



Box 2250, Yellowknife, NT X1A 2P7 • Tel: (867) 669-3301 • Fax: (867) 669-3316

August 29, 2023

Tyree Mullaney
Regulatory Officer
Mackenzie Valley Land and Water Board
7th Floor – 4922 48th Street
P.O. Box 2130
Yellowknife, NT X1A 2P6

Dear Ms. Mullaney

**Re: Jackfish Generating Facility Water Licence MV2019L1-0001
Monthly SNP Submission, July 2023**

Enclosed please find the monthly SNP report for the Jackfish Lake generating facilities. Operations from July 1, 2023 – July 31, 2023 are included in this submission.

Monitoring data for water temperature and flow at locations SNP00-1a,b,c,d and SNP-00-2a,b,c has been collected in accordance with Annex A, parts A & B of the water licence. The total circulation of water at the Jackfish facility was within the limits of the water licence during the last month.

There were no reportable spills at the Jackfish facility during the month.

I can be reached at (867) 669-3301 or via email at ehendry@ntpc.com if you have any questions or concerns.

Sincerely,

A handwritten signature in cursive script that reads "Eileen Hendry".

Eileen Hendry, C.E.T.
Manager, System Control

Jackfish WL MV2019L1-0001 Surveillance Network Program Monthly Data Monitoring

July, 2023

Water Circulated for Plant Cooling

	Cat Plant Water Used (m ³)	EMD Plant Water Used (m ³)	K Plant Water Used (m ³)	Total Water Used (m ³)
2023-07-01	3,531	8,999	5,694	18,224
2023-07-02	2,989	9,002	5,678	17,669
2023-07-03	3,236	8,993	5,645	17,875
2023-07-04	3,186	8,989	5,615	17,789
2023-07-05	3,500	8,980	5,603	18,083
2023-07-06	3,428	8,958	5,602	17,988
2023-07-07	3,425	8,949	4,750	17,124
2023-07-08	3,496	8,926	2,620	15,042
2023-07-09	3,852	8,900	5,429	18,182
2023-07-10	3,622	8,870	5,660	18,152
2023-07-11	3,611	8,852	5,659	18,122
2023-07-12	3,570	8,846	6,567	18,983
2023-07-13	3,545	8,819	6,499	18,862
2023-07-14	3,576	8,746	6,712	19,034
2023-07-15	3,721	8,750	5,613	18,085
2023-07-16	3,955	8,751	5,607	18,313
2023-07-17	3,720	8,746	6,611	19,077
2023-07-18	3,864	8,737	6,928	19,529
2023-07-19	3,847	8,739	6,883	19,469
2023-07-20	3,638	8,740	8,103	20,481
2023-07-21	3,512	8,722	8,002	20,236
2023-07-22	3,529	8,695	5,683	17,906
2023-07-23	3,510	8,677	5,702	17,889
2023-07-24	3,488	8,647	5,693	17,828
2023-07-25	3,432	8,631	8,833	20,896
2023-07-26	2,617	8,612	9,735	20,964
2023-07-27	3,128	8,609	7,572	19,310
2023-07-28	2,951	8,603	8,136	19,689
2023-07-29	3,151	8,591	9,684	21,426
2023-07-30	3,104	8,575	9,683	21,363
2023-07-31	3,136	8,560	10,850	22,546
Total	106,868	272,217	207,052	586,137

