

AGENDA

Regular Council Meeting
Tuesday, February 20, 2024, at 6:30 p.m.
Powassan Council Chambers
252 Clark Street, Powassan, ON

1. CALL TO ORDER

2. LAND ACKNOWLEDGMENT

“We respectfully acknowledge that we are on the traditional territory of the Anishinaabe Peoples, in the Robinson-Huron and Williams Treaties areas. We wish to acknowledge the long history of First Nations and Métis Peoples in Ontario and show respect to the neighbouring Indigenous communities. We offer our gratitude for their care of, and teachings about, our earth and our relations. May we continue to honour these teachings.”

3. ROLL CALL

4. DISCLOSURE OF MONETARY INTEREST AND GENERAL NATURE THEREOF

5. APPROVAL OF THE AGENDA

6. DELEGATIONS TO COUNCIL

7. ADOPTION OF MINUTES OF PREVIOUS OPEN SESSION MEETINGS OF COUNCIL

7.1 Regular Council meeting of February 6, 2024

8. MINUTES AND REPORTS FROM COMMITTEES OF COUNCIL

9. MINUTES AND REPORTS FROM APPOINTED BOARDS

9.1 District of Parry Sound Social Services Administration Board CAO's Report of February 2024

10. STAFF REPORTS

10.1 Fire Chief, B. Cox – Fire Report from November 2022 – November 2023

10.2 Clerk, A. Quinn – Recommendations from Renfrew Inquest

10.3 Treasurer/Director of Corporate Services, B. Robinson – Statement of Remuneration and Expenses 2023

11. BY-LAWS

12. UNFINISHED BUSINESS

13. NEW BUSINESS

- 13.1 Councillor Hall – Councillor Annual Remuneration
- 13.2 Knight Piésold Ltd. - 2023 Annual Landfill Water Quality Monitoring Report
- 13.3 City of North Bay – Household Hazardous Waste Program
- 13.4 Ontario Clean Water Agency – Powassan Lagoons Annual Operating Report 2023

14. CORRESPONDENCE

- 14.1 Ministry of Northern Development - Modernization of the Northern Services Boards Act
- 14.2 Rorab Shrine Club – Tag Day 2024
- 14.3 North Bay Regional Health Centre – Annual Pledge Payment

15. ADDENDUM

16. NOTICE OF SCHEDULE OF COUNCIL AND BOARD MEETINGS

17. CLOSED SESSION

- 17.1 Adoption of Closed Session Minutes of February 6, 2023
- 17.2 Identifiable Individuals – Section 239(2)(b) of the Municipal Act and under Section 9(4)(b) of the Procedural Bylaw – matters regarding an identifiable individual, including municipal or local board employees.

18. MOTION TO ADJOURN

Regular Council Meeting
Tuesday, February 6, 2024, at 6:30 pm
Powassan Council Chambers

Present: Peter McIsaac, Mayor
Markus Wand, Deputy Mayor
Dave Britton, Councillor
Randy Hall, Councillor

Absent,
With Regrets: Leo Patey, Councillor

Staff: B. Robinson, Treasurer/Director of Corporate Services
A. Quinn, Clerk

Presentation: Councillor Wendy Whitwell – Armour Township,
Chair of Almaguin Community Economic Development (ACED)

Disclosure of Monetary Interest and General Nature Thereof:

P. McIsaac Item 12.1 Mentions Employer

- 2024-22** Moved by: M. Wand Seconded by: D. Britton
That the agenda of the Regular Council Meeting of February 6, 2024, be approved with the following addition:
17.6 Labour Relations – Section 239(2)(d) of the Municipal Act and under Section 9(4)(d) of the Procedural Bylaw – matters regarding labour relations or employee negotiations. **Carried**
- 2024-23** Moved by: R. Hall Seconded by: D. Britton
That the minutes of the Regular Meeting of Council of January 16, 2024, be adopted. **Carried**
- 2024-24** Moved by: D. Britton Seconded by: R. Hall
That the minutes from the Powassan Maple Syrup Festival committee meeting of January 24, 2024, be received. **Carried**
- 2024-25** Moved by: R. Hall Seconded by: D. Britton
That the District of Parry Sound Social Services Administration Board's Chief Administrative Officer's Report dated January 2024, be received. **Carried**
- 2024-26** Moved by: M. Wand Seconded by: R. Hall
That the minutes of the Golden Sunshine Municipal Non-Profit Housing Corporation committee meeting of December 19, 2023, be received. **Carried**

- 2024-27** Moved by: D. Britton Seconded by: M. Wand
That the minutes from the Powassan and District Union Public Library meeting of December 18, 2023, be received. **Carried**
- 2024-28** Moved by: R. Hall Seconded by: M. Wand
That the minutes of the North Bay Mattawa Conservation Authority Special meeting of December 1, 2023, be received. **Carried**
- 2024-29** Moved by: D. Britton Seconded by: R. Hall
That the minutes of the North Bay Mattawa Conservation Authority meeting of December 13, 2023, be received. **Carried**
- 2024-30** Moved by: M. Wand Seconded by: R. Hall
That the minutes of the North Bay Mattawa Conservation Authority Special Meeting minutes of January 8, 2024, be received. **Carried**
- 2024-31** Moved by: R. Hall Seconded by: D. Britton
That the minutes of the North Bay Mattawa Conservation Authority Source Protection Authority meeting minutes of August 16, 2023, be received. **Carried**
- 2024-32** Moved by: D. Britton Seconded by: R. Hall
That the memo from Public Works Foreman, T. Tennant, regarding scrap metal at the Municipal landfill, be received; and,

FURTHER that staff be directed to move forward with taking over scrap metal collection at the Municipal landfill as set out in T. Tennant's memo. **Carried**
- 2024-33** Moved by: R. Hall Seconded by: M. Wand
That the memo from Treasurer/Director of Corporate Services, B. Robinson, regarding the 2023 Budget Variance, be received for information purposes. **Carried**
- 2024-34** Moved by: M. Wand Seconded by: D. Britton
That Bylaw 2024-03, being a Bylaw to regulate special events on municipal highways,

Be **READ** a **FIRST** and **SECOND** time on the 16th day of January 2024 and to be **READ** a **THIRD** and **FINAL** time and considered passed in open Council on the 6th day of February 2024. **Carried**
- 2024-35** Moved by: D. Britton Seconded by: R. Hall
That Bylaw 2024-04, being a Bylaw to approve the Human Resource Policy Manual for the Municipality of Powassan,

Be **READ** a **FIRST** and **SECOND** time and considered **READ** a **THIRD** and **FINAL** time and adopted as such in open Council meeting this the 6th day of February 2024, for the immediate wellbeing of the Municipality. **Carried**

Mayor McIsaac left the Chair; Deputy Mayor Wand took the Chair.

2024-36

Moved by: D. Britton Seconded by: R. Hall

That the Connecting Link Service Agreement between the Municipality of Powassan and Fowler Construction Company be received; and,

FURTHER that staff be directed to bring back opportunities for discussion prior to the 2024-2025 season.

Carried

Mayor McIsaac returned to Chair.

2024-37

Moved by: R. Hall Seconded by: M. Wand

That the letter from Mr. Avdeyev dated January 24, 2024, regarding the intent to purchase McDonald Street, be received.

Carried

2024-38

Moved by: R. Hall Seconded by: D. Britton

That the report from Councillor M. Wand regarding the Municipality of Powassan withdrawing from the North Almaguin Planning Board be received; and,

FURTHER that staff be directed to report back to Council with timelines and a strategy for the Municipality to become its own planning authority, at the March 19, 2024, Regular Meeting of Council.

Carried

2024-39

Moved by: M. Wand Seconded by: D. Britton

That the report from Councillor M. Wand regarding a horse hitching post in the area of Memorial Park, be received; and,

FURTHER that staff be directed to obtain costs and bring a report back to Council. **Carried**

2024-40

Moved by: D. Britton Seconded by: R. Hall

That the correspondence dated January 19, 2024, from the Minister of Natural Resources and Forestry, regarding Crown Land Disposition in Northern Municipalities, be received.

Carried

2024-41

Moved by: R. Hall Seconded by: D. Britton

That the correspondence dated January 22, 2024, from the Minister of Agriculture, Food and rural Affairs, regarding the Rural Economic Development program, be received. **Carried**

2024-42

Moved by: D. Britton Seconded by: M. Wand

That the correspondence from the Municipal Policing Bureau Commander of the Ontario Provincial Police regarding the OPP 2024 Annual Billing Statements, be received.

Carried

2024-43

Moved by: M. Wand Seconded by: R. Hall

That the correspondence from the Association of Ontario Road Supervisors be received; and,

WHEREAS, municipal public works departments from across the Province of Ontario provide invaluable services to our communities ensuring the health and safety of all residents;

AND WHEREAS, if it was not for our municipal public works employees from across the Province of Ontario maintaining our public roads systems, our communities would not be able to function as emergency personnel could not respond to calls, school buses could not get our children to school, residents would not be able to get to work, school or appointments and

many more basic functions would not be able to happen;

AND WHEREAS, municipal public works departments are already feeling the impacts of a labour shortage, which will only be exasperated over the next three to five years, which will cause levels of service municipalities are able to provide to ensure the health and safety of our residents to decrease;

AND WHEREAS, there is currently no provincial-wide course that properly trains potential municipal public works employees, specifically relating to municipal heavy equipment.

