

July 7, 2021

Mr. Matt Thompson Wisconsin Department of Natural Resources 1300 W. Clairemont Avenue Eau Claire, WI 54701

Subject: 2021 Second Quarterly Report - Wauleco, Inc., Wausau, Wisconsin

BRRTS #02-37-000006

Dear Mr. Thompson:

On behalf of Wauleco, Inc., TRC is submitting a copy (enclosed) of the 2021 Second Quarterly Report for the Wauleco, Inc., site in Wausau, Wisconsin.

If you have any questions or comments regarding this information, please call me at (608) 235-4963.

Sincerely,

TRC

Bruce Iverson Project Manager

Attachments: 2021 Second Quarterly Report

cc: Evan Schreiner - Wauleco, Inc. (2 copies)

David Crass - Michael Best & Friedrich, LLP (electronic copy only)

Tom Dushek – TRC Wauleco (1 copy)

Ken Quinn – TRC (1 copy)

Wauleco, Inc. - Wausau, Wisconsin Quarterly Report Submitted July 2021

Summary of 2021 Second Quarter Activities

Groundwater Extraction and Treatment System Operation

Tables 1a, b, and c summarize the extraction and treatment system performance data for this reporting period. The results of the water discharged to the municipal sewer during the second quarter of 2021 are summarized as follows:

- Pentachlorophenol (PCP) screening (on-site gas chromatograph) results for the system effluent samples, which represent the water discharged to the municipal sanitary sewer, averaged 12.83 μg/L in April, 3.79 μg/L in May, and 1.40 μg/L in June.
- Laboratory results for the sampling event conducted this quarter are included in Tables 1a, b, and c for each month. The laboratory results for PCP in the system effluent was 12.0 μg/L on April 14, <3.0 μg/L on May 19, and <3.0 μg/L on June 16, 2021.
- Both laboratory and on-site screening results indicate that the effluent PCP concentrations were below the monthly average permit level of 150 μg/L and the daily maximum concentration of 300 μg/L.
- Total treatment system efficiency (including carbon polishing units) removed more than 99 percent of the PCP between the influent and the effluent.
- The treatment system was shutdown on May 3, 2021 for carbon replacement in the eight final treatment vessels, cleaning, and general maintenance. The treatment system was restarted on May 11, 2021.

On-site screening PCP influent concentrations ranged from 3,924 μ g/L to 7,959 μ g/L during the quarter (Tables 1a, b, and c). PCP influent and effluent concentrations in the fluidized bed reactor (FBR) are presented graphically, both as individual data points and as moving averages, on Figure 1. FBR results included the following:

- As shown on Figure 1 and in Tables 1a, b, and c, PCP concentrations in the FBR influent fluctuated during the quarter, and generally remain within normal concentrations.
- The average PCP removal efficiency for the biological portion (*i.e.*, FBR influent to the fixed film reactor [FFR] effluent) of the system during this quarter is compared to the following:

Month	Average PCP Removal (%)	Previous 12 Month Average (%)	Average 1 Year Ago (%)
April 2021	79	83	85
May 2021	81	83	85
June 2021	80	82	87

• The dissolved oxygen concentration in the influent to the FBR averaged 2.0 mg/L in April, 2.4 mg/L in May, and 2.6 mg/L in June 2021.

Laboratory results for the mercury analysis of the system effluent samples are included in Tables 1a, b, and c. The mercury concentration in the system effluent sample (discharged to the sanitary sewer) was $0.069 \mu g/L$ on April 14, $<0.02 \mu g/L$ on May 19, and $0.032 \mu g/L$ on June 16, which are below the permit discharge limit of 1.6 µg/L. The mass loading for mercury in April was calculated at 0.0000182 lb/24 hours, and June was calculated at 0.00000891 lb/24 hours which is below the permit discharge limit of 0.00048 lb/24 hours. The mass loading for mercury in May was calculated using half the detection limit of 0.01 µg/L, at 0.00000276 lb/24 hours in May, which are below the permit discharge limit of 0.00048 lb/24 hours.

The daily groundwater flow of the effluent to the Wausau Wastewater Treatment Plant averaged 21.91 gpm for April, 22.99 gpm for May when the treatment system was in operation, and 23.16 gpm for June 2021 (Tables 2a, b, and c). Since June, 2012 the pumping rate has been operated at approximately 22 gpm.

Figure 2 shows the average groundwater flow extracted and the average daily flow discharged to the Wausau Wastewater Treatment Plant.

Groundwater Monitoring

A complete round of water table elevations for the month of April 2021 are summarized in Table 3.

The product thickness data for April 2021 are summarized in Table 4. Measurements show minimal product present in April.

Water table elevations and product thickness data for May and June, 2021 for eleven select monitoring wells being measured in association with the City of Wausau Wastewater Treatment Plant dewatering are also summarized in Tables 3 and 4, respectively. Measurements show no product present in May and June for these wells.

