RioTinto

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Mason Mantla, Chair
Wek'èezhìi Land and Water Board
PO Box 32
Wekweètì, NT X0E 1W0, Canada

April 2, 2024

Dear Mr. Mantla,

Subject: DDMI 2022 Annual Type A Water Licence Report

Please find attached Diavik Diamond Mines (2012) Inc's (DDMI) 2023 Annual Type A Water Licence Report as specified under Part B, Condition 5 and Schedule 1, Condition 1 of Water Licence W2015L2-0001.

Please contact the undersigned or Kyla Gray (kyla.gray@riotinto.com) if you have any questions regarding this submission.

Yours sincerely,

Nelson, Mark (DDMI)
Digitally signed by Nelson, Mark (DDMI)
Date: 2024.03.31 17:37:27 -06'00'

Mark Nelson
Superintendent, Environment & Closure
Cross shift: Nicole Goodman

CC: Marie-Eve Cyr, WLWB
Anneli Jokela, WLWB

Attachment A: DDMI 2023 Type A Water Licence Report

RioTinto

Diavik Diamond Mine (2012) Inc.

Type A Water Licence W2015L2-0001

2023 Annual Report

April 2024

TABLE OF CONTENTS

1.0 INTRODUCTION

This Annual Report is prepared as per Part B Condition 5, and Schedule 1, Condition 1 of the Type A Water Licence (W2015L2-0001) issued to Diavik Diamond Mines (2012) Inc. (DDMI). This Licence was issued by and is administered by the Wek'èezhìi Land and Water Board (WLWB). The current Water Licence is a renewal of Diavik's previous Water Licence (W2007L2-0003) and became effective 19 October 2015. This annual report conforms to conditions in the Amended Water Licence (W2015L2-0001) issued by the WLWB on November 9, 2022.

The Annual Report is organized by sections and is designed to follow and fulfill requirements set out in Schedule 1 of the Water Licence. Additional reports, plans, and other documents referred to in the text of the report are provided under separate cover in accordance with the specific terms and conditions outlined in the Water Licence.

2.0 MONTHLY AND ANNUAL QUANTITIES OF WATER OBTAINED FROM LAC DE GRAS (SCHEDULE 1 CONDITION 1A)

During 2023, water was obtained from Lac de Gras for domestic use (main accommodations complex, south accommodations camp, maintenance shops, and other infrastructure on the site), drills, process plant, and dust control. Table 1 and Figure 1 show quantities withdrawn from the lake with their associated use. DDMI's permitted annual raw water use from Lac de Gras is 1,280,000 m^3.

Table 1 Monthly raw water quantities obtained (m^3) from Lac de Gras for drill, domestic, process plant, and site dust management use in 2023.

Month	Drills, Incineration, and Construction (m^3)	Domestic (m^3)	Process Plant (m^3)	**Dust Management (m^3)**	Cumulative Totals (m^3)
January	196	6,657	50,321	0	57,174
February	147	5,845	57,357	0	63,349
March	16	6,652	57,020	0	63,688
April	26	6,710	69,465	0	76,201
May	68	6,869	62,935	1,214	70,086
June	82	6,210	68,551	30,750	105,593
July	24	6,324	74,949	46,725	128,022
August	274	6,516	64,044	20,906	91,740
September	53	6,697	50,803	0	57,553
October	62	6,689	61,163	0	67,914
November	58	7,112	65,681	0	72,851
December	44	7,390	61,588	0	69,022
Total	**1,050**	**79,671**	**743,877**	**99,595**	**924,979**

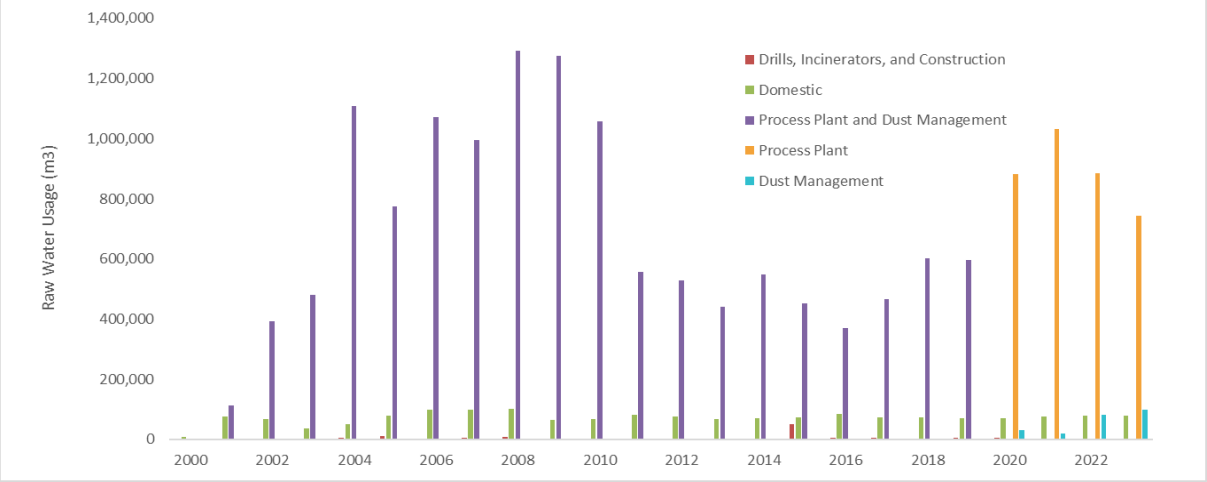

Figure 1 Annual quantities of raw water obtained (m^3) from Lac de Gras for; drills and construction, domestic and process plant, and dust control use from 2000 through 2023. * Since 2020 process plant and dust management raw water usage are displayed separately.

3.0 MONTHLY, ANNUAL, AND TOTAL QUANTITIES OF WATER DEWATERED FROM THE A21 POOL (SCHEDULE 1 CONDITION 1B)

The construction of the water retention dike for A21 was completed in 2018. Dewatering of the A21 pool into Lac de Gras commenced on 3 November 2017 and was completed on 24 April 2018. All A21 water is now diverted to the North Inlet. Monthly A21 pit dewatering to North Inlet volumes are displayed in Table 2 and Figure 2 summarizes the volumes dewatered from the A21 up to 2023.

Table 2 Monthly dewatering (m³) volumes from A21 pit to North Inlet in 2023.

Month	Volume pumped to North Inlet (m³)
January	235,028
February	243,956
March	275,239
April	303,809
May	345,705
June	200,525
July	331,088
August	325,172
September	336,618
October	318,334
November	290,951
December	303,636
Total	**3,510,061**

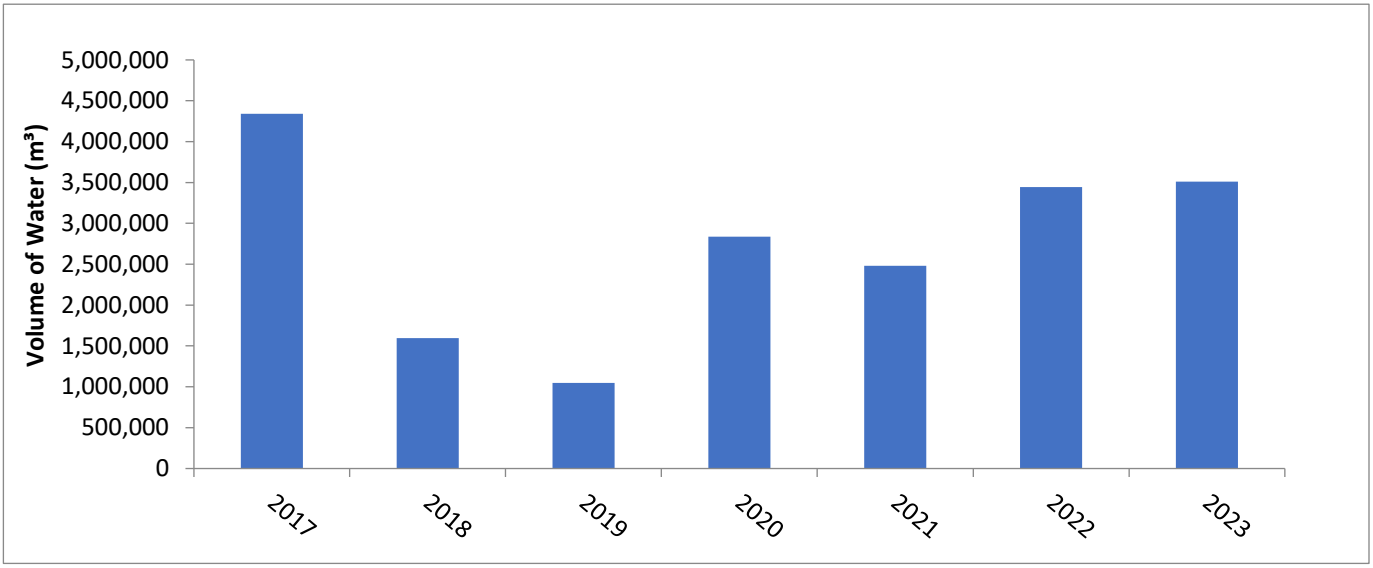

Figure 2 Annual A21 pit dewatering volumes (m³) between 2017 through 2023.

4.0 MONTHLY ELEVATIONS OF WATER IN THE NORTH INLET DURING OPEN WATER PERIOD (SCHEDULE 1 CONDITION 1C)

The North Inlet is operated as a single pond, with no discrete cells. Elevations of water in the North Inlet Pond during the open water period for 2023 are shown in Table 3. Measurements are taken daily at 10:00 hours.

Table 3 Monthly North Inlet elevations (mASL) in 2023 during open water period. Values are monthly averages.

Month	North Inlet Water Level (mASL)
May	415.73
June	415.23
July	415.07
August	415.06
September	415.28
October	414.91

5.0 MONTHLY AND ANNUAL QUANTITIES (IN CUBIC METERS) OF RECYCLED WATER IDENTIFYING BOTH THE SOURCE AND USE (SCHEDULE 1 CONDITION 1D)

Table 4 below provides the monthly volumes of water recycled from the Processed Kimberlite Containment Facility (PKCF) and the North Inlet for use in the Process Plant in 2023. In 2020 the PKCF barge was removed and replaced with the North West Decant Sump due to a change in FPK deposition that now slopes toward the spillway. Since the removal of the barge, PKCF water is no longer recycled for use in the Process Plant. Figure 3 shows totals from 2000 through 2023.

Table 4 Monthly recycled water (m^3) from the PKCF and North Inlet for use in the Process Plant in 2023.

Month	Recycled water from the North Inlet (m^3) for use in the Process Plant	Cumulative Totals (m^3)
January	195,423	195,423
February	182,464	182,464
March	240,203	240,203
April	231,182	231,182
May	177,418	177,418
June	195,828	195,828
July	200,150	200,150
August	190,672	190,672
September	152,860	152,860
October	157,102	157,102
November	192,485	192,485
December	184,703	184,703
Total	**2,300,490**	**2,300,490**

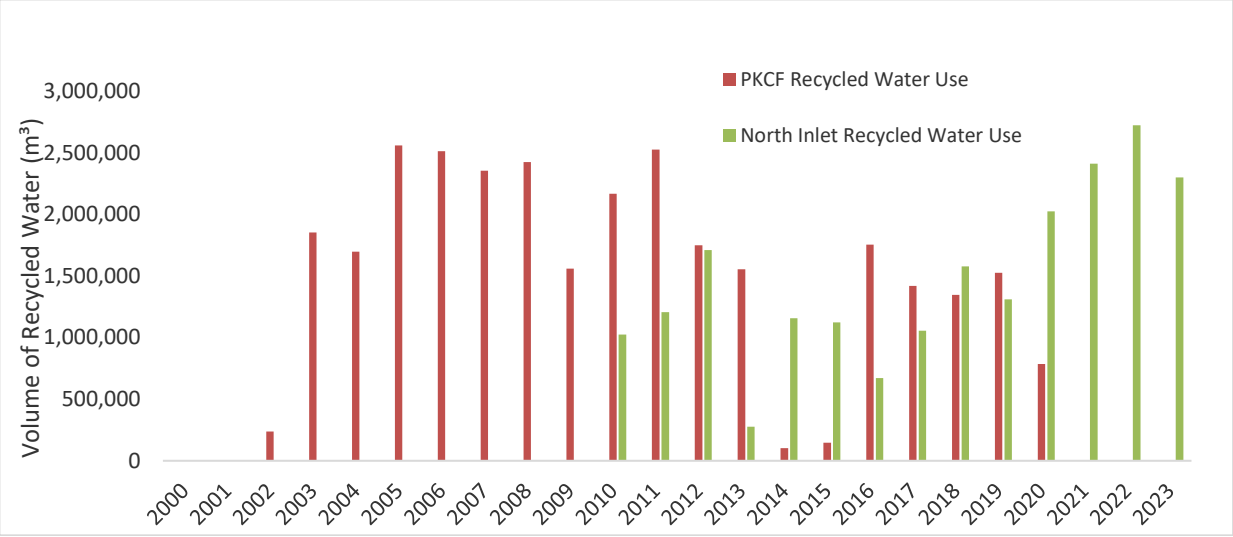

Figure 3 Annual quantities of recycled PKCF and North Inlet water (m^3) for use in the Process Plant from 2000 through 2023.

6.0 MONTHLY AND ANNUAL QUANTITIES OF SOLIDS (IN TONNES) AND LIQUID FRACTIONS (IN CUBIC METERS) OF EACH WASTE STREAM DISCHARGED TO THE PROCESSED KIMBERLITE CONTAINMENT FACILITY AND THE NORTH INLET BY SOURCE (SCHEDULE 1 CONDITION 1E)

Table 5 below lists the quantities of solid and liquid fractions of waste discharged to the PKCF in 2023. Figure 4 and Figure 5 represent coarse and fine discharged reject totals (metric tonnes and m^3) from 2000 through 2023 and Figure 6 represents Process Plant water volumes (m^3) discharged to PKCF from 2000 through 2023. PKCF interception well and collection pond water is transferred to either the PKCF or North Inlet depending on day-to-day operational requirements. Figure 7 represents annual quantities of PKCF interception well water and collection pond water sent to the PKCF from 2000 through 2023. Interception wells and collection ponds reporting to the North Inlet are presented in Table 6 and Figure 8. Treated sewage effluent fractions reported to the PKCF are presented in Table 9 of Section 10.0.

Table 5 Monthly solid and liquid fractions discharged to the PKCF in 2023.

Month	Collection Ponds Pumped to the PKCF (m^3)	PKCF Interception Wells to PKCF (m^3)	Coarse Rejects to PKCF (metric tonnes)	Fine Rejects to PKCF (m^3)	Process Plant Water Discharge to PKCF (m^3)
January	0	25,755	118,841	89,016	281,766
February	0	17,829	86,819	68,726	3,436
March	0	15,070	60,394	68,630	332,017
April	0	11,830	86,570	20,832*	72,557
May	19,962	11,452	59,775	0	372,187
June	16,167	15,967	85,939	0	0
July	14,901	12,344	67,544	0	0
August	16,036	12,640	43,482	0	0
September	19,183	8,443	26,833	0	0
October	18,833	5,595	44,126	0	0
November	60	0	30,806	0	0
December	1,011	0	28,532	0	0
Total	**106,153**	**136,925**	**739,661**	**247,204**	**1,061,963**

***Note:** April was the final month for Fine Processed Kimberlite discharge to PKCF. All FPK material will be discharged to A418 pit moving forward.

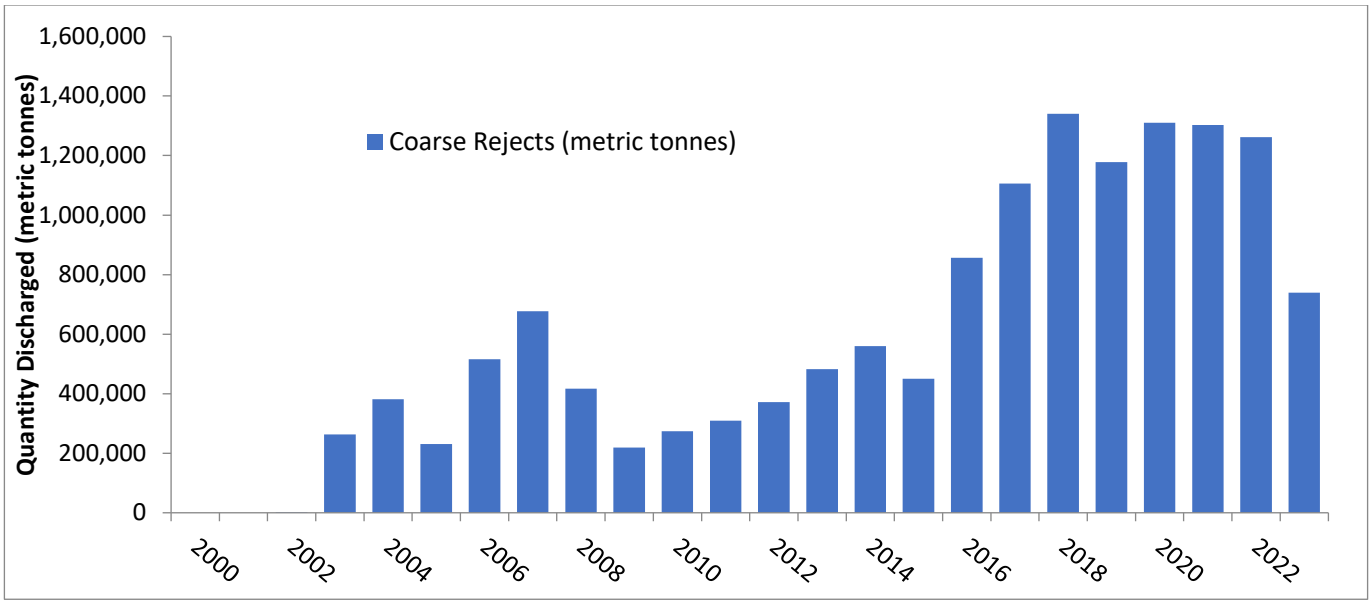

Figure 4 Annual quantities of coarse rejects (metric tonnes) discharged to the PKCF from 2000 through 2023.

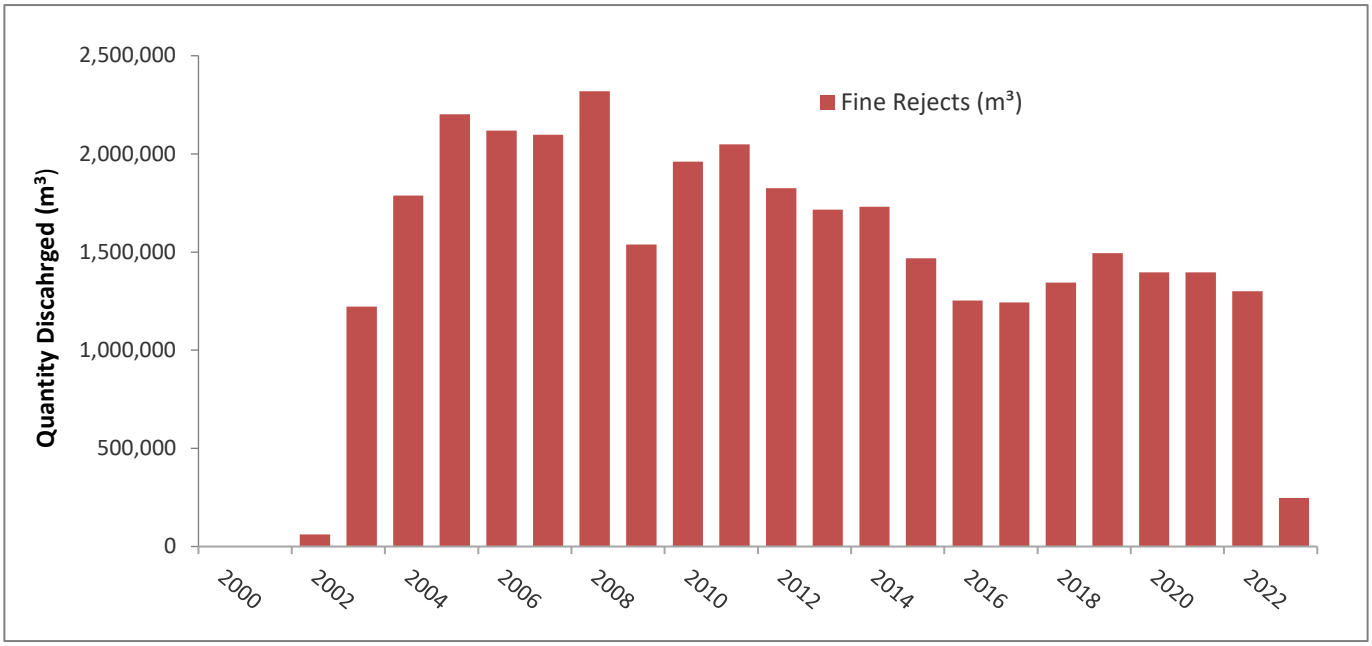

Figure 5 Annual quantities of fine rejects (m³) discharged to the PKCF from 2000 through 2023.

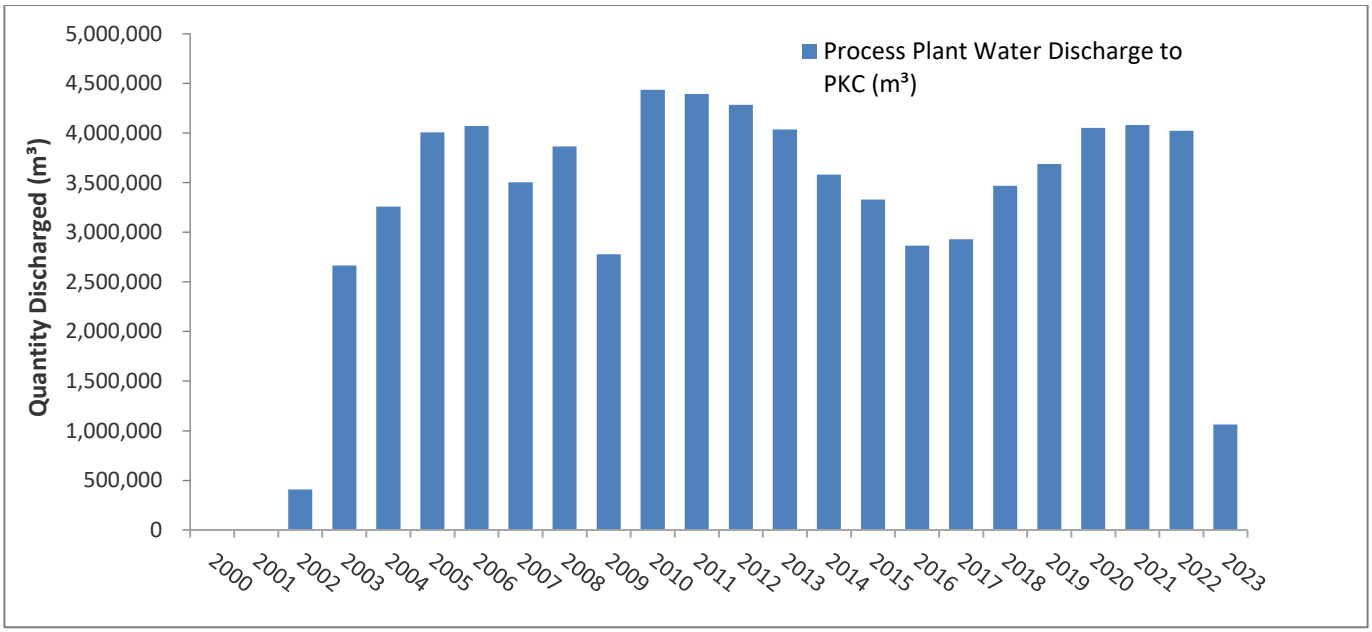

Figure 6 Annual quantities of Process Plant water (m³) discharged to the PKCF from 2000 through 2023.

