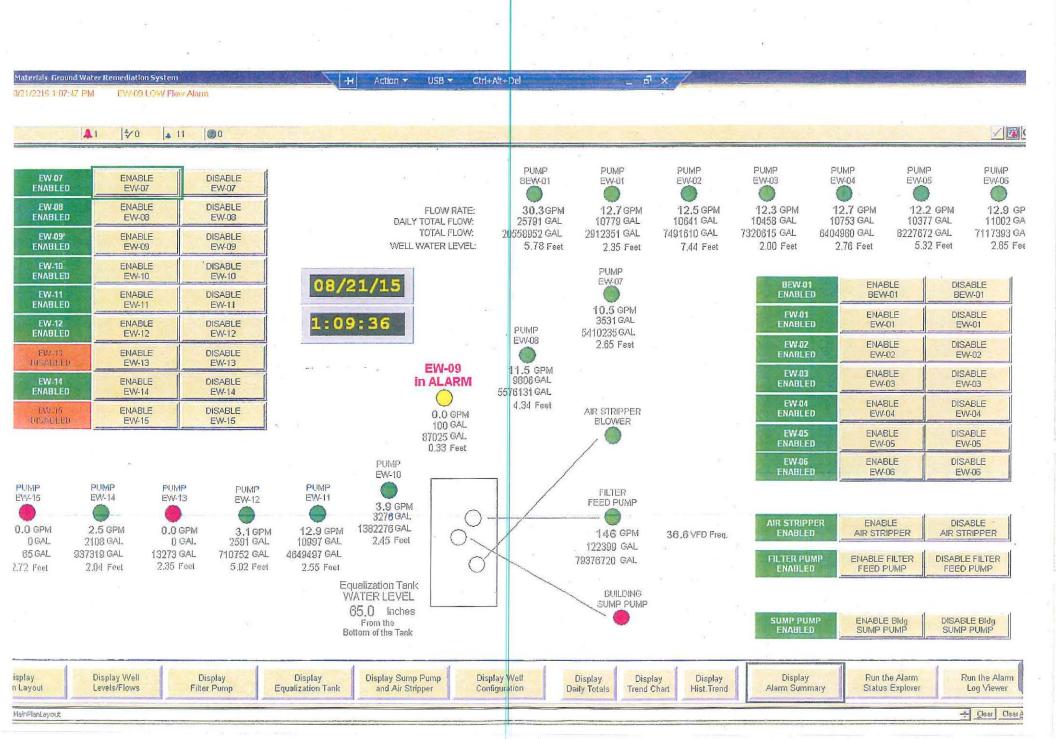
Stay Time frame: If the Petition (s) is filed within eighteen (18) days of the mailing of this Public Notice, the effective date of any part of the permit, within the scope of the Petition for Stay is suspended for fifteen (15) days. The Permit will become effective again upon expiration of the fifteen (15) days, unless or until an Environmental Law Judge stays the permit action in whole or in part.

Hearing Notification: Pursuant to Indiana Code, when a written request is submitted, the OEA will provide the petitioner or any person wanting notification, with the Notice of pre-hearing conferences, preliminary hearings, hearing stays or orders disposing of the Petition for Administrative Review. Petition for Administrative Review must be filed in compliance with the procedures and time frames outlined above. Procedural or scheduling questions should be directed to the OEA at the phone listed above.

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ATTACHMENT 20 RADIO MATERIALS CORPORATION GWET SYSTEM OPERATIONS SCREEN CAPTURE FROM AUGUST 21, 2015

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ATTACHMENT 21 RADIO MATERIALS CORPORATION IDEM AUGUST 13, 2014 NPDES INDUSTRIAL FACILITY INSPECTION REPORT

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Attachment A

IDEM's August 19, 2014 Inspection Report



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

Michael R. Pence

Thomas W. Easterly

Commissioner

August 19, 2014

Via Email to: sdavis@craworld.com Mr. Steve Davis, Engineer RMC Corp & Kraft Foods Global, INC 6520 Corporate Drive Indianapolis, Indiana 46278

Dear Mr. Davis:

Re: Inspection Summary Letter RMC Groundwater Remediation Project NPDES Permit No. IN0063657 Attica, Fountain County

An inspection of the above-referenced facility or location was conducted by a representative of the Indiana Department of Environmental Management, Office of Water Quality, pursuant to IC 13-18-3-9. A summary of the inspection is provided below:

Date(s) of Inspection:

August 13, 2014

Type of Inspection:

Compliance Evaluation Inspection

Inspection Results:

No violations were observed.

IDEM recommends the permittee begin the process of registering for NetDMR. Information on NetDMR can be obtained at http://www.in.gov/idem/6765.htm.

A copy of the NPDES Industrial Facility Inspection Report is enclosed for your records. Please direct any response to this letter and any questions to Kim Rohr at 317-719-1666 or by email to KRohr@idem.IN.gov.

Sincerely,

Donald R. Daily, Inspections Section Chief

Compliance Branch
Office of Water Quality

Enclosure



NPDES Industrial Facility Inspection Report INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

NPDE	S Permit Number:	Facility Type:				7	Facility C	lassification:		TEMPO AI ID
	IN0063657		Industrial		Minor C					
Date	(s) of Inspection: Aug	ust 13, 201	4							
			luation Inspection	ĺ	1041-1-2					21
	and Location of Facility Inspec				Receiving Wat	ters/POTW	<i>l</i> :		Pern	nit Expiration Date
	Groundwater Remedia	ition Proje					1 24			7/30/2015
Attic		IN 479	County: 18 Fountain		Riley Lake t	to Waba	sh Rive			ign Flow: NA
On Si	e Representative(s): Name Last Name	Title		Email					Phone	a
Ste		Engine	eer		is@craworl	ld.com				-291-7026
	Was a verbal sumn	narv of th	e inspection aiv	en to	the on-site	e rep?	Yes	· (*)		
Certifi	ed Operator:	Number: (Class: Effective Dat	e: Exp	oiration Date: E	Email:		1.1		The state of the state of
Peen	Michael Johnson onsible Official:	3149	D 7-1-14					orld.com	Nob.	-1 INC
	Steve Davis, Engineer			X	Permittee: R				SIODE	al, INC
	Corporate Drive					davis@d 17-291-7		.com	-1-	Contacted?
ا المحالة	manalia Indiana 40070				Fax:	17-291-1	7020		-	Yes
India	napolis, Indiana 46278		INSPECT	ONE						165
	Conditions evaluated	were found t				nection (5)			
	C Violations were discov					peccion. (٥,			
	C Potential problems we			ispect	ion. (4)					
								L. IDEM	(2)	
	C Violations were discov								(2)	
	C Violations were discov	ered and ma	ay subject you to a	n appro	opriate enforc	ement re	sponse.	(1)		*
			EAS EVALUATE				ers but			
S	Descriping Waters	(S = Satisfa	ctory, M = Marginal,	U = UI	Self-Monito		aluated N	Complia	naa	Schedules
	Receiving Waters	S	Facility/Site	S	Flow Meas			Complia	nce	Scriedules
S	Effluent/Discharge		Operation	-				F60	Line	4- Cli
S	Permit	S	Maintenance	N	Laboratory		S		Limi	ts Compliance
S	Overflow/Bypass	N	Sludge	S	Records/Re	1.0	N	Other:		
-			DETAILED AR			11-11-11-11-1	er miner		1,000	
	M recommends the perm ined at http://www.in.gov			gisterii	ng for NetDIV	/IR. Into	rmation	on NetDN	/IR c	an be
	eiving Waters:	/IdeIII/07 de								
C.150-100	The receiving stream	is visibly fr	ee of excessive of	leposi	ts of settled s	solids, flo	oating d	ebris, oil,	scui	m, or
	- billowy foam.									
	nents:	a of notable	a faara algaa ar s	alida						
The	receiving stream was fre	e or notable	e loam, algae of s	olius.		4.5				
Effle	uent/Discharge:								_	
S	1. Treated effluent is es	sentially fre	ee of excessive so	olids, f	loating debri	s, oil, sc	um, or l	oillowy foa	am.	
N	2. Pretreatment dischar					sive oils,	grease,	solids, or	foar	m and does
	not appear to be in viola									
_N	_ 3. Pretreatment dischar		itary sewers does	not c	ontain mater	rials that	pass th	rough or i	nter	fere with the
Com	operation of the POTW ments:									
	effluent was clear and fro	ee of color	at the time of the	insped	ction.					