Enclosures: Tables 1a, b, and c – Above Ground Treatment System Data

Tables 2a, b, and c – Treatment System Flows

Table 3 – Groundwater Elevation Data Table 4 – Free Product Measurements

Figure 1 – FBR Influent and Effluent PCP Concentrations

Figure 2 – Average Groundwater Extraction Rates and Water Level Deviation

Versus Time

TABLE 1a APRIL 2021

<u>Parameter</u>	<u>UNIT</u>	DATE	FBR <u>Influent</u>	FBR Effluent	FFR <u>Effluent</u>	Bag Filter Effluent	Filters1+2 Effluent	System Effluent	
Biological Oxygen Demand	mg/L	4/14/2021	10	9.1				13	
Chemical Oxygen Demand	mg/L	4/14/2021	43	43				36	
Chloride	mg/L	4/14/2021	160	150				160	
Dissolved Oxygen	mg/L mg/L mg/L	4/1/2021 4/8/2021 4/14/2021	2.2	1.3	6.2 5.9 6.2				
	mg/L mg/L mg/L	4/22/2021 4/30/2021	1.9		6.4 6.4				
Nitrogen, Ammonia	mg/L mg/L mg/L mg/L mg/L	4/1/2021 4/8/2021 4/14/2021 4/22/2021 4/30/2021	0.4 0.4 0.4	0.3 0.4 0.4 0.6 0.6	0.3 0.4 0.6 0.4 0.5				
Nitrogen, Nitrate	mg/L mg/L mg/L mg/L mg/L	4/1/2021 4/8/2021 4/14/2021 4/22/2021 4/30/2021	< < <	< < < < < < < <	< < < < < < < < < < < < < < < < < < <				
Nitrogen, Nitrate + Nitrite	mg/L	4/14/2021	<	<				<	
Nitrogen, Total Kjeldahl	mg/L	4/14/2021	<	<				<	
Pentachlorophenol-Screen	μg/L μg/L μg/L μg/L μg/L μg/L	4/1/2021 4/2/2021 4/3/2021 4/4/2021 4/5/2021 4/6/2021		1262	1005				10 10 14 14 14 14
	µg/L µg/L µg/L µg/L µg/L µg/L µg/L	4/7/2021 4/8/2021 4/9/2021 4/10/2021 4/11/2021 4/12/2021 4/13/2021	7959	1943	2176				15 20 12 5 5 12 12
	μg/L μg/L μg/L μg/L μg/L μg/L μg/L μg/L	4/14/2021 4/15/2021 4/16/2021 4/17/2021 4/18/2021 4/19/2021 4/20/2021 4/21/2021	5102	1309	1025		627		18 9 9 11 11 11 15 17
	μg/L μg/L μg/L μg/L μg/L	4/22/2021 4/23/2021 4/24/2021 4/25/2021	5996	1295	1221				13 13 13 13

TABLE 1a APRIL 2021

<u>Parameter</u>	<u>UNIT</u>	DATE I	FBR Influent	FBR Effluent	FFR <u>Effluent</u>	Bag Filter Effluent	Filters1+2 Effluent	System Effluent	System Eff Dup
Pentachlorophenol-Screen	μg/L	4/26/2021						1:	3
-	μg/L	4/27/2021						1.	5
	μg/L	4/28/2021						1:	9
	μg/L	4/29/2021						2	0
	μg/L	4/30/2021 51	131	1265	997			1-	4
pН	S.U.	4/1/2021 6.	.65	7	7				
	S.U.	4/8/2021 6.	.7	6.65	6.65				
	S.U.	4/14/2021 6.	.65	6.5	6.65				
	S.U.	4/22/2021 6.	.7	6.9	6.9				
	S.U.	4/30/2021 6.	.7	6.75	6.75				
Phosphorus, Ortho	mg/L	4/14/2021 <		<				<	
Phosphorus, Phosphate	mg/L	4/1/2021 0.	.4	0.3	0.3				
	mg/L	4/8/2021 0.	.4	0.3	0.3				
	mg/L	4/14/2021 1		2	2				
	mg/L	4/22/2021 1		0.8	0.8				
	mg/L	4/30/2021 0.	.9	0.8	0.8				
Solids, Total Suspended	mg/L	4/14/2021 15 4/14/2021 0.		21				5.8 0.069	
Mercury	μg/L	4/14/2021 0.	.21					0.069	
Phenol									
2,3,4,6-Tetrachlorophenol	μg/L	4/14/2021 24			57		50	<	<
2,4,5-Trichlorophenol	$\mu g/L$	4/14/2021 <			<		<	<	<
2,4,6-Trichlorophenol	$\mu g/L$	4/14/2021 <			<		<	<	<
2,4-Dichlorophenol	μg/L	4/14/2021 <			<		<	<	<
2,4-Dimethylphenol	μg/L	4/14/2021 <			<		<	<	<
2,4-Dinitrophenol	μg/L	4/14/2021 <			<		<	<	<
2,6-Dichlorophenol	μg/L	4/14/2021 <			<		<	<	<
2-Chlorophenol	μg/L	4/14/2021 <			<		<	<	<
2-Methylphenol	μg/L	4/14/2021 <			<		<	<	<
2-Nitrophenol	μg/L	4/14/2021 <			<		<	<	<
3&4-Methylphenol	μg/L	4/14/2021 <			<		<	<	<
4,6-Dinitro-2-Methylphenol	μg/L	4/14/2021 <			<		<	<	<
4-Chloro-3-Methylphenol	μg/L	4/14/2021 <			<		<	<	<
4-Nitrophenol	μg/L	4/14/2021 <			<		<	<	<
Pentachlorophenol	μg/L	4/14/2021 28			520		480	12	13
Phenol	μg/L	4/14/2021 <			<		<	<	<