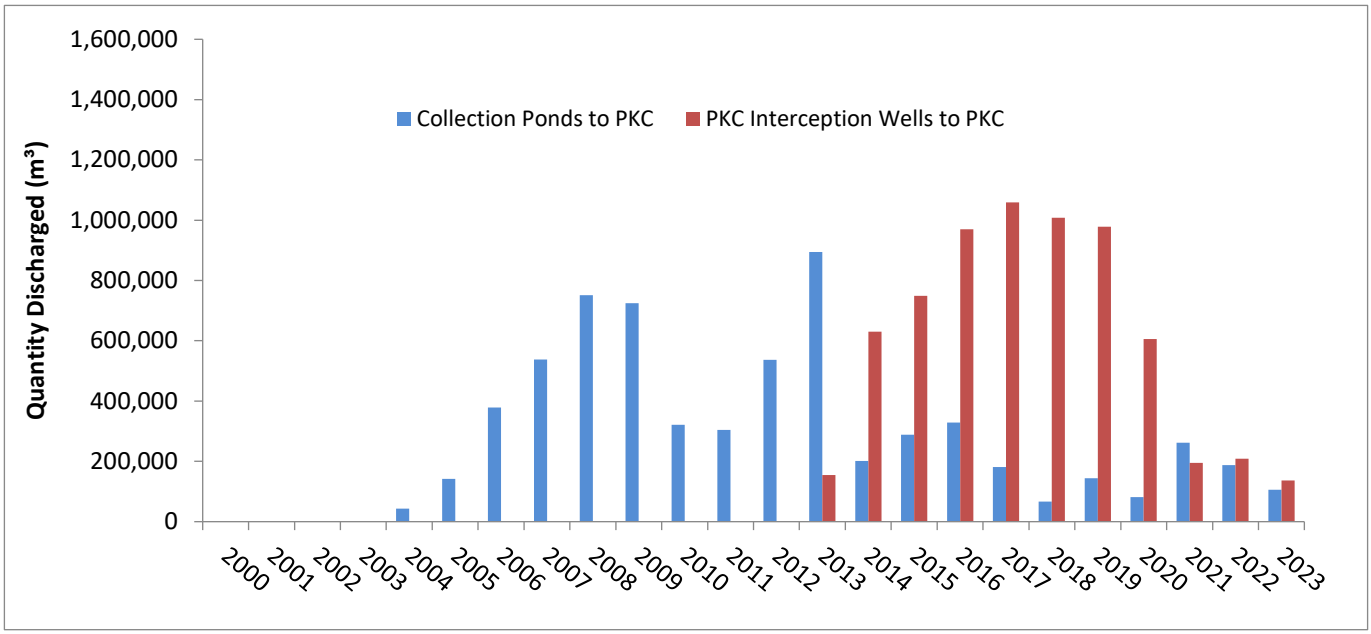

Figure 7 Annual quantities of PKCF interception well water and collection pond discharged (m³) to the PKCF from 2000 through 2023.

Table 6 below lists monthly quantities of pit, underground, Dike Pumping Station (DPS) well, PKCF interception well and decant water, and collection pond water discharged to the North Inlet in 2023. Figure 8 represents annual quantities from 2000 through 2023. Due to underground dewatering initiated in 2010, the volumes of water reporting to the open pits have decreased significantly. Currently, water is pumped from the A154 and A418 pits to the North Inlet only when present (e.g., freshet). Water is also intercepted and pumped through the DPS wells. Water from the A21 pool reporting to the North Inlet are presented in Table 2 of Section 3.

Table 6 Monthly liquid fractions discharged to the North Inlet by source in 2023.

Month	A154/A418 DPS Well Water to North Inlet (m^3)	A154 Pit Water to North Inlet (m^3)	A418 Pit Water to North Inlet (m^3)	A154/A418 Decline Water to North Inlet (m^3)	Collection Ponds to North Inlet (m^3)	**PKCF NW Decant Sump to North Inlet (m^3)**	PKCF Interception Wells to North Inlet (m^3)	A21 Pit Water to North Inlet
January	4,495	25,242	38,972	806,021	0	128	14,963	235,028
February	3,313	50,008	27,183	691,037	0	106	9,153	243,956
March	3,279	24,274	9,327	782,137	0	1,472	3,358	275,239
April	3,730	37,548	28	749,545	0	13,228	0	303,809
May	30,083	22,444	902	784,605	195,177	281,106	22,272	345,705
June	6,015	2,274	0	784,814	24,986	200,631	19,267	200,525
July	11,007	30,032	1,050	788,990	3,787	133,411	19,533	331,088
August	8,097	102,916	0	721,677	0	81,447	23,353	325,172
September	8,019	186,872	1,635	639,968	0	162,416	23,033	336,618
October	8,811	211,528	1,384	628,169	15,661	117,775	21,235	318,334
November	5,257	235,546	0	543,932	0	164	13,513	290,951
December	4,079	95,247	0	690,600	0	140	1,994	303,636
Total	**96,185**	**1,023,931**	**80,481**	**8,611,495**	**239,611**	**992,024**	**171,674**	**3,510,061**

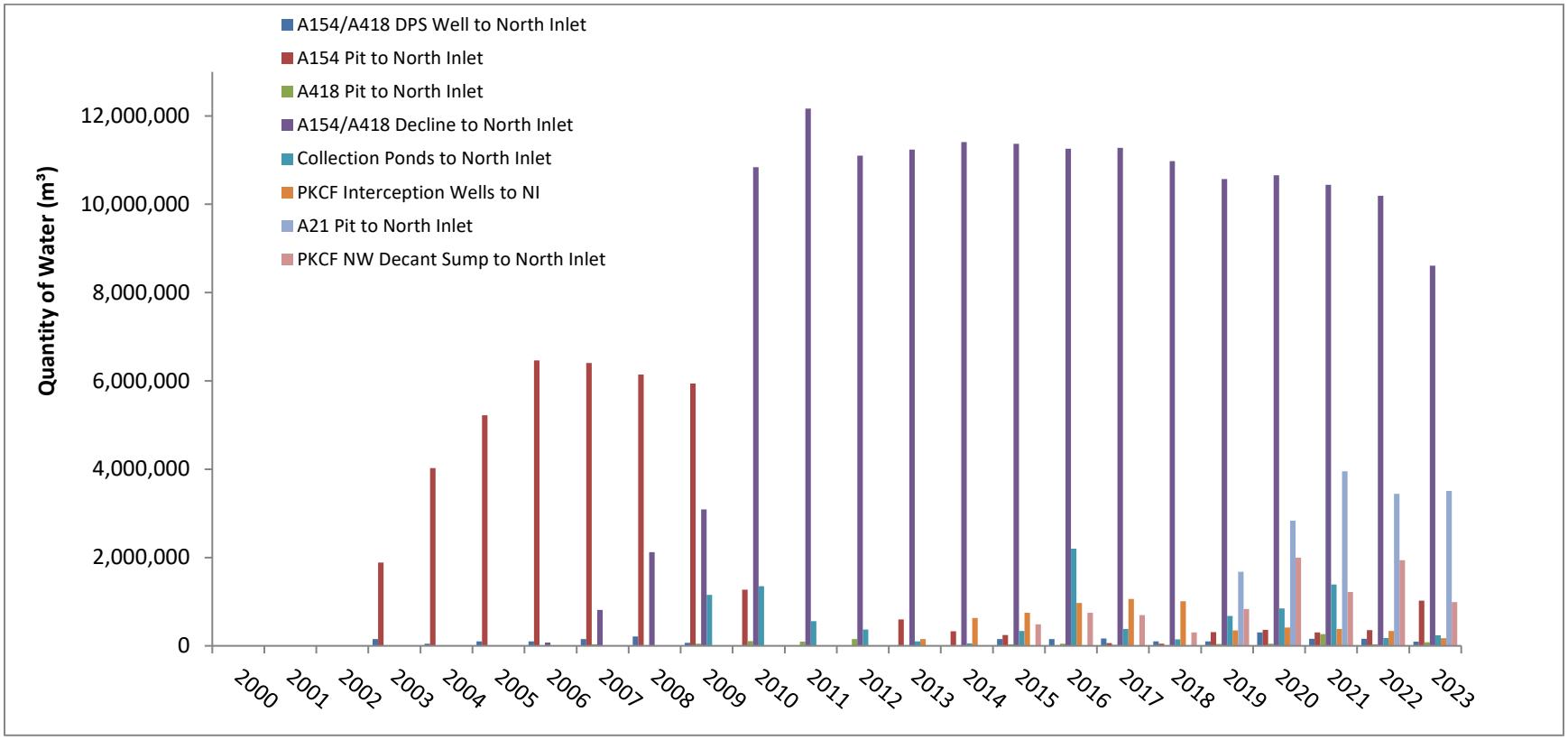

Figure 8 Annual quantities of liquid fractions discharged to the North Inlet from 2000 through 2023.

7.0 MONTHLY QUANTITIES (IN CUBIC METERS) OF FINE PROCESSED KIMBERLITE WASTE DEPOSITED INTO THE A418 PIT.

DDMI received Ministerial approval of the Processed Kimberlite to Mine Workings (PKMW) Project in 2021. Fine Processed Kimberlite (FPK) deposition in to the A418 open pit and mine workings began in April 2023 via two pipelines. Table 7 and Figure 9 below display the monthly FPK deposition quantities for 2023.

Table 7 Monthly FPK discharge to A418 Pit in 2023.

Month	FPK (m^3) to A418 Pit
January	0
February	0
March	0
April	278,024
May	275,703
June	339,315
July	375,125
August	340,242
September	279,524
October	296,396
November	324,105
December	306,520
Total	**2,814,954**

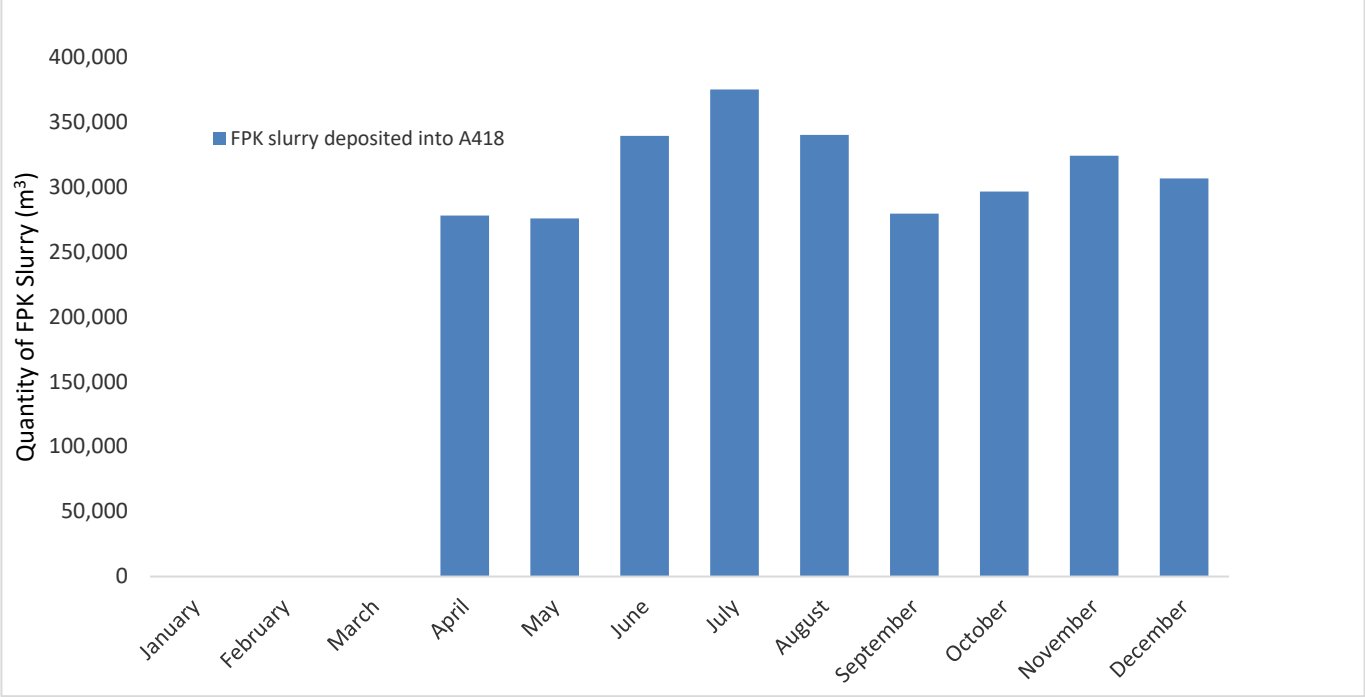

Figure 9 Monthly FPK discharge to A418 Pit in 2023.

8.0 MONTHLY AND ANNUAL QUANTITIES OF DREDGED SEDIMENT IN CUBIC METERS (SCHEDULE 1 CONDITION 1F)

A21 dredging activities were completed in 2016 and, as directed by the Board (20 April 2017) DDMI has since verified a storage capacity of 1.1 million cubic meters to the Pond 3 Dam spillway invert.

9.0 MONTHLY AND ANNUAL QUANTITIES IN CUBIC METERS OF ALL DISCHARGES TO LAC DE GRAS BY SOURCE (SCHEDULE 1 CONDITION 1G)

Table 8 below presents the volume of water moved to Lac de Gras (LDG) in 2023. No other material was discharged to Lac de Gras in 2023.

Table 8 Monthly water discharges (m^3) to Lac de Gras in 2023.

Month	NIWTP Treated Effluent Discharged to Lac de Gras (m^3)
January	892,001
February	962,523
March	850,576
April	881,974
May	1,568,344
June	1,233,091
July	1,291,590
August	985,705
September	1,257,937
October	1,298,187
November	860,667
December	1,020,991
Total	**13,103,586**

10.0 MONTHLY AND ANNUAL QUANTITIES IN CUBIC METERS OF TREATED EFFLUENT DISCHARGED FROM THE SEWAGE TREATMENT FACILITY (SCHEDULE 1 CONDITION 1H)

Table 9 and Figure 10 below show the amount of treated sewage effluent discharged from the sewage treatment facility in 2023 and in previous years. From 2000 to 2002, sewage effluent was pumped to Lac de Gras. From 2003 onward, it has been incorporated into the FPK waste stream.

Table 9 Monthly quantities of treated sewage effluent (m^3) sent to FPK waste stream in 2023.

Month	Treated Sewage Effluent Volume (m^3)
January	6,031
February	5,229
March	5,666
April	6,023
May	6,050
June	5,432
July	5,501
August	5,523
September	5,930
October	5,920
November	6,383
December	6,409
Total	**70,097**

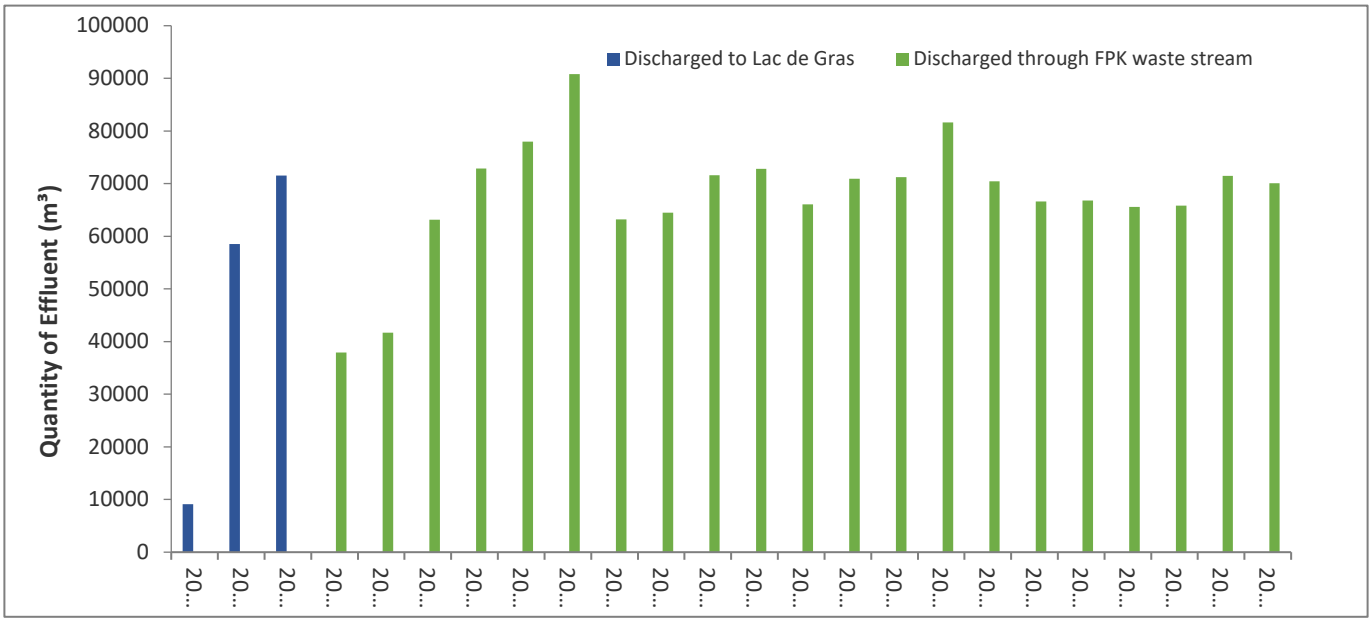

Figure 10 Annual quantities of treated sewage effluent (m^3) discharged from 2000 through 2023.

11.0 MONTHLY AND ANNUAL QUANTITIES IN CUBIC METERS OF SEWAGE SOLIDS REMOVED FROM THE SEWAGE TREATMENT FACILITY (SCHEDULE 1 CONDITION 1I)

Table 10 below provides the volume of sewage solids removed from the sewage treatment plant facility in 2023. Figure 11 shows volumes from 2000 through 2023. Up until 2013, treated sewage solids were stored in a lined cell within the waste transfer area. From 2013 to 2020, the GNWT Lands Inspector approved a long-term storage area for treated sewage solids located at the Till (lake sediments) Pile of the Waste Rock Storage Area-North Country Rock Pile (WRSA-NCRP). In 2020, remining of the Till Pile – WRSA-NCRP began to provide cover material for the WRSA-NCRP to support progressive reclamation of the WRSA-NCRP and in spring 2022 treated sewage solids produced had been directly deposited on the WRSA-NCRP along with till. In 2023, sewage solids were deposited in the WRSA-NCRP Life of Mine area where it will be covered with till and rockfill at closure.

Table 10 Monthly sewage solids removed from the Sewage Treatment Facility (m^3) in 2023.

Month	Sewage Solids Removed (m^3)
January	120
February	161
March	313
April	169
May	122
June	193
July	166
August	191
September	208
October	170
November	199
December	156
Total	**2,168**

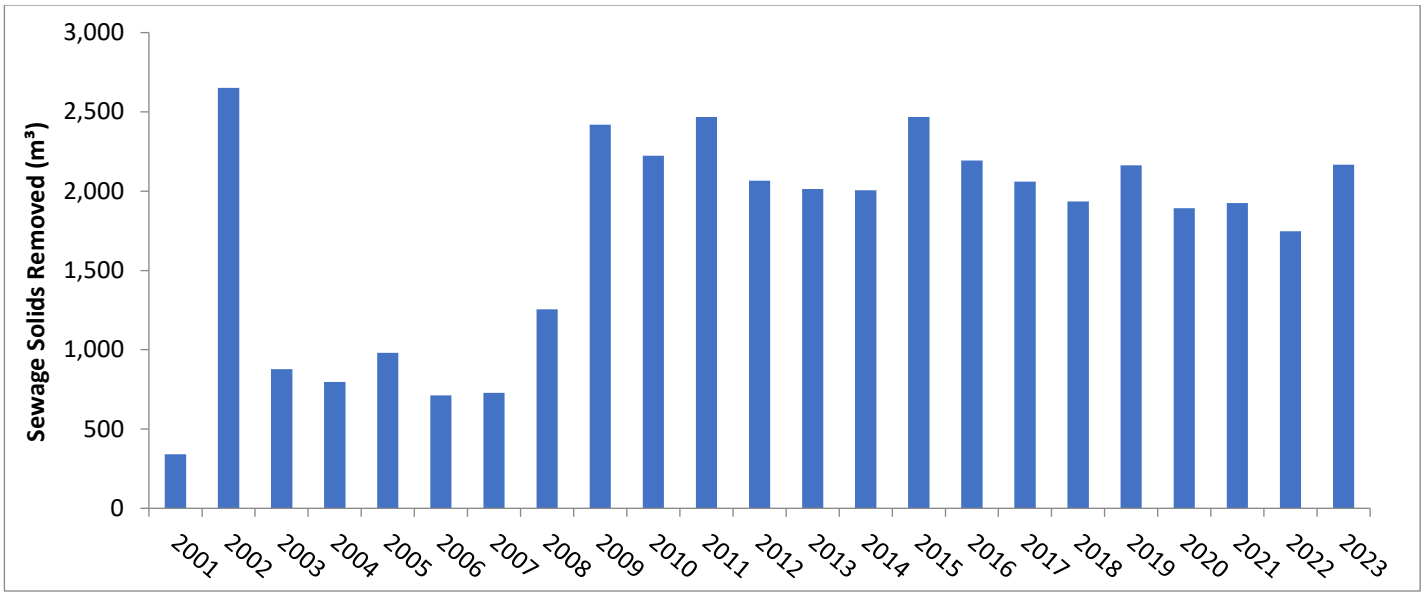

Figure 11 Annual quantities of treated sewage solids (m³) generated on site from 2000 through 2023.