Danielle
Permit: S 1. Does the facility have a copy of the current permit available for reference.
1 1
S 2. Receiving waters are accurately described in the permit.
N 3. The permit has been properly transferred if there is a new owner.
Comments:
The facility has a valid permit.
Overflow/Bypass:
N_1. No unauthorized overflow/bypass events in the past 12 months.
N 2. Overflow/bypass events have been properly reported.
N 3. Any adverse impacts from overflow/bypass events have been properly mitigated.
Comments:
The facility has had no reported bypasses in the past 12 months.
,
Facility/Site:
N_ 1. The facility has standby power or equivalent provision, If required.
S 2. An adequate alarm or notification system for power or equipment failure is available for the treatment facility
S 3. Safe and adequate access is provided for inspection of all treatment units and outfalls.
S 4. Facilities and equipment do not appear beyond their useful life.
5. List any safety concerns noted during the inspection in the box below:
Comments:
The facility has an alarm system that auto-dials the operator on call for any power or equipment failure.
Operation:
S 1. All facilities and systems necessary for achieving compliance with the terms and conditions of the permit are
operated efficiently, including an anticipated bypass report for steps of treatment taken out of service.
S 2. An adequate, qualified operating staff is provided to carry out the operation of the facility, including:
a. Certified Operator's on-site attendance and/or qualified operations personnel attendance is adequate.
b. Adequate documentation of operational activities, including system monitoring and cleaning.
c. Adequate funding to ensure proper operation.
N 3. Solids handling procedures are adequate.
N 4. Documentation of solids removal, handling, and disposal is adequate.
Comments:
All units of treatment appear to be operating efficiently.
Maintenance:
S 1. A maintenance record system has been established and includes maintenance/repair history and
preventative maintenance plan.
S 2. Facility maintenance activities appear adequate.
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Comments

The air stripper is taken apart and cleaned twice a year. There is an inspection sheet that is followed every time the operator is present. Air pressure and water levels are recorded whenever someone is on-site.

Sludge:

N 1. Sludges, screenings, and slurries are handled and disposed of properly.

Comments:

No sludge has been produced or removed.

Self-Monitoring:

- S 1. Samples are taken at pre-designated locations and are representative.
- N 2. Flow-proportioned samples are obtained where needed.
- S 3. The facility conducts sampling of all waste streams, including type and frequency, as required in the permit.
- S 4. Sample collection procedures, including automatic sampling, include:
 - a. Samples are refrigerated during compositing.
 - b. Proper preservation techniques are used.
 - c. Containers and holding times conform to 40 CFR 136.3.
- S 5. Sample documentation is adequate and includes:
 - a. Dates, times, and locations of sampling.
 - b. Name of individual performing sampling.
 - c. Instantaneous flow for flow-weighted aliquots.
 - d. Chain of Custody records.
- N 6. NPDES Permit Total Toxic Organic (TTO) requirements are being met.
- N 7. NPDES Permit Whole Effluent Toxicity (WET) testing requirements are being met.

Comments:

The Self Monitoring Program was rated as satisfactory. All sampling practices are conducted accurately and at the frequency required by the permit.

Flow Measurement:

- S 1. Flow is properly monitored as required by the permit.
- S 2. Flow data and calibration records are available for review.

Comments

The facility's flow measurement program, including all documentation, is adequate and representative.

Laboratory:

The following laboratory records were reviewed:

Chain-of-Custody

Contract Lab Reports

pH Bench Sheets

- N 1. The laboratory practices and protocol reviewed were adequate, including:
 - a. Written laboratory QA/QC manual.
 - b. Samples are properly stored.
 - c. Approved analytical methods are used.
 - d. Calibration and maintenance of instruments is adequate.
 - e. QA/QC procedures are adequate.
 - f. Dates of analyses. (and times, where required)
 - g. Name of person performing analyses.

Contract Lab Information

Pace Analytical

Indianapolis, IN

Comments:

The facility performs pH testing on-site all other parameters are tested at Pace Analytical. Pace was not evaluated on the day of inspection.

Records/Reports:

The following records/reports were reviewed:

DMRs for the period of August 2013 to June 2014 were reviewed as part of the inspection.

- S 1. All facility records for the period including the previous three years were available for review.
- S 2. DMRs and MMRs are completed properly and accurately including:
 - a. "No Ex" column is accurate.
 - b. Signatory requirements are met.
 - c. Reports are prepared by or under the direction of a certified operator.
- N 3. Bypass and Noncompliance reporting are adequate.

Comments:

The requested records were available and appear complete and accurate. July 2013 records were reviewed during a previous inspection on 09/18/13.

