

Gray, Jane K - DNR

From: Kathryn Balachandran <kbalachandran@ksinghengineering.com>
Sent: Wednesday, February 5, 2025 11:02 AM
To: Gray, Jane K - DNR
Cc: Shane LaFave; Que El-Amin; Pratap Singh; Angy Singh
Subject: RE: Community Within the Corridor East Block (02-41-263675) - Information Requested
Attachments: 1 - CWC-EB_Round 4_Passive Sampler Log.pdf; 2 - CWC-EB_Round 4_Table 5.pdf; 3 - CWC-EB_Round 4_Attachment A-3.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

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Hi, Jane

Please find the following files attached to this email in response to WDNR's Information Request regarding the *Fourth Round of Commissioning Report* for CWC-East Block (BRRS # 02-41-263675):

- An updated Attachment B, which now includes anemometer readings prior to fan deployment as well as details about fan placement and deployment
- An updated Table 5, which now includes effluent temperatures (in degrees Fahrenheit) for all Blowers measured
- An updated Attachment A-3, which now includes a legend with explanations for the GC calibration data table

Please contact us if you have questions or require additional information. Thank you for your time and ongoing support.

Best Regards,
~katie

Kathryn Balachandran, Ph.D.
Project Engineer | kbalachandran@ksinghengineering.com
608.467.2005 (p) | 262.821.1174 (f)
www.ksinghengineering.com



From: Gray, Jane K - DNR <jane.gray@wisconsin.gov>
Sent: Friday, January 24, 2025 4:14 PM
To: Pratap Singh <psingh@ksinghengineering.com>
Cc: Shane LaFave <Shane@roerscompanies.com>; Que El-Amin <que@scott-crawford.com>; Kathryn Balachandran <kbalachandran@ksinghengineering.com>; Robert Reineke <rreineke@ksinghengineering.com>
Subject: Community Within the Corridor East Block (02-41-263675) - Information Requested

Good afternoon – Thank you for submitting *Fourth Round of Commissioning* (Report) on January 20, 2025, for the subject site. To assist with the DNR’s review of the Report, please provide the following additional information:

- The Report indicates that anemometer measurements were collected to measure the baseline air flow rate in each of the units and rooms where indoor air samples were collected, and that fans were placed in spaces where the air flow was less than 10 cm/sec. Please provide the anemometer readings prior to the deployment of the fans in a table format, as available. Also, please clarify which rooms and units the fans were placed; include this information on the requested data table.
- Indicate whether temperatures were collected from the blower exhaust. If available, please provide these measurements in an updated Table 5.
- Include a legend and explanation to accompany Attachment A3. Please discuss what the concentrations listed on the table mean and why they are different from the standards used for calibration.

You may submit this information to the DNR’s RR electronic submittal portal or to me via email. Thank you for your continued work on this project. Do not hesitate to reach out with any questions you might have.

Best, Jane

Jane Gray

she/her/hers

Hydrogeologist Program Coordinator – West Central Region

Remediation and Redevelopment Program

Wisconsin Department of Natural Resources

Phone: (414) 435-8021

jane.gray@wisconsin.gov



dnr.wi.gov

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Attachment A-3. GC Unit Calibration / Standard Data

Commissioning Round 4

Community Within the Corridor - East Block

Filename	Date	Time	COC	R-Time	Area Counts	ppbv	ug/m3	unit	COC	R-Time	Area Counts	ppbv	ug/m3	unit
KSingh 061524-3038.CHR	12/16/2024	10:08:52 AM	TCE	3.6160	1249.7902	1.8347	10.0906	ug/m3	PCE	6.9560	5904.8740	2.0159	13.9498	ug/m3
KSingh 061524-3045.CHR	12/16/2024	11:23:44 AM	TCE	3.5900	481.2553	0.3342	1.8381	ug/m3	PCE	6.9060	2510.5271	0.4979	3.4454	ug/m3
KSingh 061524-3046.CHR	12/16/2024	11:33:47 AM	TCE	3.5830	996.9686	0.8991	4.9450	ug/m3	PCE	6.8800	6045.9230	2.0636	14.2802	ug/m3
KSingh 061524-3178.CHR	12/20/2024	10:28:06 AM	TCE	3.5700	2165.4014	6.0155	33.0854	ug/m3	PCE	6.8530	9969.7732	3.3919	23.4722	ug/m3
KSingh 061524-3179.CHR	12/20/2024	10:50:17 AM	TCE	3.5600	957.8360	0.8427	4.6349	ug/m3	PCE	6.8260	4395.2952	1.0339	7.1545	ug/m3
KSingh 061524-3180.CHR	12/20/2024	11:00:16 AM	TCE	3.5600	651.4587	0.4524	2.4882	ug/m3	PCE	6.8400	3494.8518	0.7674	5.3101	ug/m3
KSingh 061524-3219.CHR	1/6/2025	9:29:25 AM	TCE	3.5830	2178.3939	2.0111	11.0610	ug/m3	PCE	6.8730	9827.7332	3.3439	23.1394	ug/m3