TABLE 1b MAY 2021

<u>Parameter</u>	<u>UNIT</u>	<u>DATE</u>	FBR <u>Influent</u>	FBR Effluent	FFR Effluent	Bag Filter Effluent	Filters1+2 Effluent	System Effluent	System Eff Dup
Biological Oxygen Demand	mg/L	5/19/2021	11	3.8				<	
Chemical Oxygen Demand	mg/L	5/19/2021	43	36				21	
Chloride	mg/L	5/19/2021	170	160				160	
Dissolved Oxygen	mg/L	5/13/2021	2.4	0.9	5.1				
	mg/L	5/19/2021	2.1	0.8	5.1				
	mg/L	5/27/2021	2.6	1	5.8				
Nitrogen, Ammonia	mg/L	5/13/2021	0.4	0.3	0.4				
rvidogen, rimmomu	mg/L	5/19/2021	0.3	0.5	0.4				
		5/27/2021	0.5	0.3	0.3				
	mg/L	3/2//2021	0.3	0.3	0.3				
Nitrogen, Nitrate	mg/L	5/13/2021	<	<	<				
	mg/L	5/19/2021	<	<	<				
	mg/L	5/27/2021	<	<	<				
Nitrogen, Total Kjeldahl	mg/L	5/19/2021	2.0	<				<	
Pentachlorophenol-Screen	μg/L	5/1/2021						16	
•	μg/L	5/2/2021						16	
	μg/L	5/3/2021						16	
	μg/L μg/L	5/4/2021						16	
	μg/L μg/L	5/5/2021						10	
	μg/L μg/L	5/6/2021							
	μg/L μg/L	5/7/2021							
	μg/L μg/L	5/8/2021							
	μg/L μg/L	5/9/2021							
		5/10/2021							
	μg/L	5/11/2021							
	μg/L	5/11/2021						2	
	μg/L	5/12/2021	5228	1542	1147			3	
	μg/L	5/13/2021	3220	1342	114/			2 1	
	μg/L								
	μg/L	5/15/2021						1	
	μg/L	5/16/2021						1	
	μg/L	5/17/2021						1	
	μg/L	5/18/2021	470.4	027	77.4		-	1	
	μg/L	5/19/2021	4794	937	774		5	1	
	μg/L	5/20/2021						1	
	μg/L	5/21/2021						1	
	μg/L	5/22/2021						1	
	μg/L	5/23/2021						1	
	μg/L	5/24/2021						1	
	μg/L	5/25/2021						1	
	μg/L	5/26/2021						1	
	$\mu g/L$	5/27/2021	5252	833	918			1	
	$\mu g/L$	5/28/2021						2	
	μg/L	5/29/2021						2	
	$\mu g/L$	5/30/2021						2	

TABLE 1b MAY 2021

<u>Parameter</u>	<u>UNIT</u>	<u>DATE</u>	FBR Influent	FBR Effluent	FFR Effluent	Bag Filter Effluent	Filters1+2 Effluent	System Effluent	System Eff Dup
Pentachlorophenol-Screen	$\mu g/L$	5/31/2021						2	
рН	S.U.	5/13/2021	7.1	7.05	7.05				
	S.U.	5/19/2021	6.95	6.7	6.85				
	S.U.	5/27/2021	6.75	6.7	6.8				
Phosphorus, Ortho	mg/L	5/19/2021	<	<				<	
Phosphorus, Phosphate	mg/L	5/13/2021	0.8	0.4	0.3				
	mg/L	5/19/2021	0.7	0.4	0.4				
	mg/L	5/27/2021	0.4	0.3	0.3				
Solids, Total Suspended	mg/L	5/19/2021	15	18				<	
Mercury	$\mu g/L$	5/19/2021						<	
Phenol									
2,3,4,6-Tetrachlorophenol	μg/L	5/19/2021	220	52	46			<	<
2,4,5-Trichlorophenol	μg/L	5/19/2021	<	<	<			<	<
2,4,6-Trichlorophenol	$\mu g/L$	5/19/2021	<	<	<			<	<
2,4-Dichlorophenol	$\mu g/L$	5/19/2021	<	<	<			<	<
2,4-Dimethylphenol	$\mu g/L$	5/19/2021	<	<	<			<	<
2,4-Dinitrophenol	$\mu g/L$	5/19/2021	<	<	<			<	<
2,6-Dichlorophenol	$\mu g/L$	5/19/2021	<	<	<			<	<
2-Chlorophenol	$\mu g/L$	5/19/2021	<	<	<			<	<
2-Methylphenol	μg/L	5/19/2021	<	<	<			<	<
2-Nitrophenol	μg/L	5/19/2021	<	<	<			<	<
3&4-Methylphenol	μg/L	5/19/2021	<	<	<			<	<
4,6-Dinitro-2-Methylphenol	μg/L	5/19/2021	<	<	<			<	<
4-Chloro-3-Methylphenol	μg/L	5/19/2021	<	<	<			<	<
4-Nitrophenol	μg/L	5/19/2021	<	<	<			<	<
Pentachlorophenol	$\mu g/L$	5/19/2021	3200	490	440			<	<
Phenol	$\mu g/L$	5/19/2021	<	<	<			<	<