Compliance Schedules:		•	
N 1. The NPDES Permit	Schedule of Compliance monitoring and reporting i	milestones have been met.	
N 2. Agreed Order compl	liance milestones have been met.		
Comments:			
There is no Compliance Sch	edule in the current permit, and there is no Agreed	Order.	
Effluent Limits Compliance	3 :	The state of the s	
Yes 1. Were DMRs reviewe	ed as part of the inspection?	•	
No 2. Were violations note 3. Overflow/Bypass an Comments:	ugust 2013 to June 2014 were reviewed as pared during the review of DMRs? d Noncompliance reporting. ent violations for the period reviewed.	t of the inspection.	
There were no reported ento			
	IDEM REPRESENTATIVE		
Inspector Name:	Email:	Phone Number:	
Kim Rohr	KRohr@idem.IN.gov	317-719-1666	
	IDEM MANAGER REVIEW		
IDEM Manager:		Date:	
Andy Schmidt		8/18/2014	

ATTACHMENT 22 RADIO MATERIALS CORPORATION MONTHLY PROGRESS REPORTS DATED SEPTEMBER 15, 2015 AND OCTOBER 15, 2015

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MONTHLY STATUS REPORT INTERIM CORRECTIVE MEASURES RADIO MATERIALS CORPORATION RCRA FACILITY INVESTIGATION (RFI)

Report Date:

September 15, 2015

Facility Name:

Radio Materials Corporation (RMC)

1095 East Summit Street Attica, Indiana 47918

U.S. EPA # IND 005 477 021

Submitted to:

Dr. Bhooma Sundar, U.S. Environmental Protection Agency (U.S. EPA)

Region 5

GHD Project #:

019190

Activity:

Vapor Intrusion Mitigation, Soil Vapor Extraction (SVE), and Groundwater

Interim Corrective Measures (ICMs)

Prepared by:

Steven Wanner

GHD Services Inc. (GHD)

Reporting Period:

August 1 through August 31, 2015

Significant Events and/or Activities Performed During This Reporting Period:

 Contacted residents, scheduled and completed routine vapor mitigation system inspection and maintenance at three residences

Groundwater ICMs

- Operated the Groundwater Extraction and Treatment (GWET) system continuously during the month of August 2015
- Operated the AS/SVE system continuously during the month of August 2015
- The monthly inspection and NPDES sampling for the GWET system was conducted on August 28, 2015
- Operated the AS/SVE system continuously during the month of August 2015. GHD inspected the AS/SVE system on August 13, 2015 and the system was operating normally

Soil ICMs

- Operated the SWMU 5 and 11/AOC 2 SVE system throughout August 2015. Attachment A provides records related to operation
- Inspected the WMU 5 and 11/AOC 2 SVE system and conducted SVE effluent sampling on August 13, 2015 The system was operating normally

Submittals

- Submitted the July 2015 monthly status report for ICM work to U.S. EPA on August 17, 2015
- Submitted the July 2015 Federal Discharge Monitoring Report (DMR) and State Monthly Monitoring Report (MMR) to the Indiana Department of Environmental Management (IDEM) on August 10, 2015, as required by the NPDES Permit No. IN006357

Anticipated Activities to be Performed During the Next Reporting Period (September 1 to September 30, 2015):

- Submit the August 2015 monthly ICM status report
- Submit the August DMR and MMR to IDEM and U.S. EPA
- Continue operation and OM&M of the groundwater ICMs north and south of Summit Street
- Continue operation and GM&M of the SWMUs 5 and 11 SVE system
- Semiannual blower preventive maintenance for AS/SVE and SVE systems by subcontractor

Available Analytical Data Generated During the Reporting Period:

- Table B.1 in Attachment B provides a summary of the NPDES outfall effluent analytical results from the samples collected in August 2015. All results were below the effluent limits specified in NPDES Permit No. IN006357
- Table B.2 in Attachment B provides a summary of the total influent analytical results from the samples collected in August 2015 for the HB950 Group 1 and 3 SVE wells

Information Needed/Issues to be Addressed:

None to report

Status/Changes to Key Project Personnel:

There were no changes to key project personnel.

In the event that clarification or further information is required, please contact Steven Wanner at (317) 291-7007.

Attachment A

August 2015 SVE OM&M Status Report

Attachment A

Monthly Soil Vapor Extraction (SVE) System Information Radio Materials Corporation Attica, Indiana

Month:

August 2015

	Run Time During Month	Cumulative Run Time	
SVE System	(hr)	(hr)	Date Recorded
HB 1300 Blower System	0	22,660	3/1/12
HB 950 Blower System	744	44,779	9/1/15
SWMU 1/2 System	0	33,412	5/1/14

	TCE Removal Estimate	PCE Removal Estimate	cDCE Removal Estimate
	During Month	During Month	During Month
SVE System	(lb)	(lb)	(ib)
HB 1300 Blower System	0	0 .	0
HB 950 Blower System	3.7	0.3	1.2
SWMU 1/2 System	0	0	0
Monthly Totals	3.7	0.3	1.2

	Cumulative TCE Removal	Cumulative PCE Removal	Cumulative cDCE Removal
	Estimate	Estimate	Estimate
SVE System	(ton)	(ton)	(ton)
HB 1300 Blower System	3.3	0.6	0.4
HB 950 Blower System	1.4	1.9	0.5
SWMU 1/2 System	0.04	0.4	0.06
Cumulative Totals	4.7	2.9	1.0

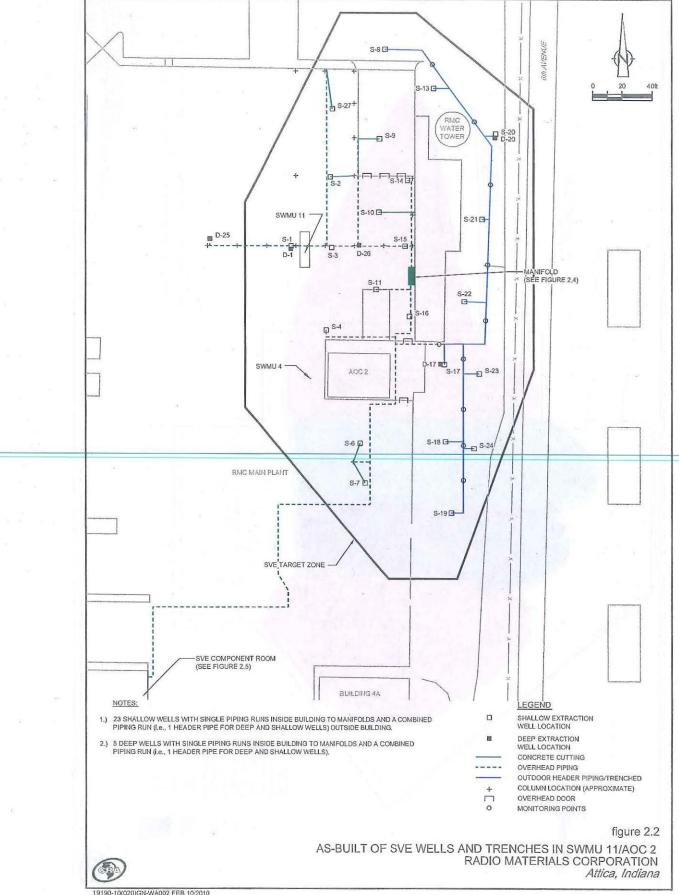
Significant Operation, Maintenance & Monitoring Activities/Notes:

