

PPG Industries, Inc. 10800 S. 13th Street, Oak Creek WI 53154 (414) 764-6000

December 19, 2011

Mr. Scott Ferguson Wisconsin Department of Natural Resources 2300 North Dr. Martin Luther King Drive Milwaukee, WI 53212

Subject: Nineteenth Semi-Annual Progress Report

Interim Measure Implementation

PPG Industries, Inc. Oak Creek, Wisconsin Facility

Dear Mr. Ferguson:

This letter is being submitted to fulfill the progress reporting requirements under Wisconsin Administrative Code (WAC) NR 700 for the PPG Industries, Inc. facility located at 10800 South 13th Street in Oak Creek, Wisconsin. This report describes continuing activities undertaken by PPG to address a spill of xylene and naphtha initially reported to the Wisconsin Department of Natural Resources (WDNR) on February 12, 2002. Additionally, this letter presents the anticipated activities that will occur during the next six months.

Activities Undertaken Since May 2011

Environmental contractor Tetra Tech continues to assist in the monitoring and remediation activities. PPG has continued to pump groundwater from well MW-1 in order to maintain containment in the vicinity of the release. The water is pumped through a two-stage carbon filtration system from a level-activated pump in well MW-1. Water passing through the carbon filter is discharged to the Publicly Owned Treatment Works (POTW) in accordance with the facility's sewer discharge permit. The volume of water pumped varies depending on precipitation recharge but has averaged approximately 170 gallons per day.

On November 1, 2011, the monitoring wells were checked for light non-aqueous phase liquid (LNAPL), water levels were measured, and groundwater samples were collected. On this occasion, LNAPL was not present in any of the wells. This marks the 16th consecutive round where no LNAPL was detected. A plan view map showing the monitoring well locations is provided in Attachment 1. Note that MW-1 had the pump installed, but the pump was not functioning at the time of the sampling event. No free product was observed in the water collected from the well. Samples were collected from monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5, and MW-6. The sample collected from MW-1 was collected directly from MW-1 using a bailer.

The following table provides a summary of the November 2011 sampling results from the Site wells; Table 1 provides a historical summary of the results of all of the sampling events.

Summary of November 2011 Results

		Ethylbenzene	Xylenes
*****	Preventive Action Level:	140	1,000
	Enforcement Standard:	700	10,000
Well Number	Date		
MW-1	11/01/2011	<0.41(1)	4.3
MW-2	11/01/2011	5580	45,100
MW-3	11/01/2011	8000	66,200
MW-4	11/01/2011	<0.41	2.6
MW-5	11/01/2011	<0.41	<0.87
MW-6	11/01/2011	<0.41	< 0.87

Notes:

All concentrations in µg/l.

(1) "<" indicates not detected at the reporting limit.

Ethylbenzene and xylene were either not detected or detected at concentrations below their respective Enforcement Standard at all wells except MW-2 and MW-3. Ethylbenzene and xylene concentrations at MW-2 and MW-3 exceeded the Enforcement Standards for both analytes. The analytical data shows an increase in both ethylbenzene and xylene concentrations in MW-2 and MW-3 compared to the May 2011 results but a decrease in concentrations when compared to the May 2010 results. Ethylbenzene was not detected in groundwater samples from MW-1, MW-4, MW-5, and MW-6 and xylene was not detected in samples from MW-5 and MW-6. Xylene was detected in MW-1 and MW-4 but at concentrations far below the Preventive Action Level. Ethylbenzene and xylene concentrations have been either not detected or at concentrations well below Preventative Action Level in MW-1 for eight consecutive events and in MW-4 for 15 consecutive events. Ethylbenzene and xylene were not detected at MW-5 for the 17th consecutive sampling event. At MW-6, ethylbenzene was not detected for the 18th consecutive sampling event and xylene was not detected for the 8th consecutive event.

Planned Activities

PPG proposes to discontinue pumping of groundwater from MW-1 on February 1, 2012 because no LNAPL has been observed in the well for 16 consecutive events and concentrations of ethylbenzene and xylene have been non-detect or at concentrations far below the Preventative Action Limit since May 2008. PPG is currently evaluating options to reduce concentrations in MW-2 and MW-3, including the possible use of mobile vacuum-enhanced recovery.