LEGEND		
Heading	Meaning	Explanation
COC	Contaminant of Concern	The indoor air contaminant of analytical interest, i.e. Trichloroethylene (TCE) or Perchloroethylene (PCE)
R-Time	Retention Time	Time (in minutes) elapsed when a COC's peak appears during an individual GC run
Area Counts	area under a COC's peak	Peaksimple software identifies peaks and then measures the area under each peak as an Area Count. During calibration, a sample of known COC concentration is injected into the GC unit, and then the resultant Area Counts is correlated with the known concentration. Doing this for multiple samples of known concentrations is how a calibration curve is generated.
ppbv	parts per billion by volume	The detector in the GC unit measures COCs' concentration in ppbv.
ug/m3	micrograms per cubic meter	To convert the concentration of TCE in ppbv to ug/m3, multiply the concentration in ppbv by 5.5.

Table 5. Blower Exhaust Measurements
Commissioning Round 4
Community Within the Corridor - East Block

Blower No.	Blower Type	Pipe Diameter (in)	Commissioning Round 2 - March 2024				Commissioning Round 3A - August 2024				Commissioning Round 3B - October 2024				Commissioning Round 4 - January 2025					
			Velocity (ft/min)	Flow Rate (cfm)	TCE Reading (µg/m³)	TCE Removal (lbs/week)	Velocity (ft/min)	Flow Rate (cfm)	TCE Reading (µg/m³)	TCE Removal (lbs/week)	Velocity (ft/min)	Flow Rate (cfm)	TCE Reading (µg/m³)	TCE Removal (lbs/week)	Blower Vacuum (in. H ₂ O)	Velocity (ft/min)	Flow Rate (cfm)	TCE Reading (µg/m³)	TCE Removal (lbs/week)	Effluent Temp. (°F)
Blower 1	GBR 123	4	1,988	173	0.900	0.000098	4,174	364	5.12	0.0012	3,071	268	1.81	0.00031	-8.551	3,957	345	1.2205	0.00027	56.3
Blower 2	GBR 123	4	2,540	222	10.1	0.0014	4,469	390	14.7	0.0036	2,756	241	14.6	0.0022	-9.145	3,701	323	5.4982	0.0011	58.4
Blower 2A	GBR 123	4	1,969	172	12.3	0.0013	4,451	388	14.4	0.0035	3,563	311	22.7	0.0044	-9.386	4,114	359	7.5928	0.0017	51.2
Blower 3	Fliteway	6	4,003	786	2.60	0.0013	4,154	816	7.56	0.0039	3,859	758	2.52	0.0012	-12.1	3,996	785	2.0243	0.0010	59.1
Blower 4															-4.5					
Blower 5 [‡]	GBR 123	4	5,158	450	320	0.091	4,193	366	462	0.11	4,292	375	661	0.16	-14.38	4,410	385	250.015	0.061	58.1
Blower 6	GBR 89	4	2,944	257	1.70	0.00027	3,354	293	1.62	0.00030	3,004	262	0.630	0.00010	-4.660	2,950	257	0.3793	0.000061	57.5
Blower 7	GBR 89	4	2,164	189	9.90	0.0012	3,237	282	12.5	0.0022	2,808	245	11.2	0.0017	-5.258	2,994	261	5.9959	0.0010	56.6
Blower 8*	GBR 89 (3A)	4	1,700	148	13.7	0.0013	2,824	246	22.6	0.0035	---	---	---	---	---	---	---	---	---	---
	GBR 123 (3B)	4	---	---	---	---	---	---	---	---	3,913	341	35.5	0.0076	-17.76	3,624	316	6.9242	0.0014	52.6
Blower 9 [‡]	GBR 89	4	2,197	192	64.2	0.0077	2,848	249	67.7	0.011	2,504	219	142	0.019	-5.258	2,610	228			