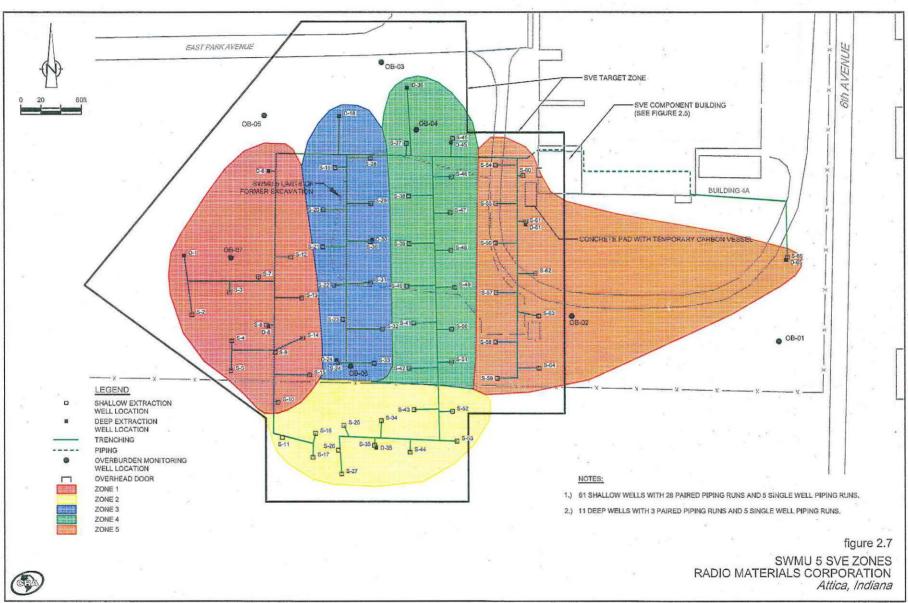
- 1. The SWMU 1/2 System was removed from service in April 2014. The HB 1300 blower was removed from service in February 2012, and the HB 950 blower was reconfigured to service both SWMU 5 and SWMU 11.
- From August 1st through August 13th at 11:00 am, the HB 950 Blower System was extracting from S-1, S-3, S-6, S-9, and all outdoor wells (Group 3), which are extraction wells located within SWMU 11. From August 13th at 11:00 am to August 31st, the HB 950 Blower System was extracting from S-57, S-54/S-60, S-58/S-63, S-55/S-61, S-56/S-62 (Group 1), which are extraction wells located within SWMU 5's Zone 5 (Orange). SWMU 5 is depicted on Figure 2.7, and SWMU 11 is depicted on Figure 2.2.
- 3. Less than 2,000 gallons of condensate/knockout water per week were discharged to the City of Attica sewer system, which complies with the City of Attica's request.
- 4. For the August 2015 removal estimates from the HB 950 Blower System, air analytical data from the 9/17/14, 2/13/15, and 4/1/15 sampling events were used to estimate the monthly removal of PCE, TCE, and cDCE.

PCE - Tetrachloroethene

TCE - Trichloroethene

cDCE - cis-1,2-Dichloroethene





Attachment B

August 2015 Analytical Data Summary

NPDES OUTFALL EFFLUENT ANALYTICAL RESULTS SUMMARY RADIO MATERIALS CORPORATION ATTICA, INDIANA

Sample Location:		NPDES Outfall 1
Sample ID:		EW-082815-TP-00 ²
Sample Date:		8/28/2015
Parameters	Units	·
Volatile Organic Compounds		
cis-1,2-Dichloroethene	ug/L	5.9
Tetrachloroethene	ug/L	ND (5.0)
Trichloroethene	ug/L	ND (5.0)

ug/L

ND (2.0)

Notes:

Vinyl chloride

ND - Not detected at the associated reporting limit

J - Estimated concentration

TOTAL INFLUENT FOR THE HB950 SVE WELLS ANALYTICAL RESULTS SUMMARY RADIO MATERIALS CORPORATION ATTICA, INDIANA

Sample Location: HB950 Total Influent HB950 Total	Influent
Sample ID: EA-081315-TP-001 EA-081315	
Sample Date: 8/13/2015 8/13/20	E464 100000000
Well Grouping: Group 3 SVE Wells Group 1 SV	
tron crouping.	a violio
Parameters Units	
Volatile Organic Compounds	
1,1-Dichloroethene ug/m3 2.8 97.0	
cis-1,2-Dichloroethene ug/m3 1850 2470)
Tetrachloroethene ug/m3 6120 1020)
trans-1,2-Dichloroethene ug/m3 8.6 94.0	
Trichloroethene ug/m3 3060 16100	0
Vinyl chloride ug/m3 24.2 ND (0.	16)

Notes:

ND - Not detected at the associated reporting limit

MONTHLY STATUS REPORT INTERIM CORRECTIVE MEASURES RADIO MATERIALS CORPORATION RCRA FACILITY INVESTIGATION (RFI)

Report Date:

October 15, 2015

Facility Name:

Radio Materials Corporation (RMC)

1095 East Summit Street Attica. Indiana 47918

U.S. EPA # IND 005 477 021

Submitted to:

Dr. Bhooma Sundar, U.S. Environmental Protection Agency (U.S. EPA)

Region 5

GHD Project #:

019190

Activity:

Vapor Intrusion Mitigation, Soil Vapor Extraction (SVE), and Groundwater

Interim Corrective Measures (ICMs)

Prepared by:

Steven Wanner

GHD Services Inc. (GHD)

Reporting Period:

September 1 through September 30, 2015

Significant Events and/or Activities Performed During This Reporting Period:

 Contacted residents, scheduled and completed routine vapor mitigation system inspection and maintenance at three residences

Groundwater ICMs

- Operated the Groundwater Extraction and Treatment (GWET) system continuously during the month of September 2015, with the following exception:
 - System went down on September 19th most likely due to thunderstorms in the area. The GWET system was remotely restarted on September 22, 2015
- Operated the AS/SVE system continuously during the month of September 2015, with the following exception:
 - A system alarm was received on September 28, likely due to a power loss, which was reset on September 29, 2015
- The monthly inspection and NPDES sampling for the GWET system was conducted on September 22, 2015
- Operated the AS/SVE system continuously during the month of September 2015. GHD inspected the AS/SVE system on September 22, 2015 and the system was operating normally

Soil ICMs

- Operated the SWMU 5 and 11/AOC 2 SVE system throughout September 2015. Attachment A provides records related to operation
- Inspected the SWMU 5 and 11/AOC 2 SVE system and conducted SVE effluent sampling on September 9, 2015 The system was operating normally