TABLE 1c JUNE 2021

<u>Parameter</u>	<u>UNIT</u>	DATE	FBR <u>Influent</u>	FBR Effluent	FFR <u>Effluent</u>	Bag Filter Effluent	Filters1+2 Effluent	System Effluent	System Eff Dup
Biological Oxygen Demand	mg/L	6/16/2021	6.1	4.6				<	
Chemical Oxygen Demand	mg/L	6/16/2021	57	33				45	
Chloride	mg/L	6/16/2021	230	230				240	
Dissolved Oxygen	mg/L	6/3/2021	2.7	1.2	5.4				
	mg/L	6/10/2021	2.6	1	5.2				
	mg/L	6/16/2021	2.2	1.1	5.3				
	mg/L	6/24/2021	2.7	1.2	5				
Nitrogen, Ammonia	mg/L	6/3/2021	0.5	0.4	0.4				
	mg/L	6/10/2021	0.4	0.4	0.4				
	mg/L	6/16/2021	0.4	0.3	0.3				
	mg/L	6/24/2021	0.3	0.3	0.3				
Nitrogen, Nitrate	mg/L	6/3/2021	<	<	<				
	mg/L	6/10/2021	<	<	<				
	mg/L	6/16/2021	<	<	<				
	mg/L	6/24/2021	<	<	<				
Nitrogen, Total Kjeldahl	mg/L	6/16/2021	0.44	<				<	
Pentachlorophenol-Screen	μg/L	6/1/2021						2	
	$\mu g/L$	6/2/2021						3	
	μg/L	6/3/2021	4219	815	798			2	
	μg/L	6/4/2021						3	
	μg/L	6/5/2021						1	
	$\mu g/L$	6/6/2021						1	
	$\mu g/L$	6/7/2021						1	
	$\mu g/L$	6/8/2021						2	
	$\mu g/L$	6/9/2021						1	
	$\mu g/L$	6/10/2021	4713	853	1041			1	
	$\mu g/L$	6/11/2021						1	
	$\mu g/L$	6/12/2021						2	
	$\mu g/L$	6/13/2021						2	
	$\mu g/L$	6/14/2021						2	
	$\mu g/L$	6/15/2021						1	
	$\mu g/L$	6/16/2021	3924	766	845		121	1	
	$\mu g/L$	6/17/2021						1	
	μg/L	6/18/2021						1	
	$\mu g/L$	6/19/2021						1	
	$\mu g/L$	6/20/2021						1	
	μg/L	6/21/2021						1	
	$\mu g/L$	6/22/2021						1	
	$\mu g/L$	6/23/2021						1	
	$\mu g/L$	6/24/2021	4276	923	687			1	
	$\mu g/L$	6/25/2021						1	
	$\mu g/L$	6/26/2021						1	
	$\mu g/L$	6/27/2021						1	
	$\mu g/L$	6/28/2021						1	

TABLE 1c JUNE 2021

Parameter	<u>UNIT</u>	DATE	FBR <u>Influent</u>	FBR Effluent	FFR Effluent	Bag Filter Effluent	Filters1+2 Effluent	System <u>Effluent</u>	System Eff Dup
Pentachlorophenol-Screen	u ~/I	6/29/2021						1	
Pentachiorophenoi-Screen	μg/L	6/30/2021						3	
	$\mu g/L$	0/30/2021						3	
pН	S.U.	6/3/2021	6.7	6.65	6.8				
F	S.U.	6/10/2021	6.8	6.8	6.75				
	S.U.	6/16/2021	6.7	6.9	6.9				
	S.U.	6/24/2021	6.6	6.65	6.7				
	5.5.	0/2 1/2021	0.0	0.02	0.7				
Phosphorus, Ortho	mg/L	6/16/2021	<	<				<	
Phosphorus, Phosphate	mg/L	6/3/2021	0.5	0.2	0.3				
1 / 1	mg/L	6/10/2021	0.4	0.2	0.2				
	mg/L	6/16/2021	0.4	0.2	0.2				
	mg/L	6/24/2021	0.6	0.3	0.3				
	8								
Solids, Total Suspended	mg/L	6/16/2021	18	14				<	
Mercury	$\mu g/L$	6/16/2021						0.032	
Phenol									
2,3,4,6-Tetrachlorophenol	$\mu g/L$	6/16/2021	<		45			<	<
2,4,5-Trichlorophenol	μg/L	6/16/2021	<		<			<	<
2,4,6-Trichlorophenol	μg/L	6/16/2021	<		<			<	<
2,4-Dichlorophenol	μg/L	6/16/2021	<		<			<	<
2,4-Dimethylphenol	μg/L	6/16/2021	<		<			<	<
2,4-Dinitrophenol	μg/L	6/16/2021	<		<			<	<
2,6-Dichlorophenol	μg/L	6/16/2021	<		<			<	<
2-Chlorophenol	μg/L	6/16/2021	<		<			<	<
2-Methylphenol	$\mu g/L$	6/16/2021	<		<			<	<
2-Nitrophenol	$\mu g/L$	6/16/2021	<		<			<	<
3&4-Methylphenol	$\mu g/L$	6/16/2021	<		<			<	<
4,6-Dinitro-2-Methylphenol	$\mu g/L$	6/16/2021	<		<			<	<
4-Chloro-3-Methylphenol	$\mu g/L$	6/16/2021	<		<			<	<
4-Nitrophenol	$\mu g/L$	6/16/2021	<		<			<	<
Pentachlorophenol	$\mu g/L$	6/16/2021	2800		430			<	<
Phenol	$\mu g/L$	6/16/2021	<		<			<	<

