## Lauridsen, Keld B - DNR

From: Maletzke, Jeff < Jeff.Maletzke@aecom.com>

Sent: Monday, February 3, 2020 8:58 AM

**To:** Lauridsen, Keld B - DNR

Cc:Mrotek, Melissa (GBY); Cole, AlbertSubject:DNR BRRTS Activity #02-05-583452Attachments:WDNR submittal 1-31-20.pdf

Keld:

On behalf of GP, please see attached documentation of PCB Soil Excavation/Removal Activities. Thank you.

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Georgia-Pacific Consumer Operations LLC

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January 31, 2020

SUBMITTED VIA EMAIL

Mr. Keld Lauridsen Hydrogeologist Wisconsin Department of Natural Resources 2984 Shawano Avenue Green Bay, WI 54313-6727

Subject:

**PCB Soil Excavation/Removal Activities** 

Georgia-Pacific Consumer Operations LLC - Green Bay Broadway Mill

DNR BRRTS Activity # 02-05-583452

Dear Mr. Lauridsen:

Georgia-Pacific Consumer Operations LLC (GP) is providing the Wisconsin Department of Natural Resources (WDNR) with this documentation of soil excavation/removal and disposal activities completed to remediate PCB impacts near soil boring B-101 at the GP Broadway Mill, located at 1919 South Broadway Street, in the City of Green Bay, Wisconsin. This documentation is being submitted in support of a request for No Further Action (NFA). However, we understand that the Department may not issue an NFA determination until after PFAS sampling is completed in other areas of the site.

### Background

Five geotechnical borings (B-101, B-102, B-103, B-104A, and B-105) were completed in January and February 2019 to obtain preliminary geotechnical information regarding the nature of the soils on site and the quality of the fill material at the locations shown on Figure 1. A composite sample of the fill material beneath a layer of coal from the coal storage yard was collected for TCLP and PCB sampling required for the landfill disposal of the soils which were expected to be excavated for a proposed mill project. Samples were analyzed for TCLP metals, TCLP VOCs, TCLP SVOCs, and PCBs. The results of this initial sampling indicated the presence of benzene, MEK, Cadmium, and Barium in the TCLP samples and PCBs in one soil sample which led to the submittal of a Release Notification and Release Confirmation Sampling Plan to the WDNR on May 9, 2019.

Confirmation samples were collected on June 17, 2019. The results of the confirmation sampling indicated no detections of benzene and very low levels of cadmium. The detected concentrations of cadmium were below the NR720 RCLs. These results indicated no need for further investigation regarding benzene and cadmium. However, total PCBs were detected in soil samples collected in surficial fill near B-101 at concentrations above the Groundwater Pathway RCL of 9.4 ug/Kg. These results, as well as a sampling plan for an additional investigation was submitted to the WDNR on August 8, 2019.

Based on the detections of PCBs in the initial confirmation sampling, additional soil samples were collected on September 13, 2019 to delineate the extent of PCBs (relative to the Groundwater Pathway RCL). A total of 5 borings (B-101E through B-101I) were completed at the locations shown on Figure 1. No PCBs were detected in any of the additional confirmation samples, thereby establishing the lateral extent of PCBs in the B-101 area defined by sample locations B-101E through B-101I as shown on Figure 1. The vertical limits of PCB impacts were established during previous sampling to be limited to surficial fill as PCBs were not detected in deeper samples (8.5 to 9.5 ft bgs). These results, as well as a work plan to excavate and remove PCB-impacted soil was submitted to the WDNR on November 12, 2019.

Table 1 provides a summary of the analytical data and the regulatory standards for all the soil samples collected. A summary of detected compounds is also shown on Figure 1.