Submittals

- Submitted the August 2015 monthly status report for ICM work to U.S. EPA on September 15, 2015
- Submitted the August 2015 Federal Discharge Monitoring Report (DMR) and State Monthly Monitoring Report (MMR) to the Indiana Department of Environmental Management (IDEM) on September 9, 2015, as required by the NPDES Permit No. IN006357

Anticipated Activities to be Performed During the Next Reporting Period (October 1 to October 31, 2015):

- Submit the September 2015 monthly ICM status report
- Submit the September 2015 DMR and MMR to IDEM and U.S. EPA
- Continue operation and OM&M of the groundwater ICMs north and south of Summit Street
- Continue operation and OM&M of the SWMUs 5 and 11 SVE system
- Semiannual blower preventive maintenance for AS/SVE and SVE systems by subcontractor
- Perform quarterly Rydlyme cleaning of the groundwater extraction system air stripper

Available Analytical Data Generated During the Reporting Period:

 Table B.1 in Attachment B provides a summary of the NPDES outfall effluent analytical results from the samples collected in September 2015. All results were below the effluent limits specified in NPDES Permit No. IN006357

Information Needed/Issues to be Addressed:

• Based on the SVE effluent samples recently collected in August and September 2015, it has been determined that the effluent concentration data obtained in February and April 2015 were anomalously low. This resulted in underestimation of the monthly and cumulative volatile organic compound (VOC) removal rates reported to the U.S. EPA during the period of February to August 2015. Attachment C provides the updated VOC removal estimates for this period, which were revised based on the more recent effluent data from August and September 2015. The February and April 2015 effluent data will not be used in future calculations of VOC removal rates

Status/Changes to Key Project Personnel:

There were no changes to key project personnel.

In the event that clarification or further information is required, please contact Steven Wanner at (317) 291-7007.

Attachment A

September 2015 SVE OM&M Status Report

Attachment A

Monthly Soil Vapor Extraction (SVE) System Information Radio Materials Corporation Attica, Indiana

Month:

September 2015

SVE System	Run Time During Month (hr)	Cumulative Run Time (hr)	Date Recorded
HB 1300 Blower System	0	22,660	3/1/12
HB 950 Blower System	474	45,253	10/1/15
SWMU 1/2 System	0	33,412	5/1/14

SVE System	TCE Removal Estimate During Month (lb)	PCE Removal Estimate During Month (lb)	cDCE Removal Estimate During Month (lb)
HB 1300 Blower System	-0	0	0
HB 950 Blower System	252	22.5	40.2
SWMU 1/2 System	0	0	0
Monthly Totals	252	22.5	40.2

SVE System	Cumulative TCE Removal Estimate (ton)	Cumulative PCE Removal Estimate (ton)	Cumulative cDCE Removal Estimate (ton)
HB 1300 Blower System	3.3	0.6	0.4
HB 950 Blower System	1.9	1.9	0.6
SWMU 1/2 System	0.04	0.4	0.1
Cumulative Totals	5.2	2.9	1.1

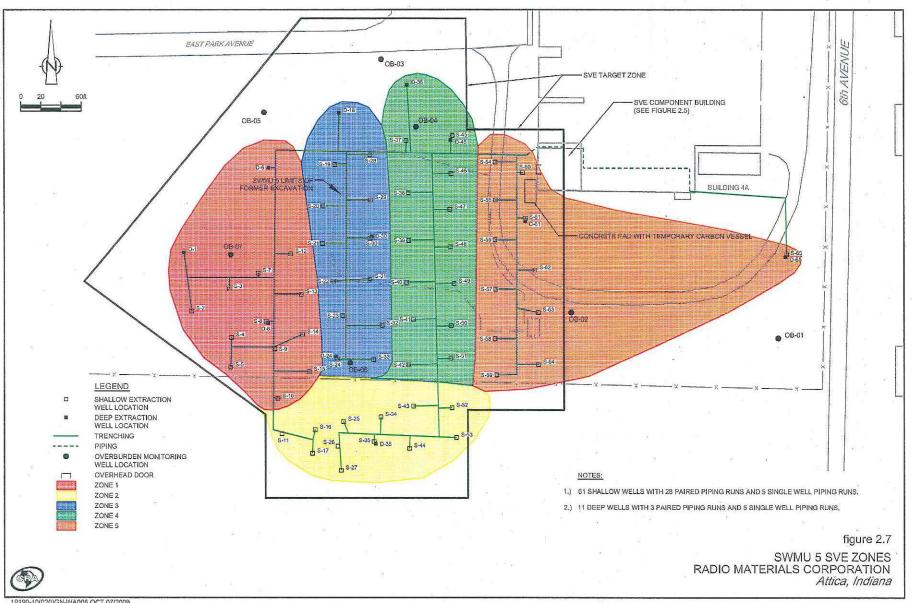
Significant Operation, Maintenance & Monitoring Activities/Notes:

- 1. The SWMU 1/2 System was removed from service in April 2014. The HB 1300 blower was removed from service in February 2012, and the HB 950 blower was reconfigured to service both SWMU 5 and SWMU 11.
- 2. From September 1st through September 9th at 10:30 am, the HB 950 Blower System was extracting from S-57, S-54/S-60, S-58/S-61, S-56/S-62 (Group 1), which are extraction wells located within SWMU 5's Zone 5 (Orange). From September 9th at 10:30 am to September 30th, the HB 950 Blower System was extracting from S-39/S-48, S-47, S-38/S-46, S-40/S-49, S-20/S-29, S-24/S-33, D-18/D-30, and D-6 (Group 2), which are extraction wells located within SWMU 5's Zone 1 (Red), Zone 3 (Blue), and Zone 4 (Green). SWMU 5 is depicted on Figure 2.7.
- 3. Less than 2,000 gallons of condensate/knockout water per week were discharged to the City of Attica sewer system, which complies with the City of Attica's request.
- 4. For the September 2015 removal estimates from the HB 950 Blower System, air analytical data from the 7/24/15 and 9/9/15 sampling events were used to estimate the monthly removal of PCE, TCE, and cDCE.