12.0 CURRENT ANNUAL AND PAST ANNUAL QUANTITIES IN CUBIC METERS AND TONNES FOR TILL, ORE STOCKPILING, PROCESSED KIMBERLITE GENERATION AND WASTE ROCK PRODUCTION (PER ROCK TYPE) BY DESTINATION, INCLUDING SOURCES OF EACH MATERIAL (SCHEDULE 1 CONDITION 1J)

As per the approved Waste Rock Management Plan (Version 11.1), rock was differentiated into three types based on percent Total Sulphur (Type I - clean rock (<0.04%), Type II - potential acid generating rock (0.04-0.08%), and Type III - with the greatest potential of leaching metals (>0.08%) or using visual classification. Table 11, Figure 12 and Figure 13 show the quantities of materials moved in 2023 and in previous years. Type I material is used for construction (e.g. PKCF dam raises and road construction or maintenance), is placed in the Type I rock pile or is stockpiled for later use. Type II and III rock are placed within the designated Type III areas in the WRSA-NRCP or can be used in the PKCF north dam or cement rock fill (CRF) underground. For details on Processed Kimberlite values, refer to Section 6. As per the currently approved Waste Rock Management Plan (Version 11.1), temporary stockpiling of ore is planned until the end of Operations at areas on site, including at the mine portals and near the crusher, where potential drainage (surface runoff and seepage) can be captured by the current water management system. Seepage will be monitored as per Part G Condition 11, and in accordance with Schedule 6 Condition 7 of the Water Licence.

Table 11 Materials moved (m^3/tonnes) in 2023.

Month	Overburden (till and sediments) (m^3/tonnes)	Waste Rock (m^3/tonnes)		
		Type I	Type II	Type III
		Open Pits		
January	0/0	83,303/169,939	0/0	0/0
February	0/0	6,810/13,893	0/0	0/0
March	0/0	4,228/8,626	0/0	0/0
April	0/0	4,622/9,428	0/0	0/0
May	0/0	654/1,335	0/0	0/0
June	0/0	0/0	0/0	0/0
July	0/0	0/0	0/0	0/0
August	0/0	0/0	0/0	0/0
September	0/0	0/0	0/0	0/0
October	0/0	0/0	0/0	0/0
November	0/0	0/0	0/0	0/0
December	0/0	0/0	0/0	0/0
Total	**0/0**	**99,618/203,221**	**0/0**	**0/0**
		Underground		
January	0/0	0/0	0/0	12,540/25,582
February	0/0	0/0	0/0	1,007/2,054
March	0/0	0/0	0/0	7,000/14,281
April	0/0	0/0	0/0	5,385/10,986
May	0/0	0/0	0/0	1,142/2,329
June	0/0	112/228	0/0	131/268
July	0/0	0/0	0/0	5,288/17,193
August	0/0	0/0	0/0	12,539/10,788
September	0/0	2,362/4,819	0/0	4,954/25,579
October	0/0	4,049/8,259	0/0	0/0
November	0/0	61,435/125,327	0/0	4,954/10,106
December	0/0	7,567/15,437	0/0	188/384
Total	**0/0**	**75,524/154,070**	**0/0**	**58,603/119,550**

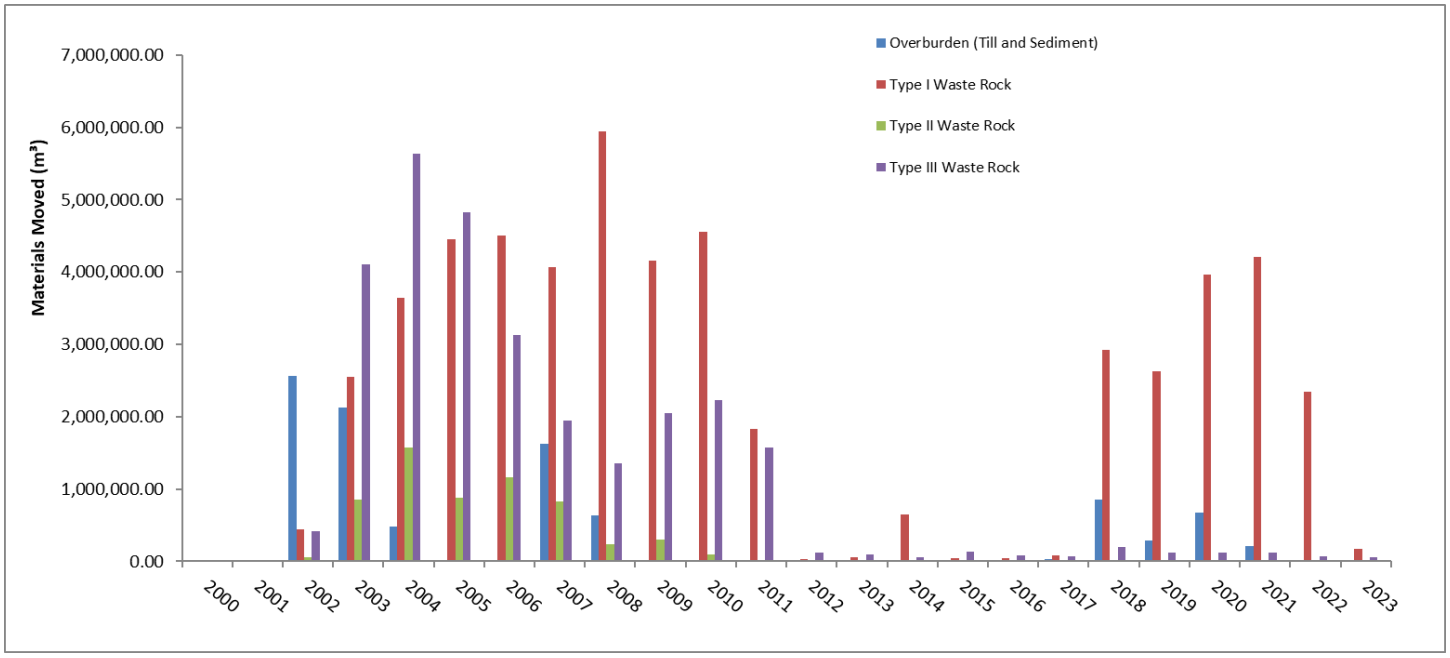

Figure 12 Materials moved (m³) from 2000 through 2023.

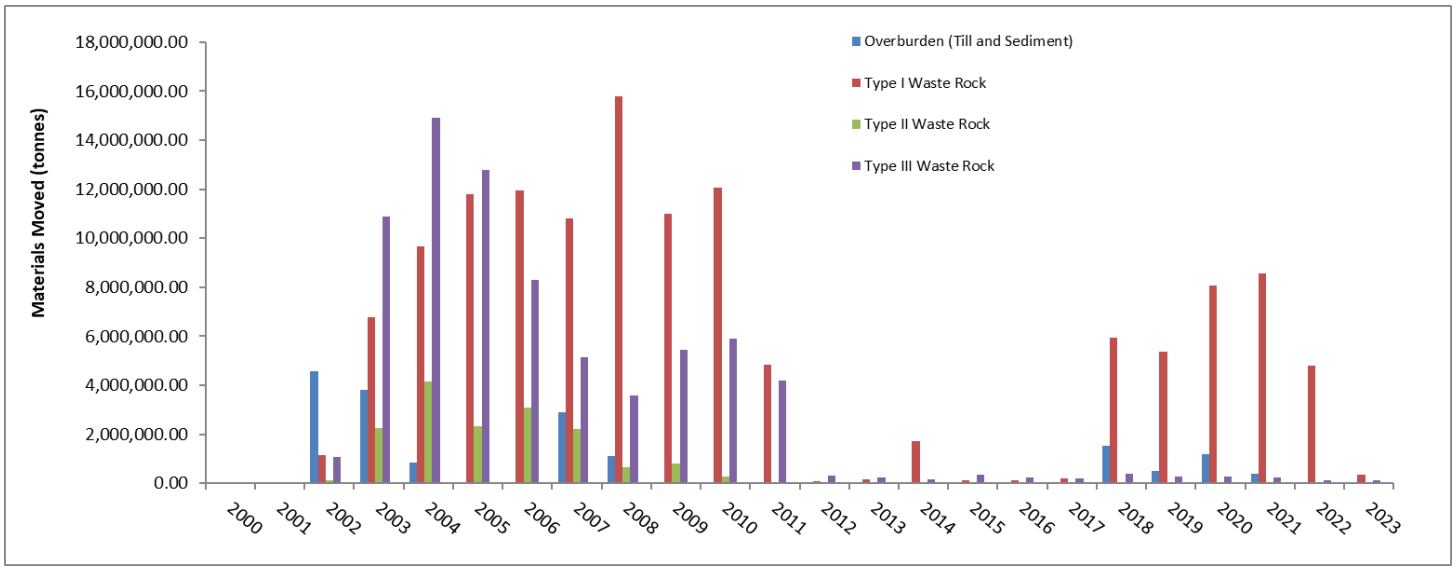

Figure 13 Materials moved (tonnes) from 2000 through 2023.

Historic Waste Rock and Till Production

A summary of historic waste rock and till production is presented in Table 12. Note that beginning in 2011, all Type II rock was conservatively classified and operationally handled as Type III rock. All till produced between 2002 and 2004 was sourced from the A154 pit and till produced in 2007 and 2008 was from the A418 pit and is currently stored in the WRSA-NCRP till storage area. All Type I rock produced prior to 2017 was sourced from the A418 and A154 open pits and was used for surface and A21 dike construction, with excess material stored in the WRSA-NCRP Type I areas. All Type I rock produced since 2017 was sourced from the A21 Pit and was used for surface construction with excess material stored in the WRSA-SCRP. All Type III rock produced throughout the life of mine is stored in the WRSA-NCRP Type III areas, with the exception for a small amount used in CRF (cemented rockfill) and the PKCF north dam, as well as the areas identified in the current Waste Rock Management Plan. Waste rock from the A21 pit either will report to the WRSA-SCRP or be used as cover material for reclamation activities.

Table 12 Historic waste rock and till production. Note that the volumes are estimated based on a waste rock particle density of 2.65 g/cm³, and a till bulk density of 1.78 g/cm³. Type I waste rock re-mined from the SCRP has an estimated particle density of 2.04 g/cm³.

bcm = bank cubic meters

Year	Till (tonnes)	Till (bcm)	Type I (tonnes)	Type I (bcm)	Type II (tonnes)	Type II (bcm)	Type III (tonnes)	Type III (bcm)
2002	4,300,800	2,560,000	1,166,000	440,000	132,500	50,000	1,086,500	410,000
2003	3,578,400	2,130,000	6,757,500	2,550,000	2,252,500	850,000	10,865,000	4,100,000
2004	806,400	480,000	9,646,000	3,640,000	4,160,500	1,570,000	14,919,500	5,630,000
2005	-	-	11,792,500	4,450,000	2,332,000	880,000	12,773,000	4,820,000
2006	-	-	11,951,500	4,510,000	3,074,000	1,160,000	8,294,500	3,130,000
2007	2,721,600	1,620,000	10,785,500	4,070,000	2,199,500	830,000	5,141,000	1,940,000
2008	1,058,400	630,000	15,767,500	5,950,000	636,000	240,000	3,577,500	1,350,000
2009	-	-	11,003,913	4,152,420	788,561	297,570	5,439,046	2,052,470
2010	-	-	12,073,180	4,555,917	261,290	98,600	5,906,996	2,229,055
2011	-	-	4,841,550	1,827,000	-	-	4,181,700	1,578,000
2012	-	-	81,520	30,762	-	-	313,818	118,422
2013	-	-	143,715	54,232	-	-	249,665	94,213
2014	-	-	1,722,500	650,000	-	-	159,000	60,000
2015	-	-	106,000	40,000	-	-	344,500	130,000
2016	-	-	119,623	45,141	-	-	231,394	87,318
2017	52,510	29,500	212,242	80,091	-	-	179,860	67,872
2018	1,366,661	813,489	5,830,263	2,200,099	-	-	395,074	149,085
2019	516,052	337,629	6,837,598	2,580,226	-	-	315,079	118,898

2020	1,194,656	711,105	8,076,691	3,047,808	-	-	258,039	97,373
2021	381,438	227,046	8,574,730	3,235,747	-	-	237,685	89,692
2022	-	-	4,783,334	1,805,032	-	-	137,431	51,861
2023	-	-	216,524	81,707	-	-	55,196	20,829

13.0 DISTRIBUTION OF ZONES 1 AND 2 WITHIN A21

Per the Waste Rock Management Plan, the distribution of Zone 1 and 2 within the A21 are presented below. Zone 1 is classified as Type I rock and Zone 2 has potential to intersect metasediment or unknown rock type. Note: the distribution projects vertically for the A21 underground.

The percentage of remaining potential Type lll in the active A21 open pit wall is 3.1%.

Figure 9 - Zone 1 (pink); Zone 2 (blue), and Kimberlite (green) in A21 as of March 2024.

14.0 COMPARISON OF PREDICTED QUANTITIES OF MATERIALS BETWEEN THE PKCF PLAN AND WRMP AGAINST MATERIAL DEPOSITED IN THE PRECEDING YEAR (SCHEDULE 1 CONDITION 1K (i))

A comparison of the actual amount of waste rock and till moved in 2023 to the planed/predicted quantities is outlined below in Table 13. It is important to note that operational mine plans may change frequently to adapt to changing mine conditions and circumstances with no adverse effects.

Table 13 Predicted vs. actual 2023 waste rock and processed kimberlite production (tonnes).

Material Type & Source	Predicted Amount	Actual Amount	Difference
A154/418 Underground Type I	0	0	0
A154/A418/A21 Underground Type III	18,250	137,712	119,462
A21 Overburden and Till	0	0	0
A21 Waste Rock**	636,974	216,524	-420,291
Processed Kimberlite*	2,000,732	1,809,478	-191,254

*Processed Kimberlite generation (tonnage) is equivalent to ore production.
** includes all Type I waste rock from both A21 Surface and Underground.

15.0 IDENTIFY IF PREDICTIONS IN THE PK MANAGEMENT PLAN AND WRMP REQUIRE UPDATING AND ANY IMPLICATIONS ON HOW MATERIALS ARE MANAGED (SCHEDULE 1 CONDITION 1K (ii))

Updates to predictions in the Processed Kimberlite Management Plan and Waste Rock Management Plan not required at time of annual Water Licence submission.

16.0 SUMMARY WHICH DESCRIBES ANY IMPORTANT TRENDS, NOTABLE EVENTS, OR OTHER SIGNIFICANT INTERPRETATIONS OF ALL THE SNP DATA. ALL RAW DATA IS TO BE SUBMITTED IN ELECTRONIC FORM (SCHEDULE 1 CONDITION 1L)

Tabular summaries of the Surveillance Network Program (SNP) data, including QAQC data collected in 2023, were submitted to the Board monthly in SNP Reports and posted to the Board's electronic Public Registry. Excerpts of these summary tables are presented in Figures 14 and 15.

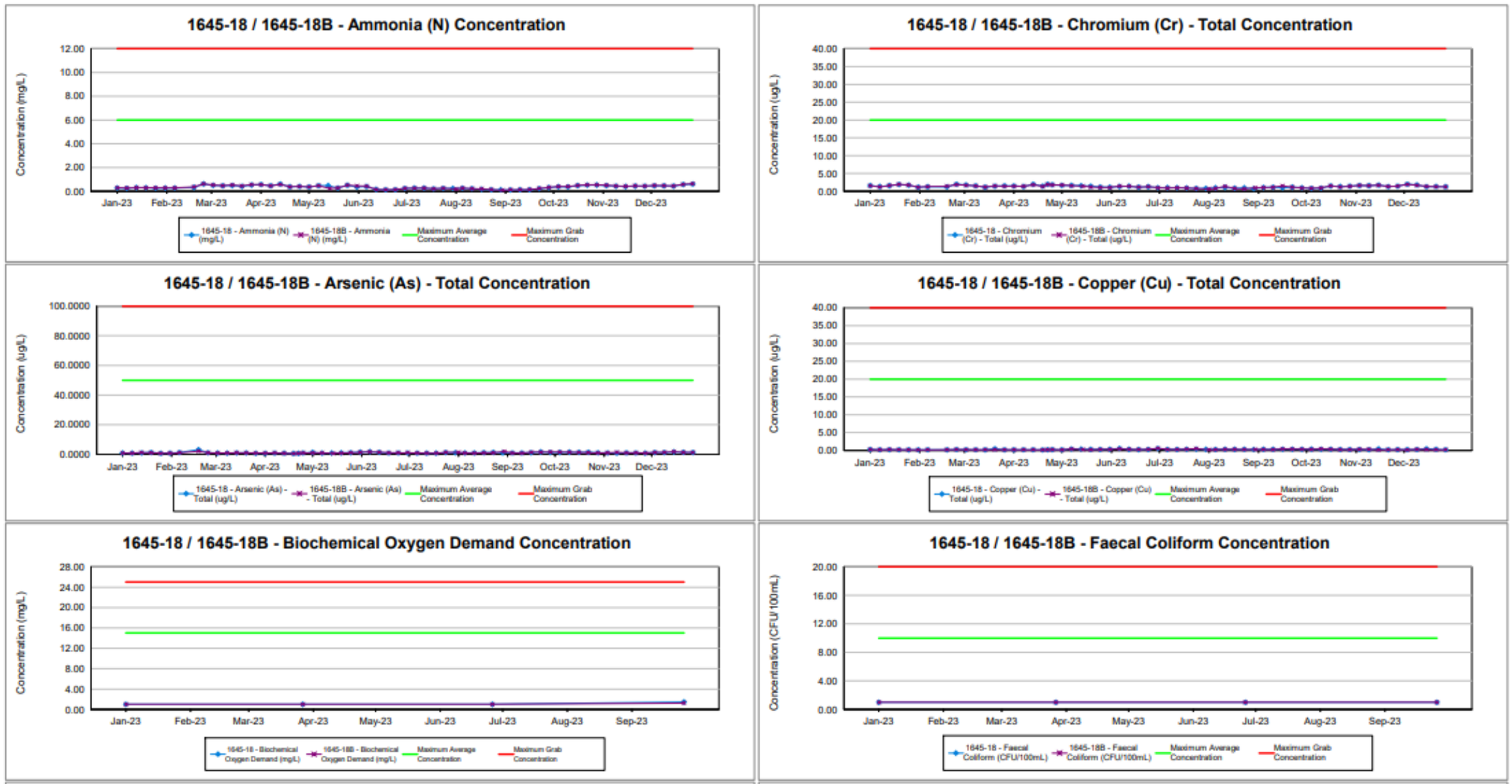

Figure 10-Effluent Quality Criteria (EQC) and Measured Concentrations for Total Ammonia, Total Arsenic, Biochemical Oxygen Demand (BOD_5), Total Cadmium, Total Chromium, Total Copper, Faecal Coliform Concentration, and Total Lead, at 1645-18 and 1645-18B in 2023.

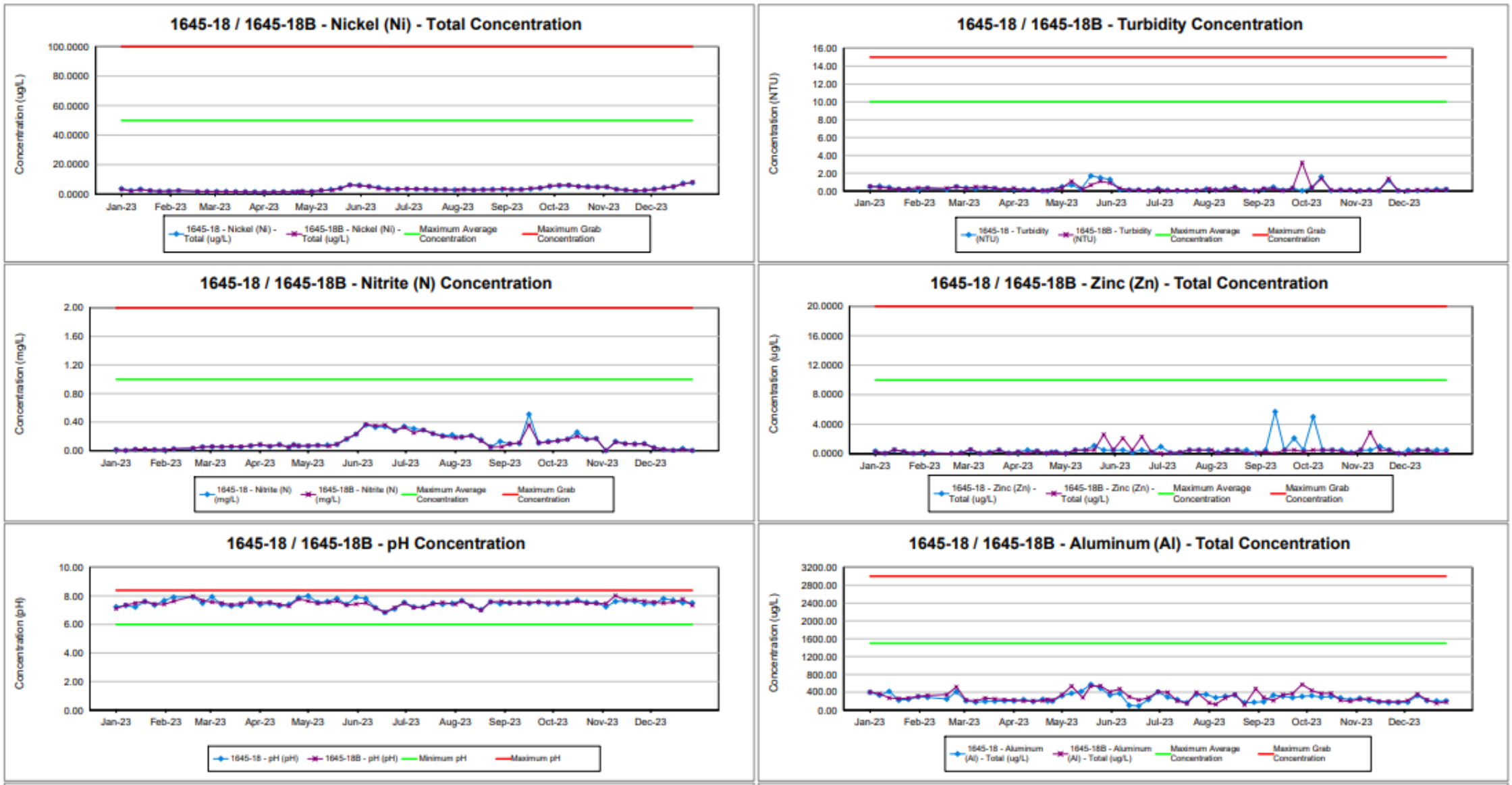

Figure 11 Effluent Quality Criteria (EQC) and Measured Concentrations of Total Nickel, Total Nitrite, Total Aluminum, Total Zinc, pH, Total Suspended Solids, C6-C50 Hydrocarbons, and Turbidity, at 1645-18 and 1645-18B in 2023.

