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

December 19, 2017

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

Subject: **Thirty First 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 semiannually for the duration of the project.

Activities Undertaken Since November 2016

Environmental contractor Tetra Tech continues to assist in the monitoring and remediation activities. As proposed in the 20th Annual Progress Report dated August 31, 2012, the pump was shut down on November 30, 2012. The MW-1 pump was removed from service because no LNAPL had been observed in the well for 18 consecutive semi-annual events (9 years) and concentrations of ethylbenzene and xylene had been non-detect or at concentrations far below the PAL from May 2008 to May 2012 (4 years). Attachment 1 contains a plan view map showing monitoring well locations.

On November 2, 2017, all the monitoring wells were checked for light non-aqueous phase liquid (LNAPL). LNAPL was not present in any of the wells nor was free product observed in the sample water collected from MW-2 or MW-3. This marks the 28th consecutive round and 13 years where no LNAPL was detected.

As proposed in the 20th Annual Progress Report dated August 31, 2012, samples were collected only from monitoring wells MW-2 and MW-3. Sampling of MW-1, MW-4, MW-5, and MW-6 was discontinued for the following reasons.

- Concentrations of ethylbenzene and xylene in wells MW-1, MW-4, MW-5, and MW-6, were consistently either non-detect or at concentrations far below the PAL.
- MW-1 and MW-4 were below the PAL between May 2008 and June 2012 (4 years).
- MW-5 was below the PAL between November 2003 and June 2012 (8 years); and MW-6 was non-detect from 2002 to June 2012 (10 years).

The following table provides a summary of the May 2017 results for sampled site wells; Table 1 provides a historical summary of the results of all of the sampling events.

Summary of November 2017 Results

		Ethylbenzene	Xylenes
Preventive Action Level (PAL):		140	400
Enforcement Standard (ES):		700	2,000
Well Number	Date	µg/l	µg/l
MW-2	11/02/17	**912**	**7,450**
MW-3	11/02/17	**1,810**	**15,360**

Notes: All concentrations in µg/l.

(1) MW-1, MW-4, MW-5, and MW-6 sampling was discontinued following the June 2012 sampling event.
(2) Bold indicated exceedance of the Preventative Action Level (PAL)
(3) Italic indicates exceedance of the Enforcement Standard (ES)

Ethylbenzene and xylene concentrations at MW-2 exceeded the PAL and ES for both analytes. The analytical data shows an increase in both ethylbenzene concentrations and xylene concentrations in MW-2 compared to the May 2017 results but overall these results are similar to historical results.

Ethylbenzene and xylene concentrations at MW-3 exceed the PAL and ES for both analytes. The analytical data shows a significant increase in both ethylbenzene and xylene concentrations in MW-3 compared to the May 2017 results but overall these results are similar to historical results.

These results suggest natural attenuation/dilution processes are continuing to reduce concentrations.

Planned Activities

Groundwater sampling will continue on a semiannual basis for MW-2 and MW-3. All the wells will be checked for the presence of LNAPL on an annual basis. Water quality samples from the MW-2 and MW-3 will be evaluated relative to WAC groundwater quality standards. The next sampling event is scheduled for May 2018.

Closing

PPG will submit annual progress reports to WDNR and advise immediately if there is any significant change in conditions at the site. If you have any questions, please contact me at (724) 325-5034.

Sincerely,

Aaron F. Signarovitz, EIT
Environmental Engineer

cc: Jason Chapelle – WDNR S.E. Region, Water Division
Jody Overmyer – PPG EHS, Monroeville
Erica Love – Tetra Tech, Inc.

Attachments

TABLE 1

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

	MW-1		MW-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
6/17/12	<0.41	<0.87	3,080	27,740	540	4,980	<0.41	11.1	<0.41	<0.87	<0.41	<0.87
11/8/12	N/S	N/S	4,840	42,000	559	4,700	N/S	N/S	N/S	N/S	N/S	N/S
7/26/13	N/S	N/S	186	1,864	558	6,130	N/S	N/S	N/S	N/S	N/S	N/S
11/15/13	N/S	N/S	3,860	36,500	932	10,010	N/S	N/S	N/S	N/S	N/S	N/S
05/20/14	N/S	N/S	7,000	53,800	1,710	15,700	N/S	N/S	N/S	N/S	N/S	N/S
11/11/14	N/S	N/S	13,800	110,000	11,900	93,900	N/S	N/S	N/S	N/S	N/S	N/S
5/20/15	N/S	N/S	4,520	36,500	783	6,750	N/S	N/S	N/S	N/S	N/S	N/S
11/11/15	N/S	N/S	5,020	40,800	6,130	49,600	N/S	N/S	N/S	N/S	N/S	N/S
5/10/16	N/S	N/S	326	2,560	39.5	324	N/S	N/S	N/S	N/S	N/S	N/S
11/3/16	N/S	N/S	366	3,005	296	2,504	N/S	N/S	N/S	N/S	N/S	N/S
5/24/17	N/S	N/S	483	3,930	410	3,510	N/S	N/S	N/S	N/S	N/S	N/S
11/02/17	N/S	N/S	912	7,450	1,810	15,300	N/S	N/S	N/S	N/S	N/S	N/S