PCE - Tetrachloroethene

TCE - Trichloroethene

cDCE - cis-1,2-Dichloroethene



Attachment B

September 2015 Analytical Data Summary

NPDES OUTFALL EFFLUENT ANALYTICAL RESULTS SUMMARY RADIO MATERIALS CORPORATION ATTICA, INDIANA

NPDES Outfa EW-092215-SN 9/22/2015	
Units	
ug/L	4.3
ug/L	ND (1.0)
ug/L	1.5
ug/L	ND (1.0)
	ug/L ug/L ug/L

Notes:

ND - Not detected at the associated reporting limit

J - Estimated concentration

Attachment C

Revised SVE OM&M System Reports

MONTHLY SOIL VAPOR EXTRACTION (SVE) SYSTEM INFORMATION RADIO MATERIALS CORPORATION ATTICA, INDIANA

MONTH:

FEBRUARY 2015

	Run Time During Mönth	Cumulative Run Time	
SVE System	(hr)	(hr)	Date Recorded
HB 1300 Blower System	0	22,660	3/1/12
HB 950 Blower System	672	40,522	3/1/15
SWMU 1/2 System	0	33,412	5/1/14

	TCE Removal Estimate During	PCE Removal Estimate During	cDCE Removal Estimate During
	Month	Month	Month
SVE System	(Ib)	· (lb)	(lb)
HB 1300 Blower System	0	0 .	0
HB 950 Blower System	75.5	8.7	45.3
SWMU 1/2 System	0	0	0
Monthly Totals	75.5	8.7	45.3

	Cumulative TCE Removal	Cumulative PCE Removal	Cumulative cDCE Removal
	Estimate	Estimate	Estimate
SVE System	(ton)	(ton)	(ton)
HB 1300 Blower System	3.3	0.6	0.4
HB 950 Blower System	1.4	1.9	0.5
SWMU 1/2 System	0.04	0.4	0.06
Cumulative Totals	4.7	2.9	1.0

Significant Operation, Maintenance & Monitoring Activities/Notes:

- 1. The SWMU 1/2 System was removed from service in April 2014. The HB 1300 blower was removed from service in February 2012, and the HB 950 blower was reconfigured to service both SWMU 5 and SWMU 11.
- From February 1st through February 13th at 1:30 pm, the HB 950 Blower System was extracting from S-57, S-54/S-60, S-58/S-61, S-56/S-62 (Group 1), which are extraction wells located within SWMU 5's Zone 5 (Orange). From February 13th at 1:30 pm through February 28th, the HB 950 Blower System was extracting from S-39/S-48, S-47, S-38/S-46, S-40/S-49, S-20/S-29, S-24/S-33, D-18/D-30, and D-6 (Group 2), which are extraction wells located within SWMU 5's Zone 1 (Red), Zone 3 (Blue), and Zone 4 (Green). SWMU 5 is depicted on Figure 2.7.
- 3. Less than 2,000 gallons of condensate/knockout water per week were discharged to the City of Attica sewer system, which complies with the City of Attica's request.
- 4. For the February 2015 removal estimates from the HB 950 Blower System, air analytical data from the 9/17/14 and 10/13/14 sampling events were used to estimate the monthly removal of PCE, TCE, and cDCE.

PCE - Tetrachloroethene

TCE - Trichloroethene

cDCE - cis-1,2-Dichloroethene

MONTHLY SOIL VAPOR EXTRACTION (SVE) SYSTEM INFORMATION RADIO MATERIALS CORPORATION ATTICA, INDIANA

MONTH:

MARCH 2015

SVE System	Run Time During Month (hr)	Cumulative Run Time (hr)	Date Recorded
HB 1300 Blower System	0	22,660	3/1/12
HB 950 Blower System	742	41,264	4/1/15
SWMU 1/2 System	0	33,412	5/1/14

SVE System	TCE Removal Estimate During Month (lb)	PCE Removal Estimate During Month (lb)	cDCE Removal Estimate During Month (lb)
HB 1300 Blower System	0	0	. 0
HB 950 Blower System	46.1	10.9	15.9
SWMU 1/2 System	- 0	0	0
Monthly Totals	46.1	10.9	15.9

SVE System	Cumulative TCE Removal Estimate (ton)	Cumulative PCE Removal Estimate (ton)	Cumulative cDCE Removal Estimate (ton)
HB 1300 Blower System	3.3	0.6	0.4
HB 950 Blower System	1.4	1.9	0.5
SWMU 1/2 System	0.04	0.4	0.06
Cumulative Totals	4.7	2.9	1.0

Significant Operation, Maintenance & Monitoring Activities/Notes:

- 1. The SWMU 1/2 System was removed from service in April 2014. The HB 1300 blower was removed from service in February 2012, and the HB 950 blower was reconfigured to service both SWMU 5 and SWMU 11.
- 2. From March 1st through March 4th at 12:00 pm, the HB 950 Blower System was extracting from S-39/S-48, S-47, S-38/S-46, S-40/S-49, S-20/S-29, S-24/S-33, D-18/D-30, and D-6 (Group 2), which are extraction wells located within SWMU 5's Zone 1 (Red), Zone 3 (Blue), and Zone 4 (Green). From March 4th at 12:00 pm through March 31st, the HB 950 Blower System was extracting from S-1, S-3, S-6, S-9, and all outdoor wells (Group 3), which are extraction wells located within SWMU 11. SWMU 5 is depicted on Figure 2.7, and SWMU 11 is depicted on Figure 2.2.
- 3. Less than 2,000 gallons of condensate/knockout water per week were discharged to the City of Attica sewer system, which complies with the City of Attica's request.
- 4. For the March 2015 removal estimates from the HB 950 Blower System, air analytical data from the 10/13/14 and 11/25/14 sampling events were used to estimate the monthly removal of PCE, TCE, and cDCE.
- PCE Tetrachloroethene
- TCE Trichloroethene
- cDCE cis-1,2-Dichloroethene

MONTHLY SOIL VAPOR EXTRACTION (SVE) SYSTEM INFORMATION RADIO MATERIALS CORPORATION ATTICA, INDIANA

MONTH:

APRIL 2015

	Run Time During Month	Cumulative Run Time	
SVE System	(hr)	(hr)	Date Recorded
HB 1300 Blower System	0	22,660	3/1/12
HB 950 Blower System	720	41,984	5/1/15
SWMU 1/2 System	0	33,412	5/1/14

	Month	PCE Removal Estimate During Month	cDCE Removal Estimate During Month
HB 1300 Blower System	0	0	0
HB 950 Blower System	120	10.6	40
SWMU 1/2 System	0	0	. 0
Monthly Totals	120	10.6	40

	Cumulative TCE Removal	Cumulative PCE Removal Estimate	Cumulative cDCE Removal Estimate
	Estimate		
SVE System	(ton)	(ton)	(ton)
HB 1300 Blower System	3.3	0.6	0.4
HB 950 Blower System	1.5	1.9	0.5
SWMU 1/2 System	0.04	0.4	0.06
Cumulative Totals	4.8	2.9	1.0

Significant Operation, Maintenance & Monitoring Activities/Notes:

- 1. The SWMU 1/2 System was removed from service in April 2014. The HB 1300 blower was removed from service in February 2012, and the HB 950 blower was reconfigured to service both SWMU 5 and SWMU 11.
- 2. From April 1st at 12:00 am through April 1st at 1:00 pm, the HB 950 Blower System was extracting from S-1, S-3, S-6, S-9, and all outdoor wells (Group 3), which are extraction wells located within SWMU 11. From April 1st at 1:00 pm through April 30th, the HB 950 Blower System was extracting from S-57, S-54/S-60, S-58/S-63, S-55/S-61, S-56/S-62 (Group 1), which are extraction wells located within SWMU 5's Zone 5 (Orange). SWMU 5 is depicted on Figure 2.7, and SWMU 11 is depicted on Figure 2.2.
- 3. Less than 2,000 gallons of condensate/knockout water per week were discharged to the City of Attica sewer system, which complies with the City of Attica's request.
- 4. For the April 2015 removal estimates from the HB 950 Blower System, air analytical data from the 9/17/14 and 11/25/14 sampling events were used to estimate the monthly removal of PCE, TCE, and cDCE.