TABLE 2a **APRIL 2021**

Treatment System Flows Wauleco, Inc. Wausau, Wisconsin

Date	Influent Groundwater Flow Rate ^{(1) (3)} (gpm)	POTW Discharge Flow Rate ^{(1) (4)} (gpm)	POTW Totalized Discharge ⁽³⁾ (gal)
Date	(gpiii)	(gpiii)	(gai)
4/1/2021	21.23	21.61	98274924
4/2/2021	21.09	21.49	98305875
4/3/2021	21.19	21.43	98336731
4/4/2021	21.05	21.75	98368055
4/5/2021	21.12	21.53	98399058
4/6/2021	21.25	21.43	98429921
4/7/2021	19.10	18.87	98457090
4/8/2021	18.85	18.51	98483738
4/9/2021	18.86	18.67	98510628
4/10/2021	21.55	21.27	98541258
4/11/2021	20.93	20.90	98571355
4/12/2021	18.41	20.48	98600854
4/13/2021	18.80	20.38	98630196
4/14/2021	20.67	22.14	98662079
4/15/2021	20.78	21.96	98693697
4/16/2021	20.93	21.39	98724498
4/17/2021	21.42	22.79	98757322
4/18/2021	21.58	22.88	98790276
4/19/2021	21.71	22.94	98823310
4/20/2021	21.90	22.93	98856323
4/21/2021	22.16	23.34	98889927
4/22/2021	22.28	23.44	98923684
4/23/2021	22.14	23.31	98957254
4/24/2021	22.23	23.26	98990750
4/25/2021	22.48	23.17	99024116
4/26/2021	22.55	23.14	99057439
4/27/2021	22.46	23.23	99090886
4/28/2021	22.46	22.54	99123339
4/29/2021	22.49	23.19	99156738
4/30/2021	22.54	23.41	99190452
Average For			
The Month	21.21	21.91	
Total ⁽²⁾ :			946,644

Footnotes:

⁽¹⁾ Influent and POTW discharge flow rates are daily averages. These may not be equal due to balancing in the treatment system and calibration of individual flowmeters. The influent groundwater flow rate is calculated by adding the instantaneous flow rate from each pumping well (i.e., 16 meters). The POTW discharge flow rate is recorded directly from the effluent meter.

⁽²⁾ Total is the cumulative gallons discharged to the POTW during the reporting period. This number is calculated by subtracting the total of the previous month's last day from the total of the current month's last day, see previous month's report for the number used. The total from the first day of the current month is not used in the calculation.

⁽³⁾ Totalizers were reset to 0 on August 23, 2012 during the system shutdown for maintenance.

⁽⁴⁾ A new effluent meter was installed in April, 2017 during the system shutdown for maintenance.

TABLE 2b MAY 2021

Treatment System Flows Wauleco, Inc. Wausau, Wisconsin

Date	Influent Groundwater Flow Rate (1) (3) (gpm)	POTW Discharge Flow Rate (1) (4) (gpm)	POTW Totalized Discharge ⁽³⁾ (gal)
5/1/2021	22.65	23.69	99224564
5/2/2021	22.71	22.98	99257651
5/3/2021	22.63	22.69	99290323
5/4/2021	2.34	8.90	99303146
5/5/2021	0.00	0.43	99303763
5/6/2021	1.83	0.00	99303764
5/7/2021	0.00	0.00	99303764
5/8/2021	0.00	0.00	99303764
5/9/2021	0.00	0.00	99303764
5/10/2021	0.00	0.00	99303764
5/11/2021	1.01	0.00	99303764
5/12/2021	21.27	20.05	99332632
5/13/2021	25.55	26.25	99370426
5/14/2021	7.29	8.13	99382140
5/15/2021	22.20	23.23	99415595
5/16/2021	24.19	25.86	99452831
5/17/2021	24.64	25.62	99489719
5/18/2021	22.01	24.25	99524638
5/19/2021	21.10	23.50	99558478
5/20/2021	21.28	23.51	99592339
5/21/2021	21.37	23.71	99626476
5/22/2021	20.94	23.60	99660462
5/23/2021	20.90	23.71	99694599
5/24/2021	20.69	23.53	99728485
5/25/2021	20.57	23.47	99762287
5/26/2021	20.26	23.47	99796085
5/27/2021	20.35	23.50	99829921
5/28/2021	20.30	23.54	99863816
5/29/2021	20.11	23.51	99897676
5/30/2021	20.08	23.43	99931418
5/31/2021	20.31	23.55	99965337
Average For			
The Month	15.61	17.15	
Average For			
The Month With	21.02	22.99	
System Running	21.02	<i>42.</i> 99	774.005
Total ⁽²⁾ :			774,885