THEREFORE IT BE RESOLVED, that the Municipality of Powassan supports the work of the Association of Ontario Road Supervisors to develop a Municipal Equipment Operator Course to address this issue;

AND THAT, the Council of the Municipality of Powassan calls on the Province of Ontario's Ministry of Labour, Training, Immigration and Skilled Trades to fully fund the Municipal Equipment Operator Course in 2024 through the Skills Development Fund;

AND THAT, a copy of this resolution be sent to the Minister of Labour, Training, Immigration and Skilled Trades David Piccini, Municipality of Powassan's Member of Provincial Parliament Honourable Vic Fedeli, and the Association of Ontario Road Supervisors.

Carried

2024-44

Moved by: R. Hall

Seconded by: D. Britton

That the correspondence from Ms. Linklater of the Trout Creek and Area Pickleball Club regarding pickleball courts, be received.

Carried

2024-45

Moved by: D. Britton

Seconded by: R. Hall

That the correspondence from Enbridge Gas Inc., regarding the Ontario Energy Board's decision on Phase 1 of the 2024 rebasing application, be received.

Carried

2024-46

Moved by: D. Britton

Seconded by: R. Hall

That Council now adjourns to closed session at 8:03pm to discuss:

17.1 Adoption of Closed Session Minutes of December 5, 2023

17.2 Identifiable Individuals – Section 239(2)(b) of the Municipal Act and under Section 9(4)(b) of the Procedural Bylaw – matters regarding an identifiable individual, including municipal or local board employees.

17.3 Identifiable Individuals – Section 239(2)(b) of the Municipal Act and under Section 9(4)(b) of the Procedural Bylaw – matters regarding an identifiable individual, including municipal or local board employees.

17.4 Identifiable Individuals – Section 239(2)(b) of the Municipal Act and under Section 9(4)(b) of the Procedural Bylaw – matters regarding an identifiable individual, including municipal or local board employees.

17.5 Disposition of Land – Section 239(2)(c) of the Municipal Act and under Section 9(4)(c) of the Procedural Bylaw – matters regarding a proposed or pending acquisition or disposition of land by the Municipality.

17.6 Labour Relations – Section 239(2)(d) of the Municipal Act and under Section 9(4)(d) of the Procedural Bylaw – matters regarding labour relations or employee negotiations.

Carried

2024-47

Moved by: M. Wand Seconded by: R. Hall

That Council now reconvenes to regular session at 9:37 p.m.

Carried

2024-48

Moved by: D. Britton Seconded by: R. Hall

That Council now adjourns at 9:37 p.m.

Carried

Mayor

Clerk



Chief Administrative Officer's Report

February 2024

Mission Statement

To foster healthier communities by economically providing caring human services that empower and enable the people we serve to improve their quality of life.



NOSDA Chair's Meeting

On Jan. 10th, myself and Board Chair Rick Zanussi attended a NOSDA Chair's meeting where the topic of the Federal "Reaching Home" Funding reductions was discussed. We have not been a recipient of this funding allotment, however we as a Board will be discussing our support of our NOSDA partners in their ask for this reduction of 57% to be reversed.

Hazard Identification and Risk Assessment (HIRA) Session

On Jan. 12th I attend a Hazard Identification and Risk Assessment or HIRA session to support the Municipality of Magnetawan who are modernizing their emergency management program. The first phase of this project is well underway, and the purpose of HIRA is to assess the potential risk of hazards with the capacity to cause an emergency or disaster. This process helps to set priorities for prevention, mitigation, preparedness, response, and recovery efforts.

2024 Rural Ontario Municipal Association (ROMA) Annual Conference

I had the privilege to participate in the 2024 Rural Ontario Municipal Association (ROMA) Annual Conference, January 21st to 23rd at the Sheraton Centre Toronto Hotel. Rural municipalities are facing unprecedented challenges related to homelessness, access to primary health care and attainable housing. More than 1,600 participants from as many as 300 municipalities, as well as organizations across Ontario, participated in this conference.

The conference theme, "Closer to Home" specifically reflects ROMA's recent focus on improving rural access to primary health care. The event featured dozens of speakers, sessions and workshops that reflect the broad scope of rural municipal responsibilities. Keynote presenters included:

- Hon. Doug Ford, Premier of Ontario
- Hon. Paul Calandra, Ontario's Minister of Municipal Affairs and Housing
- Hon. Lisa Thompson, Minister of Agriculture, Food and Rural Affairs
- Hon. Kinga Surma, Minister of Infrastructure
- Marit Stiles, Leader of the Ontario NDP and Official Opposition
- Bonnie Crombie, Leader, Ontario Liberal Party
- Mike Schreiner, Leader of the Green Party of Ontario
- Robin Jones, ROMA Chair
- Colin Best, AMO President

I participated in nine delegations to various ministries with NOSDA . We were received very well by all ministers and representatives and look forward to their responses.



Caroline Mulroney @C_Mulroney · 1m

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Thank you to AFMO, NOSDA & @TIAOtweets for meeting with me during #ROMA2024, we discussed the importance of Francophone tourism to Northern Ontario's economy & safeguarding essential French-language service delivery for all ages across Ontario, including in rural & remote areas.



Michael Parsa @MichaelParsa

Follow

It was a pleasure to meet with @NOSDA2 today at @ROMA_Ont to discuss ways that we can work together to continue improving social assistance delivery for everyone in rural Ontario.

Thank you for sharing your insights.

#ROMA2024



Town of Parry Sound Official Plan Visioning Session

On January 30th, we attended a Visioning Workshop hosted by the Town of Parry Sound at the Bobby Orr Community Centre, as they undertake an update to their Official Plan with the help of MHBC planning. Identified as a key community member, the DSSAB was invited to attend and provide input into this important initiative. This event was well attended, and providing for thought provoking and engaging conversations in a workshop format. The town is inviting feedback from the community through a visioning questionnaire found [here](#) until **Friday February 9th, 2024**. For more information on the Official Plan Review and to keep up to date with updates and opportunities to get involved, please visit the Official Plan Review [webpage](#).

Ontario Health Team

On January 26th, we were pleased to be present at the Charles W. Stockey centre in Parry Sound where Deputy Premier and Minister of Health, Sylvia Jones, announced the approval of the West Parry Sound Ontario Health Team. Since June of 2018, when the Ministry of Health announced its intention to restructure how health care is organized and delivered across the province, local partners have been working to ensure that West Parry Sound has an official voice at the table. Becoming one of 58 localized health organizations tasked with better integration of local services will provide the WPS OHT partners with opportunities to champion the unique challenges of the area and to build local solutions, based on the real-time needs of West Parry Sound. As an organization that depends on integration and partnerships, we are proud to be a partner in the creation of the new West Parry Sound Ontario Health Team. This will mean further advancement of partnerships, with greater financial resources from the province, which will broaden the scope of collaboration between health and human service providers. Together, we will continue to work towards better outcomes for those we serve.



Facebook Pages

A friendly reminder to follow our Facebook pages!



- ◆ [District of Parry Sound Social Services Administration Board](#)
- ◆ [Esprit Place Family Resource Centre](#)
- ◆ [EarlyON Child and Family Centres in the District of Parry Sound](#)
- ◆ [The Meadow View](#)

Social Media

Facebook Stats

District of Parry Sound Social Services Administration Board	JUNE 2023	AUG 2023	SEPT 2023	OCT 2023	NOV 2023	DEC 2023
Total Page Followers	478	490	500	513	521	530
Post Reach this Period (# of people who saw post)	4,010	2,249	4,112	2,667	4,324	2,441
Post Engagement this Period (# of reactions, comments, shares)	692	234	428	287	305	289

Esprit Place Family Resource Centre	JUNE 2023	AUG 2023	SEPT 2023	OCT 2023	NOV 2023	DEC 2023
Total Page Followers	131	132	133	133	151	175
Post Reach this Period (# of people who saw post)	203	62	55	92	5,743	1,610
Post Engagement this Period (# of reactions, comments, shares)	2	1	2	16	624	292

DSSAB Twitter Stats https://twitter.com/psdssab	JUNE 2023	AUG 2023	SEPT 2023	OCT 2023	NOV 2023	DEC 2023
Total Tweets	10	N/A	19	11	8	4
Total Impressions	301	56	229	206	167	77
Total Followers	30	31	32	34	40	42

DSSAB LinkedIN Stats https://bit.ly/2YyFHIE	JUNE 2023	AUG 2023	SEPT 2023	OCT 2023	NOV 2023	DEC 2023
Total Followers	434	437	441	444	444	444
Search Appearances (in last 7 days)	281	185	115	49	52	25
Total Page Views	56	33	22	49	48	30
Post Impressions	786	182	558	1,036	570	368
Total Unique Visitors	25	19	14	22	18	16