Notable Events in 2023

There were no notable events in 2023.

Significant Interpretations of the Data

Effluent and mixing zone data is analyzed and interpreted as part of the annual Aquatics Effect Monitoring Program (AEMP) report that is submitted to the Board under Part I Condition 8.

17.0 ANALYZE TEMPORAL TRENDS IN PHC F3 CONCENTRATION FROM SNP STATIONS 1645-75 AND 1645-75B, SINCE THE BEGINNING OF SAMPLING FOR PHC F3, AND TO PRESENT AND DISCUSS RESULTS FROM THIS ANALYSIS (SCHEDULE 1 CONDITION 1M)

In 2014, DDMI established four (4) SNP stations at NIWTP 1 and 2 clarifiers (Table 13) to monitor hydrocarbon levels in the NIWTP sludge to ensure sediment and water quality is suitable for aquatic life. Each clarifier is sampled monthly (1645-85A sampled with 1645-86A and are offset with 1645-85B/1645-86B by two weeks) together with A154/A418 underground water 1645-75 (9290 pump station and dewatering sumps) and A154/A418 underground water 1645-75B (9105 pump station). PHC F3 analytical results were first presented in the July 2014 SNP Report and have been presented in all subsequent SNP Reports thereafter.

Table 14 Clarifier sludge SNP allocation.

	North Inlet Water Treatment Plant 1		North Inlet Water Treatment Plant 2	
Clarifier	Clarifier 1	Clarifier 2	Clarifier 3	Clarifier 4
SNP Station	1645-85A	1645-85B	1645-86A	1645-86B

In 2023, F3 concentrations in underground water pumped from station 1645-75 ranged from 0.25 – 17.0 mg/L and F3 concentrations in underground water pumped from station 1645-75B were below detection. The F3 detection limit in May 2019 improved from 0.2 mg/L to 0.1 mg/L. PHC F3 concentrations in sludge from NIWTP clarifiers ranged from below detection limit to 10.0 mg/L.

PHC F3 concentrations from underground water 1645-75 from 2014 through 2023 showed no significant trend (r^2 <0.01) (Figure 17). Concentrations of PHC F3 from underground water 1645-75B consistently remained below detection limit (0.2/0.1mg/L) in 2014 through 2023 (Figure 18); as such, these data are excluded from any trend analysis in this section. Figure 19 shows all PHC F3 results from 2014 through 2023 from 1645-75. Table 15 presents the correlation values of underground water (1645-75) and NIWTP clarifier sludge from 2014 to 2023.

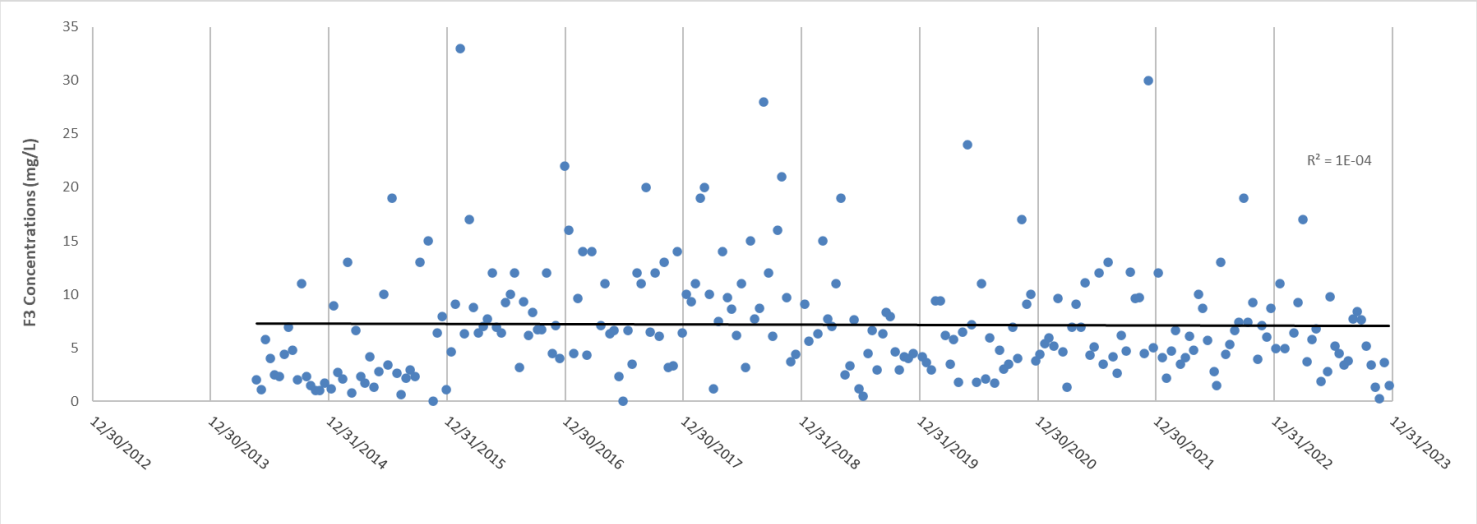

Figure 17 PHC F3 concentrations (mg/L) at station 1645-75 in 2014 through 2023.

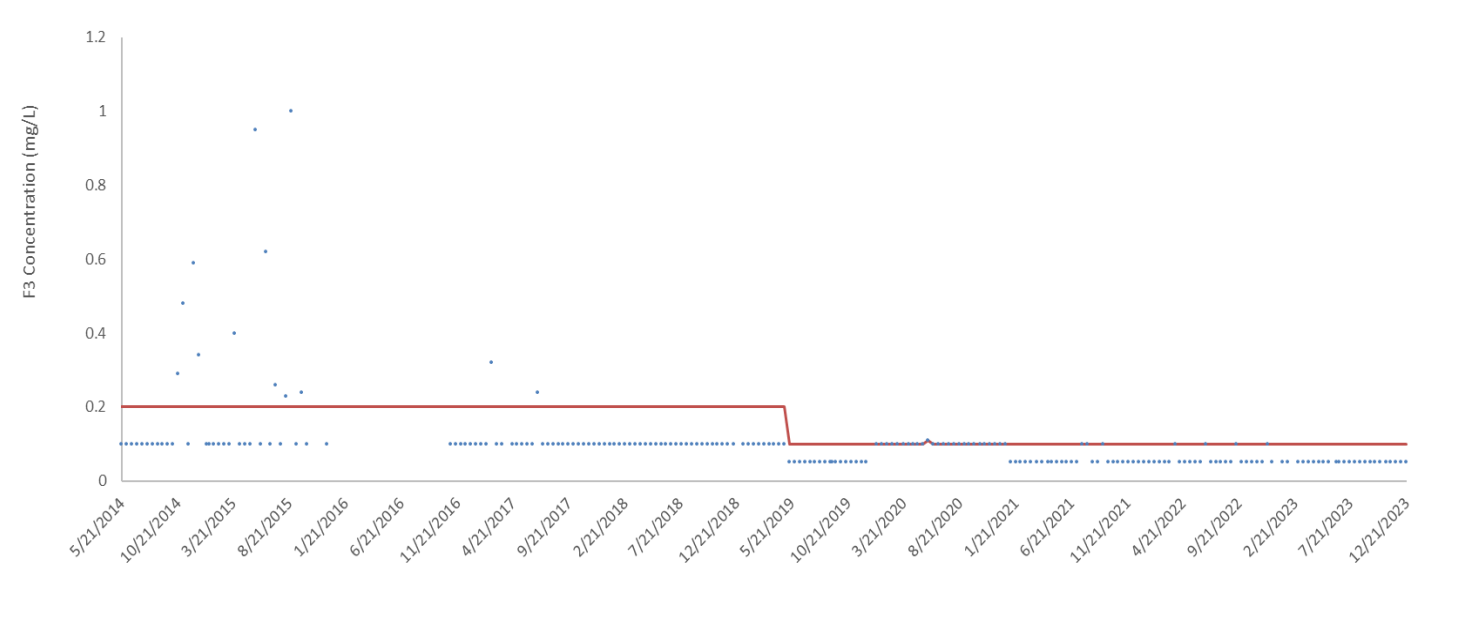

Figure 18 PHC F3 concentrations (mg/L) at station 1645-75B in 2014 through 2023. Detection limit (0.2mg/L May 2014 to May 2019 and 0.1mg/L May 2019 to Dec 2023) shown with red line.

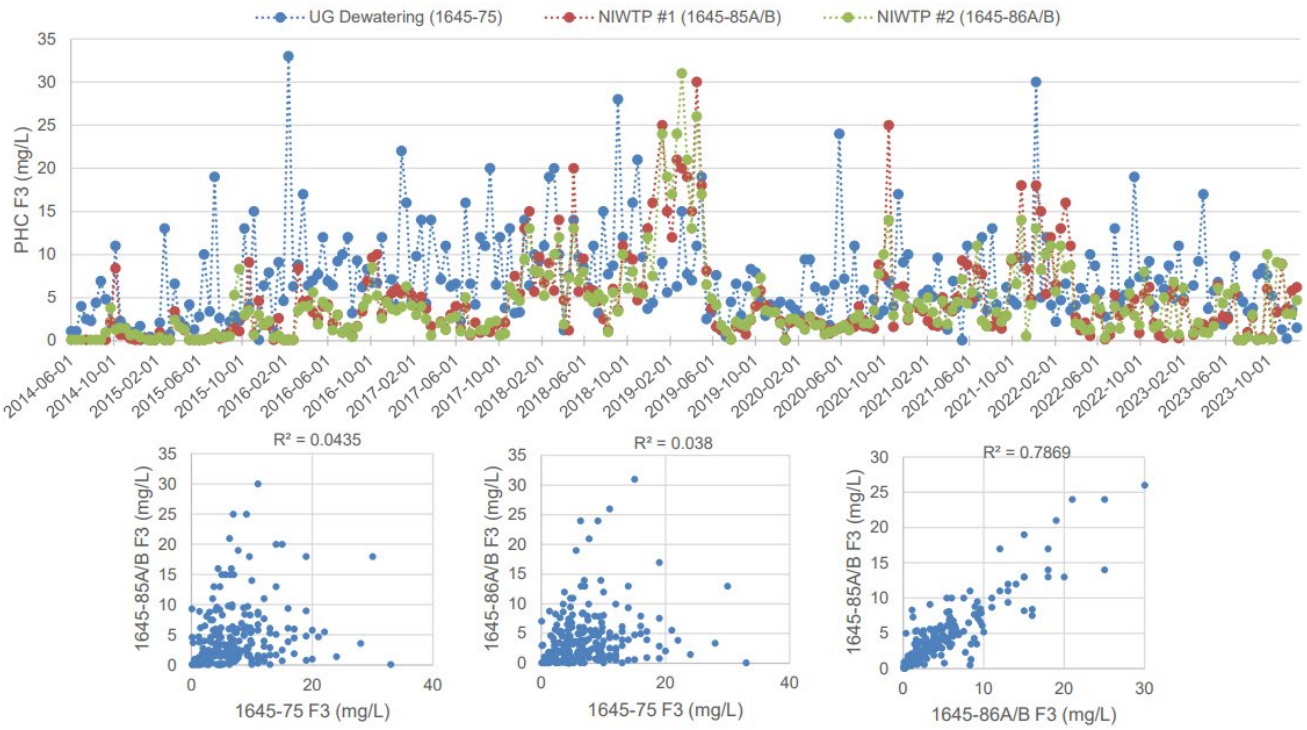

Figure 19 PHC-F3 concentrations (mg/L) at stations 1645-75, 1645-85A, 1645-85B, 1645-86A, and 1645-86B in 2014 through 2023.

Table 15 Correlation coefficient (r) values of underground water (1645-75) and clarifiers from May 2014 through December 2023.

Sample Point	1645-75	1645-85A	1645-85B	1645-86A	1645-86B
1645-75	1				
1645-85A	0.15	1			
1645-85B	0.25		1		
1645-86A	0.19	0.90		1	
1645-86B	0.20		0.89		1

Based on the data set to date (May 2014 through Dec 2023) there is no clear trend or correlation linking PHC F3 concentrations in underground water (1645-75) to PHC F3 concentrations in clarifier sludge. The weak linear correlations suggest that there is no relationship between PHC F3 concentrations in underground water (1645-75) and PHC F3 concentrations in clarifier sludge. Changes in PHC F3 in underground water do not have a corresponding increase/decrease in measured PHC F3 in clarifier sludge on the same day or in the following sample period two weeks later, (i.e., there is no immediate or delayed linkage between the two). As anticipated, and although not a significant “trend”, it is worth noting that PHC F3 concentrations in each clarifier on each sampling date are generally aligned.

18.0 PRESENT THE PHC F3 RESULTS FROM SEDIMENT COLLECTED DURING OPEN WATER SEASON AT SNP STATION 1645-19 AND PROVIDE A DISCUSSION ON THE ANALYSIS OF THAT DATA (SCHEDULE 1 CONDITION 1N)

PHC F3 concentrations in lakebed sediment grab samples collected from the effluent mixing zone in Lac de Gras (1645-19) in September 2023 were very low (Table 15). Concentrations are consistent with main effluent discharge to Lac de Gras from NIWTP (1645-18 and 1645-18B) being below detection limit (0.2 mg/L). DDMI will continue to collect samples annually during open water season and analyze the data to determine temporal trends.

Table 16 PHC F3 concentrations (mg/kg) in lakebed sediment collected from the effluent-mixing zone in Lac de Gras in 2023.

Location	1645-19A	1645-19B2	1645-19C
2016	70	38	<40
2017	<40	<40	<40
2018	<40	50	89
2019	<210	<200	<200
2020	<200	<150	<190
2021	<180	<130	<110
2022	<180	<140	<160
2023	<170	<120	<200

*Soil Quality Guidelines (CCME 2008) PHC F3 limit = 1,300 mg/kg.

19.0 SUMMARY OF CONSTRUCTION ACTIVITIES CONDUCTED AND AN UPDATED MINE PLAN, INCLUDING ANY CHANGES TO THE SCHEDULE FOR MINE DEVELOPMENT (SCHEDULE 1 CONDITION 1O)

There were a number of construction projects undertaken in 2023. A summary of operations and construction projects ongoing, completed or initiated is provided below.

Surface Projects

PKCF

- Granite placement for Zone 1
- Solar farm transformer pad construction
- Solar farm cable berm construction
- Cessation of FPK Deposition to PKCF

WRSA-NCRP and WRSA-SCRP

- WRSA-NCRP Progressive Reclamation
- WRSA-North Country Till Pile Re-mining
- New Access Connector from PKCF South Cell to AN Road/WRSA-SCRP
- WRSA-SCRP Re-Mining

PKMW Project

- Commissioning of twin PK to A418 pipelines and commencement of deposition of PK into the A418 pit

Underground Projects

- Construction of two (2) Bulkheads in the A418 Underground (A9080 and A9130 levels)
- Decommissioning of the A418 underground completed September 2023
- Continued development of A21 Underground/West Ramp

2023 Camp Numbers

Total Daily Average Camp Population: 583 The daily average camp population in 2023 increased by 26 individuals compared to 2022.

Pit Bottom Elevations on December 31, 2023

- A154: 156 m below sea level (bsl) (8844 level)
- A21: 218.5 m asl (9218.5 level)

The Lac de Gras water surface elevation is approximately 415.5 m asl (9415.4 level)

Underground Development in 2023

The total underground development for 2023 was 3730 eq m, which included 2,600 eq m of lateral waste rock development, 39 eq m of vertical waste rock development, and 1,130 m of ore development.

Mine Plan

The end of 2023 marked Diavik's twenty first year of continuous mining and processing operations. Current mine plans provide for continued mining and processing until 2026. Mine plan and status of all kimberlite pipes is provided below in Table 17.

Table 17: Ore bodies, access, and mine plan/status

Kimberlite Pipe	Access	Mine Status
A154 North	• A154 open pit • A154 underground (common decline with A418)	• Open pit mining completed Q3 2008 • Underground mining active
A154 South	• A154 open pit • A154 underground (common decline with A418)	• Open pit mining completed Q3 2010 • Underground mining active
A418	• A418 open pit • A418 underground (common decline with A154)	• Open pit mining completed Q3 2012 Underground mining completed in Q4 2022
A21	• A21 open pit • A21 underground	• Open pit mining completed Q2 2023 • Underground development started Q4 2023 • Ore production planned for Q4 2024

20.0 SUMMARY OF ALL WORK CARRIED OUT UNDER MANAGEMENT PLANS IN ACCORDANCE WITH PART G (SCHEDULE 1 CONDITION 1P)

This section lists management plans as outlined in Part G of Water Licence W2015L2-0001.

Table 18 below provides the status of management plans in 2023. These management plans are submitted to the Board and are presented under a separate cover. No non-conformances under these management plans were identified in 2023.

Table 18 Management plan status in 2023.

Plan	Version Number	Submission Date	Approved (Y/N)
Engagement Plan	3.1	July 2020	Y
PKMW Engagement Plan	1.1	February 2022	Y
Ammonia Management Plan	7.0	January 2020	Y
North Inlet Water Treatment Plant Operations Plan	2.0	January 2020	Y
Waste Rock Management Plan	11.0	December 2022	Y
Water Management Plan	17	March 2023	Y
Interim Closure and Reclamation Plan	4.1	January 2021	Y (with additional direction)
Final Closure and Reclamation Plan	1.0	October 2022	Pending
Processed Kimberlite Management Plan	7.1	January 2023	Y
Waste Management Plan	6	April 2023	Y
Contingency Plan	24.0	December 2022	Y
Sewage Treatment Facility Operations Plan	6.0	March 2011	Y

DDMI's Annual Seepage Report is submitted by March 31 each year under a separate cover.

21.0 AN OVERALL WATER BALANCE FOR THE PROJECT, THAT INCLUDES THE SPECIFIC WATER BALANCES FOR EACH OF THE PROCESSED KIMBERLITE CONTAINMENT FACILITY AND THE NORTH INLET FACILITY, AND ASSOCIATED WATERS FOR BOTH FACILITIES AS UPDATED WITH CURRENT INFORMATION RESPECTING (SCHEDULE 1 CONDITION 1Q);

I. ON-SITE PRECIPITATION, EVAPORATION AND RUNOFF;

II. VOLUMES OF RECYCLED WATER AND RAW WATER UTILIZED DURING THE PREVIOUS YEAR;

III. GROUNDWATER INFLOWS TO THE PIT;

IV. REALIZED CAPACITY OF WATER TREATMENT PLANTS; AND

V. STAGE-VOLUME CURVES THAT SHOW THE EXPECTED CAPACITY OF THE PROCESSED KIMBERLITE CONTAINMENT AND NORTH INLET FACILITIES.

A water balance for 2024 was completed by DDMI. The model is updated annually, and model inputs and results are presented in Appendix A.

22.0 SUMMARY OF MODIFICATIONS AND/OR MAJOR MAINTENANCE WORK CARRIED OUT ON THE WATER TREATMENT PLANT, PKCF, SEWAGE TREATMENT FACILITIES, DRAINAGE CONTROL AND COLLECTION SYSTEMS AND ANY ASSOCIATED STRUCTURES (SCHEDULE 1 CONDITION 1R)

The following is a summary of modifications to the above facilities and systems that were carried out in 2023.

Sewage Treatment Plant

- No process or equipment changes in 2023.

Potable Water Treatment Plant

- No process or equipment changes in 2023.

North Inlet Water Treatment Plant

- No process or equipment changes in 2023.

Drainage Control and Collection System

- No process or equipment changes in 2023.

North Inlet East and West Dikes

- There were no modifications to either of the North Inlet East or West Dikes in 2022.

Processed Kimberlite Containment Facility

- Deposition of Fine Processed Kimberlite into the A418 Pit via PKMW Project. Deposition began in April 2023.
- Construction of Zone 1 rockfill cover as part of progressive reclamation.

23.0 A LIST AND DESCRIPTION INLUDING VOLUMES OF ALL UNAUTHORIZED DISCHARGES AND SPILLS OF WASTE, AND SUMMARIES OF FOLLOW UP ACTIONS TAKEN (SCHEDULE 1 CONDITION 1S)

Listed below in Table 18 are the unauthorized discharges or spills of waste that occurred on surface and were reported to the NWT Spill Line (greater than 100 L or within 3 m of water) in 2022. Follow-up reports for each of these spills were forwarded to the GNWT Lands Inspector.

Table 19 List of unauthorized discharges on surface reported to the GNWT spill line in 2023.