Footnotes:

- (1) Influent and POTW discharge flow rates are daily averages. These may not be equal due to balancing in the treatment system and calibration of individual flowmeters. The influent groundwater flow rate is calculated by adding the instantaneous flow rate from each pumping well (i.e., 16 meters). The POTW discharge flow rate is recorded directly from the effluent meter.
- (2) Total is the cumulative gallons discharged to the POTW during the reporting period. This number is calculated by subtracting the total of the previous month's last day from the total of the current month's last day, see previous month's report for the number used. The total from the first day of the current month is not used in the calculation.
- $^{(3)}$ Totalizers were reset to 0 on August 23, 2012 during the system shutdown for maintenance.
- ⁽⁴⁾ A new effluent meter was installed in April, 2017 during the system shutdown for maintenance.

TABLE 2c JUNE 2021

Treatment System Flows Wauleco, Inc. Wausau, Wisconsin

Date	Influent Groundwater Flow Rate ^{(1) (3)} (gpm)	POTW Discharge Flow Rate ^{(1) (4)} (gpm)	POTW Totalized Discharge ⁽³⁾ (gal)
6/1/2021	20.44	23.50	99999179
6/2/2021	20.64	23.35	100032810
6/3/2021	20.49	23.35	100066436
6/4/2021	20.28	23.23	100099885
6/5/2021	20.53	23.48	100133695
6/6/2021	20.31	23.36	100167334
6/7/2021	20.17	23.36	100200968
6/8/2021	19.54	23.26	100234459
6/9/2021	19.34	23.27	100267961
6/10/2021	19.40	23.27	100301467
6/11/2021	19.41	23.26	100334963
6/12/2021	19.46	23.08	100368200
6/13/2021	19.82	23.36	100401838
6/14/2021	19.65	23.33	100435431
6/15/2021	19.83	22.95	100468472
6/16/2021	19.86	22.92	100501470
6/17/2021	20.38	22.75	100534233
6/18/2021	20.14	22.74	100566981
6/19/2021	20.37	22.99	100600089
6/20/2021	20.50	23.17	100633455
6/21/2021	20.58	23.13	100666758
6/22/2021	20.27	23.05	100699955
6/23/2021	19.64	22.93	100732971
6/24/2021	20.02	23.25	100766445
6/25/2021	20.92	23.07	100799671
6/26/2021	20.67	23.00	100832784
6/27/2021	20.87	23.23	100866230
6/28/2021	20.85	23.26	100899721
6/29/2021	20.86	22.92	100932727
6/30/2021	20.81	22.99	100965839
Average For			
The Month	20.20	23.16	
Total ⁽²⁾ :			1,000,502

Footnotes:

⁽¹⁾ Influent and POTW discharge flow rates are daily averages. These may not be equal due to balancing in the treatment system and calibration of individual flowmeters. The influent groundwater flow rate is calculated by adding the instantaneous flow rate from each pumping well (i.e., 16 meters). The POTW discharge flow rate is recorded directly from the effluent meter.

⁽²⁾ Total is the cumulative gallons discharged to the POTW during the reporting period. This number is calculated by subtracting the total of the previous month's last day from the total of the current month's last day, see previous month's report for the number used. The total from the first day of the current month is not used in the calculation.

⁽³⁾ Totalizers were reset to 0 on August 23, 2012 during the system shutdown for maintenance.

⁽⁴⁾ A new effluent meter was installed in April, 2017 during the system shutdown for maintenance.