**NEW! Instagram - Esprit Place
Family Resource Centre**

<https://www.instagram.com/espritplace/>

**NOV
2023** **DEC
2023**

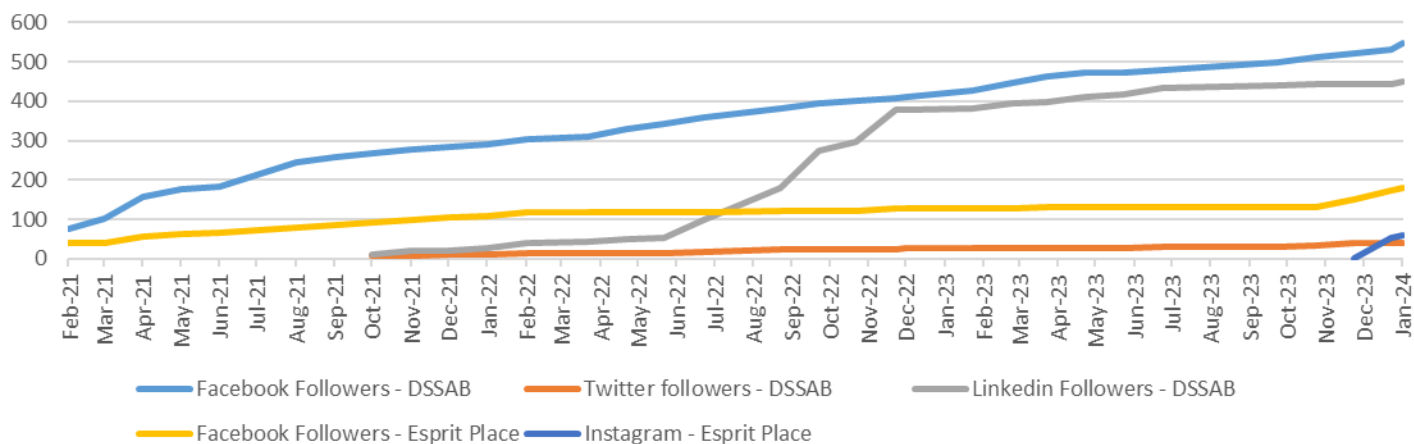
Total Followers

0 55

of posts

0 18

Social Media Follower - Trends



Licensed Child Care Programs

Total Children Utilizing Directly Operated Child Care in the District December 2023

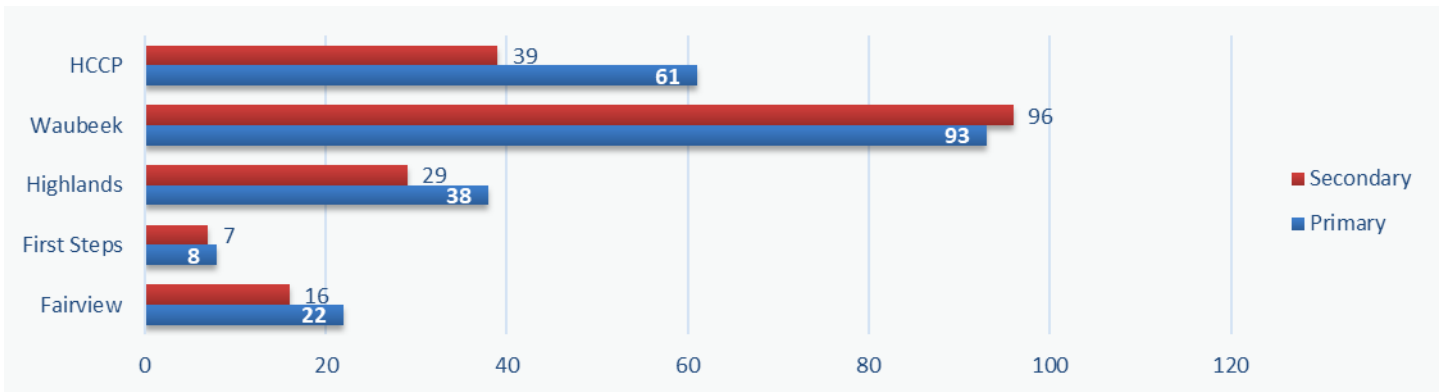
Age Group	Fairview ELCC	First Steps ELCC	Highlands ELCC	Waubee ELCC	HCCP	Total
Infant (0-18M)	2	3	3	1	19	28
Toddler (18-30M)	10	7	12	21	24	74
Preschool (30M-4Y)	17	17	20	29	53	136
# of Active Children	29	27	35	51	96	238

Fairview, First Steps, and Waubee Early Learning and Child Care Centres are at their operating capacity and Highlands has reached their licensed capacity to try and accommodate as many families off the waitlist as possible.

School Age Programs December 2023

Location	Enrollment	Primary Waitlist	Secondary Waitlist
Mapleridge After School	26	6	3
Mapleridge Before School	11	0	0
Sundridge Centennial After School	13	0	0
Home Child Care	37	10	1
# of Active Children	87	26	4

Directly Operated Child Care Waitlist by Program December 2023



The blue bar indicates the current number of children needing care now that cannot be accommodated. The red bar shows the number of children that will be needing care in future months. The greatest need for spaces remains consistent across the west side of the district and the southeast corner, namely Emsdale, Kearney, Sprucedale, and Novar communities.

Inclusion Support Services December 2023

Age Group	EarlyON	Licensed	Monthly	YTD Total	Waitlist	New	Discharges
Infant	0	0	0	0	0	1	0
Toddler (18-30M)	0	10	10	21	1	1	0
Preschool (30M-4Y)	6	32	38	67	4	3	0
School Age (4Y+)	4	13	17	49	1	0	0
Monthly Total	10	55	65	-	6	5	0
YTD Total	12	80	-	137	46	46	32

EarlyON Child and Family Programs December 2023

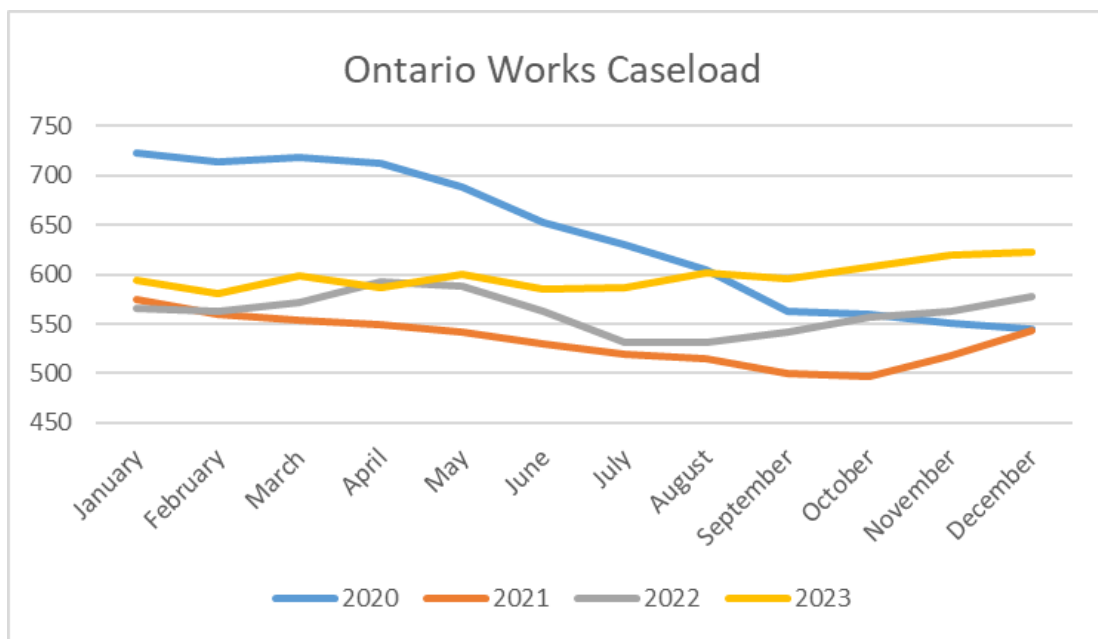
Activity	December	YTD
Number of Children Attending	711	18,866
Number of New Children Attending	25	601
Number of Adults Attending	523	6,893
Number of Virtual Programming Events	3	52
Number of Engagements through Social Media	146	7,181
Number of Views through Social Media	4,323	104,035

The EarlyON Child and Family Centres have had great success this past year as shown by the Year-to-Date totals. Over 18,000 children and over 6,000 adults have visited the programs! In addition, we have surpassed our goal of 100,000 views on the EarlyON Facebook page!