PCE - Tetrachloroethene

TCE - Trichloroethene

cDCE - cis-1,2-Dichloroethene

MONTHLY SOIL VAPOR EXTRACTION (SVE) SYSTEM INFORMATION RADIO MATERIALS CORPORATION ATTICA, INDIANA

MONTH:

MAY 2015

SVE System	Run Time During Month (hr)	Cumulative Run Time (hr)	Date Recorded
HB 1300 Blower System	0	22,660	3/1/12
HB 950 Blower System	703	42,687	6/1/15
SWMU 1/2 System	0	33,412	5/1/14

SVE System	TCE Removal Estimate During Month (lb)	PCE Removal Estimate During Month (lb)	cDCE Removal Estimate During Month (lb)
HB 1300 Blower System	0	0	0
HB 950 Blower System	58.2	9.2	53.3
SWMU 1/2 System	0	0	0
Monthly Totals	58.2	9.2	53.3

SVE System	Cumulative TCE Removal Estimate (ton)	Cumulative PCE Removal Estimate (ton)	Cumulative cDCE Removal Estimate (ton)
HB 1300 Blower System	3.3	0.6	0.4
HB 950 Blower System	1.5	1.9	0.5
SWMU 1/2 System	0.04	0.4	0.1
Cumulative Totals	4.8	2.9	1.0

Significant Operation, Maintenance & Monitoring Activities/Notes:

- 1. The SWMU 1/2 System was removed from service in April 2014. The HB 1300 blower was removed from service in February 2012, and the HB 950 blower was reconfigured to service both SWMU 5 and SWMU 11.
- From May 1st at 12:00 am through May 1st at 11:30 am, the HB 950 Blower System was extracting from S-57, S-54/S-60, S-58/S-63, S-55/S-61, S-56/S-62(Group 1), which are extraction wells located within SWMU 5's Zone 5 (Orange). From May 1st at 11:30 am through May 29th at 12:30 pm, the HB 950 Blower System was extracting from S-39/S-48, S-47, S-38/S-46, S-40/S-49, S-20/S-29, S-24/S-33, D-18/D-30, and D-6 (Group 2), which are extraction wells located within SWMU 5's Zone 1 (Red), Zone 3 (Blue), and Zone 4 (Green). From May 29th at 12:30 pm through May 31st, the HB 950 Blower System was extracting from S-1, S-3, S-6, S-9, and all outdoor wells (Group 3), which are extraction wells located within SWMU 11. SWMU 5 is depicted on Figure 2.7, and SWMU 11 is depicted on Figure 2.2.
- 3. Less than 2,000 gallons of condensate/knockout water per week were discharged to the City of Attica sewer system, which complies with the City of Attica's request.
- 4. For the May 2015 removal estimates from the HB 950 Blower System, air analytical data from the 9/17/14, 10/13/14, and 11/25/14 sampling events were used to estimate the monthly removal of PCE, TCE, and cDCE.

PCE - Tetrachloroethene

TCE - Trichloroethene

Monthly Soil Vapor Extraction (SVE) System Information Radio Materials Corporation Attica, Indiana

Month:

June 2015

	Run Time During Month	Cumulative Run Time	
SVE System	(hr)	(hr)	Date Recorded
HB 1300 Blower System	0	22,660	3/1/12
HB 950 Blower System	604	43,291	7/1/15
SWMU 1/2 System	0	33,412	5/1/14

	TCE Removal Estimate	PCE Removal Estimate	cDCE Removal Estimate
·	During Month	During Month	During Month
SVE System	(lb)	(lb)	(lb)
HB 1300 Blower System	0	0	0
HB 950 Blower System	42.6	8.9	24.2
SWMU 1/2 System	0	0	0
Monthly Totals	42.6	8.9	24.2

	Cumulative TCE Removal	Cumulative PCE Removal	Cumulative cDCE Removal
	Estimate	Estimate	Estimate
SVE System	(ton)	(ton)	(ton)
HB 1300 Blower System	3.3	0.6	0.4
HB 950 Blower System	1.5	1:9	0.5
SWMU 1/2 System	0.04	0.4	0.1
Cumulative Totals	4.8	2.9	1.0

Significant Operation, Maintenance & Monitoring Activities/Notes:

- 1. The SWMU 1/2 System was removed from service in April 2014. The HB 1300 blower was removed from service in February 2012, and the HB 950 blower was reconfigured to service both SWMU 5 and SWMU 11.
- 2. From June 1st through June 19th at 11:30 am, the HB 950 Blower System was extracting from S-1, S-3, S-6, S-9, and all outdoor wells (Group 3), which are extraction wells located within SWMU 11. From June 19th at 11:30 am through June 30th, the HB 950 Blower System was extracting from S-39/S-48, S-47, S-38/S-46, S-40/S-29, S-24/S-33, D-18/D-30, and D-6 (Group 2), which are extraction wells located within SWMU 5's Zone 1 (Red), Zone 3 (Blue), and Zone 4 (Green). SWMU 5 is depicted on Figure 2.7, and SWMU 11 is depicted on Figure 2.2.
- 3. Less than 2,000 gallons of condensate/knockout water per week were discharged to the City of Attica sewer system, which complies with the City of Attica's request.
- 4. For the June 2015 removal estimates from the HB 950 Blower System, air analytical data from the 10/13/14 and 11/25/14 sampling events were used to estimate the monthly removal of PCE, TCE, and cDCE.