TABLE 3 Page 1 of 2

Groundwater Elevation Data Wauleco, Inc. Wausau, Wisconsin

Well	April 05, 2021	May 03, 2021	June 01, 2021
	(ft msl)	(ft msl)	(ft msl)
PW01	1162.4		
PW02	Abandoned	Abandoned	Abandoned
PW03	1162.3		
PW3S	1161.52		
PW04	1161.42		
PW05	1161.52		
PW06	1161.92		
PW07	1161.68		
PW08	1162.62		
PW09I			
PW09O	1161.48		
PW10	1161.59		
PW11	1160.34		
PW12	1162.6		
PW13	1161.45		
PW14	1161.43		
PW15	1161.08		
PW16	1160.66		
PW17	1150.66		
PW17 PW18			
	1161.4 1159.95		
PW19			
PW20	1159.198		
PW21	1160.09		
PW22	1161.54		
PW23	1161.45		
PW24	1159.4		
PW25	1158.24		
PW26	1159.14		
PW27	1157.53		
PW28	1162.47		
PW29	1162.53		
P01	1161.4		
OW01	1163.65		
W01A	1162.73		
W01B	1162.77		
W02	1162.18		
W03A	1160.89		
W03B	1161.44		
W04A	1162.01		
W04B	1161.93		
W05	1161.45		
W06R	1162.68		
W07	1162.44		
W08	1169.45		
W09	1161.92		
W10A	1160.99	1161.18	1161.18
W10B	1160.97		
W11	1160.84	1160.92	1160.80
W12	1160.47	1160.52	1160.38
W13	1161.55		
W14	1160.81	1160.85	1160.64
W14 W16	1161.66	1161.77	1161.79
W17	1161.1		
W17 W18	1161.1		
W19	Abandoned	Abandoned	Abandoned
VV 1 9	Aballdoffed	Avandoned	Avandoned

TABLE 3 (continued)

Groundwater Elevation Data Wauleco, Inc. Wausau, Wisconsin

Well	April 05, 2021	May 03, 2021	June 01, 2021
<u></u>	(ft msl)	(ft msl)	(ft msl)
W21	1160.8	1160.91	1160.62
W22	1160.87	1161.11	1161.36
W23	1160.83		
W24A	1160.83		
W25	1162.86		
W26/W26R	1160.97	1161.46	1161.09
W27	1161.3	1161.46	1161.47
W28	1161.01		
W29/W29R	1160.92	1161.02	1160.89
W30	1161.39		
W31	1160.89		
W32	1160.9	1161.01	1160.97
W33	1161.73		
W34	1161.61		
W35	1161.57		
W36	1162.09		
W39	Abandoned	Abandoned	Abandoned
W40/W40R	1161.012		
W41	1161.66		
W42	1162.17		
W44	1161.43		
W45	1161.52		
W46	1161.24		
W47	1160.33		
W48	1160.68		
W49	1161.06		
W66	1162.63		
W67	1162.61		
W68A	1162.59		
W68B	1162.56		
W69	1161.73		
W70B	Abandoned	Abandoned	Abandoned
River			
IW01	1161.41		
IW01A	1161.43		
FP01	1159.74		
FP02	1159.94		
FP03	1158.54		
FP04	1159.96		
3M Basin	Water in 1st basin only		
DFOWM 5			
DFOWM 9	Abandoned	Abandoned	Abandoned
DFOWM 10A	Abandoned	Abandoned	Abandoned
DFOWM 11			
DFOWM 12			
W71	1164.27		
W72	1162.95		
W73	1162.23		
W74	1161.99		

Notes:

- 1. ft msl = feet mean sea level
- 2. PW09O denotes the outer well and PW09I denotes the inner well
- 3. ---- = Well not measured
- 4. Groundwater elevations have been adjusted for product thickness.
- $5. \ \, \text{Top of casing elevations were resurveyed for the on-site wells on December 4, 2009} \; . \; \, \text{Use of the new data began in January 2010}.$

Table 4Page 1 of 2

Free Product Measurements Wauleco, Inc. Wausau, Wisconsin

Well	April 05, 2021	May 03, 2021	June 01, 2021
<u> </u>	(ft)	(ft msl)	(ft msl)
PW01	0.00		
PW02	Abandoned	Abandoned	Abandoned
PW03	0.00		
PW3S	0.00		
PW04	0.00		
PW05	0.00		
PW06	0.00		
PW07	0.00		
PW08	0.00		
PW09I			
PW09O	0.00		
PW10	0.00		
PW11	0.00		
PW12	0.00		
PW13	0.00		
PW14	0.00		
PW15	0.00		
PW16	0.00		
PW17			
PW18	0.00		
PW19			
	0.00		
PW20	0.11		
PW21	0.00		
PW22	0.00		
PW23	0.00		
PW24	0.00		
PW25	0.00		
PW26	0.02		
PW27	0.00		
PW28	0.00		
PW29	0.00		
P01	0.00		
OW01	0.00		
W01A	0.00		
W01B	0.00		
W02	0.00		
W03A	0.00		
W03B	0.00		
W04A	0.00		
W04B	0.00		
W05	0.00		
W06R	0.00		
W07	0.00		
W08	0.00		
W09	0.00		
W10A	0.00	0.00	0.00
W10B	0.00		
W11	0.00	0.00	0.00
W12	0.00	0.00	0.00
W13	0.00		
W14	0.00	0.00	0.00
W16	0.00	0.00	0.00
W17	0.00		

Table 4 (continued)