Spill Date (dd/mm /yyyy)	DDMI Dept/Con-tractor	Equipment Type	Cause of Spill	Spill Location Designation	Spill Location (Specific)	Spilled Product	Spill Volume (L)	Follow-up Action
12/01/ 2023	Surface Mining	Drill	Breakage	A21 Pit	Bottom of A21 Pit	Diesel	500	Clean up, repair, report
07/02/ 2023	Site Maintenance	Pipeline	Breakage	North Inlet	North Inlet	Process Water	450000 000	Repair pipeline, report
19/03/ 2023	Surface Mining	Pipeline	Breakage	South Country Rock Pile	Old AN Road near PKC South	Process Water	16000	Repair pipeline, report
21/03/ 2023	Site Maintenance	Effluent Pump	Breakage	South Camp	Underneath DOC	Sewage	500	Replace coupling, clean up, report
26/03/ 2023	Site Maintenance	Pipeline	Breakage	Roads	South Haul Road pull-off near Pond 1	Process Water	2500	Repair pipeline, report
16/05/ 2023	Site Services	Discharge Line	Breakage	North Mine Dry	North Mine Dry Sewage Tank	Sewage	50	Repair line, clean up, report
21/05/ 2023	Site Services	Fuel Truck	Operator Error	South Tank Farm	STF Refueling containment pad	Diesel	300	Clean up, report
18/06/ 2023	Fixed Plant - Backfill	Pipeline	Breakage	Backfill Plant	Backfill plant bulk fuel tanks	Diesel	100	Clean up, repair pipeline, report
18/06/ 2023	Site Services	Pipeline	Breakage	South Tank Farm	South Tank Farm	Diesel	200	Repair defective valve, report
22/06/ 2023	Rio Tinto Exploration	Drill	Operator Error	Offsite	Mainland	Drill Cuttings	50	Affected water pumped out, report
23/06/ 2023	Fixed Plant - Backfill	Tote	Breakage	Backfill Plant	Laydown near Pond 1	Concrete Admix-tures	1730	Clean up, remove damaged totes, report
30/07/ 2023	Underground Mining	UG Haul Truck	Breakage	A154 Pit	A154 Refueling Bay	Diesel	200	Clean up, repair fuel receiver, report
11/08/ 2023	Fixed Plant - Process	Sump	Operator Error	Process Plant	Process Plant and LV road near truck shop parking lot	Process Water	50000	Valve closed, impacted material cleaned up, report
19/08/ 2023	Fixed Plant - Backfill	Pipeline	Breakage	Backfill Plant	Pipeline berm south of Backfill loadout	Untreated Water	75000	Pipeline repaired, cleaned up, report

Spill Date (dd/mm /yyyy)	DDMI Dept/Con-tractor	Equipment Type	Cause of Spill	Spill Location Designation	Spill Location (Specific)	Spilled Product	Spill Volume (L)	Follow-up Action
01/09/ 2023	Underground Mining	UG Haul Truck	Breakage	A154 Pit	N Portal Ore Pad	Hydraulic Oil	100	Clean up, repair hydraulic hose, report
06/09/ 2023	Site Maintenance	Pipeline	Breakage	North Inlet	West side of North Inlet containment	Untreated Water	18000	Plug replaced, report
06/09/ 2023	Site Maintenance	Pipeline	Breakage	PKC	PKC Muster Station	Untreated Water	5000	Pipeline repaired, report
10/09/ 2023	Site Maintenance	Pipeline	Breakage	PKC	PKC Muster beneath access road	Untreated Water	10000	Pipeline to be replaced, report
11/09/ 2023	Fixed Plant – Process	Pipeline	Breakage	PKC	Southeast PKC	Process Water	200	Flange tightened, report
13/09/ 2023	Site Maintenance	Tank	Overfill	South Camp	Underneath G Dorm	Sewage	2000	Cleaned up, verified level alarm operational, report
23/10/ 2023	Fixed Plant – Backfill	Loader	Breakage	Backfill Plant	Backfill Loadout Refueling Area	Hydraulic Oil	70	Hydraulic line repaired, cleaned up, report
14/11/ 2023	Fixed Plant – Process	Pipeline	Breakage	Ponds	Pond 5 Catchment Area	FPK slurry	45000	Pressure release valve replaced, report
18/11/ 2023	Pit Maintenance	Pipeline	Breakage	A154 Pit	Pit Dewatering at 280 Level	Process Water	8650	Pipeline repaired, report
18/11/ 2023	Site Maintenance	Lift Station	Overfill	Maintenance Building	Maintenance Building West Exit	Sewage	80	Cleaned up, pump floats replaced, report
27/12/ 2023	Fixed Plant – Process	Pipeline	Breakage	Ponds	Pond 5 Containment	FPK slurry	168000 0	Drainage valve replaced, report

24.0 OUTLINE OF SPILL TRAINING EXERCISES CARRIED OUT (SCHEDULE 1 CONDITION 1T)

Diavik has a fully equipped Emergency Response Team (ERT) trained and ready to respond to emergencies, including environmental incidents. The team has its own fire truck, airport response truck, ambulance, underground pumper truck, rescue truck and spill response trailer. The Diavik ERT also has access to additional equipment such as loaders and suction trucks when required. Every employee at Diavik receives spill training during their initial site induction so they can respond to minor spills and raise the alarm if a larger response is required. ERT members receive extensive HAZMAT training and learn how to respond while wearing protective clothing and breathing apparatus.

The Diavik ERT is comprised of up to 80 members, each of whom meet or exceed the minimum training requirements of 8 hours per 2 rotations. Training is held every other Wednesday and Saturday throughout the year.

25.0 ANNUAL UNDERGROUND SPILL SUMMARY (SCHEDULE 1 CONDITION 1U)

Table 20 compares the frequency and volume of hydrocarbons spilled in the underground mine monthly from 2013 through 2023. In 2023, there was a 40% decrease in the number of hydrocarbon spills and a 20% decrease in the volume of hydrocarbons spilled compared to 2022.

Table 20 Frequency and volume of underground hydrocarbon spills (liters) from 2013 through 2023.

	2013		2014		2015		2016		2017		2018		2019		2020		2021		2022		2023	
Month	#	Volume	#	Volume	#	Volume	#	Volume	#	Volume	#	Volume	#	Volume	#	Volume	#	Volume	#	Volume	#	Volume
Jan	39	318	47	670	9	78	10	262	11	65	5	266	6	130	24	337	6	150	0	0	1	10
Feb	35	505	18	124	8	255	10	135	9	93	4	203	5	50	14	142	5	30	4	65	1	20
Mar	26	618	25	158	11	205	22	428	9	815	7	152	5	76	7	76	2	20	6	77	1	15
Apr	15	270	22	236	16	136	12	152	11	30	3	277	7	117	11	153	6	135	5	40	0	0
May	16	278	19	287	6	47	9	84	7	77	4	153	9	91	8	92	3	37	1	15	0	0
Jun	15	303	13	117	8	321	12	195	10	80	5	219	11	122	11	178	9	255	1	2	5	85
Jul	13	181	13	162	11	228	17	320	6	146	11	65	8	114	6	208	3	17	4	90	4	13
Aug	13	126	9	83	6	101	17	227	5	60	2	36	6	76	10	186	5	66	6	80	1	2
Sep	8	179	18	359	1	15	14	249	8	20	2	60	6	87	12	379	9	230	4	95	5	250
Oct	9	190	12	132	26	221	13	256	6	60	6	51	1	15	6	51	3	76	1	10	0	0
Nov	22	591	12	167	32	572	14	163	7	50	3	285	20	244	5	55	7	160	1	40	3	30
Dec	17	222	4	116	21	283	13	225	5	121	7	83	29	263	7	98	4	80	2	20	0	0
Total	**228**	**3,781**	**212**	**2,611**	**155**	**2,462**	**163**	**2,696**	**94**	**1617**	**59**	**1,850**	**113**	**1,385**	**121**	**1,955**	**62**	**1256**	**35**	**534**	**21**	**425**

26.0 RESULTS AND INTERPRETATION OF FURTHER ZONE CHARACTERIZATION AND HYDROGEOLOGICAL TEST WORK CONDUCTED IN ACCORDANCE WITH PART F, CONDITION 12, AND ITS IMPLICATIONS FOR POTENTIAL GROUNDWATER INFLOWS AND OVERALL WATER BALANCES (SCHEDULE 1 CONDITION 1V)

The current description of the fracture zone and hydraulic test work conducted can be found in the Geotechnical and Hydrogeological Feasibility Report: Case V-VI A21 Open Pit Design – Diavik Diamond Mines (October 2012). The above information has been used to describe groundwater inflows and water balance (Appendix A) in the Water Management Plan Version 17.

27.0 PROGRESS REPORTS ON ANY STUDIES REQUESTED BY THE BOARD AND A BRIEF DESCPRITION OF ANY FUTURE STUDIES PLANNED BY LICENCEE (SCHEDULE 1 CONDITION 1W)

Studies requested by the Board have been incorporated into the Water Licence report conditions. No new studies began in 2023.

28.0 ANNUAL RESULTS AND INTERPRETATION OF GEOCHEMICAL SAMPLING OR TESTING COMPLETED FOR TILL, ORE, PROCESS KIMBERLITE, AND/OR WASTE ROCK PRODUCED IN THE PRECEDING YEAR, INCLUDING WHETHER RESULTS AFFECT PROCESSED KIMBERLITE CONTAINMENT FACILITY PLAN OR WASTE ROCK MANAGEMENT PLAN (SCHEDULE 1 CONDITION X)

In accordance with the Board's directive (13 December 2017), DDMI is required to report individual biotite schist xenoliths, the amount of operationally defined and segregated Type III waste rock and blast hole cutting results with Sulphur content greater than 0.04 wt%S in the monthly SNP report. In 2023, 55,196 tonnes of waste rock from the A21 underground development was conservatively classified as Type III and was associated with joint structures and confined to a 5-10 m thick zone intersection the ramp development. In 2023, 25,110 tonnes of Type III waste rock was extracted from the A154/A418 underground mines. All Type III waste rock was deposited in the NCRP Type III storage area.

A pre-deposition sample of PK slurry was extracted for analysis as per Decision #4 of Reasons for Decision for Processed Kimberlite Management Plan Version 7.

No additional geochemical sampling or testing was completed for processed kimberlite, till, ore, or waste rock in 2023.

29.0 DETAILS ON WATER USE OR WASTE DISPOSAL REQUESTED BY THE BOARD BY NOVEMBER 1 OF THE YEAR BEING REPORTED (SCHEDULE 1 CONDITION 1Y)

No details were requested by the Board prior to 1 November 2023.

30.0 ANNUAL TRENDS IN AMMONIA CONCENTRATIONS (SCHEDULE 1 CONDITION 1Z)

Throughout 2023 ammonia concentrations measured in effluent (1645-18 and 1645-18B) released from the North Inlet Water Treatment Plant (NIWTP) remained well below the discharge criteria specified in the Water Licence, as shown in Figure 21. The concentration of ammonia remained relatively constant throughout 2023 with annual variability between 0.0025 and 0.64 mg/L, and an average of 0.34 mg/L.

DDMI continues to use best practices to reduce ammonia concentrations at the source and will continue to monitor ammonia concentrations in the effluent prior to discharge to Lac de Gras.

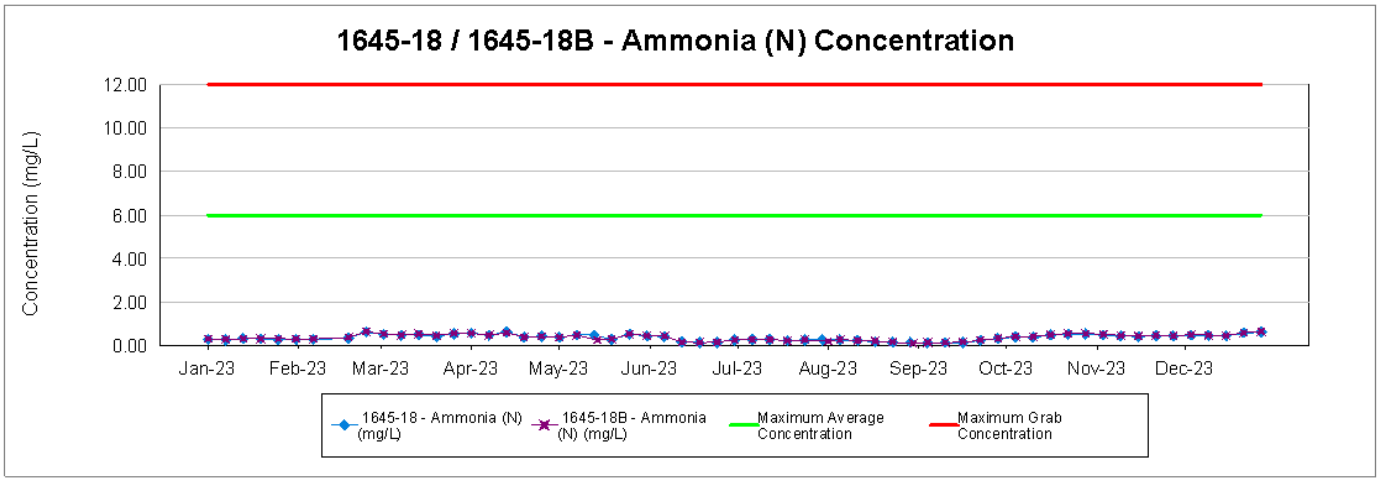

Figure 21 Ammonia concentrations (mg/L) of effluent discharged from North Inlet Water Treatment Plant to Lac de Gras in 2023.

31.0 SUMMARIZE FEEDBACK RECEIVED FROM AFFECTED PARTIES RESULTING FROM AN INTERNAL ANNUAL REVIEW OF THE ENGAGEMENT PLAN, AS WELL AS ON DDMI'S ENGAGEMENT PROCESSES THROUGHOUT THE YEAR (SCHEDULE 1 CONDITION 1AA)

DDMI submitted Version 3.1 of the Engagement Plan to the WLWB in July 2021, which was reviewed by potentially affected parties, including Indigenous Groups, prior to Board-approval. DDMI continues to work with all affected parties to collect feedback on DDMI's engagement approach with respect to all aspects of operations, including future closure.

During 2023, DDMI regularly engaged with community partners on a variety of topics from Participation Agreement (PA) implementation, PKMW engagement, business updates, closure, and regulatory. From an operational perspective, engagements with community leaders and members were tracked and recorded. As a partner to the Socio-Economic Agreement, DDMI engaged with PA partners, Government of the Northwest Territories, and other NWT based mining operations throughout 2023.

DDMI submitted version 1.1 of the PKMW Engagement Plan to the WLWB on February 18, 2022. The Plan was subsequently approved by the Wek'èezhìi Land and Water Board on March 30, 2022.

In August 2020, DDMI and Fort Resolution Metis Government (FRMG) met to formally start the engagement process. A draft PKMW Engagement Protocol was shared with FRMG in September 2021. Since that time, DDMI has made many attempts to continue discussions with FRMG to advance and finalize the Engagement Protocol. A detailed log of engagements and attempts with FRMG in 2021 is included in the DDMI Community Engagement Record (PKMW Engagement Plan V1.1, Appendix A). Despite significant communication in 2022 with FRMG, DDMI is still waiting on the draft Engagement Protocol from FRMG and will finalize the Engagement Protocol as soon as possible once FRMG have responded.

DDMI has collaboratively designed and finalized Engagement Protocols for the PKMW project with Łutsel K'e Dene First Nation, North Slave Métis Alliance, Deninu Kue First Nation, and Northwest Territory Métis Nation. The Tłı̨cho Government has its own engagement protocols; Tłı̨chǫ Weghàà Ełeyatıts'eedı together with Diavik's PKMW Engagement Plan forms the foundation for engagement with the Tłı̨cho Government. Most recently, DDMI has finalized an Engagement Protocol with the Yellowknives Dene First Nation.

The Kitikmeot Inuit Association (KIA) has provided feedback that a formal engagement protocol was not needed as there are already agreements and relationships established between the KIA and DDMI that facilitates engagement.

31.0 A SUMMARY OF ACTIVITIES CARRIED OUT AS PART OF THE PKMW PROJECT IN THE PREVIOUS CALENDAR YEAR INCLUDING: (SCHEDULE 1, CONDITION 1BB)

I. A SUMMARY AND INTERPRETATION OF RESULTS FROM MONITORING CONDUCTED AS REQUIRED IN THE APPROVED PK MANAGEMENT PLAN (SCHEDULE 1, CONDITION 1BB (I))

The PKMW project has been operational since April 2023. Water quality monitoring of the PKMW discharge will not commence until the decant water level reaches and remains stable (via the installation of a barge) at approximately elevation 257 m. Predicted infilling scenarios in the A418 pit estimate the water level to reach the 257 m level as early as May 2024.

All water quality data, results, and analysis collected in 2024 will be presented in the Type A Water Licence 2024 Annual Report.

II. A SUMMARY OF ANY ACTION LEVEL EXCEEDANCES UNDER THE APPROVED PK MANAGEMENT PLAN AND A DESCRIPTION OF ACTIONS TAKEN IN RESPONSE TO THOSE EXCEEDANCES (SCHEDULE 1, CONDITION 1BB (II))

The PKMW project has been operational since April 2023. Water quality monitoring will not commence until the water level in the A418 Pit reaches an elevation of 257 m. As such, there have been no Action Level exceedance in relation to the PKMW project in 2023.

All water quality data, results, and analysis collected in 2024 will be presented in the Type A Water Licence 2024 Annual Report.

III. A COMPARISON OF PREDICTIONS MADE ABOUT CONCENTRATIONS OF WATER QUALITY VARIABLES IN THE DECANT WATER OR POREWATER COMPARED TO ACTUAL SAMPLING RESULTS FROM SNP 1645-88 (SCHEDULE 1 CONDITION 1BB(II))

The PKMW project has been operational since April 2023. Water quality analysis will not commence until the water level in the A418 Pit reaches an elevation of 257 m, at which time a barge and SNP Station 1645-88 will be installed. Current A418 Infilling projections estimate that barge pumping could commence as early as May 2024, which would allow for sampling of the decant water from Station 1645-88.

Any water quality data, results, and analysis collected in 2024 will be presented in the Type A Water Licence 2024 Annual Report.

APPENDIX A – 2024 ANNUAL WATER BALANCE CALIBRATION

RioTinto

Diavik Diamond Mines (2012) Inc.

2023 Annual Water Balance

April 2024

RioTinto

Table of Contents

Water Balance

1.1 Site Water Balance

The water balance is an accounting of the inputs and outputs of water at the Diavik Diamond Mines (2012) Inc. (DDMI) site. The 2023 water balance uses site-specific historical data and assumptions to provide a framework for understanding on-site hydrologic processes for the 2024 year. The water balance fulfills this by noting all water usage at the DDMI site, and tracking water flows from the source through all operations at the facility.

Water levels at the North Inlet are targeted to be within 0.5 m of the Lac de Gras lake surface elevation, and are expected to be within this range throughout 2024. The water storage capacity in the North Inlet and the treatment capacity of the North Inlet Water Treatment Plant (NIWTP) will be sufficient for predicted inflows under normal operating conditions for the 2024 year. In the case of an extraordinary occurrence, the expected maximum daily water treatment rate is well below the maximum daily treatment capacity of the NIWTP (Appendix E).

1.2 Water Balance Subsystems

The DDMI site water can be divided into two (2) subsystems. The North Inlet subsystem, and the Processed Kimberlite Containment Facility (PKCF) (includes Process Plant and A418). The subsystems are linked by a pipeline from the North Inlet to the Process Plant (commissioned in March 2010), a pipeline from the PKCF to the North Inlet, and a pipeline from the PKCF to the Process Plant.

The North Inlet serves as a storage and final transfer facility for mine water and local runoff water prior to treatment at the NIWTP and subsequent discharge to Lac de Gras. The NIWTP is the sole discharge point on-site and as such, there are no waste streams discharged to Lac de Gras without treatment.

Key reasons for developing a detailed water balance around the North Inlet include:

- To estimate required treatment rates and subsequent water levels for various operational and risk management scenarios
- To estimate when/if, during the mine operation, the treatment capacity of the NIWTP will need to be increased

- To provide a tool for operating the North Inlet as per its design requirements

Water in the North Inlet that will be released is treated at the NIWTP to ensure water discharged to Lac de Gras meets mandated discharge criteria. The capacity of the NIWTP is affected by long term events only, typically on the scale of months to years. Storms and other sudden events are stored and equalized in the North Inlet prior to treatment by the NIWTP.

1.3 Water Balance Inputs

Watershed runoff includes direct precipitation, i.e., rainfall and snowfall. For this water balance, it was assumed that snowfall accumulates from October to May and 'releases' during freshet (May). Watershed runoff accounts for evapotranspiration, infiltration, and storage losses over land.

The water balance simulation utilized a monthly timestep to determine the monthly and accumulated annual total inflows/outflows.

1.3.1 Watershed Runoff

Watershed runoff was calculated based on a watershed map created by DDMI in March 2023. The watershed map uses a satellite image with a 50 cm resolution based on a Transverse Mercator projection and a North American 1983 Datum. The coordinate system utilized was NAD 1983 UTM Zone 12N. The watershed map notes areas within the drainage control and collections system capture as well as the areas with the potential to discharge to the receiving environment. For this water balance, only areas delineated within the drainage control and collection system capture were used to represent each area watershed (Figure 1).

Two (2) inputs were utilized related to watershed runoff:

- Freshet watershed runoff coefficient
- Summer months watershed runoff coefficient

Runoff coefficients are used to calculate watershed runoff reporting from precipitation during freshet and summer months. A coefficient of 0.63 is applied during freshet (triggered when snowmelt is occurring), and 0.38 is applied the remainder of the year. Evapotranspiration, infiltration, and storage losses over land are collectively accounted for using these runoff coefficients. Runoff coefficients values are assumed from a 2007 climate baseline of the Mine site (Golder 2008) and are consistent with regional runoff coefficients for the melt season (typically

ranging between 0.60 and 0. 70) and the summer season (typically ranging between 0.35 to 0.40) (Dominion Diamond 2014).

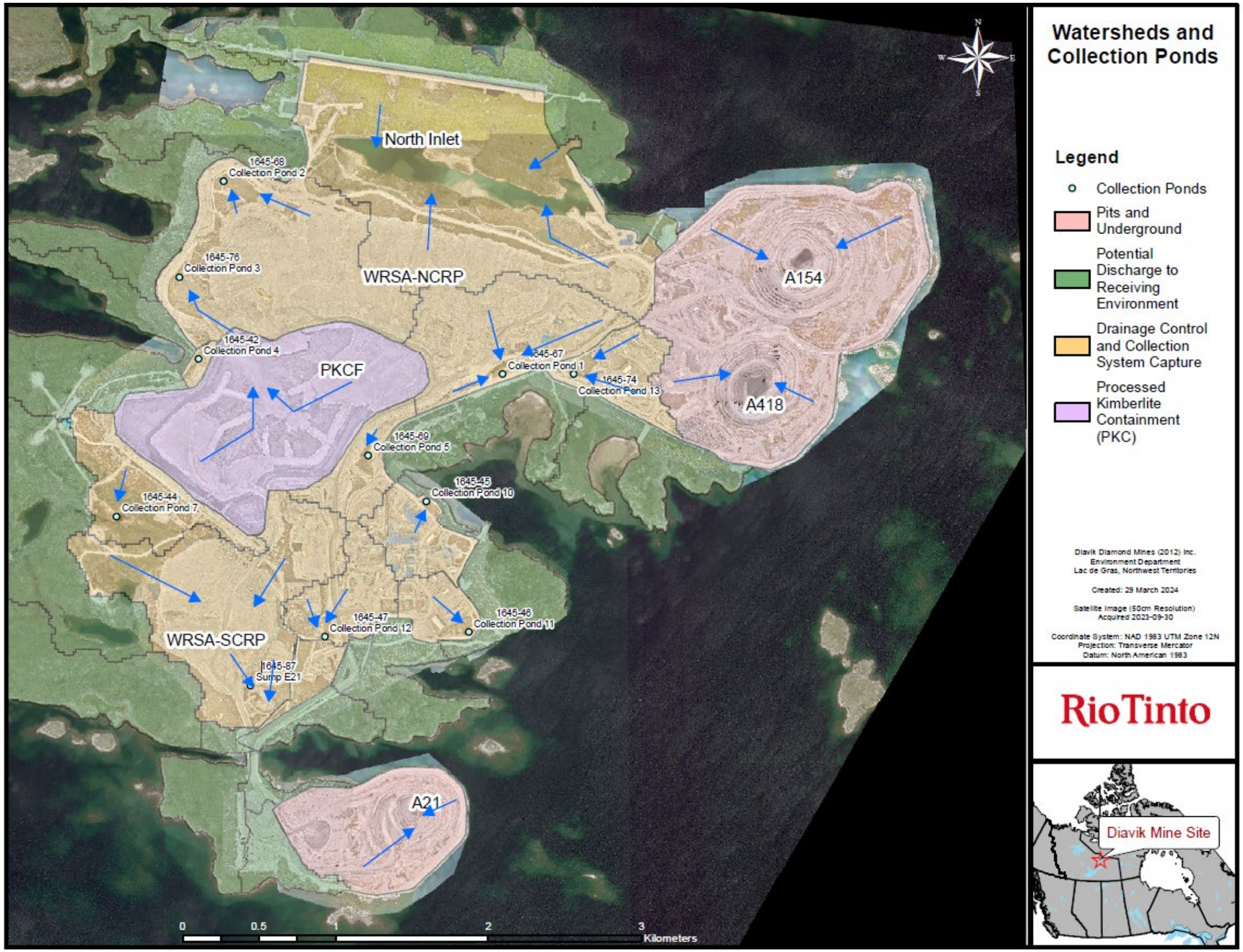

Figure 1 Collection Ponds, PKCF, and pit locations in reference to site surface runoff watersheds/catchments.