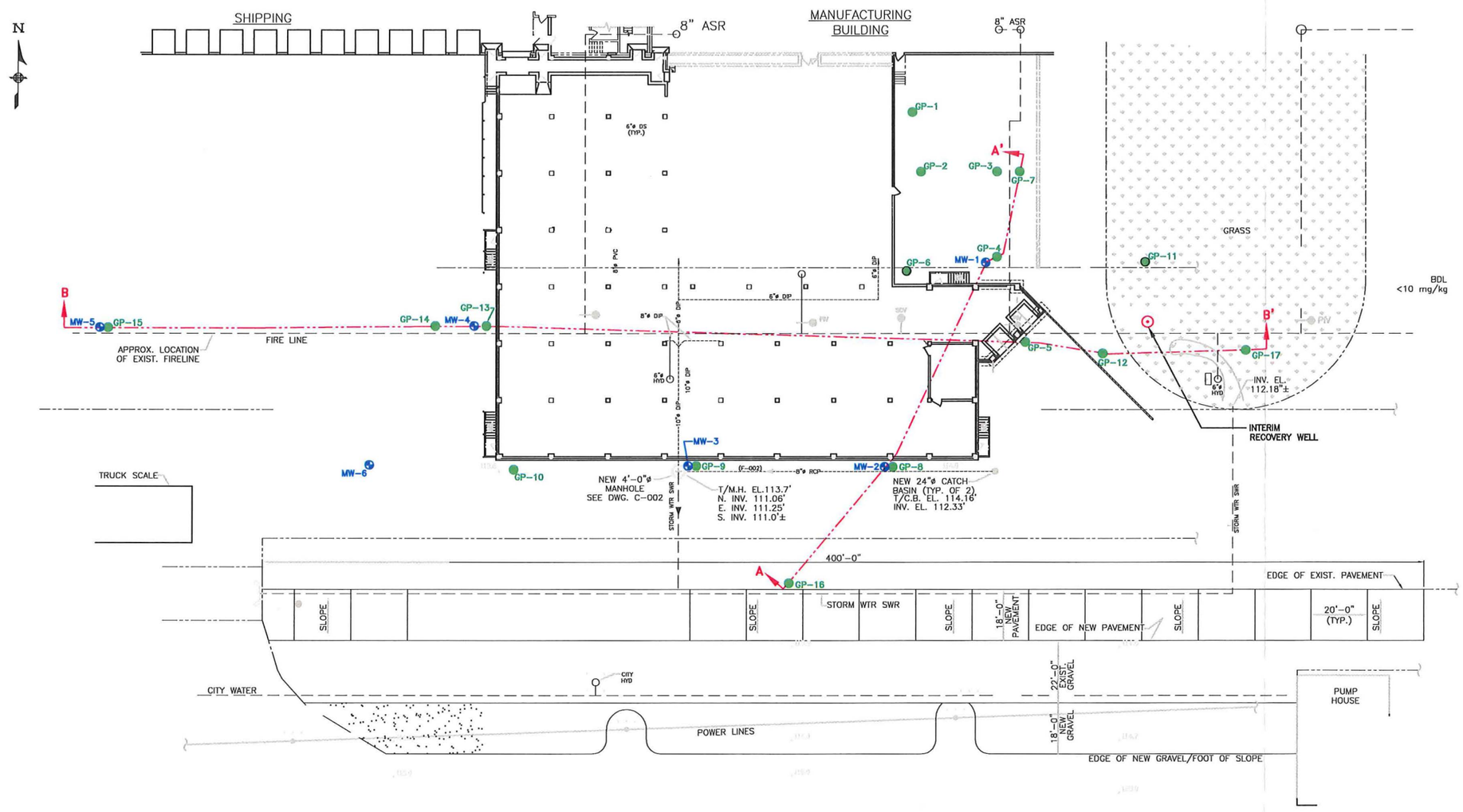
Notes: All concentrations in µg/l.

(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



LEGEND

- MONITORING WELLS
- GEOPROBE TEST BORINGS
- INTERIM RECOVERY WELL
- GEOLOGIC CROSS SECTION LOCATIONS

SCALE 20 0 20 FEET

THIS DRAWING IS DERIVED FROM PPG DRAWING NO. OC-01010-C-001 REV. 1

WPZ G:\AUTOCAD\WCS\120208-ppg-oak creek\120208-siteplan.dwg 11-05-2002 02:15 pm
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Images: [none]

Plot time: 02:15 pm
Plot date: 11-05-2002

REFERENCES	NO.	REVISIONS	BY	DATE	NO.	REVISIONS	BY	DATE	NO.	REVISIONS	BY	DATE
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MFG consulting scientists and engineers
820 West Street, Suite A
Pittsburgh, Pennsylvania 15212
Phone (412) 321-2229
Fax (412) 321-2320

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DRAWN BY:	WPZ
CHECKED BY:	JRF
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PCP/PC2:	MFG-STD
VIEW NAME:	
ORIGINATION DATE:	03/28/01
PLOT SCALE:	1:1 OR 1:2
DATE:	JULY 2002

PPG – OAK CREEK

OAK CREEK, WISCONSIN

FIG. 1 SITE PLAN

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