PCE - Tetrachloroethene

TCE - Trichloroethene

Monthly Soil Vapor Extraction (SVE) System Information Radio Materials Corporation Attica, Indiana

Month:

July 2015

SVE System	Run Time During Month (hr)	Cumulative Run Time (hr)	Date Recorded
HB 1300 Blower System	0	22,660	3/1/12
HB 950 Blower System	744	44,035	8/1/15
SWMU 1/2 System	0	33,412	5/1/14

SVE System	TCE Removal Estimate During Month (lb)	PCE Removal Estimate During Month (lb)	cDCE Removal Estimate During Month (lb)
HB 1300 Blower System	0	0	0
HB 950 Blower System	416	48.6	70.1
SWMU 1/2 System	0	0	0
Monthly Totals	416	48.6	70.1

SVE System	Cumulative TCE Removal Estimate (ton)	Cumulative PCE Removal Estimate (ton)	Cumulative cDCE Removal Estimate (ton)
HB 1300 Blower System	3.3	0.6	0.4
HB 950 Blower System	1.7	1.9	0.6
SWMU 1/2 System	0.04	0.4	0.1
Cumulative Totals	5.0	2.9	1.1

Significant Operation, Maintenance & Monitoring Activities/Notes:

- 1. The SWMU 1/2 System was removed from service in April 2014. The HB 1300 blower was removed from service in February 2012, and the HB 950 blower was reconfigured to service both SWMU 5 and SWMU 11.
- 2. From July 1st through July 24th at 11:30 am, the HB 950 Blower System was extracting from S-39/S-48, S-47, S-38/S-46, S-40/S-49, S-20/S-29, S-24/S-33, D-18/D-30, and D-6 (Group 2), which are extraction wells located within SWMU 5's Zone 1 (Red), Zone 3 (Blue), and Zone 4 (Green). From July 24th at 11:30 am through July 31st, the HB 950 Blower System was extracting from S-1, S-3, S-6, S-9, and all outdoor wells (Group 3), which are extraction wells located within SWMU 11. SWMU 5 is depicted on Figure 2.7, and SWMU 11 is depicted on Figure 2.2.
- 3. Less than 2,000 gallons of condensate/knockout water per week were discharged to the City of Attica sewer system, which complies with the City of Attica's request.
- 4. For the July 2015 removal estimates from the HB 950 Blower System, air analytical data from the 7/24/15 and 8/13/15 sampling events were used to estimate the monthly removal of PCE, TCE, and cDCE.

PCE - Tetrachloroethene

TCE - Trichloroethene

Monthly Soil Vapor Extraction (SVE) System Information Radio Materials Corporation Attica, Indiana

Month

August 2015

SVE System	Run Time During Month (hr)	Cumulative Run Time (hr)	Date Recorded
HB 1300 Blower System	0	22,660	3/1/12
HB 950 Blower System	744	44,779	9/1/15
SWMU 1/2 System	0	33,412	5/1/14

SVE System	TCE Removal Estimate During Month (lb)	PCE Removal Estimate During Month (lb)	cDCE Removal Estimate During Month (lb)
HB 1300 Blower System	0	0	0
HB 950 Blower System	180	21.2	22.4
SWMU 1/2 System	0	. 0	0
Monthly Totals	180	21.2	22.4

	Cumulative TCE Removal	Cumulative PCE Removal	Cumulative cDCE Removal
	Estimate	Estimate	Estimate
SVE System	(ton)	(ton)	(ton)
HB 1300 Blower System	3.3	0.6	0.4
HB 950 Blower System	1.8	1.9	0.6
SWMU 1/2 System	0.04	0.4	0.1
Cumulative Totals	5.1	2.9	1.1

Significant Operation, Maintenance & Monitoring Activities/Notes:

- 1. The SWMU 1/2 System was removed from service in April 2014. The HB 1300 blower was removed from service in February 2012, and the HB 950 blower was reconfigured to service both SWMU 5 and SWMU 11.
- From August 1st through August 13th at 11:00 am, the HB 950 Blower System was extracting from S-1, S-3, S-6, S-9, and all outdoor wells (Group 3), which are extraction wells located within SWMU 11. From August 13th at 11:00 am to August 31st, the HB 950 Blower System was extracting from S-57, S-54/S-60, S-58/S-63, S-55/S-61, S-56/S-62 (Group 1), which are extraction wells located within SWMU 5's Zone 5 (Orange). SWMU 5 is depicted on Figure 2.7, and SWMU 11 is depicted on Figure 2.2.
- 3. Less than 2,000 gallons of condensate/knockout water per week were discharged to the City of Attica sewer system, which complies with the City of Attica's request.
- 4. For the August 2015 removal estimates from the HB 950 Blower System, air analytical data from the 8/13/15 and 9/9/15 sampling events were used to estimate the monthly removal of PCE, TCE, and cDCE.

PCE - Tetrachloroethene

TCE - Trichloroethene

ATTACHMENT 23 RADIO MATERIALS CORPORATION SPREADSHEET – SUMMARY OF INTERIM CORRECTIVE MEASURES STATUS – AUGUST 2015

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SUMMARY OF ICMs STATUS - AUGUST 2015 RADIO MATERIALS CORPORATION ATTICA, INDIANA

SWMU, AOC or Other	Description	Media	COCs	Treatment Technology	Status	Media-Specific Goals Achieved?	Comments
SWMU 1	Former Outdoor Drum Storage Area	Soil	VOCs	Excavation/SVE	Shut Down	Evaluating in CMS	ICM implemented both in SWMU 1 and 2 due to overlapping
SWMU 2	Disposal Area A	Soil	VOCs/metals	Excavation/SVE	Shut Down	Evaluating in CMS	footprints
SWMU 5	Disposal Area B	Soil	VOCs	SVE/Targeted ISCO	Ongoing	Assessing	
SWMU 11	PCE Vapor Degreaser	Soil	VOCs	SVE/Targeted ISCO	Ongoing	Assessing	Includes AOC 2 PCE UST
SWMU 12	Dynamite Burial Site	Dynamite	Dynamite	Excavation/Off-Site Incineration	Completed	Yes	
AOC 3B	North Outfall	Soil	Lead	Excavation/Off-Site Disposal	Completed	Yes	
AOC 5	On-Site Water Supply Wells	Groundwater	VOCs	Well Closures/Water Supply Hookup	Completed	Yes	Closed wells and hooked users up to City water supply
Other - City Water	Attica City Water Wells 1 and 2	Groundwater	VOCs/TCE	Air stripping	Ongoing	Yes	City water treatment system installed , OM&M ongoing
Other - Groundwater	Southern VOC Plume	Groundwater	VOCs	Air stripping/sparging	Ongoing	Assessing	

Abbreviations

SWMU - Solid Waste Management Unit

AOC - Area of Concern

VOCs - Volatile Organic Compounds

TCE - Trichloroethene

PCE - Tetrachloroethene

SVE - Soil Vapor Extraction

ISCO - In-Situ Chemical Oxidation

UST - Underground Storage Tank

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ATTACHMENT 24 RADIO MATERIALS CORPORATION FIGURES – 2010 AND 2013 TCE PLUME EXTENT (OVERBURDEN) AND 2010 AND 2013 PCE PLUME EXTENT (OVERBURDEN)

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