1.3.2 Climate and Precipitation

Utilizing a current climate baseline dataset that incorporates the most representative available information is critical to estimating climate statistics for which future projected changes will be referenced from. For this water balance, climate observations were obtained from meteorological stations used in previous assessments of climate within the region. This consisted of on-site observations coupled with climate stations located within 250 km of the Diavik site. The main criteria for the climate station selection are the length of record (typically 30 years of data), similar geographical setting compared to the study area, and the availability of continuous daily observations (Golder 2021).

A continuous record of 30 years for the precipitation and temperature variables were gathered and adapted from the on-site Diavik climate station, the Ekati A, and the Lupin A climate stations (Appendix A). The resulting dataset, sourced from the Diavik Diamond Mine Final Closure and Reclamation Plan, was used to represent the current climate and precipitation baseline (Table 1, Table 2, Table 3) (Diavik Diamond Mine 2022; Golder 2021). Table 1 was used to determine the timing of spring freshet and winter freeze-up. Table 2 and Table 3 were used to estimate the monthly precipitation and potential evapotranspiration.

Table 1 Temperature long-term average (1990 to 2019) representative of DDMI site

Temperature	Average (°C)
Annual	-8.9
January	-28.6
February	-27.6
March	-22.8
April	-13.7
May	-2.9
June	8.1
July	12.8
August	10.7
September	4.1
October	-5.3
November	-17.7
December	-25.2

Table 2 Precipitation long-term average (1990 to 2019) representative of DDMI site

Precipitation	Total (mm)
Annual	384.6
January	22.3
February	17.1
March	29.4
April	22.9
May	29.0
June	27.4
July	35.1
August	51.9
September	42.1
October	41.7
November	42.0
December	23.5

Table 3 Potential evapotranspiration long-term average (1990 to 2019) representative of DDMI site

Potential Evapotranspiration	Mean (mm)
January	0.0
February	0.1
March	1.7
April	10.6
May	40.5
June	86.9
July	94.3
August	61.3
September	24.8
October	5.9
November	0.5
December	0

1.3.3 Water Loss Mechanisms

Three water loss mechanisms are included in the water balance inputs.

- Evaporation/evapotranspiration
- Infiltration
- Storage losses

1.3.4 North Inlet Subsystem

Water sources reporting to the North Inlet include:

- Direct precipitation; including
    - Direct precipitation transferred from Ponds 2, 3, 4, 7, 12, and the E21 sump
- Watershed runoff; including
    - Watershed runoff transferred from Ponds 2, 3, 4, 7, 12, and the E21 sump
- Pit inflows from the A154 pit
- Pit inflows from the A418 pit
- Pit inflows from the A21 pit
- Groundwater inflows from the underground development and operation of the A154 and A21 pits
- Groundwater inflows from the A418 pit
- Fine processed kimberlite from the Process Plant via the A418 pit (beginning mid-2024 via 9245 Barge)

Pit and underground inflows (encompassing watershed runoff and groundwater) are the main long-term contributors to the North Inlet. All pit and underground inflow waters were assumed to be directed to the North Inlet. Due to the closure of the A418 pit, pumping from the A418 pit is temporarily paused and is expected to resume in mid-2024.

The NIWTP has a nominal treatment capacity of 50,000 m^3/day, but on occasion, has treated water at 80,000 m^3/day for extended periods. The NIWTP has a pumping capacity of 80,000 m^3/day.

1.3.5 PKCF Subsystem

Water sources reporting to the PKCF include:

- Watershed runoff; including
    - Direct precipitation
- Coarse processed kimberlite

Historically, there was a moderate amount of seepage through the PKCF dam embankments. Ponds 4, 5, and 7 were constructed to capture and pumped back to the PKCF or the North Inlet for treatment. In 2010, a series of interception wells were installed around the PKCF to intercept water and redirect it either back to the PKCF, the North Inlet for treatment, or the Process Plant for re-use in process. For the purposes of this water balance, it was assumed all water from the interception wells would be pumped into the Process Plant as PKCF reclaimed water. It was assumed that the interception wells capture water related to porewater space which do not interact with the watershed runoff.

During extraordinary events, such as a 1:500-year storm event (environmental design flood) the PKCF is designed so that Pond 3 will be able to receive and temporarily store excess water and which will enable catchment without discharge to the environment. Additionally, in the case an Inflow Design Flood (greater than a 1:500-year storm event) the PKCF spillway permits excess water to discharge from the PKCF to Pond 3. As such, Pond 3 is managed to maintain sufficient freeboard to store an Inflow Design Flood for the combined PKCF and Pond 3 catchment without discharge to the environment (Diavik Diamond Mines 2023; Golder 2018).

1.3.5.1 Process Plant

Water sources reporting to the Process Plant include:

- Direct precipitation transferred from Ponds 1 and 5; including
    - Direct precipitation transferred to Pond 1 from Ponds 10, 11, and 13
- Watershed runoff transferred from Ponds 1 and 5; including

    - Watershed runoff transferred to Pond 1 from Ponds 10, 11, and 13

- Plant feed water (water storage within mined kimberlite ore)
- Water from Lac de Gras
- Water from the North Inlet (recycled water)
- Water from PKC interception wells (PKCF reclaim water)

The Process Plant subsystem sources its water primarily from the North Inlet, followed by Lac de Gras. The total water estimated to be extracted from Lac de Gras into the Process Plant subsystem is well below the DDMI Water Licence maximum of 1.28 million cubic metres (Mm^3)/year of water. The Process Plant is expected to transfer coarse processed kimberlite to the PKCF and fine processed kimberlite to the A418 pit. Both the coarse processed kimberlite and the fine processed kimberlite are assumed to be output at a consistent monthly rate. Due to the expected water-pipe configuration for 2024, the Process Plant is expected to directly receive transferred water from Ponds 1 and 5. Additionally, the Process Plant will indirectly receive transferred water from Ponds 10, 11, and 13 via Pond 1. The Process Plant does not have water storage capabilities and therefore will extract water from the North Inlet and from Lac de Gras based on operational needs, determined monthly in the model.

1.4 Results

1.4.1 North Inlet Subsystem

Table 4 presents estimated totals of inflows and outflows to/from the North Inlet from various sources.

Water levels at the North Inlet are targeted to be within 0.5 m of the Lac de Gras lake surface elevation and are expected to be within this range throughout 2024. The estimations demonstrate that the capacity in the North Inlet and NIWTP treatment capacity will be sufficient for predicted inflows and movement under normal operating conditions for the 2024 year. Additionally, in the case of an extraordinary occurrence, the expected maximum daily water treatment is well below the maximum daily treatment capacity of the NIWTP.

Monitoring pit and underground inflows and scheduling other inflows and treatment rates will remain important management activities moving forward. Excess capacity in the North Inlet will

be maintained as much as possible to provide a buffer for surge inflows and/or treatment capacity reductions.

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Table 4 North Inlet subsystem inflows and outflows

2024	Effluent to LDG (m^3)	Recycled NI Water (m^3)	Direct Precipitation (m^3)	North Inlet Evapotranspiration (m^3)	Watershed Runoff (m^3)	Pond 2 Pumped IN (m^3)	Pond 3 Pumped IN (m^3)	Pond 4 Pumped IN (m^3)	Pond 6 Pumped IN (m^3)	Pond 7 Pumped IN (m^3)	Pond 12 Pumped IN (m^3)	A21 Pumped IN (m^3)	A418 Pumped IN (m^3)	A154 Pumped IN (m^3)	PKCF Pumped IN (m^3)	IN vs OUT (m^3)
January	636,718	193296	0	0	0	0	0	0	0	0	0	253363	0	576651	0	0
February	635,920	193296	0	0	0	0	0	0	0	0	0	253363	0	575852	0	0
March	635,956	193296	0	0	0	0	0	0	0	0	0	253363	0	575888	0	0
April	635,759	193296	0	0	0	0	0	0	0	0	0	253363	0	575692	0	0
May	1,784,570	88685	57443	16474	235961	63971	65037	4885	55306	56367	26831	353228	0	789759	180942	0
June	719,050	153157	8453	26809	20944	6531	3263	292	12824	7062	4786	239762	0	554498	40601	0
July	1,189,887	144754	10828	29092	26829	8982	5538	466	15407	9311	5942	242033	441147	562362	34887	0
August	1,341,718	122559	16011	18911	39671	15632	14424	1111	17154	14987	7160	264582	464260	593630	34566	0
September	1,333,961	146124	12988	7651	32180	14609	13689	1036	14478	12546	7177	271387	474298	604368	28980	0
October	1,196,492	190482	12864	1820	0	2771	2857	193	809	558	1965	266180	476813	618798	4984	0
November	1,097,785	193296	0	0	0	0	0	0	0	0	0	253363	460534	577183	0	0
December	1,096,607	193296	0	0	0	0	0	0	0	0	0	253363	460330	576210	0	0
TOTALS	**12,304,425**	**2,005,532**	**118,587**	**100,756**	**355,585**	**112,496**	**104,808**	**7,983**	**115,978**	**100,831**	**53,862**	**3,157,350**	**2,777,383**	**7,180,891**	**324,959**	**0**

NI Surface Area (ha)	NI Surface Area (m^2)	NI Watershed Area (ha)	NI Watershed Area (m^2)	Runoff coefficient during freshet	Runoff coefficient remaining time of year
30.85	308500	201.15	2011500	0.63	0.38

1.4.2 PKCF Subsystem (incl. Process Plant)

Table 5 presents estimated totals of inflows and outflows to/from the PKCF.

Coarse processed kimberlite is estimated to maintain a relatively consistent deposition rate from the Process Plant into the PKCF throughout the year. The PKCF interception wells pumped out to the Process Plant relate to porewater space which was assumed to not interact with the watershed runoff.

Table 6 presents estimated totals of inflows and outflows to/from the Process Plant from various sources.

Water pumped in from the North Inlet is recycled water and is adapted from measured 2023 volumes. Raw water pumped in from Lac de Gras was adapted from measured 2023 volumes. Raw water from Lac de Gras is estimated to be pumped at a relatively consistent rate during autumn, winter, and spring months. From May to September, the volume of raw water pumped into the Process Plant will maintain a relatively consistent rate but will decrease by approximately 25% due to inflows from Ponds 1 and 5. Similarly, recycled water pumped in from the North Inlet decreases in the freshet and summer months. Coarse processed kimberlite is deposited to the PKCF, while the fine processed kimberlite is deposited to the A418 pit. Plant feed water represents water storage within mined earthworks.

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Table 5 PKCF subsystem inflows and outflows

2024	Interception Wells Pumped OUT to PP (m^3)	Watershed Runoff (m^3)	CPK Pumped IN to PKCF (m^3)	IN vs OUT (m^3)	Pumped to NI (m^3)
January	3378	0	4983	4983	0
February	3378	0	4983	4983	0
March	3378	0	4983	4983	0
April	3378	0	4983	4983	0
May	3378	175959	4983	180942	180942
June	3378	15618	4983	20601	40601
July	3378	20007	4983	24990	34887
August	3378	29583	4983	34566	34566
September	3378	23997	4983	28980	28980
October	3378	0	4983	4983	4984
November	3378	0	4983	4983	0
December	3378	0	4983	4983	0
TOTALS	**40,530**	**265,164**	**59,794**	**324,958**	**324,959**

PKCF Surface Area (ha)	PKCF Surface Area (m^2)	Runoff coefficient during freshet	Runoff coefficient remaining time of year
150	1500000	0.63	0.38

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Table 6 Process Plant inflows and outflows

2024	Pond 1 Pumped IN (m^3)	Pond 5 Pumped IN (m^3)	Plant Feed Water Pumped IN (m^3)	LDG Water Pumped IN (m^3)	NI Water Pumped IN (m^3)	PKC Reclaim (m^3)	CPK Pumped OUT (m^3)	FPK Pumped OUT (m^3)	IN vs OUT (m^3)
January	0	0	15,087	59324	193,296	3378	4,983	266,100	0
February	0	0	15,087	59324	193,296	3378	4,983	266,100	0
March	0	0	15,087	59324	193,296	3378	4,983	266,100	0
April	0	0	15,087	59324	193,296	3378	4,983	266,100	0
May	87948	34420	15,087	41566	88,685	3378	4,983	266,100	0
June	51230	3808	15,087	44425	153,157	3378	4,983	266,100	0
July	58263	5149	15,087	44454	144,754	3378	4,983	266,100	0
August	76690	8856	15,087	44515	122,559	3378	4,983	266,100	0
September	39436	7580	15,087	59480	146,124	3378	4,983	266,100	0
October	2245	569	15,087	59324	190,482	3378	4,983	266,100	0
November	0	0	15,087	59324	193,296	3378	4,983	266,100	0
December	0	0	15,087	59324	193,296	3378	4,983	266,100	0
TOTALS	**315,812**	**60,383**	**181,038**	**649,704**	**2,005,532**	**40,530**	**59,794**	**3,193,204**	**1**

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Appendix A Regional Climate Stations

Station Name	Station Number	Latitude, Longitude	Distance to Site (km)	Elevation (m)	Time Period	Data Availability (%)	
						Precipitation	Mean Temperature
Diavik Mine	-	64°29'46"N, -111°43'36"W	-	440	1998-2020	52%	87%
Ekati A	220N001	64°42'0"N, -111°23'24"W	27.9	468.2	1998-2016	94%	97%
Lupin A	23026HN	65°45'36"N, -112°45'0"W	148.2	499.6	1982-2007	99%	99%

Appendix B Collection Pond & Pit Inputs and Outputs

Water Balance Equation for Pond 1

Water Pumped Out = (PPT_{in} - Evapotranspiration + Watershed Runoff + Water Pumped In)

2024	Direct Precipitation (m^3)	Pond Evapotranspiration (m^3)	Watershed Runoff (m^3)	Pumped IN from Pond 10 (m^3)	Pumped IN from Pond 11 (m^3)	Pumped IN from Pond 13 (m^3)	IN vs OUT (m^3)	Pumped to PP (m^3)	Pumped Out Balance (m^3)
January	0	0	0	0	0	0	0	0	0
February	0	0	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0	0	0
April	0	0	0	0	0	0	0	0	0
May	3947	1132	76983	36024	18833	43294	177948	87948	90000
June	581	1842	11328	4843	1459	4861	21230	51230	-30000
July	744	1999	14512	6302	2152	6552	28263	58263	-30000
August	1100	1300	21458	9772	4479	11181	46690	76690	-30000
September	893	526	17406	8071	4047	9546	39436	39436	0
October	884	125	0	208	594	684	2245	2245	0
November	0	0	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0	0	0
TOTALS	**8,149**	**6,924**	**141,687**	**65,219**	**31,564**	**76,117**	**315,812**	**315,812**	**0**

Pond 1 Surface Area (ha)	Pond 1 Surface Area (m^2)	Pond 1 Watershed (m^2)	Runoff coefficient during freshet	Runoff coefficient remaining time of year
2.12	21200	656259	0.63	0.38

NOTES

Pond 1 surface area sourced from: "Site Disturbance Parcels 2023 incl OG.xlsx"

"-" or "0" = no/neglible flow (>1 m3)

Pond 1 watershed surface area sourced from Table 1 in Appendix X-19 in the "*DDMI FCRP V1(1).pdf*"

Runoff coefficients sourced from Appendix X-19 in the "*DDMI FCRP V1(1).pdf*"

Water Balance Equation for Pond 2

Water Pumped Out = (PPT_{in} - Evapotranspiration + Watershed Runoff)

2024	Direct Precipitation (m^3)	Pond Evapotranspiration (m^3)	Watershed Runoff (m^3)	IN vs OUT (m^3)	Pumped to NI (m^3)	Pumped Out Balance (m^3)
January	0	0	0	0	0	0
February	0	0	0	0	0	0
March	0	0	0	0	0	0
April	0	0	0	0	0	0
May	14412	4133	58692	68971	63971	5000
June	2121	6726	8637	4031	6531	-2500
July	2717	7299	11064	6482	8982	-2500
August	4017	4745	16359	15632	15632	0
September	3259	1920	13270	14609	14609	0
October	3228	457	0	2771	2771	0
November	0	0	0	0	0	0
December	0	0	0	0	0	0
TOTALS	**29,753**	**25,279**	**108,022**	**112,496**	**112,496**	**-**

Pond 2 Surface Area (ha)	Pond 2 Surface Area (m^2)	Pond 2 Watershed (m^2)	Runoff coefficient during freshet	Runoff coefficient remaining time of year
7.74	77400	500332	0.63	0.38

NOTES
Pond 2 surface area sourced from: "*Site Disturbance Parcels 2023 incl OG-Rev 2.pdf*"
"-" or "0" = no/neglible flow (>1 m3)
Pond 2 watershed surface area estimated via Google Earth using known watershed map.
Runoff coefficients sourced from Appendix X-19 in the "*DDMI FCRP V1(1).pdf*"

Water Balance Equation for Pond 3

Water Pumped Out = (PPT_{in} - Evapotranspiration + Watershed Runoff)

2024	Direct Precipitation (m^3)	Pond Evapotranspiration (m^3)	Watershed Runoff (m^3)	IN vs OUT (m^3)	Pumped to NI (m^3)	Pumped Out Balance (m^3)
January	0	0	0	0	0	0
February	0	0	0	0	0	0
March	0	0	0	0	0	0
April	0	0	0	0	0	0
May	14859	4261	54439	65037	65037	0
June	2187	6935	8011	3263	3263	0
July	2801	7525	10262	5538	5538	0
August	4142	4892	15174	14424	14424	0
September	3360	1979	12309	13689	13689	0
October	3328	471	0	2857	2857	0
November	0	0	0	0	0	0
December	0	0	0	0	0	0
TOTALS	**30,675**	**26,063**	**100,196**	**104,808**	**104,808**	**-**

Pond 3 Surface Area (ha)	Pond 3 Surface Area (m^2)	Pond 3 Watershed (m^2)	Runoff coefficient during freshet	Runoff coefficient remaining time of year
7.98	79800	464081	0.63	0.38

NOTES
Pond 3 surface area sourced from: "*Site Disturbance Parcels 2023 incl OG-Rev 2.pdf*"
"-" or "0" = no/neglible flow (>1 m3)
Pond 3 watershed surface area estimated via Google Earth using known watershed map.
Runoff coefficients sourced from Appendix X-19 in the "*DDMI FCRP V1(1).pdf*"

Water Balance Equation for Pond 4

Water Pumped Out = (PPT_{in} - Evapotranspiration + Watershed Runoff)

2024	Direct Precipitation (m^3)	Pond Evapotranspiration (m^3)	Watershed Runoff (m^3)	IN vs OUT (m^3)	Pumped to NI (m^3)	Pumped Out Balance (m^3)
January	0	0	0	0	0	0
February	0	0	0	0	0	0
March	0	0	0	0	0	0
April	0	0	0	0	0	0
May	1005	288	4168	4885	4885	0
June	148	469	613	292	292	0
July	190	509	786	466	466	0
August	280	331	1162	1111	1111	0
September	227	134	942	1036	1036	0
October	225	32	0	193	193	0
November	0	0	0	0	0	0
December	0	0	0	0	0	0
TOTALS	**2,076**	**1,764**	**7,671**	**7,983**	**7,983**	**-**

Pond 4 Surface Area (ha)	Pond 4 Surface Area (m^2)	Pond 4 Watershed (m^2)	Runoff coefficient during freshet	Runoff coefficient remaining time of year
0.54	5400	35529	0.63	0.38

NOTES
Pond 4 surface area sourced from: "*Site Disturbance Parcels 2023 incl OG-Rev 2.pdf*"
"-" or "0" = no/neglible flow (>1 m3)
Pond 4 watershed surface area estimated via Google Earth using known watershed map.
Runoff coefficients sourced from Appendix X-19 in the "*DDMI FCRP V1(1).pdf*"

Water Balance Equation for Pond 5

Water Pumped Out = (PPT_{in} - Evapotranspiration + Watershed Runoff)

2024	Direct Precipitation (m^3)	Pond Evapotranspiration (m^3)	Watershed Runoff (m^3)	IN vs OUT (m^3)	Pumped to PP (m^3)	Pumped Out Balance (m^3)
January	0	0	0	0	0	0
February	0	0	0	0	0	0
March	0	0	0	0	0	0
April	0	0	0	0	0	0
May	2961	849	32309	34420	34420	0
June	436	1382	4754	3808	3808	0
July	558	1499	6090	5149	5149	0
August	825	975	9005	8856	8856	0
September	669	394	7305	7580	7580	0
October	663	94	0	569	569	0
November	0	0	0	0	0	0
December	0	0	0	0	0	0
TOTALS	**6,112**	**5,193**	**59,464**	**60,383**	**60,383**	**-**

Pond 5 Surface Area (ha)	Pond 5 Surface Area (m^2)	Pond 5 Watershed (m^2)	Runoff coefficient during freshet	Runoff coefficient remaining time of year
1.59	15900	275421	0.63	0.38

NOTES
Pond 5 surface area sourced from: "*Site Disturbance Parcels 2023 incl OG-Rev 2.pdf*"
"-" or "0" = no/neglible flow (>1 m3)
Pond 5 watershed surface area estimated via Google Earth using known watershed map.
Runoff coefficients sourced from Appendix X-19 in the "*DDMI FCRP V1(1).pdf*"

Water Balance Equation for Pond 6

Water Pumped Out = (PPT_{in} - Evapotranspiration + Watershed Runoff)