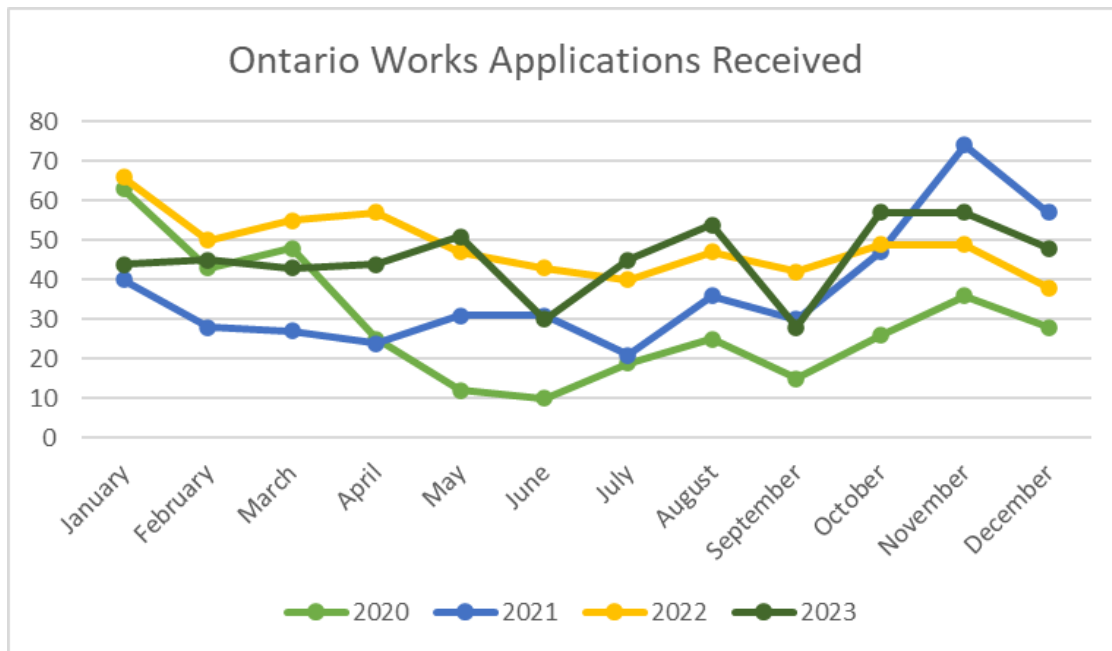
Funding Sources for District Wide Childcare Spaces December 2023

Active	# of Children	# of Families	Funding Source - New	# of Children	# of Families
CWELCC*	75	74	CWELCC	1	1
CWELCC Full Fee	203	199	CWELCC Full Fee	1	1
Extended Day Fee Subsidy	1	1	Fee Subsidy	1	1
Fee Subsidy	38	27	Ontario Works	0	0
Full Fee	20	19			
Ontario Works	12	9			
Total	349	329	Total	3	3

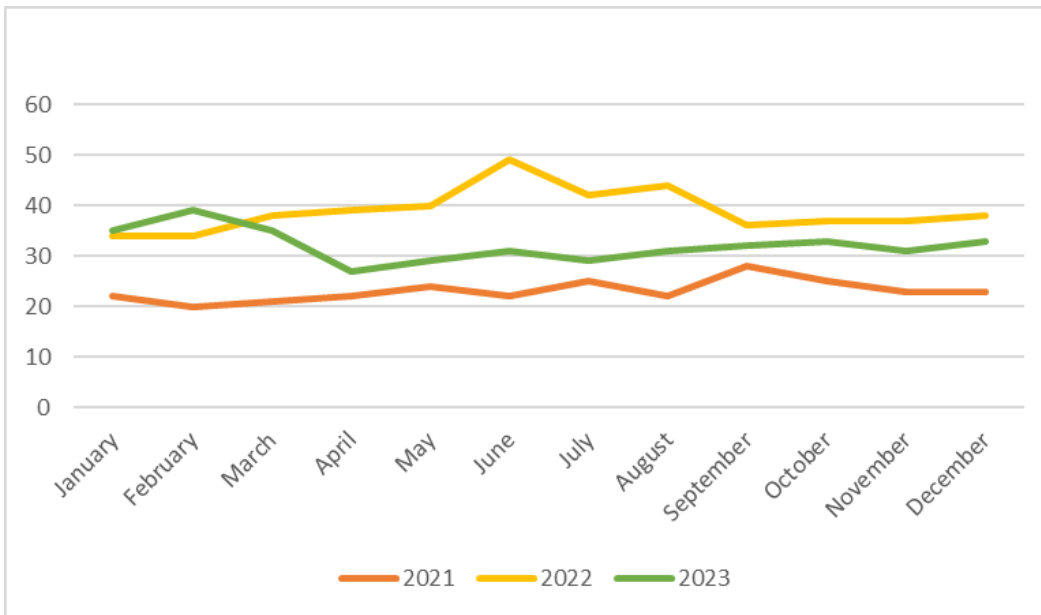
* CWELCC – Canada-Wide Early Learning Child Care; eligible for children 0 - 6



Ontario Works Intake - Social Assistance Digital Application (SADA) & Local Office Ontario Works Applications Received

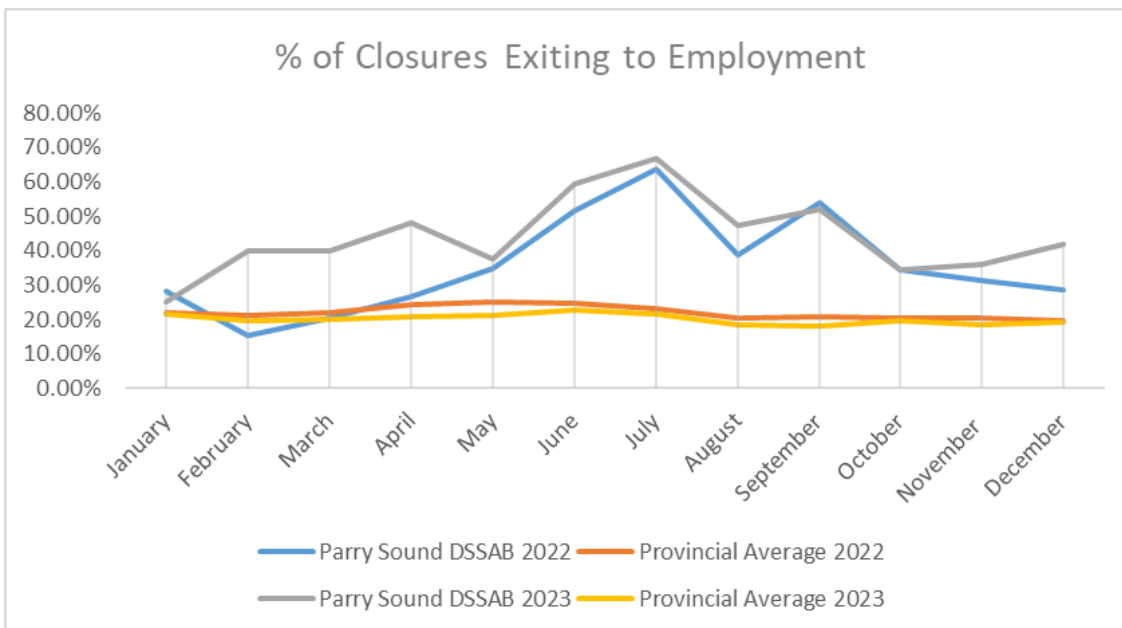


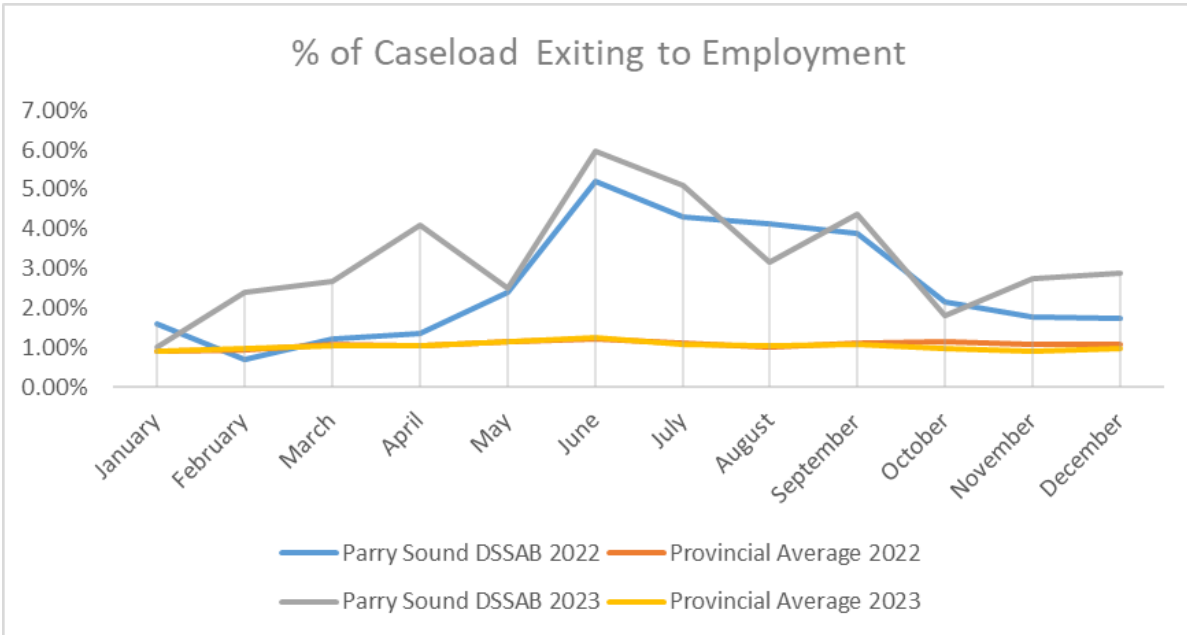
ODSP Participants in Ontario Works Employment Assistance



The OW Caseload as of the end of December is **622**. The number continues its slow upward climb we have seen month over month in 2023. We are supporting **33** ODSP participants in our Employment Assistance program. We also have **55** Temporary Care Assistance cases. Intake was steady month over month. We had **48** Ontario Works Applications (43 of those online through SADA) in the month of December.