### Soil Excavation/Removal Activities

Based on the data discussed above and the workplan submitted to and approved by WDNR, surficial fill and coal within the area defined by sample locations B-101E through B-101I was excavated and disposed at GP Consumer Operations LLC Green Bay West Landfill (Green Bay, WI) on December 10, 2019. The bottom of the coal and fill material in this area is approximately 7.5 feet bgs. Therefore, the excavation was extended to a depth of eight feet bgs. Final dimensions of the excavation were 52 feet by 50 feet by 8 feet deep. A total of 605 cubic yards of material was excavated. Forty-one truckloads of excavated material were transported to the licensed landfill. A separate manifest was completed for each truckload, an example of which is included as Attachment A. A complete set of manifests are on file at GP's Broadway Mill facility.

After excavation, the excavated area was backfilled to within one foot of the original grade with clean sand fill supplied by McKeefry and Sons from the Hylok Sand Pit (3513 Northwood Road, Suamico, WI). The top one foot of the excavated area was capped with ¾-inch crushed gravel supplied by McKeefry and Sons from Pit #3 (W830 Main Laney Drive, Pulaski, WI). Photo-documentation of excavation and backfilling activities is provided as Attachment B.

Based on our previous discussions it is our understanding that completion of this excavation per the approved workplan completes all remedial actions required by the WDNR regarding the PCB-impacted materials and will result in an NFA for the PCB-impacted soils.

Please contact me at (920) 438-2233 or melissa.mrotek@gapac.com if you have any questions.

Sincerely.

Melissa Mrotek

**Environmental Program Manager** 

Georgia-Pacific Consumer Operations LLC

**Broadway Mill** 

**Enclosures:** 

Figure 1 – Confirmation Sampling Locations and Limits of Excavation

Table 1 - Summary of Soil Analytical Results

Attachment A – Example Soil Manifest

Attachment B - Photo Log of Excavation and Backfilling Activities



- D (Confirmation sample location coincident with geotechnical boring completed January 2019)
- Location of Geotechnical Soil Borings
- Additional confirmation sampling location at 3-4 ft bgs

ND = Not Detected J = Result is between Limit of Dectection and Limit of Quantification NA = Not Analyzed per Release Confirmation Sampling Plan submitted to WDNR May 9, 2019 and WDNR recommendation via email May 10, 2019. NS= Not Sampled

400 Feet

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prior written conser	REVISION	BY	DATE	NO.

•	PROJ	ROJECT: PCB INVESTIGATION												
	MACH NAME: SOIL SAMPLING & EXCAVATION/REMOVAL													
Georgia-Pacific Consumer Products	DET NAME: CONFIRMATION SAMPLE LOCATIONS & LIMITS OF EXCAVATION													
GREEN BAY BROADWAY	DR.	ASM		CH.	JM		DAT	ΓE:	1/28/20	-				-
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onfidential and Proprietary informations of GPCP IP Holdings, LLC all rights eserved. Duplication prohibited withot	ï			-				-			-			REV
prior written consent.	FIGURE 1 DWG #: CONFIRMATION SAMPLE LOCAT									CATIONS				

# Soil Analytical Data Summary

Project Pace Mill Expansion

Georgia Pacific Broadway Mill - Green Bay, Wisconsin

Project No. 60614524

		Sample	B-101A	B-101A	B-101B	B-101B	B-101C	B-101C	B-101D	B-101D DUP	B-101D	B-101E	B-101F	B-101G	B-101H	B-101I	B-103A	B-103A	B-103B	B-103B	B-103C
Parameter	Unit	Depth (ft/bgs)	3-4	8.5-9.5	3-4	8.5-9.5	3-4	8.5-9.5	3-4	3-4	8.5-9.5	3-4	3-4	3-4	3-4	3-4	5.5-6.5	7-8	5.5-6.5	7-8	5.5-6.5
Cadmium, Total	mg/kg																				
PCB-1016	ug/Kg		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND					
PCB-1221	ug/Kg		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND					
PCB-1232	ug/Kg		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND					
PCB-1242	ug/Kg		ND	ND	[55]J	ND	250	ND	ND	94	ND	ND	ND	ND	ND	ND					
PCB-1248	ug/Kg		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND					
PCB-1254	ug/Kg		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND					
PCB-1260	ug/Kg		ND	ND	ND	ND	[19]J	ND	ND	ND	ND	ND	ND	ND	ND	ND					
Total PCBs	ug/Kg		ND	ND	[55]J	ND	270	ND	ND	94	ND	ND	ND	ND	ND	ND					
Benzene	ug/Kg																				