PPG proposes to discontinue monitoring of MW-5 and MW-6 in 2012 because ethylbenzene and xylene concentrations are either non-detect or at concentrations far below the Preventative Action Limit at both wells for many years. MW-5 concentrations of ethylbenzene and xylene have not been above the Preventive Action Level since November 2003. In MW-6, ethylbenzene and xylene has never been detected above the Preventive Action Level since sampling began in 2002.

Mr. Scott Ferguson December 19, 2011 Page 3

Groundwater sampling will continue on a semiannual basis for MW-1, MW-2, MW-3, and MW-4 and the wells will be checked for the presence of LNAPL. Water quality samples from the monitoring wells MW-1 through MW-4 will be evaluated relative to WAC groundwater quality standards. The next sampling event is scheduled for May 2012.

Closing

PPG will submit semi-annual progress reports to WDNR and advise immediately if there is any significant change in conditions at the site. If you have any questions regarding this submittal, or require any further information, please contact me at (414) 764-6000 x374.

Sincerely,

Jeffrey Bence

Manager, Environmental Health & Safety

cc:

Jason Chapelle - WDNR S.E. Region, Water Division

Brian McGuire – PPG EHS, Allison Park Mark Portman – Tetra Tech NUS, Inc.

Attachments

TABLE 1 **Summary of Historical Groundwater Sample Results** PPG Inc., Oak Creek, Wisconsin Facility

	MW-	Ī	MW-2	2	MW-3		MW-4		MW-5		MW-6	
Date	Ethylbenzene	Xylene ⁽¹⁾	Ethylbenzene	Xylene	Ethylbenzene	Xylene	Ethylbenzene	Xylene	Ethylbenzene	Xylene	Ethylbenzene	Xylene
6/21/02	N/S ⁽²⁾	N/S	N/S	N/S	N/S	N/S	N/S	N/S	510	2,550	0.28	1.05
3/4/03	N/S	N/S	N/S	N/S	N/S	N/S	1,100	9,200	230	677.4	< 0.53	<1.83
11/04/03	940	10,600	N/S	N/S	N/S	N/S	N/S	N/S	<0.54 ⁽³⁾	<2.63	< 0.54	<2.63
4/29/04	N/S	N/S	10,000	89,000	6,000	49,000	1.9	72	<0.54	<2.63	< 0.54	<2.63
11/03/04	1,400	12,200	3,900	47,000	3,500	39,000	4.6	310	< 0.54	<2.63	< 0.54	<2.63
5/04/05	400	2,000	11,000	99,000	10,000	81,000	< 0.54	<2.63	< 0.54	<2.63	< 0.54	<2.63
12/22/05	480	3,420	15,000	123,000	11,000	97,000	< 0.54	<2.63	< 0.54	<2.63	< 0.54	<2.63
5/30/06	310	2,460	6,600	61,000	2,000	18,700	< 0.54	<2.63	<0.54	<2.63	< 0.54	<2.63
11/09/06	430	1,520	14,000	110,000	12,000	99,000	<0.4	<1.1	<0.4	<1.1	<0.4	<1.1
5/10/07	1,400	7,800	11,000	82,000	8,800	71,000	<1.1	<5.3	< 0.54	<2.63	< 0.54	<2.63
11/20/07	1,200	6,550	47,100	371,000	14,800	112,900	< 0.50	1.04 J	<0.50	< 0.62	< 0.50	1.23 J
5/28/08	26.5	97.6	105	1,045	332	2,868	< 0.4	1.70 J	<0.4	<1.1	<0.4	<1.1
11/12/08	54.6	380	10,200	79,200	8210	65,900	<0.4	0.80 J	<0.4	<1.1	<0.4	<1.1
5/6/09	22.9	186.9	2,030	17,030	1,490	12,220	<0.4	0.42 J	<0.4	<1.1	<0.4	1.1>
11/3/09	16.6	72	6,280	50,400	3,310	27,510	0.68 J	9	<0.4	<1.1	< 0.4	<1.1
5/24/10	< 0.41	<0.87	7,930	63,000	1,020	8,030	< 0.41	0.41 J	<0.41	<0.87	<0.41	< 0.87
11/17/10	17.7	92.3	10,000	79,600	8,750	72,600	<0.41	< 0.87	<0.41	<0.87	<0.41	< 0.87
5/26/11	< 0.41	0.42J	583	4,770	98.6	796	< 0.41	< 0.87	<0.41	< 0.87	<0.41	<0.87
11/1/11	< 0.41	4.3	5,580	45,100	8,000	66,200	< 0.41	2.6	<0.41	< 0.87	< 0.41	< 0.87