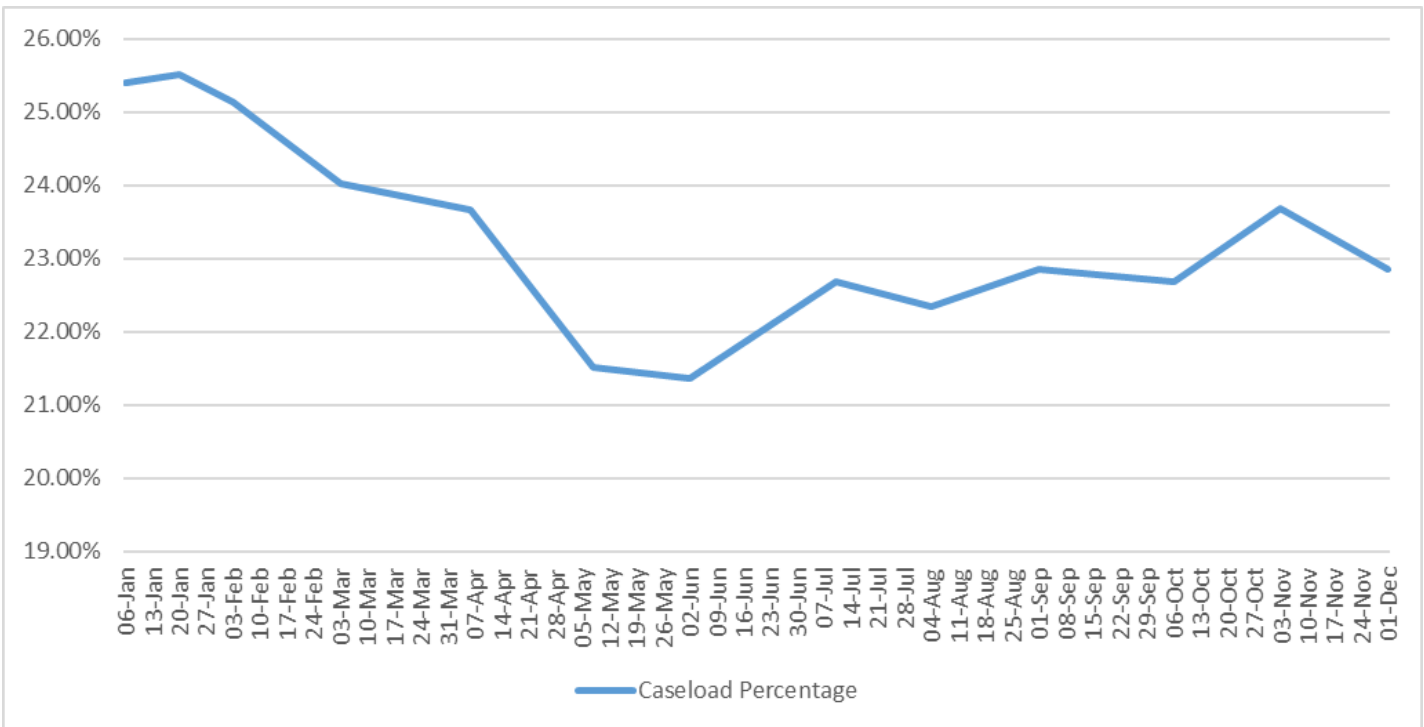
Employment Assistance & Performance Outcomes



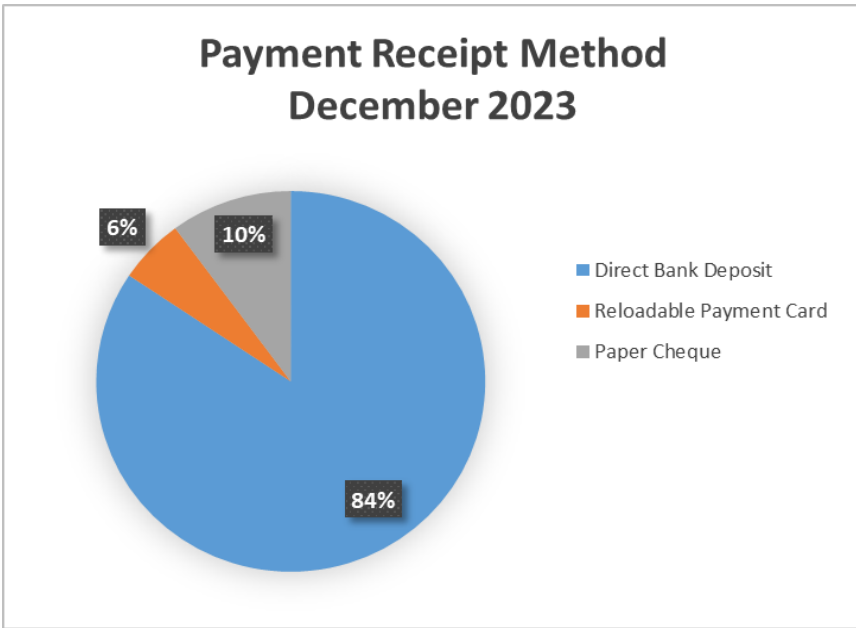


Our Employment Outcomes performance in December have exceeded last years performance and continues to be well above the provincial average and our target range. These are great results considering the early start to the winter in our area and the declining job postings according to the Labour Market Group. Additionally, we also exited 6.9% of the caseload for any reason in December.

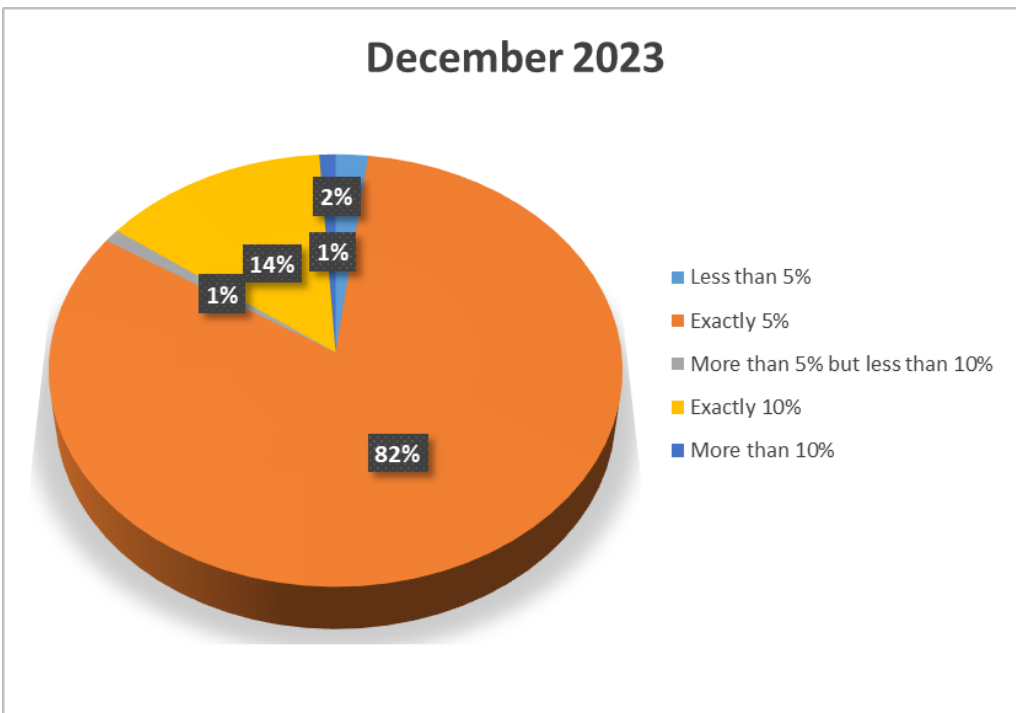
MyBenefits Enrollment 2023



DBD Enrollment



Overpayment Recovery Rate





West Parry Sound Health Centre
Rural Nurse Practitioner-Led Clinic



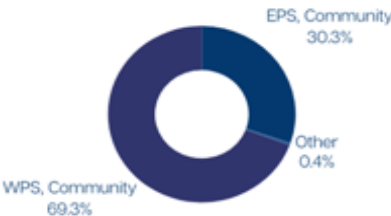
Referral Source



Client Gender



Location of Encounter



Referral Out

CMHA 9	RAAM 3	PSFHT 2	Min Attorney General 1	NNDsB 1
			Home & Community Care 2	Legal Aid 3
	SJB 5	NPLC 2	The Friends 1	Esprit Place 1
			Salvation Army 1	Addiction Tx 3
			Harvest Share 1	Housing Stability - VAW 1

Encounter Data for 2023-2024 Q3 (Oct-Dec)

Housing Stability Program - Community Relations Workers

Support

All services performed, provided, or arranged by the Homelessness Stability Program staff to promote, improve, sustain, or restore appropriate housing for individuals active with the Homelessness Stability Program, periodically within the month, not requiring intense case management.