# Soil Analytical Data Summary

Project Pace Mill Expansion

Georgia Pacific Broadway Mill - Green Bay, Wisconsin

Project No. 60614524

																	Soil Contaminant Levels R 720 Wis. Adm Code)		
		Sample	B-103C	B-103D	B-103D DUP	B-103D	B-104A	B-104B	B-104C	B-104D	B-105A	B-105B	B-105C	B-105D	B-105D DUP			Protection of	
Parameter	Unit	Depth (ft/bgs)	7-8	5.5-6.5	5.5-6.5	7-8	4.8-5.8	4.8-5.8	4.8-5.8	4.8-5.8	5-6	5-6	5-6	5-6	5-6	Industrial Direct Contact		Groundwater Quality (DF = 2)	
Cadmium, Total	mg/kg										[0.059]	[0.089]	ND	[0.095]	ND	985	71.1	0.752	
PCB-1016	ug/Kg															28,000	4,110		
PCB-1221	ug/Kg															883	213		
PCB-1232	ug/Kg															792	190		
PCB-1242	ug/Kg															972	235		
PCB-1248	ug/Kg															975	236		
PCB-1254	ug/Kg															988	239		
PCB-1260	ug/Kg															1,000	243		
Total PCBs	ug/Kg															967	234	9.4	
Benzene	ug/Kg			ND	ND	ND				ND				ND		7,070	1,600	5.1	

### Notes:

- 1. Values in brackets represent results greater than or equal to the Limit of Detection (LOD), but less than the Limit of Quantitation (LOQ), and are within a region of "less certain quantitation."
- 2. Only parameters with detections are shown.
- 3. DF = Dilution Factor

= Not Analyzed per Release Confirmation Sampling Plan submitted to WDNR May 9, 2019 and WDNR recommendation in e-mail correspondence dated May 10, 2019.

ND = Not Detected

- J = Result enclosed in brackets is between LOD and LOQ, a region of less certain quantitation.
- -- = No RCL listed

# Attachment A

Example Soil Manifest

# **NON-HAZARDOUS WASTE MANIFEST**

F	Pleas	e print or type (Form designed for use on elite (12 pitch) typewriter)				
		NON-HAZARDOUS WASTE MANIFEST  1. Generator's US EPA ID No.  WILLIAM 1. Generator's US EPA ID No.		Manifest Document No	19-68	2. Page 1 of
		3. Generator's Name and Mailing Address  6P Consumer operations LCC		1000		
		Generator's Prone (GOO) //25 - SSO				
		5. Transporter 1 Company Name 6. US EPA ID Number		A. State Trans	110-13	6
		7. Transporter 2 Company Name 8. US EPA ID Number		B. Transporter C. State Trans	1000	22-5275
		AN		D. Transporter	2 Phone	
1		Designated Facility Name and Site Address     10. US EPA ID Number		E. State Facili	ty's ID 405016	150
		9. Designated Facility Name and Site Address  GP Consumer Operation U.C.  GB West LF  Sec6-T32N-R20E		Lider	se 4 233	32
		Gran Foully 54300 Secto 132N-HOUL		F. Facility's Ph	438-219	10
		11. WASTE DESCRIPTION	12. Co		13. Total	14. Unit
		a	No.	Туре	Quantity	Wt./Vol.
	Service of the servic	Non RORA Imported Soil-PCB LIPAM	1	DT	17	yd3
	G E N	b.				
· ·	E R	C.				
	ATO					
2500.000	R	d.				
ST						
3		G. Additonal Descriptions for Materials Listed Above		H. Handling C	odes for Wastes Listed Ab	ove
Sn						
00						
AF						
-HAZARDOUS WASTE		15. Special Handling Instructions and Additional Information	-	48	2	
NON-		DT= Dump Truck	a	# 8		
Z						
		16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste reg	and are in gulations.	all respects		
			A			Date
		Printed/Typed Name Signature Signature	1		Me / a	onth Day Year
Ī	T R	17. Transpoker 1 Acknowledgement of Receipt of Materials				Date
	A N S	Printed/Typed Name Signature				2 Vo V9
	P OR	18. Transporter 2 Acknowledgement of Receipt of Materials				Date
	RANSPORTER	Printed/Typed Name Signature			Mo	onth Day Year
	F	19. Discrepancy Indication Space				
	AC					
	L	20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this maifest, except as noted in ite	em 19.			Date
	T	Printed/Typed Name Signature	17	15	M	lonth Day Year
	Y	Richard F. Jones Pura	K	0.	The 1	2 10 19