Notes:

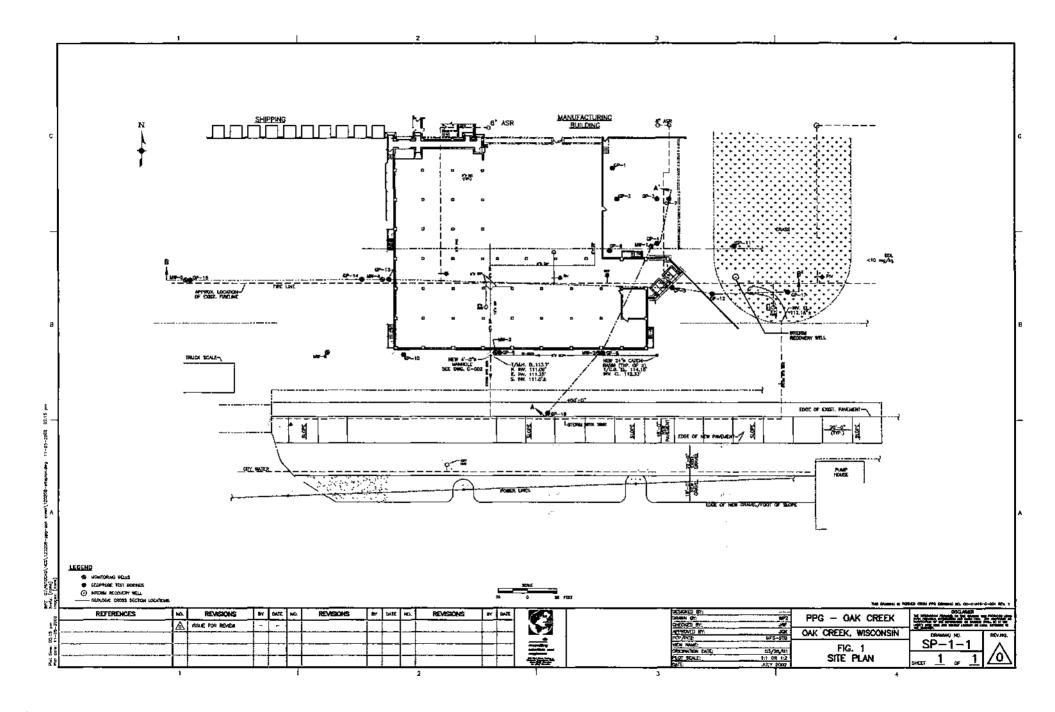
All concentrations in µg/l.

(1) Xylene concentrations are the total concentration for m, o, and p isomers and for non-detections the greater of the detection limits for each isomer.

(2) N/S indicates not sampled.

(3) "<" indicates less than reporting limit.

ATTACHMENT 1 SITE PLAN







November 09, 2011

Tom Normington TETRATECH, INC. 5404 Alderson St Schofield, WI 54476

RE: Project: 112003509.101.2 PPG OAK CREEK

Pace Project No.: 4053165

Dear Tom Normington:

Enclosed are the analytical results for sample(s) received by the laboratory on November 03, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Brian Basten

brian.basten@pacelabs.com Project Manager

Enclosures

cc: Marsha Meurette, Tetra Tech, INC.