December 2023 Income Source

	East	West
Senior	12	14
ODSP	10	28
Ontario Works	4	17
Low Income	22	33

Intense Case Management

Intense Case Management involves the coordination of appropriate services and the provision of consistent and on-going weekly supports, required by the individual to obtain, and sustain housing stability.

December 2023 Income Source

	East	West
Senior	13	19
ODSP	4	14
Ontario Works	8	15
Low Income	9	54

Contact/Referrals

December 2023	East	West	YTD
Homeless	0	3	81
At Risk	2	1	110
Esprit Outreach Homeless	0	0	6
Esprit Outreach at Risk	1	1	12
Esprit in Shelter	2		24
Program Total	191		

Short Term Housing Allowance

	Active	YTD
December 2023	4	44

Housing Stability: Household Income Sources and Issuance from HPP:

December 2023 Income Source	Total	HPP
Senior	4	\$1,682.21
ODSP	10	\$3,423.52
Ontario Works	3	\$3,276.62
Low Income	4	\$2,125.61

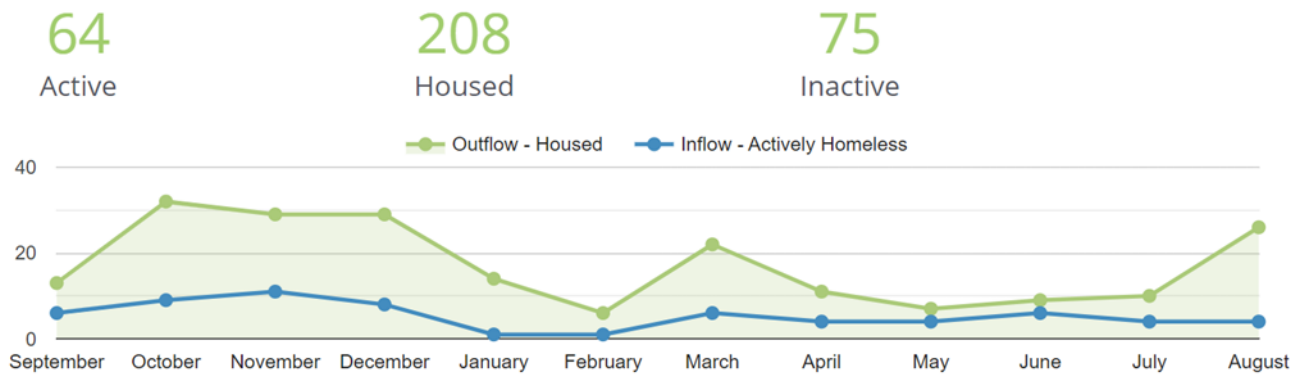
December 2023 Reason for Issue	Total
Utilities/Firewood	\$400.00
Transportation	\$1,037.91
Food/Household/Misc	\$7,798.83
Emergency Housing	\$1,271.22
Total	\$10,507.96

Ontario Works: Household Income Sources and Issuance from HPP

December 2023 Income Source	Total	HPP
Senior	1	\$941.29
ODSP	4	\$2,178.11
Ontario Works	10	\$7,309.98
Low Income	8	\$5,260.60

December 2023 Reason for Issue	Total
Rental Arrears	\$2,219.00
Utilities/Firewood	\$4,885.81
Food/Household/Misc.	\$8,370.47
Emergency Housing	\$214.70
Total	\$15,689.98

By-Name List Data **September 2021– December 2023**



Housing Programs

Social Housing Centralized Waitlist Report December 2023

	East Parry Sound	West Parry Sound	Total
Seniors	48	125	173
Families	131	443	574
Individuals	506	200	706
Total	685	768	1,453
Total Waitlist Unduplicated			466

Social Housing Centralized Waitlist (CWL) 2022 - 2023 Comparison Applications and Households Housing from the CWL

Month 2022	New App.	New SPP	Cancelled	Housed	SPP Housing	Month 2023	New App.	New SPP	Cancelled	Housed	SPP Housing
Jan	5			1		Jan	5	1	13		
Feb	9	1	2			Feb	5	1	10		
Mar	12		5	2	1	Mar	6		35		
Apr	12	1	1			Apr	11		17	6	
May	11	1		3		May	13	2	9	2	
June	15		3	2		June	9	1	2	1	
July	13	2	10	1		July	5	1	5	1	
Aug	5		17	2	1	Aug	14	1	3	1	
Sept	16		10	1	1	Sept	12		4		
Oct	14		12	6		Oct	8	1	1	4	2
Nov	12	1	8	3		Nov	12		3		
Dec	1			5		Dec	1		2	3	3
Total	125	6	68	26	3	Total	101	8	104	18	5

SPP = Special Priority Applicant

- Housing Programs added only one new application to the centralized waitlist in the month of December
- Two applications were cancelled:
 - ◊ one was cancelled as the applicant has now entered long term care
 - ◊ one was cancelled as the applicant is deceased
- All three housed applicants in December held special priority placement on the waitlist

Parry Sound District Housing Corporation December 2023

Activity for Tenant and Maintenance Services

	Current	YTD
Move outs	2	35
Move in	4	36
L1/L2 forms	0	8
N4 - notice of eviction for non payment of rent	2	11
N5 - notice of eviction disturbing the quiet enjoyment of the other occupants	1	13
N6 - notice of eviction for illegal acts or misrepresenting income for RGI housing	0	0
N7 - notice of eviction for willful damage to unit	1	2
Repayment agreements	0	65
No Trespass Order	0	1
Tenant Home Visits	19	224
Mediation/Negotiation/Referrals	9	194
Tenant Engagements/Education	4	99

Property Maintenance December 2023

Pest Control		3 buildings are currently being inspected monthly for bedbugs; 8 units have been treated
Vacant Units	15	one-bedroom (10); multiple bedroom (5) (not inclusive of The Meadow View)
Vacant Units - The Meadow View	8	one-bedroom market units available
After Hours Calls	9	Smoke detector defect, water running in vacant unit, hot water tank repairs, furnace trouble, OPP wellness check, toilet not flushing 4 staff participate in the on-call phone tree system
Work Orders	121	Created for maintenance work, and related materials for the month of December
Fire Inspections		Annual inspections were done for 5 apartment buildings, sprinkler inspection complete for 1 building

Capital Projects December 2023

- Architectural and structural inspections are currently underway for the planning phase of the Esprit Renovation project
- Painting and flooring replacement underway for Beechwood Office
- Software upgrade for Housing Operations continues
- Water pipe replacement investigation underway

Duplex Project Update

South River: Work on hot water tanks ongoing at the time of the review. Flooring complete in all units. The stair nosing installed. Railings to upper level outstanding. Doors are installed and painted. Millwork installation has commenced. Range hoods installed. A small portion of drywall / painting in main level bedrooms complete. Area to be primed & painted. Occupancy timeline is on track for February 1st, 2024.

Burks Falls: Priming was ongoing at the time of the review. Exterior railing outstanding. Dryer vent goose-necks and new hose bib have been installed. Dust from brick removal on new soffit to be cleaned. Contractor to confirm reason for break in eavestrough at the rear of the building. Occupancy timeline is on track for March 2024.

Esprit Place Family Resource Centre **December 2023**

Emergency Shelter Services	December 2023	YTD
Number of women who stayed in shelter this month	9	120
Number of children who stayed in the shelter this month	3	49
Number of hours of direct service to women (shelter and counselling)	137	1,950
Number of days at capacity	1	86
Number of days over capacity	0	92
Overall capacity %	75%	84%
Resident bed nights (women & children)	233	2,857
Phone interactions (crisis/support)	32	309

Transitional Support	December 2023	YTD
Number of women served this month	22	159
Number of NEW women registered in the program	3	34
Number of public ed/groups offered	0	3

Child Witness Program	December 2023	YTD
Number of children/women served this month	28	216
Number of NEW clients (mothers and children) registered in the program	0	45
Number of public ed/groups offered	0	7

January 22/2024

Fire Report From Nov.2022- Nov. 2023

Two Fire Stations

Total number of Firefighters 37

Last year we had a total of 64 activations , they were comprised of the following,

10 smoke/co alarms

4 smoke smell in dwelling

3 lift assists for EMS

24 MVC calls

7 false alarms

3 Fire calls

6 burning complaints

4 hydro calls

1 dog rescue

1 brush fire

1 gas spill

Revenue collected \$10,834.16 from fire permits, \$33,993.61 from MVC calls

We are able to charge MTO \$559.86 per hr per unit, max. of three units per call

We are working our way through Firefighter 1 and 2 trying to get Firefighters certified as soon as possible,

A number of the members are already certified .This is very time consuming and costly.