## Attachment B

Photo Log of Excavation and Backfilling Activities



Client Name: Georgia-Pacific Consumer Operations, LLC Site Location: Green Bay Broadway Mill 1919 South Broadway, Green Bay, WI Project No.: 60614524

Photo No.

Date: 12/10/19

Direction Photo Taken:

Northeast

Description:

Soil excavation at B-101 area in progress.



Photo No. 2 Date: 12/10/19

Direction Photo Taken:

**Northeast** 

Description:

Soil excavation in progress.





Client Name: Georgia-Pacific Consumer Operations, LLC Site Location: Green Bay Broadway Mill 1919 South Broadway, Green Bay, WI Project No.: 60614524

Photo No.

Date: 12/10/19

Direction Photo Taken:

North

**Description:** 

Limits of soil excavation; 52-foot diameter measured east-west



Photo No.

Date:

12/10/19

Direction Photo Taken:

**Northeast** 

**Description:** 

Limits of soil excavation; 52-foot diameter measured east-west.





Client Name: Georgia-Pacific Consumer Operations, LLC Site Location: Green Bay Broadway Mill 1919 South Broadway, Green Bay, WI Project No.: 60614524

Photo No. 5

Date: 12/10/19

Direction Photo Taken:

**Northeast** 

Description:

Limits of soil excavation; 50-foot diameter measured north-south.



Photo No.

Date: 12/10/19

Direction Photo Taken:

East

Description:

Vertical limits of soil excavation measured at 8 feet deep.



Client Name: Georgia-Pacific Consumer Operations, LLC Site Location: Green Bay Broadway Mill 1919 South Broadway, Green Bay, WI Project No.: 60614524

Photo No.

Date: 12/10/19

Direction Photo Taken:

**East** 

Description:

Vertical limits of soil excavation measured at 8 feet deep.



Photo No.

Date: 12/11/19

Direction Photo Taken:

Northwest

Description:

Initiation of backfilling with clean sand.





Client Name: Georgia-Pacific Consumer Operations, LLC Site Location: Green Bay Broadway Mill 1919 South Broadway, Green Bay, WI Project No.: 60614524

Photo No.

Date: 12/11/19

Direction Photo Taken:

Northeast

Description:

Continued backfilling of excavation.



Photo No.

Date: 12/11/19

Direction Photo Taken:

Northeast

**Description:** 

Backfilling and compaction of excavation.





Client Name: Georgia-Pacific Consumer Operations, LLC Site Location: Green Bay Broadway Mill 1919 South Broadway, Green Bay, WI Project No.: 60614524

Photo No. 11 Date: 12/11/19

Direction Photo Taken:

Northeast

Description:

Compaction of sand backfill.



Photo No.

Date: 12/11/19

Direction Photo Taken:

East

Description:

Compaction of sand backfill.



Client Name: Georgia-Pacific Consumer Operations, LLC Site Location: Green Bay Broadway Mill 1919 South Broadway, Green Bay, WI Project No.: 60614524

Photo No. 13 Date: 12/11/19

Direction Photo Taken:

North

Description:

Compaction and grading of gravel top layer (14 inches thick).



Photo No.

Date: 12/11/19

Direction Photo Taken:

Northeast

**Description:** 

Continued placement, grading and compaction of gravel top layer.



# AECON