Attachment B. Passive Samplers Deployment and Retrieval Log - Level 1

Commissioning Round 4

Community Within the Corridor - East Block

No.	Sampler Name	Sampler Location	Local Air Flow Rate* (cm/s)	Date Deployed	Time Deployed (hh:mm)	Sampler Height (inches)	Room Temp (°F)	Local Air Velocity** (fpm)	Notes	Date Retrieved	Time Retrieved (hh:mm)	Sampler Height (inches)	Room Temp (°F)	Local Air Velocity** (fpm)	Sampler Label ID
1	EB-01-AA	1043 Living Room	3	12/20/2024	13:57	60	68	83	• small desk fan deployed • fan height = 56"	1/3/2025	15:11	60	70	66	XO954
2	EB-01-AA2	1043 N Bedroom	15	12/20/2024	14:52	56	68	105	ceiling fan ON	1/3/2025	15:15	56	70	41	XO939
3	EB-01-AT	1043 S Bathroom	3	12/20/2024	14:55	59	68	76	• small desk fan deployed • fan height = 52"	1/3/2025	15:17	59	70	43	XO938
4	EB-01-AB	Unit 1041 Living Room	NM [†]	12/20/2024	15:01	58	70	30	• small desk fan deployed • fan height = 53"	1/3/2025	15:22	58	70	28	XO937
5	EB-01-M2	Unit 1042 Living Room	NM [†]	12/20/2024	15:06	60	70	65	• small desk fan deployed • fan height = 53"	1/3/2025	15:28	60	70	39	XO936
6	EB-01-Z	1044 S Bedroom	3	12/20/2024	15:10	56	68	104	ceiling fan ON	1/3/2025	15:33	56	70	51	XO935
7	EB-01-Z2	1044 Living Room	3	12/20/2024	15:13	58	68	119	• small desk fan deployed • fan height = 53"	1/3/2025	15:35	58	70	77	XO934
8	EB-01-Y	Unit 1045	3	12/20/2024	15:19	58	68	80	• small desk fan deployed • fan height = 53"	1/3/2025	15:38	58	70	121	TW480
9	EB-01-AS	1045 NW Wall	3	12/20/2024	15:21	59	68	120	• small desk fan deployed • fan height = 55"	1/3/2025	15:40	59	70	84	TW479
10	EB-01-X	1050 Bedroom	3	12/20/2024	15:25	58	61	42	ceiling fan ON	1/3/2025	15:43	58	61	29	TW478
11	EB-01-AR	1050 Bathroom	20	12/20/2024	15:28	59	61	188	• small desk fan deployed • fan height = 64"	1/3/2025	15:45	59	61	23	TW477
12	EB-01-AL2	1048 Laundry E	3	12/20/2024	15:34	60	67	49	• small desk fan deployed • fan height = 71"	1/3/2025	15:48	60	65	48	TW476
13	EB-01-AL	1048 Laundry W	3	12/20/2024	15:37	61	67	77	• small desk fan deployed • fan height = 78"	1/3/2025	15:50	61	65	38	TW475
14	EB-01-AJ2	1049 Storage W	3	12/20/2024	15:42	57	67	145	standing fan ON	1/3/2025	15:53	57	65	74	TW474
15	EB-01-AJ	1049 Storage E	3	12/20/2024	15:44	56	67	35	• small desk fan deployed • fan height = 66"	1/3/2025	15:54	56	65	35	TW646
16	EB-01-W	1051 Living Room	3	12/20/2024	15:47	60	68	39	• small desk fan deployed • fan height = 72"	1/3/2025	15:57	60	70	27	TW645
17</															