2024	Direct Precipitation (m^3)	Pond Evapotranspiration (m^3)	Watershed Runoff (m^3)	IN vs OUT (m^3)	Pumped to NI (m^3)	Pumped Out Balance (m^3)
January	0	0	0	0	0	0
February	0	0	0	0	0	0
March	0	0	0	0	0	0
April	0	0	0	0	0	0
May	4208	1207	62305	65306	55306	10000
June	619	1964	9168	7824	12824	-5000
July	793	2131	11745	10407	15407	-5000
August	1173	1385	17366	17154	17154	0
September	951	560	14087	14478	14478	0
October	942	133	0	809	809	0
November	0	0	0	0	0	0
December	0	0	0	0	0	0
TOTALS	**8,687**	**7,381**	**114,671**	**115,978**	**115,978**	**0**

Pond 6 Surface Area (ha)	Pond 6 Surface Area (m^2)	Pond 6 Watershed (m^2)	Runoff coefficient during freshet	Runoff coefficient remaining time of year
2.26	22600	531130	0.63	0.38

NOTES
Pond 6 surface area sourced from: "*Site Disturbance Parcels 2023 incl OG-Rev 2.pdf*"
"-" or "0" = no/neglible flow (>1 m3)
Pond 6 (E21) watershed surface area estimated via Google Earth using known watershed map.
Runoff coefficients sourced from Appendix X-19 in the "*DDMI FCRP V1(1).pdf*"

Water Balance Equation for Pond 7

Water Pumped Out = (PPT_{in} - Evapotranspiration + Watershed Runoff)

2024	Direct Precipitation (m^3)	Pond Evapotranspiration (m^3)	Watershed Runoff (m^3)	IN vs OUT (m^3)	Pumped to NI (m^3)	Pumped Out Balance (m^3)
January	0	0	0	0	0	0
February	0	0	0	0	0	0
March	0	0	0	0	0	0
April	0	0	0	0	0	0
May	2905	833	54295	56367	56367	0
June	427	1356	7990	7062	7062	0
July	548	1471	10235	9311	9311	0
August	810	956	15134	14987	14987	0
September	657	387	12276	12546	12546	0
October	651	92	0	558	558	0
November	0	0	0	0	0	0
December	0	0	0	0	0	0
TOTALS	**5,997**	**5,095**	**99,930**	**100,831**	**100,831**	**-**

Pond 7 Surface Area (ha)	Pond 7 Surface Area (m^2)	Pond 7 Watershed (m^2)	Runoff coefficient during freshet	Runoff coefficient remaining time of year
1.56	15600	462850	0.63	0.38

NOTES
Pond 7 surface area sourced from: "*Site Disturbance Parcels 2023 incl OG-Rev 2.pdf*"
"-" or "0" = no/neglible flow (>1 m3)
Pond 7 watershed surface area estimated via Google Earth using known watershed map.
Runoff coefficients sourced from Appendix X-19 in the "*DDMI FCRP V1(1).pdf*"

Water Balance Equation for Pond 10

Water Pumped Out = (PPT_{in} - Evapotranspiration + Watershed Runoff)

2024	Direct Precipitation (m^3)	Pond Evapotranspiration (m^3)	Watershed Runoff (m^3)	IN vs OUT (m^3)	Pumped to Pond 1 (m^3)	Pumped Out Balance (m^3)
January	0	0	0	0	0	0
February	0	0	0	0	0	0
March	0	0	0	0	0	0
April	0	0	0	0	0	0
May	1080	310	35253	36024	36024	0
June	159	504	5188	4843	4843	0
July	204	547	6645	6302	6302	0
August	301	356	9826	9772	9772	0
September	244	144	7971	8071	8071	0
October	242	34	0	208	208	0
November	0	0	0	0	0	0
December	0	0	0	0	0	0
TOTALS	**2,230**	**1,894**	**64,883**	**65,219**	**65,219**	**-**

Pond 10 Surface Area (ha)	Pond 10 Surface Area (m^2)	Pond 10 Watershed (m^2)	Runoff coefficient during freshet	Runoff coefficient remaining time of year
0.58	5800	300524	0.63	0.38

NOTES
Pond 10 surface area sourced from: "*Site Disturbance Parcels 2023 incl OG-Rev 2.pdf*"
"-" or "0" = no/neglible flow (>1 m3)
Pond 10 watershed surface area estimated via Google Earth using known watershed map.
Runoff coefficients sourced from Appendix X-19 in the "*DDMI FCRP V1(1).pdf*"

Water Balance Equation for Pond 11

Water Pumped Out = (PPT_{in} - Evapotranspiration + Watershed Runoff)

2024	Direct Precipitation (m^3)	Pond Evapotranspiration (m^3)	Watershed Runoff (m^3)	IN vs OUT (m^3)	Pumped to Pond 1 (m^3)	Pumped Out Balance (m^3)
January	0	0	0	0	0	0
February	0	0	0	0	0	0
March	0	0	0	0	0	0
April	0	0	0	0	0	0
May	3091	886	16628	18833	18833	0
June	455	1443	2447	1459	1459	0
July	583	1565	3135	2152	2152	0
August	862	1018	4635	4479	4479	0
September	699	412	3760	4047	4047	0
October	692	98	0	594	594	0
November	0	0	0	0	0	0
December	0	0	0	0	0	0
TOTALS	**6,381**	**5,422**	**30,605**	**31,564**	**31,564**	**-**

Pond 11 Surface Area (ha)	Pond 11 Surface Area (m^2)	Pond 11 Watershed (m^2)	Runoff coefficient during freshet	Runoff coefficient remaining time of year
1.66	16600	141753	0.63	0.38

NOTES
Pond 11 surface area sourced from: "*Site Disturbance Parcels 2023 incl OG-Rev 2.pdf*"
"-" or "0" = no/neglible flow (>1 m3)
Pond 11 watershed surface area estimated via Google Earth using known watershed map.
Runoff coefficients sourced from Appendix X-19 in the "*DDMI FCRP V1(1).pdf*"

Water Balance Equation for Pond 12

Water Pumped Out = (PPT_{in} - Evapotranspiration + Watershed Runoff)

2024	Direct Precipitation (m^3)	Pond Evapotranspiration (m^3)	Watershed Runoff (m^3)	IN vs OUT (m^3)	Pumped to NI (m^3)	Pumped Out Balance (m^3)
January	0	0	0	0	0	0
February	0	0	0	0	0	0
March	0	0	0	0	0	0
April	0	0	0	0	0	0
May	10222	2932	27541	34831	26831	8000
June	1504	4771	4053	786	4786	-4000
July	1927	5177	5192	1942	5942	-4000
August	2849	3365	7677	7160	7160	0
September	2311	1362	6227	7177	7177	0
October	2289	324	0	1965	1965	0
November	0	0	0	0	0	0
December	0	0	0	0	0	0
TOTALS	**21,104**	**17,930**	**50,689**	**53,862**	**53,862**	**-**

Pond 12 Surface Area (ha)	Pond 12 Surface Area (m^2)	Pond 12 Watershed (m^2)	Runoff coefficient during freshet	Runoff coefficient remaining time of year
5.49	54900	234777	0.63	0.38

NOTES
Pond 12 surface area sourced from: "*Site Disturbance Parcels 2023 incl OG-Rev 2.pdf*"
"-" or "0" = no/neglible flow (>1 m3)
Pond 12 watershed surface area estimated via Google Earth using known watershed map.
Runoff coefficients sourced from Appendix X-19 in the "*DDMI FCRP V1(1).pdf*"

Water Balance Equation for Pond 13

Water Pumped Out = (PPT_{in} - Evapotranspiration + Watershed Runoff)

2024	Direct Precipitation (m^3)	Pond Evapotranspiration (m^3)	Watershed Runoff (m^3)	IN vs OUT (m^3)	Pumped to Pond 1 (m^3)	Pumped Out Balance (m^3)
January	0	0	0	0	0	0
February	0	0	0	0	0	0
March	0	0	0	0	0	0
April	0	0	0	0	0	0
May	3556	1020	40757	43294	43294	0
June	523	1660	5998	4861	4861	0
July	670	1801	7683	6552	6552	0
August	991	1171	11360	11181	11181	0
September	804	474	9215	9546	9546	0
October	796	113	0	684	684	0
November	0	0	0	0	0	0
December	0	0	0	0	0	0
TOTALS	**7,342**	**6,238**	**75,013**	**76,117**	**76,117**	**-**

Pond 13 Surface Area (ha)	Pond 13 Surface Area (m^2)	Pond 13 Watershed (m^2)	Runoff coefficient during freshet	Runoff coefficient remaining time of year
1.91	19100	347442	0.63	0.38

NOTES
Pond 13 surface area sourced from: "*Site Disturbance Parcels 2023 incl OG-Rev 2.pdf*"
"-" or "0" = no/neglible flow (>1 m3)
Pond 13 watershed surface area estimated via Google Earth using known watershed map.
Runoff coefficients sourced from Appendix X-19 in the "*DDMI FCRP V1(1).pdf*"

Water Balance Equation for A418

(PPT_{in} - Evapotranspiration + Groundwater + Watershed Runoff + FPK $Pumped_{in}$ + $Pumped_{in}$)

2024	Direct Precipitation (m^3)	Pit Evapotranspiration (m^3)	Watershed Runoff (m^3)	FPK Pumped IN (m^3)	Groundwater (m^3)	IN vs OUT (m^3)	Pumped to NI (Reclaim Barge) (m^3)	Pumped Out Balance (m^3)
January	0	0	0	266100	194204	460305		460305
February	0	0	0	266100	193821	459921		459921
March	0	0	0	266100	193704	459804		459804
April	0	0	0	266100	194398	460498		460498
May	78204	22428	39063	266100	199501	560440		560440
June	11508	36498	3467	266100	195213	439790		439790
July	14742	39606	4442	266100	195469	441147	441147	0
August	21798	25746	6567	266100	195540	464260	464260	0
September	17682	10416	5327	266100	195604	474298	474298	0
October	17514	2478	0	266100	195677	476813	476813	0
November	0	0	0	266100	194434	460534	460534	0
December	0	0	0	266100	194230	460330	460330	0
TOTALS	**161,448**	**137,172**	**58,866**	**3,193,204**	**2,341,794**	**5,618,141**	**2,777,383**	**2,840,758**

A418 Pit Surface Area (million m^2)	A418 Pit Surface Area (m^2)	A418 Pit Internal & External Area (ha)	A418 Pit External Area (m^2)	Runoff coefficient during freshet	Runoff coefficient remaining time of year
0.42	420000	75.3	333000	0.63	0.38

NOTES

Volume of FPK pumped in adapted from "*202212-Waste UsagePKC Data-Ore Processing.xlsx*"

A418 pit surface area sourced from "*DDMI FCRP*".

A418 watershed surface area estimated via Google Earth using known watershed map.

"-" or "0" = no/neglible flow (>1 m3)

Runoff coefficients sourced from Appendix X-19 in the "*DDMI FCRP V1(1).pdf*"

Water Balance Equation for A154

Water Pumped Out = (PPT_{in} - Evapotranspiration + Groundwater + Watershed Runoff)

2024	Direct Precipitation (m^3)	Pit Evapotranspiration (m^3)	Watershed Runoff (m^3)	Groundwater (m^3)	IN vs OUT (m^3)	Pumped to NI (m^3)	Pumped Out Balance (m^3)
January	0	0	0	576651	576651	576651	0
February	0	0	0	575852	575852	575852	0
March	0	0	0	575888	575888	575888	0
April	0	0	0	575692	575692	575692	0
May	103900	29797	118714	596943	789759	789759	0
June	15289	48490	10537	577163	554498	554498	0
July	19586	52619	13498	581897	562362	562362	0
August	28960	34205	19959	578916	593630	593630	0
September	23492	13838	16190	578525	604368	604368	0
October	23269	0	16036	579493	618798	618798	0
November	0	0	0	577183	577183	577183	0
December	0	0	0	576210	576210	576210	0
TOTALS	**214,495**	**178,951**	**194,933**	**6,950,413**	**7,180,891**	**7,180,891**	-

A154 Pit Surface Area (ha)	A154 Pit Surface Area (m^2)	A154 Pit External Area (ha)	A154 Pit External Area (m^2)	Runoff coefficient during freshet	Runoff coefficient remaining time of year
55.8	558000	101.2	1012000	0.63	0.38

NOTES
A154 surface area and external area sourced from Table 1-2, "*DDMI FCRP V1.pdf*"
"-" or "0" = no/neglible flow (>1 m3)
Runoff coefficients sourced from Appendix X-19 in the "*DDMI FCRP V1(1).pdf*"

Water Balance Equation for A21

Water Pumped Out = (PPT_{in} - Evapotranspiration + Groundwater + Watershed Runoff)

2024	Direct Precipitation (m^3)	Pit Evapotranspiration (m^3)	Watershed Runoff (m^3)	Groundwater (m^3)	IN vs OUT (m^3)	Pumped to NI (m^3)	Pumped Out Balance (m^3)
January	0	0	0	253363	253363	253363	0
February	0	0	0	253363	253363	253363	0
March	0	0	0	253363	253363	253363	0
April	0	0	0	253363	253363	253363	0
May	66660	19117	52322	253363	353228	353228	0
June	9809	31110	7699	253363	239762	239762	0
July	12566	33759	9863	253363	242033	242033	0
August	18580	21945	14584	253363	264582	264582	0
September	15072	8878	11830	253363	271387	271387	0
October	14929	2112	0	253363	266180	266180	0
November	0	0	0	253363	253363	253363	0
December	0	0	0	253363	253363	253363	0
TOTALS	**137,615**	**116,923**	**96,299**	**3,040,359**	**3,157,350**	**3,157,350**	**-**

A21 Pit Surface Area (ha)	A21 Pit Surface Area (m^2)	A21 Pit External Area (ha)	A21 Pit External Area (m^2)	Runoff coefficient during freshet	Runoff coefficient remaining time of year
35.8	358000	28.1	281000	0.63	0.38

NOTES
A21 surface area and external area sourced from Table 1-2, "*DDMI FCRP V1.pdf*"
"-" or "0" = no/neglible flow (>1 m3)
Runoff coefficients sourced from Appendix X-19 in the "*DDMI FCRP V1(1).pdf*"

Water Balance Equation for Process Plant

$Pond_{in} + NI_{in} + Plant\ Feed\ Water_{in} + LDG\ Water_{in} + PKC\ Reclaim - CPK_{out} + FPK_{out}$

2024	Pond 1 Pumped IN (m^3)	Pond 5 Pumped IN (m^3)	Plant Feed Water Pumped IN (m^3)	LDG Water Pumped IN (m^3)	NI Water Pumped IN (m^3)	PKC Reclaim (m^3)	CPK Pumped OUT (m^3)	FPK Pumped OUT (m^3)	IN vs OUT (m^3)
January	0	0	15,087	59324	193,296	3378	4,983	266,100	0
February	0	0	15,087	59324	193,296	3378	4,983	266,100	0
March	0	0	15,087	59324	193,296	3378	4,983	266,100	0
April	0	0	15,087	59324	193,296	3378	4,983	266,100	0
May	87948	34420	15,087	41566	88,685	3378	4,983	266,100	0
June	51230	3808	15,087	44425	153,157	3378	4,983	266,100	0
July	58263	5149	15,087	44454	144,754	3378	4,983	266,100	0
August	76690	8856	15,087	44515	122,559	3378	4,983	266,100	0
September	39436	7580	15,087	59480	146,124	3378	4,983	266,100	0
October	2245	569	15,087	59324	190,482	3378	4,983	266,100	0
November	0	0	15,087	59324	193,296	3378	4,983	266,100	0
December	0	0	15,087	59324	193,296	3378	4,983	266,100	0
TOTALS	**315,812**	**60,383**	**181,038**	**649,704**	**2,005,532**	**40,530**	**59,794**	**3,193,204**	**1**

NOTES

Volume of water pumped in/out sourced from: "Compiled Pump Tracking 2015-2023 Nov.xlsx"

Plant feed water, LDG water, NI Water, CPK and FPK data ada[pted from *"202312-Water UsagePKC Data-Ore Processing.xlsx"*

"-" or "0" = no/negible flow (>1 m3)

Water Balance Equation for PKCF

Water Pumped Out to NI = (PPT_{in} - Evapotranspiration) + CPK_{in}

Interception Wells to PP_{out}

2024	Interception Wells Pumped OUT to PP (m^3)	Watershed Runoff (m^3)	CPK Pumped IN to PKCF (m^3)	IN vs OUT (m^3)	Pumped to NI (m^3)	Pumped out Balance (m^3)
January	3378	0	4983	4983	0	4983
February	3378	0	4983	4983	0	4983
March	3378	0	4983	4983	0	4983
April	3378	0	4983	4983	0	4983
May	3378	175959	4983	180942	180942	0
June	3378	15618	4983	20601	40601	-20000
July	3378	20007	4983	24990	34887	-9897
August	3378	29583	4983	34566	34566	0
September	3378	23997	4983	28980	28980	0
October	3378	0	4983	4983	4984	-1
November	3378	0	4983	4983	0	4983
December	3378	0	4983	4983	0	4983
TOTALS	**40,530**	**265,164**	**59,794**	**324,958**	**324,959**	**(1)**

PKCF Surface Area (ha)	PKCF Surface Area (m^2)	Runoff coefficient during freshet	Runoff coefficient remaining time of year
150	1500000	0.63	0.38

NOTES
PKCF surface area sourced from "*ENVI-1393-0123 R0 DDMI Cvr Ltr and PK Management Plan V7.1.pdf*"
"-" or "0" = no/neglible flow (>1 m3)
Runoff coefficients sourced from Appendix X-19 in the "*DDMI FCRP V1(1).pdf*"
Interception wells pumped OUT to Process Plant relate to porewater space that does not interact with the watershed runoff

Water Balance Equation for North Inlet

Recycled NI Water to PP + Effluent to LDG + Evapotranspiration = Precipitation + Runoff + Collection Ponds + A21 Pit + A154 Pit + PKCF Pit

2024	Effluent to LDG (m^3)	Recycled NI Water (m^3)	Direct Precipitation (m^3)	North Inlet Evapotranspiration (m^3)	Watershed Runoff (m^3)	Pond 2 Pumped IN (m^3)	Pond 3 Pumped IN (m^3)	Pond 4 Pumped IN (m^3)	Pond 6 Pumped IN (m^3)	Pond 7 Pumped IN (m^3)	Pond 12 Pumped IN (m^3)	A21 Pumped IN (m^3)	A418 Pumped IN (m^3)	A154 Pumped IN (m^3)	PKCF Pumped IN (m^3)	IN vs OUT (m^3)
January	636718	193296	0	0	0	0	0	0	0	0	0	253363	0	576651	0	0
February	635,920	193296	0	0	0	0	0	0	0	0	0	253363	0	575852	0	0
March	635,956	193296	0	0	0	0	0	0	0	0	0	253363	0	575888	0	0
April	635,759	193296	0	0	0	0	0	0	0	0	0	253363	0	575692	0	0
May	1,784,570	88685	57443	16474	235961	63971	65037	4885	55306	56367	26831	353228	0	789759	180942	0
June	719,050	153157	8453	26809	20944	6531	3263	292	12824	7062	4786	239762	0	564498	40601	0
July	1,189,887	144754	10828	29092	26829	8982	5538	466	15407	9311	5942	242033	441147	562362	34887	0
August	1,341,718	122559	16011	18911	39671	15632	14424	1111	17154	14987	7160	264582	464260	593630	34566	0
September	1,333,961	146124	12988	7651	32180	14609	13689	1036	14478	12546	7177	271387	474298	604368	28980	0
October	1,196,492	190482	12864	1820	0	2771	2857	193	809	558	1965	266180	476813	618798	4984	0
November	1,097,785	193296	0	0	0	0	0	0	0	0	0	253363	460534	577183	0	0
December	1,096,607	193296	0	0	0	0	0	0	0	0	0	253363	460330	576210	0	0
TOTALS	**12,304,425**	**2,005,532**	**118,587**	**100,756**	**355,585**	**112,496**	**104,808**	**7,983**	**115,978**	**100,831**	**53,862**	**3,157,350**	**2,777,383**	**7,180,891**	**324,959**	**0**

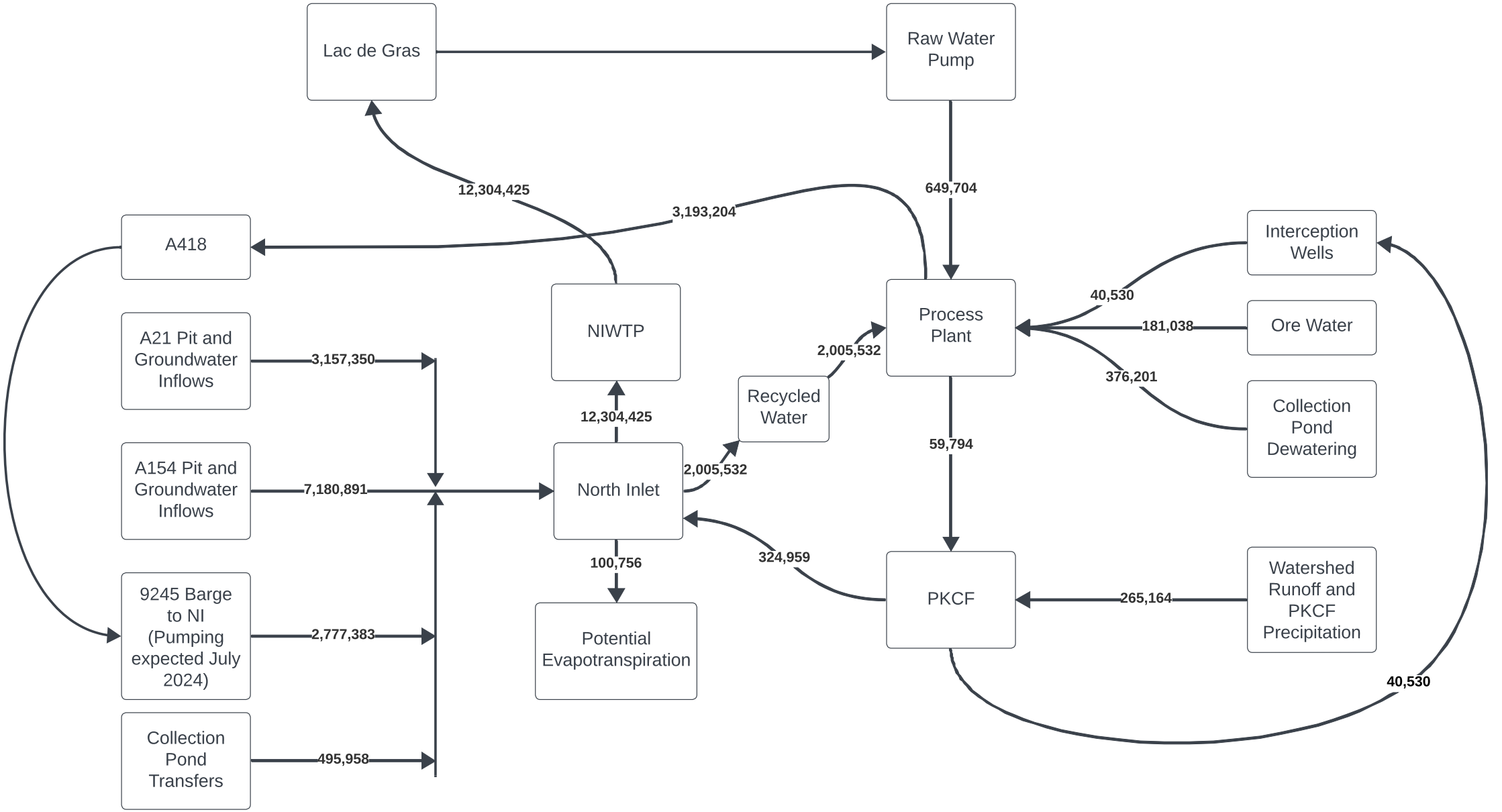
NI Surface Area (ha)	NI Surface Area (m^2)	NI Watershed Area (ha)	NI Watershed Area (m^2)	Runoff coefficient during freshet	Runoff coefficient remaining time of year
30.85	308500	201.15	2011500	0.63	0.38