CERTIFICATIONS

Project:

112003509.101.2 PPG OAK CREEK

Pace Project No.: 4053165

Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302 Florida/NELAP Certification #: E87948 Illinois Certification #: 200050 Kentucky Certification #: 82 Louisiana Certification #: 04168 Minnesota Certification #: 055-999-334 New York Certification #: 11888

North Carolina Certification #: 503 North Dakota Certification #: R-150 South Carolina Certification #: 83006001 US Dept of Agriculture #: S-76505 Wisconsin Certification #: 405132750 Wisconsin DATCP Certification #: 105-444





SAMPLE SUMMARY

Project:

112003509.101.2 PPG OAK CREEK

Lab ID	Sample ID	Matrix	Date Collected	Date Received
4053165001	NV-5	Water	11/01/11 11:30	11/03/11 11:30
4053165002	MW-6	Water	11/01/11 12:00	11/03/11 11:30
4053165003	MW-4	Water	11/01/11 12:15	11/03/11 11:30
4053165004	MW-3	Water	11/01/11 12:35	11/03/11 11:30
4053165005	MW-2	Water	11/01/11 12:45	11/03/11 11:30
4053165006	MW-1	Water	11/01/11 12:55	11/03/11 11:30
4053165007	TRIP BLANK	Water		11/03/11 11:30





SAMPLE ANALYTE COUNT

Project:

112003509.101.2 PPG OAK CREEK

Lab ID	Sample ID	Method	Analysts	Analytes Reported	
4053165001	MW-5	WI MOD GRO	ŞES	4	
4053165002	MVV-6	WI MOD GRO	SES	4	
4053165003	MYV-4	WI MOD GRO	SES	4	
4053165004	MVV-3	WI MOD GRO	SES	4	
4053165005	MW-2	WI MOD GRO	SES	4	
4053165006	MVV-1	WI MOD GRO	SES	4	
4053165007	TRIP BLANK	WI MOD GRO	SES	4	



ANALYTICAL RESULTS

Project:

112003509.101.2 PPG OAK CREEK

Sample: MW-5	Lab ID: 40531650	01 Collected	Collected: 11/01/11 11:30			1/03/11 11:30 N	Matrix: Water	
Parameters	Results Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: W	MOD GRO						
Ethylbenzene	<0.41 ug/L	1.0	0.41	1		11/08/11 11:30	100-41-4	
m&p-Xylene	<0.87 ug/L	2.0	0.87	1		11/08/11 11:30	179601-23-1	
o-Xylene	<0.38 ug/L	1.0	0.38	1		11/08/11 11:30	95-47-6	
a,a,a-Triffuorotoluene (S)	102 %.	80-120		1		11/08/11 11:30	98-08-8	
Sample: MW-6	Lab ID: 40531650	02 Collected	1: 11/01/1	1 12:00	Received: 11	1/03/11 1 1:30 N	fatrix: Water	
Parameters	Results Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: W	MOD GRO						
Ethylbenzene	<0.41 ug/L	1.0	0.41	1		11/08/11 11:55	100-41-4	
m&p-Xylene	<0.87 ug/L	2.0	0.87	1		11/08/11 11:55		
o-Xylene	<0.38 ug/L	1.0	0.38	1		11/08/11 11:55	95-47-6	
a,a,a-Trifluorotoluene (S)	103 %.	80-120		1		11/08/11 11:55	98-08-8	
Sample: MW-4	Lab ID: 40531650	03 Collected	E: 11/01/11	1 12:15	Received: 11	1/03/11 11:30 N	latrix: Water	
Parameters	Results Units	LOQ	LOD	DF	Prepared	Апаłуzed	CAS No.	Qual
WIGRO GCV	Analytical Method: W	MOD GRO						
Ethylbenzene	<0.41 ug/L	1.0	0.41	1		11/07/11 12:16	100-41-4	
m&p-Xylene	1.0J ug/L	2.0	0.87	1		11/07/11 12:16	179601-23-1	
o-Xylene	1.6 ug/L	1.0	0.38	1		11/07/11 12:16	95-47-6	
a,a,a-Trifluorotoluene (S)	103 %.	80-120		1		11/07/11 12:16	98-08-8	
Sample: MW-3	Lab ID: 405316500	04 Collected	l: 11/01/11	12:35	Received: 11	1/03/11 11:30 N	latrix: Water	
Parameters	Results Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: W	I MOD GRO						
Ethylbenzene	8000 ug/L	125	51.8	125		11/08/11 18:34	100-41-4	
m&p-Xylene	46600 ug/L	250	109	125			179601-23-1	
o-Xylene	19600 ug/L	125	47.6	125		11/08/11 18:34		
a,a,a-Triffuorotoluene (S)	103 %.	80-120		125		11/08/11 18:34		