Some of our equipment and units are getting older and we need to look at replacements soon.

The water Tanker at station 2 should be replace very soon, Pumper 1 is over 20 years old, our air packs will soon not be able to meet new

Provincial guidelines.

We have just obtained an air compressor to refile our cascade bottles to refile our scba tanks, hopefully we will have it up and running soon.

We are in the process of switching our dispatch provider from CACC in North Bay to Parry Sound EMS, hopefully by the first part of March of

this year.

We have received a Trackless machine from Giesler Marine that we are using on the outdoor rink that the volunteers have been working on.

We continue to receive surplus equipment from Fire Fighters With-out Borders, this helps us with more equipment and supplies at no cost to the tax payer.

We have been able to live within our budget but with new regulations and training we are getting stretched thin.

We will work with council and I am sure they will continue respond to our needs as they arise.

Bill Cox

Fire Chief

Municipality of Powassan

To: Council
From: Clerk, A. Quinn
Re: Renfrew Inquest Recommendations
Date: February 13, 2024

RECOMMENDATION:

That the memo from Clerk A. Quinn be received; and further that staff be directed to implement the recommendations as listed in the memo.

ANALYSIS:

At the Council Meeting of November 7, 2023, Resolution 2023-356 was passed regarding the Renfrew Inquest and calling on the Province of Ontario to declare Intimate Partner Violence (IPV) an epidemic.

Part of the resolution was to have the Clerk review the 86 Renfrew Recommendations and determine how the Municipality of Powassan can help advance the objective of ending intimate partner violence.

After review of the recommendations, it is determined that the majority are directed towards the Provincial Government, specifically the legal system and police departments, but there are a few things that I recommend be implemented at the Municipality of Powassan:

1. Participate in public education campaigns to promote awareness about IPV using social media and our website, and include information on how to seek support, risk factors, warning signs of IPV, and community and bystander engagement.
2. Update the Municipal website to include links to local child and family services and victims of abuse support groups, including links for mental health support, under the Health Services section.
3. When the Workplace Violence and Harassment Policy is reviewed, ensure the section on IPV is updated and expanded, and includes where to seek help.
4. That at least one employee be trained to recognize signs of IPV for not only the workplace but with the public as well.
5. That the Municipality be known as a 'Safe Space' where survivors can feel safe and ask for information on shelters and victims services, including men's programs and ensuring confidentiality.
6. That should the Information and Privacy Commissioner of Ontario follow recommendation 78 and develop a plain language tool to help make informed decisions about privacy, confidentiality, and public safety regarding IPV, the Municipality will use the tool if or when required.
7. That the Clerk stay up to date on laws, rules and regulations relating to IPV, thus ensuring the Municipality stays current in implementing policies and plans to help end IPV.

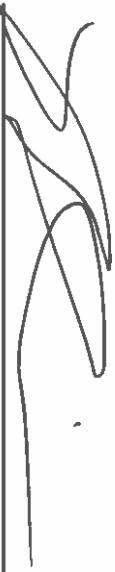
**The Corporation of the Municipality of Powassan
Statement of Remuneration and Expenses
Paid to/for Members of Council in 2023**

Council January 1 to December 31, 2023

Name	Remuneration	Committees/Boards Earnings/Expenses	Expenses	Total
Mayor Peter McIsaac	11,999.26	930.00	1,467.41	14,396.67
Deputy Mayor, Markus Wand	6,799.78	-	754.80	7,554.58
Councillor, Dave Britton	6,799.78	15,030.57	1,249.89	23,080.24
Councillor, Randy Hall	6,799.78	1,515.00	820.41	9,135.19
Councillor, Leo Patey	6,799.78	-	730.48	7,530.26
TOTALS	39,198.38	17,475.57	5,022.99	61,696.94

Dated: February 15, 2024

Statement of Treasurer-Municipal Act 2001 PART V1, section 284(1)
The remuneration and expenses are authorized by
By-Laws No.2006-33 AND No. 2011-03



Treasurer

COUNCIL MEMORANDUM

Date:	February 14, 2024
To:	Council, Clerk A. Quinn
From:	Councillor Hall
Re:	Compare Remuneration for Councillors for Budget Purposes

Recommendation:

New Business

Compare the remuneration of the Municipality of Powassan Councillors to Councillors of other local Municipalities.

Background / Rationale:

The remuneration for the Councillors of the Municipality of Powassan has not changed since 2006. The responsibilities during this time have increased as the Municipality has grown.

To decide if an increase of any amount of remuneration is warranted, I request that Staff contact the Municipalities of Callander, South River, Sundridge, Strong Twp, Jolly Twp, Armour Twp, Burks Falls, Bonfield, Chisolm, Astorville, and Magnetawan to use as comparators.

Prepared for
Municipality of Powassan
250 Clark Street
Powassan, ON
Canada, P0H 1Z0

Prepared by
Knight Piésold Ltd.
200 - 1164 Devonshire Avenue
North Bay, Ontario
Canada, P1B 6X7

NB102-309/14-2

MUNICIPALITY OF POWASSAN LANDFILL

2023 ANNUAL LANDFILL WATER QUALITY MONITORING REPORT

Rev	Description	Date
0	Issued in Final	February 14, 2024

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APPENDICES

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Appendix B	Site Photos
Appendix C	Certificates of Analysis
Appendix D	Groundwater Analytical Results
Appendix D1	Summary of Groundwater Quality Results
Appendix D2	Summary of Groundwater Exceedances
Appendix D3	Select Leachate Parameters Compared to Background Water Quality
Appendix D4	Summary of Groundwater QA/QC Results
Appendix E	Surface Water Analytical Results
Appendix E1	Summary of Surface Water Results
Appendix E2	Summary of Surface Water QA/QC Results

Abbreviations

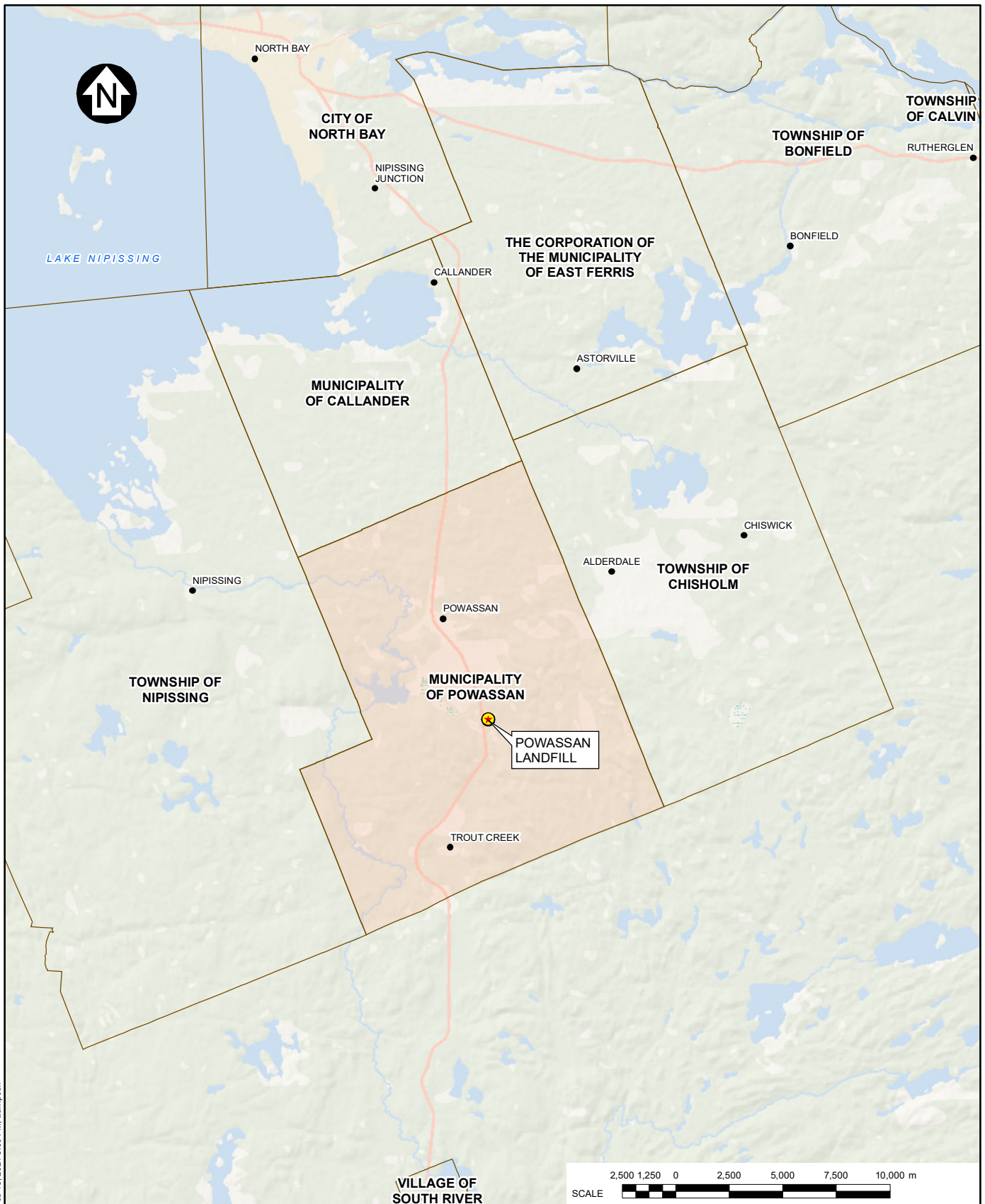
AO	Aesthetic Objective
CoA	Certificate of Approval
COC	Chain of Custody
COD	Chemical Oxygen Demand
DOC	Dissolved Organic Carbon
DO	Dissolved Oxygen
IMAC	Interim Maximum Acceptable Concentration
KP	Knight Piésold Ltd.
LEL	Lower Explosive Limit
MAC	Maximum Acceptable Concentration
mamsl	Metres Above Mean Sea Level
mbgs	Metres Below Ground Surface
MOE	Ministry of the Environment
MOP	Municipality of Powassan
MECP	Ministry of Environment, Conservation and Parks
MOECC	Ministry of the Environment and Climate Change
MOEE	Ministry of the Environment and Energy
MW	Monitoring Well
ODWS	Ontario Drinking Water Standards
OG	Operational Guidelines
ORP	Oxidation-Reduction Potential
the Landfill	Powassan Landfill
PWQO	Provincial Water Quality Objectives
QA/QC	Quality Assurance/Quality Control
RUG	Reasonable Use Guideline
RPD	Relative Percent Difference
RL	Reporting Limit
SGS	SGS Canada Inc.
SW	Surface Water
TDS	Total Dissolved Solids
TSS	Total Suspended Solids