NOTES

North Inlet surface area sourced from: *"Site Disturbance Parcels 2023 incl OG-Rev 2.pdf"*

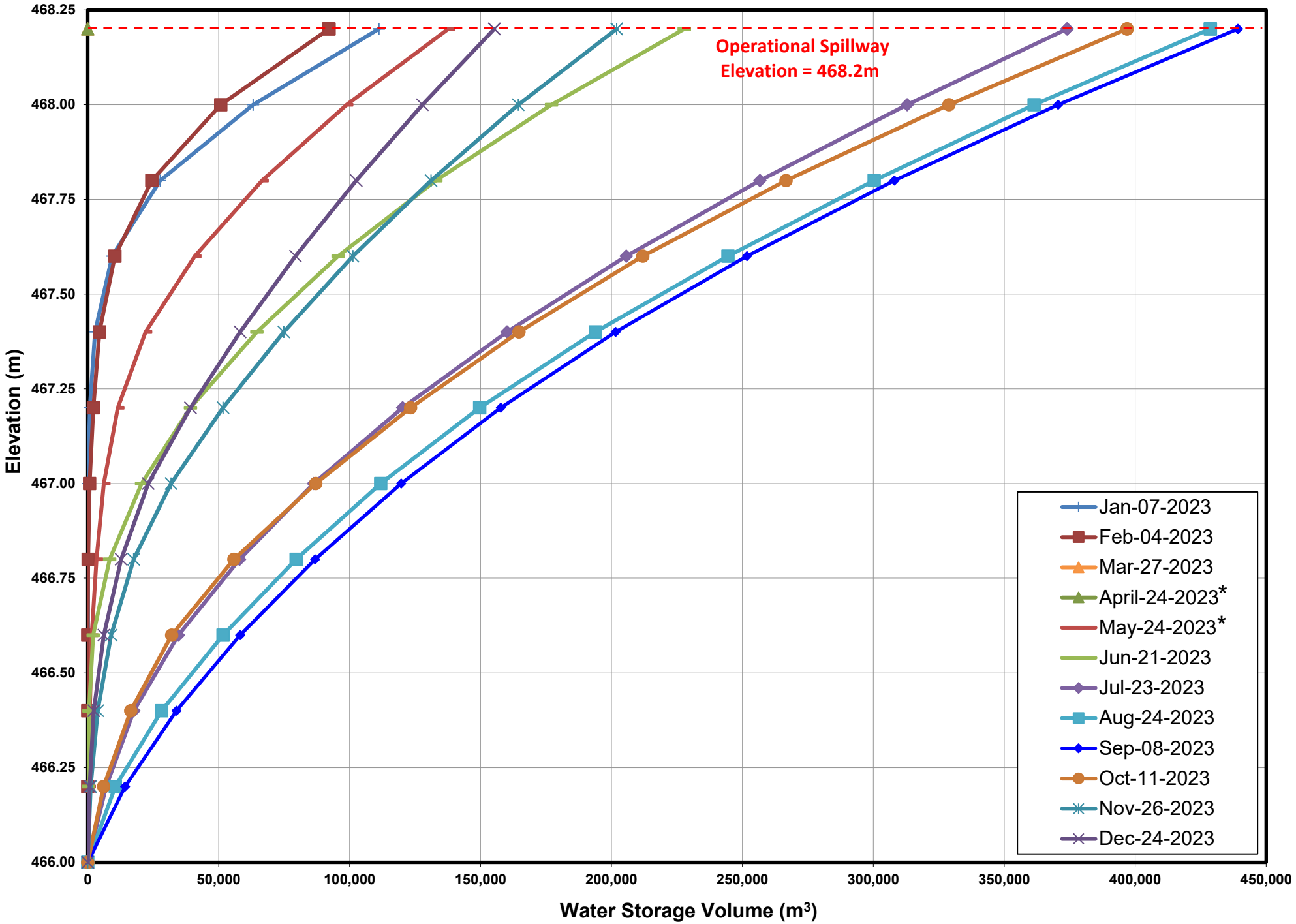
"-" or "0" = no/negligible flow (<1 m3)

Appendix C Estimated Flow Proportions in 2024


Lac de Gras
Raw Water Pump
12,304,425
649,704
3,193,204
A418
NIWTP
Process Plant
Interception Wells
40,530
181,038
Ore Water
376,201
Collection Pond Dewatering
A21 Pit and Groundwater Inflows
3,157,350
2,005,532
Recycled Water
12,304,425
A154 Pit and Groundwater Inflows
7,180,891
North Inlet
2,005,532
59,794
100,756
324,959
9245 Barge to NI (Pumping expected July 2024)
2,777,383
Potential Evapotranspiration
PKCF
265,164
Watershed Runoff and PKCF Precipitation
Collection Pond Transfers
495,958
40,530

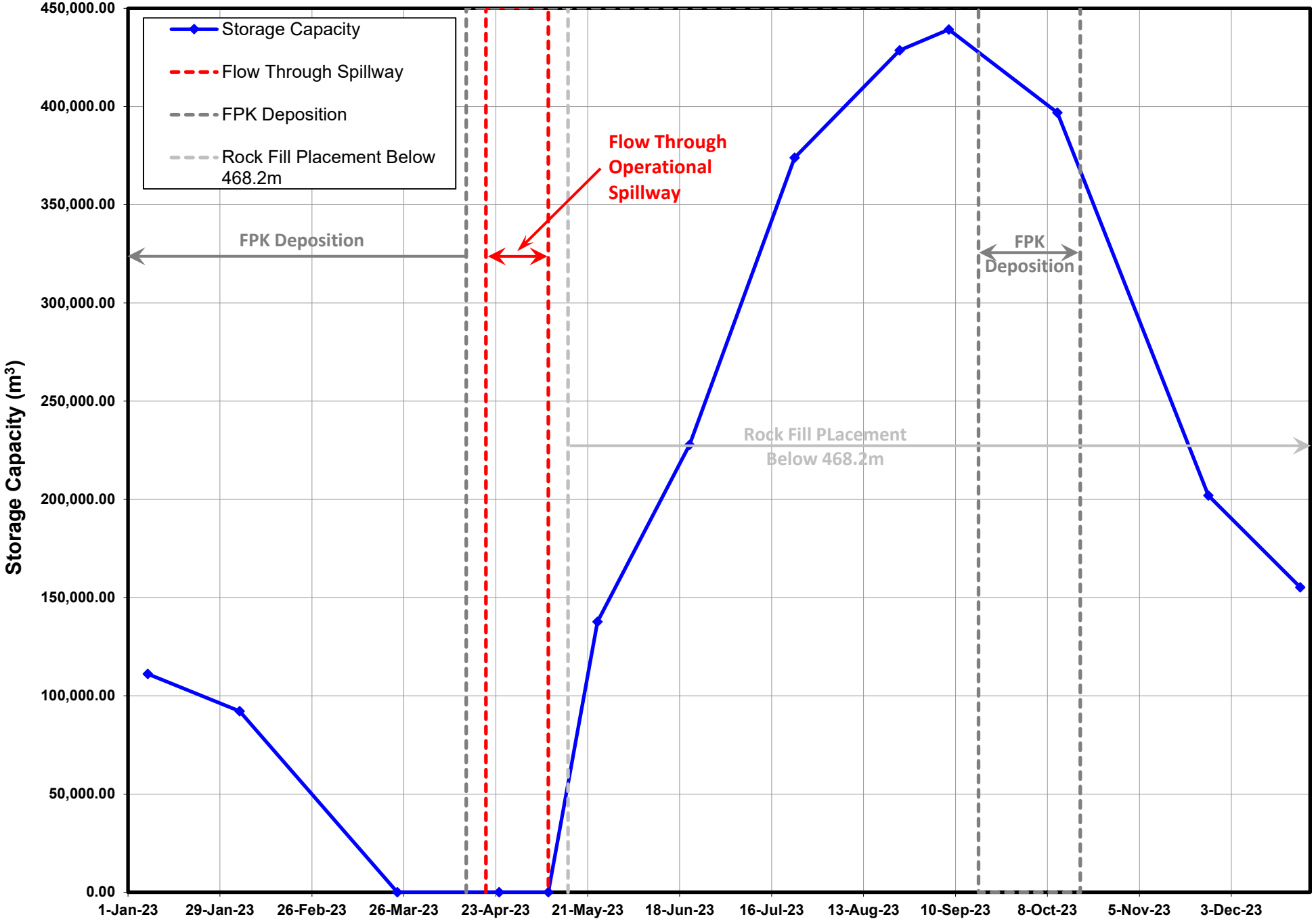
Appendix D Stage Volume Curves of PKCF

PKCF Monthly Stage - Storage Curves 2023

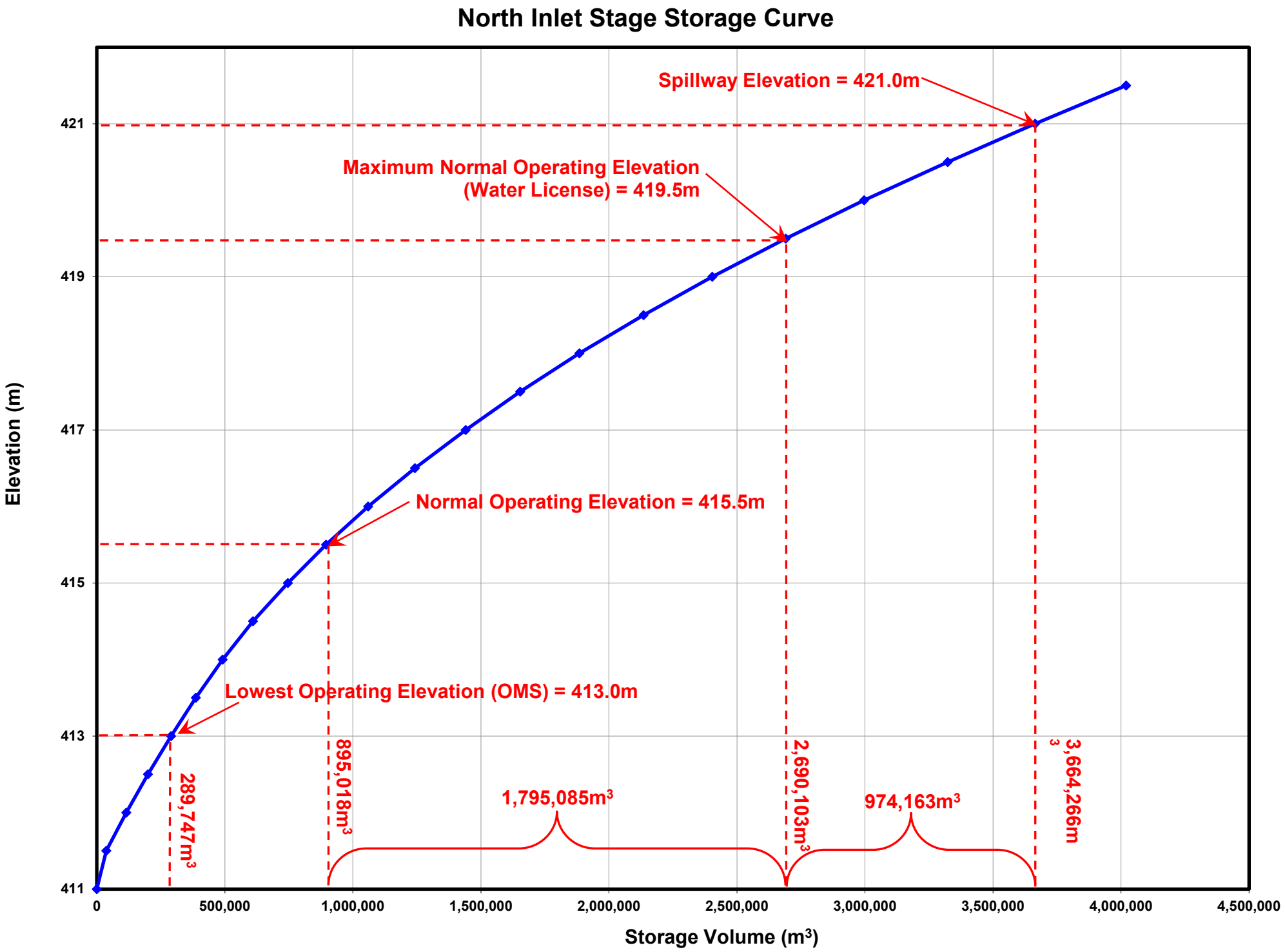


*March and April 2023 had zero storage capacity and had water flow through the spillway

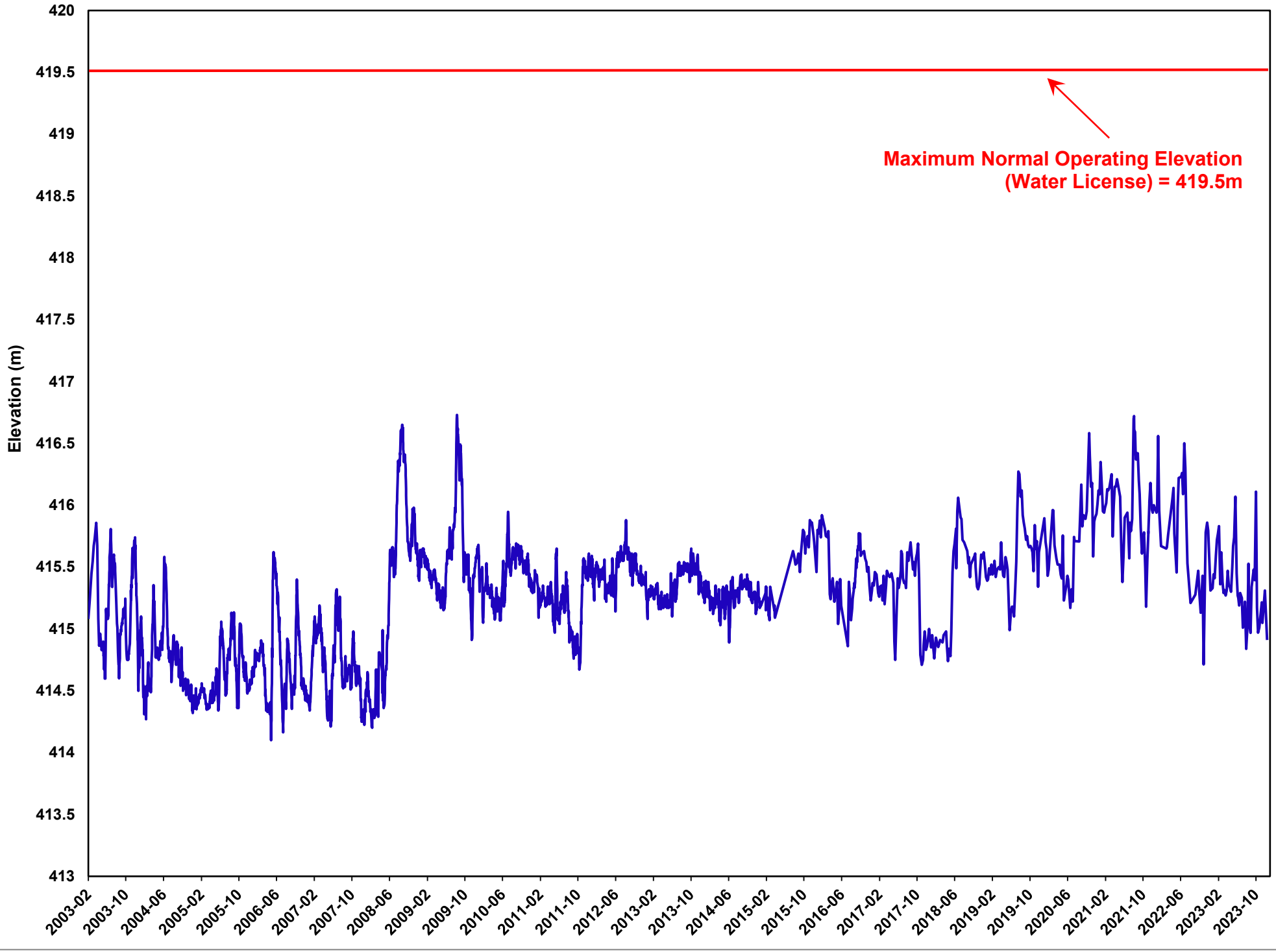
PKCF Monthly Storage Capacities 2023



Appendix E Stage Volume Curves of North Inlet


North Inlet Stage Storage Curve
Spillway Elevation = 421.0m
Maximum Normal Operating Elevation
(Water License) = 419.5m
Normal Operating Elevation = 415.5m
Lowest Operating Elevation (OMS) = 413.0m
289,747m3
895,018m3
1,795,085m3
2,690,103m3
974,163m3
3,664,266m3
Elevation (m)
421
419
417
415
413
411
0
500,000
1,000,000
1,500,000
2,000,000
2,500,000
3,000,000
3,500,000
4,000,000
4,500,000
Storage Volume (m3)

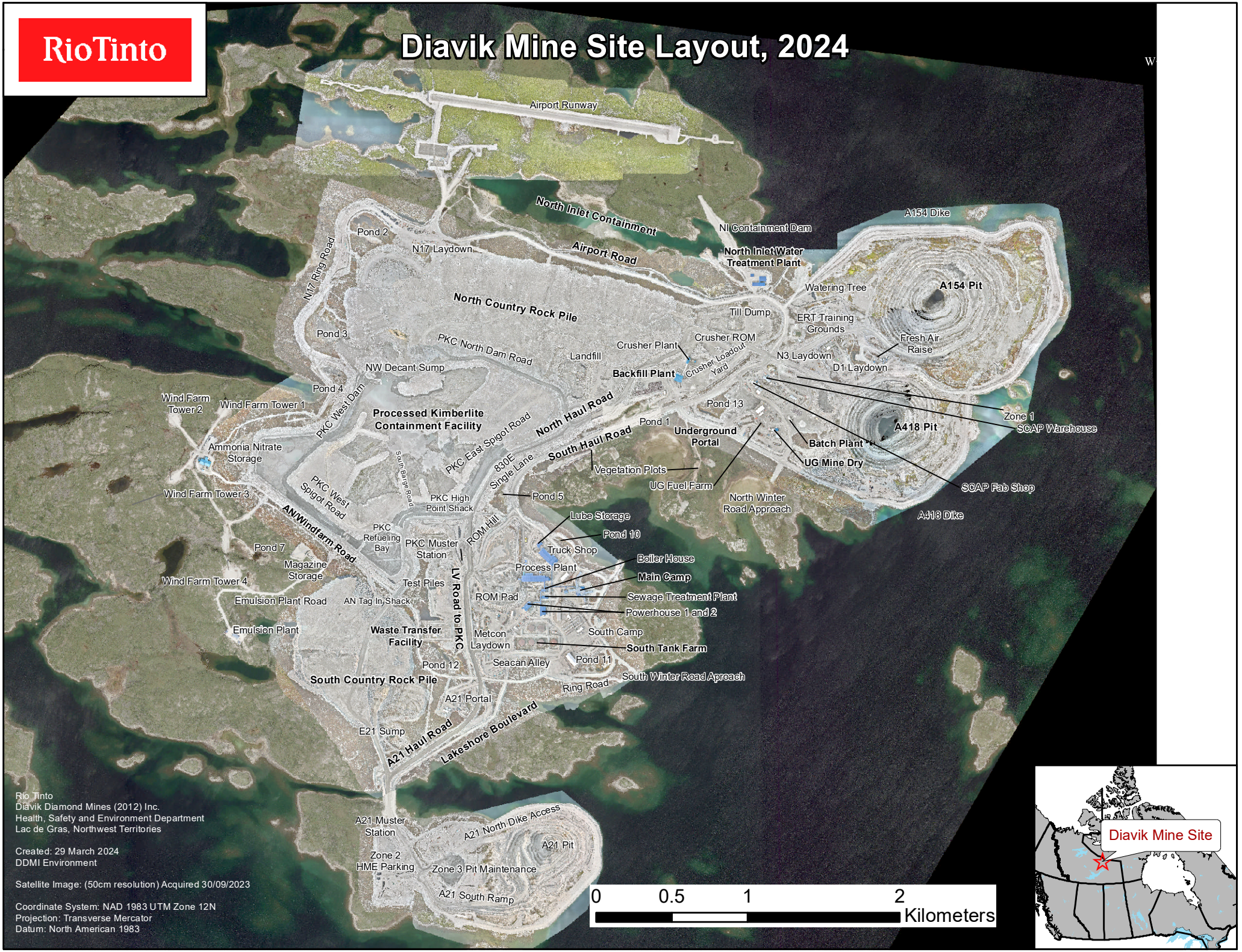
North Inlet Historical Water Level



*NIWTP maintained the North Inlet water level within 0.5m of the Lac de Gras lake surface elevation

Appendix F Site Map

Diavik Mine Site Layout, 2024



Rio Tinto
Diavik Diamond Mines (2012) Inc.
Health, Safety and Environment Department
Lac de Gras, Northwest Territories

Created: 29 March 2024
DDMI Environment

Satellite Image: (50cm resolution) Acquired 30/09/2023

Coordinate System: NAD 1983 UTM Zone 12N
Projection: Transverse Mercator
Datum: North American 1983