ANALYTICAL RESULTS

Project:

112003509.101.2 PPG OAK CREEK

Sample: MW-2	Lab ID:	4053165005	Collected	Collected: 11/01/11 12:45		Received: 11	/03/11 11:30 M	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytica	Method: WI M	OD GRO						
Ethylbenzene	5580 L	ıg/L	100	41.4	100		11/08/11 18:09	100-41-4	
m&p-Xylene	3160 0 ι	ıg/L	200	87.1	100		11/08/11 18:09	179601-23-1	
o-Xylene	13500 L	ıg/L	100	38.1	100		11/08/11 18:09	95-47- 6	
a,a,a-Trifluorotoluene (S)	103 %	%.	80-120		100		11/08/11 18:09	98-08-8	
Sample: MW-1	Lab (D:	4053165006	Collecter	1: 11/01/1	1 12:55	Received: 11	/03/11 11:30 M	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical	Analytical Method: WI MOD GRO							
Ethylbenzene	<0.41 ti	ıg/L	1.0	0.41	1		11/08/11 11:05	100-41-4	
m&p-Xylene	2.9 u	ıg/L	2.0	0.87	1		11/08/11 11:05	179601-23-1	
o-Xylene	1.4 u	ıg/L	1.0	0.38	1		11/08/11 11:05	95-47-6	
a,a,a-Trifluorotoluene (S)	103 9	%.	80-120		1		11/08/11 11:05	98-08-8	
Sample: TRIP BLANK	Lab ID;	4053165007	Collected	ſ:		Received: 11	/03/11 11:30 M	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical	Method: WI M	OD GRO						
Ethylbenzene	<0.41 u	ıg/L	1.0	0.41	1		11/08/11 10:40	100-41-4	
m&p-Xylene	<0.87 u	ıg/L	2.0	0.87	1		11/08/11 10:40	179601-23-1	
o-Xylene	<0.38 u		1.0	0.38	1		11/08/11 10:40	95-47-6	
a.a.a-Trifluorotoluene (S)	103 9		80-120		1		11/08/11 10:40	98-08-8	



QUALITY CONTROL DATA

Project:

QC Batch:

112003509.101.2 PPG OAK CREEK

Pace Project No.:

4053165

GCV/7567 Analysis Method: WI MOD GRO

QC Batch Method:

WI MOD GRO

Analysis Description:

WIGRO GCV Water

Associated Lab Samples: 4053165001, 4053165002, 4053165003, 4053165004, 4053165005, 4053165006, 4053165007

METHOD BLANK: 530331

Matrix: Water

Associated Lab Samples: 4053165001, 4053165002, 4053165003, 4053165004, 4053165005, 4053165006, 4053165007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethylbenzene	ug/L	<0.41	1.0	11/07/11 09:21	
m&p-Xylene	ug/L	<0.87	2.0	11/07/11 09:21	
o-Xylene	ug/L	<0.38	1.0	11/07/11 09:21	
a,a,a-Trifluorotoluene (S)	%.	102	80-120	11/07/11 09:21	

LABORATORY CONTROL SAM		53	30333							
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Ethylbenzene	ug/L	20	20.6	19.2	103	96	80-120	7	20	
m&p-Xylene	ug/L	40	41.1	38.3	103	96	80-120	7	20	
o-Xylene	ug/L	20	20.8	19.1	104	96	80-120	8	20	
a,a,a-Trifluorotoluene (S)	%.				104	103	80-120			





QUALIFIERS

Project:

112003509.101.2 PPG OAK CREEK

Pace Project No.: 4053165

DEFINITIONS

DF - Dilution Factor, If reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodlphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

BATCH QUALIFIERS

Batch: GCV/7567

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.