Free Product Measurements Wauleco, Inc. Wausau, Wisconsin

Well	April 05, 2021	May 03, 2021	June 01, 2021
	(ft)	(ft msl)	(ft msl)
W18	0.00		
W19	Abandoned	Abandoned	Abandoned
W21	0.00	0.00	0.00
W22	0.00	0.00	0.00
W23	0.00		
W24A	0.00		
W25	0.00		
W26/W26R	0.00	0.00	0.00
W27	0.00	0.00	0.00
W28	0.00		
W29/W29R	0.00	0.00	0.00
W30	0.00		
W31	0.00		
W32	0.00	0.00	0.00
W33	0.00		
W34	0.00		
W35	0.00		
W36	0.00		
W39	Abandoned	Abandoned	Abandoned
W40/W40R	0.24		
W41	0.00		
W42	0.00		
W44	0.00		
W45	0.00		
W46	0.00		
W47	0.00		
W48	0.00		
W49	0.00		
W66	0.00		
W67	0.00		
W68A	0.00		
W68B	0.00		
W69	0.00		
W70B	Abandoned	Abandoned	Abandoned
River			
IW01	0.00		
IW01A	0.00		
FP01	0.00		
FP02	0.00		
FP03	0.00		
FP04	0.00		
3M Basin			
DFOWM 5			
DFOWM 9	Abandoned	Abandoned	Abandoned
DFOWM 10A	Abandoned	Abandoned	Abandoned
DFOWM 11			
DFOWM 12			
W71	0.00		
W72	0.00		
W73	0.00		
W74	0.00		
** / 1	5.00		

Notes

- 1. PW09O denotes the outer well and PW09I denotes the inner well
- 2. ---- = Well not measured

FIGURE 1
FBR Influent and Effluent PCP Concentrations
Wauleco, Inc.
Wausau, WI

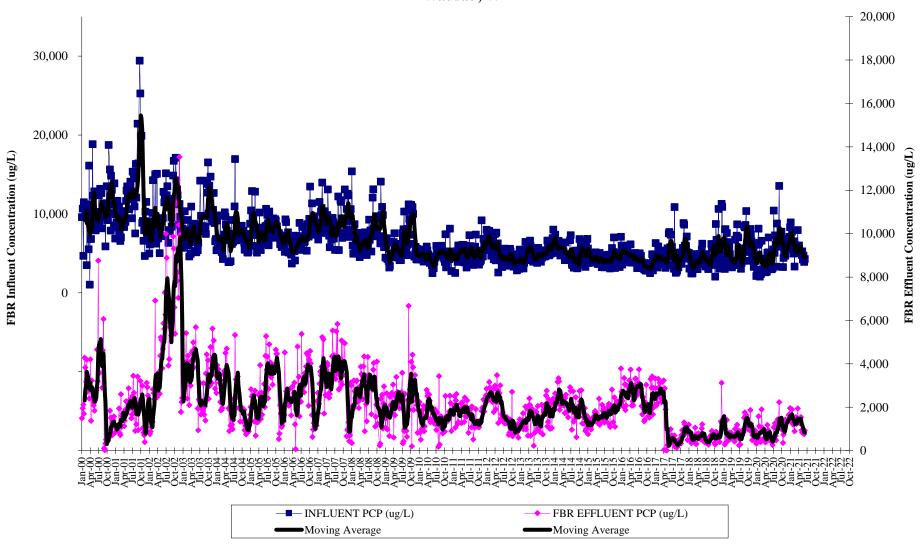
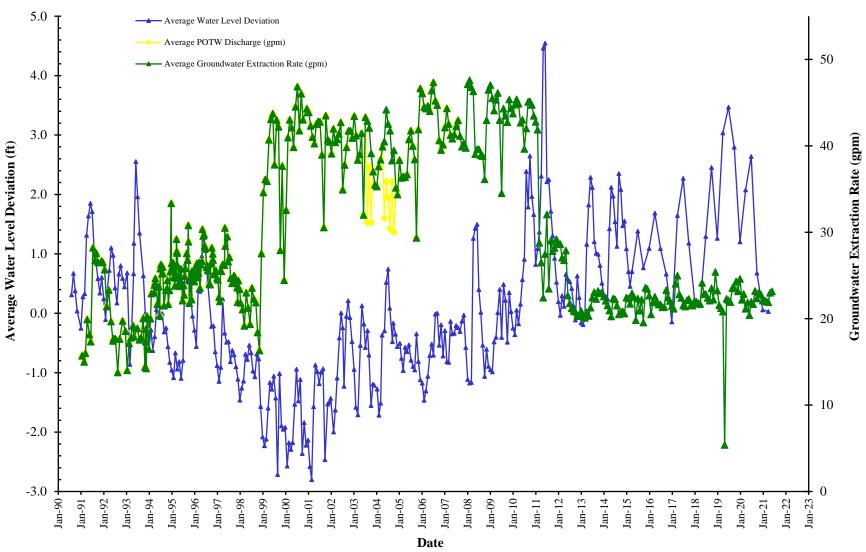


FIGURE 2

Average Groundwater Extraction Rates and Water Level Deviation Versus Time Wauleco, Inc.
Wausau, WI



Note: The Average Groundwater Extraction Rate is a monthly average of the flow into the treatment system. The monthly average POTW discharge is less than the total extraction rate during the PPT pilot test due to the injection of treated water into IW01.