Jackfish WL MV2019L1-0001 Surveillance Network Program Monthly Data Monitoring

July, 2023

	Intake Water Temperatures			Discharge Water Temperatures			
	SNP 00-1d Cat Plant Intake (°C)	SNP 00-1c EMD Plant Intake (°C)	SNP 00-1a, 1b K Plant Intakes (°C)	Average Intake Temperature (°C)	SNP 00-2c Cat Plant Discharge (°C)	SNP 00-2b EMD Plant Discharge (°C)	SNP-00-2a K Plant Discharge (°C)
2023-07-01	20.8	17.0	22.4	17.7	24.2	22.3	21.8
2023-07-02	20.4	17.0	21.5	17.3	22.0	25.7	20.9
2023-07-03	20.3	17.5	20.9	17.2	23.2	26.1	20.3
2023-07-04	21.3	18.3	21.5	17.9	29.2	27.4	20.9
2023-07-05	20.5	18.3	20.9	17.3	31.4	26.8	20.3
2023-07-06	21.2	18.9	21.4	17.9	34.3	26.7	20.8
2023-07-07	21.3	19.0	22.5	18.3	35.2	28.0	21.8
2023-07-08	21.2	19.1	25.7	19.1	34.7	30.2	25.3
2023-07-09	20.7	18.8	22.0	17.9	29.0	27.9	22.3
2023-07-10	20.6	19.0	20.8	17.5	30.9	29.4	20.2
2023-07-11	20.4	19.2	20.7	17.4	31.2	29.3	20.2
2023-07-12	20.6	19.3	21.0	17.6	31.9	29.5	21.3
2023-07-13	20.9	19.3	21.3	17.8	32.6	29.8	22.0
2023-07-14	21.2	19.6	21.4	18.0	33.9	29.7	21.9
2023-07-15	21.6	19.5	22.0	18.3	32.3	28.7	21.4
2023-07-16	21.4	19.7	21.8	18.2	27.3	31.5	21.2
2023-07-17	21.3	19.8	21.5	18.1	26.3	32.7	22.0
2023-07-18	21.3	19.9	21.6	18.1	27.3	33.3	22.2
2023-07-19	21.7	19.9	22.0	18.4	27.7	33.0	22.7
2023-07-20	21.7	19.9	22.3	18.5	32.0	31.3	23.4
2023-07-21	21.9	19.8	22.4	18.6	36.2	28.2	23.4
2023-07-22	22.1	19.7	22.5	18.7	33.7	28.7	21.9
2023-07-23	21.9	19.9	22.2	18.6	28.5	29.1	21.6
2023-07-24	21.6	19.9	21.7	18.3	28.5	32.8	21.1
2023-07-25	21.3	19.5	21.4	18.0	28.3	29.6	24.0
2023-07-26	21.0	19.6	21.2	17.8	21.4	29.9	24.4
2023-07-27	21.2	20.2	21.7	18.2	25.5	28.1	27.6
2023-07-28	21.3	20.1	21.8	18.2	24.0	28.3	26.6
2023-07-29	21.4	20.2	21.5	18.2	25.9	27.5	24.5
2023-07-30	21.5	20.1	21.7	18.3	25.7	27.2	24.7
2023-07-31	21.4	20.0	21.6	18.2	25.9	24.1	27.5
Total	21.2	19.3	21.8	18.1	29.0	28.8	22.6

Jackfish WL MV2019L1-0001 Surveillance Network Program Monthly Data Monitoring

July, 2023

Temperature Change (Discharge - Intake)

	Cat Plant	EMD Plant	K Plant
	Temperature Difference (°C)	Temperature Difference (°C)	Temperature Difference (°C)
2023-07-01	3.4	5.4	-0.5
2023-07-02	1.6	8.7	-0.5
2023-07-03	2.9	8.6	-0.6
2023-07-04	7.9	9.0	-0.6
2023-07-05	10.9	8.5	-0.5
2023-07-06	13.0	7.7	-0.6
2023-07-07	13.9	9.0	-0.7
2023-07-08	13.5	11.1	-0.3
2023-07-09	8.3	9.1	0.3
2023-07-10	10.3	10.4	-0.5
2023-07-11	10.8	10.1	-0.6
2023-07-12	11.3	10.2	0.4
2023-07-13	11.7	10.5	0.6
2023-07-14	12.7	10.0	0.6
2023-07-15	10.7	9.1	-0.6
2023-07-16	5.9	11.9	-0.6
2023-07-17	5.0	13.0	0.5
2023-07-18	6.0	13.5	0.7
2023-07-19	6.0	13.1	0.7
2023-07-20	10.3	11.5	1.1
2023-07-21	14.3	8.4	1.0
2023-07-22	11.6	9.0	-0.6
2023-07-23	6.6	9.2	-0.6
2023-07-24	7.0	12.9	-0.6
2023-07-25	7.1	10.1	2.5
2023-07-26	0.4	10.3	3.2
2023-07-27	4.4	7.9	5.9
2023-07-28	2.8	8.2	4.8
2023-07-29	4.5	7.3	3.0
2023-07-30	4.2	7.1	2.9
2023-07-31	4.5	4.1	5.9
Total	7.9	9.5	0.8

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