1.0 INTRODUCTION

Knight Piésold Ltd. (KP) was retained by the Municipality of Powassan to prepare the 2023 Powassan Landfill (the Landfill) Water Quality Monitoring Report. The Landfill is located approximately 35 kilometres south of the City of North Bay on 40 Proudfoot Road (Figure 1.1). Water quality monitoring is conducted at the Landfill in compliance with Ministry of the Environment (MOE) Certificate of Approval (CoA) No. A521701 (MOE, 2001). A copy of the CoA (and subsequent amendments) are included in Appendix A. The following is a summary of the monitoring program completed at the Landfill:

- **Groundwater Quality Monitoring** - Included the collection, laboratory testing, and analysis of groundwater samples from 27 monitoring wells. This was completed three times in 2023 (spring, summer and fall), with no less than 60 days between sampling events. Hydraulic monitoring was also conducted in each monitoring well during sampling events and from well MW11-II and MW9-I (which is exclusively used for hydraulic monitoring). Groundwater samples were analyzed for parameters based on Column 1 of the Landfill Standards for Summer and Column 2 for Spring and Fall (MOE, 2012). Water samples from two upstream residential properties were collected in the spring, summer and fall from outside taps.
- **Methane Measurements** - Included the measurement of methane gas concentrations from two methane monitoring wells in the spring, summer, and fall.
- **Surface Water Sampling** - Included the collection, laboratory testing and analysis of surface water samples from three sampling locations in the spring, summer and fall. The measured and analyzed field parameters are listed in Column 3 of the Landfill Standards (MOE, 2012).
- **Quality Assurance/Quality Control (QA/QC) Testing** - Included the collection, laboratory testing and analysis of QA/QC samples. Duplicate samples were collected from approximately 10% of the sample locations for both groundwater and surface water.

Groundwater and surface water samples were analysed by SGS Canada Inc. (SGS) in Lakefield, Ontario.



LEGEND:

- COMMUNITY
- POWASSAN LANDFILL

NOTES:

1. COORDINATE GRID IS IN METRES.
COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N.
2. BASE MAP: © ESRI AND DATA (ONLINE) SERVICE LAYERS (2024).
REDLANDS, CA: ENVIRONMENTAL SYSTEM RESEARCH INSTITUTE. ALL RIGHTS RESERVED.

MUNICIPALITY OF POWASSAN

LANDFILL SITE

SITE LOCATION MAP



P/A NO.
NB102-309/14

REF NO.
2

FIGURE 1.1

REV
0

SAVED: 1:11020030914\GIS\Figs\A01_R0.mxd; Feb 13, 2024 3:00 PM; asimpson

REV	DATE	DESCRIPTION	MSA DESIGNED	AS DRAWN	SRA REVIEWED
0	14FEB'24	ISSUED WITH REPORT			

2.0 SITE DESCRIPTION

2.1 SITE INFORMATION AND FEATURES

The Powassan Landfill has operated since approximately 1981. The Landfill covers an area of approximately 7.7 hectares and is open to receiving waste from the community on Wednesday, Friday and Saturday throughout the year (MOP, 2024).

Site access is from Proudfoot Road through an entrance gate that is closed and locked outside of the Landfill operating hours. A small building for use as the attendant's shelter is located inside the Landfill footprint, near the entrance. A garage building, used for equipment storage, is located south of the main access road.

The Landfill is surrounded by a moderately forested area and is bordered by a railway to the east, private property to the north and Proudfoot Road and Highway 11 to the south and west, respectively. Photographs that provide a visual of the site conditions and the surrounding environment are included in Appendix B.

2.2 SITE TOPOGRAPHY AND DRAINAGE

The topography of the Site is moderate with a topographic high at the east property boundary. The topography near the landfilling area slopes generally from east to west, and northeast to southwest. The ground surface is relatively flat southwest of the Site.

Surface water on site is stagnant. A wetland is situated at the northwest extent of the Landfill. To the south and east, surface water drains through a ditch along Proudfoot Road. A tributary of McGillivray Creek travels through the buffer area at the south end of the property, approximately 300 metres south of the Landfill (Integrated Earth & Environmental Limited, 1998).

Surface water runoff within the landfilling area flows to the north and west, and sometimes collects within a low-lying area/pond.

2.3 SURFICIAL GEOLOGY

Overburden at the Powassan Landfill has been described as a silty-sand to sand material, with occasional clay layers, which is characteristic of a glacial ground moraine deposit. Overburden overlies bedrock knobs of granitic bedrock (Integrated Earth & Environmental Limited, 1998).

Monitoring wells are installed within the overburden at depths ranging from 2 to 23 metres below ground surface (mbgs). Monitoring wells are frequently installed in nested pairs or nested triples throughout the Landfill Site as the presence of layered and fine grained (low conductivity) materials within the subsurface creates multiple conductive zones within the subsurface.

2.4 WATER QUALITY MONITORING PROGRAM

The current environmental monitoring program consists of the collection of groundwater samples (including from two residential properties), surface water samples and methane measurements from two monitoring wells. Monitoring is conducted three times per year (Spring, Summer, and Fall).

Groundwater samples were collected in 2023 from 27 groundwater monitoring well locations within the Landfill footprint (shown on Figure 2.1) and from two residential properties located to the east of the Landfill. Table 2.1 provides a summary of the monitoring well coordinates, ground elevation and groundwater depth for each sampling event. Monitoring wells MW18-01, MW18-02 and MW18-03 (installed in May 2018) are located along the property boundary from the west (MW18-01) to the south (MW18-03). These wells were installed to assist with delineation of potential Landfill impacts as well as to provide additional hydraulic data. Due to MW18-01 often being dry for one or two sampling events per year, monitoring well MW18-03 is now being used as the designated background monitoring well due to the location cross gradient of the landfill and reliable presence of groundwater throughout the year.

Methane concentrations were measured on site from monitoring wells MMW1 and MMW2, located near the on-site garage. These two wells were used to monitor for the generation of methane as the Landfill ages, and to assess the potential for buildup of methane within the garage. At each monitoring location, the air composition (oxygen, nitrogen, methane) was measured, as well as the lower explosive limit (LEL) for methane.

Three surface water sites were sampled in the Spring, Summer, and Fall in 2023. The locations of these sites are shown on Figure 2.1. Site SW-3, located upstream of the Landfill, is considered representative of background or natural (not influenced by the Landfill) surface water.

2.5 ASSESSMENT PROCESS

Municipal solid wastes are defined as those wastes generated and discharged from single and multifamily dwellings. Waste commonly consists of food waste, textiles, household waste, wood and soil, garden waste, paper, and plastics. This waste contains decomposable and non-decomposable materials. The decomposable materials undergo decomposition by a combination of chemical, physical, and biological processes. The by-products of this decomposition, when mixed with water, produces a leachate, which may negatively affect water quality. The resulting leachate can often contain characteristic elevated parameters (chloride, conductivity, biological oxygen demand, chemical oxygen demand (COD)) which are collectively referred to as leachate indicator parameters. Leachate indicator parameters can also include altered concentrations of redox sensitive elements such as dissolved oxygen (DO), oxidation-reduction potential (ORP), iron, manganese, and nitrates which occur based on an elevated concentration of organics.

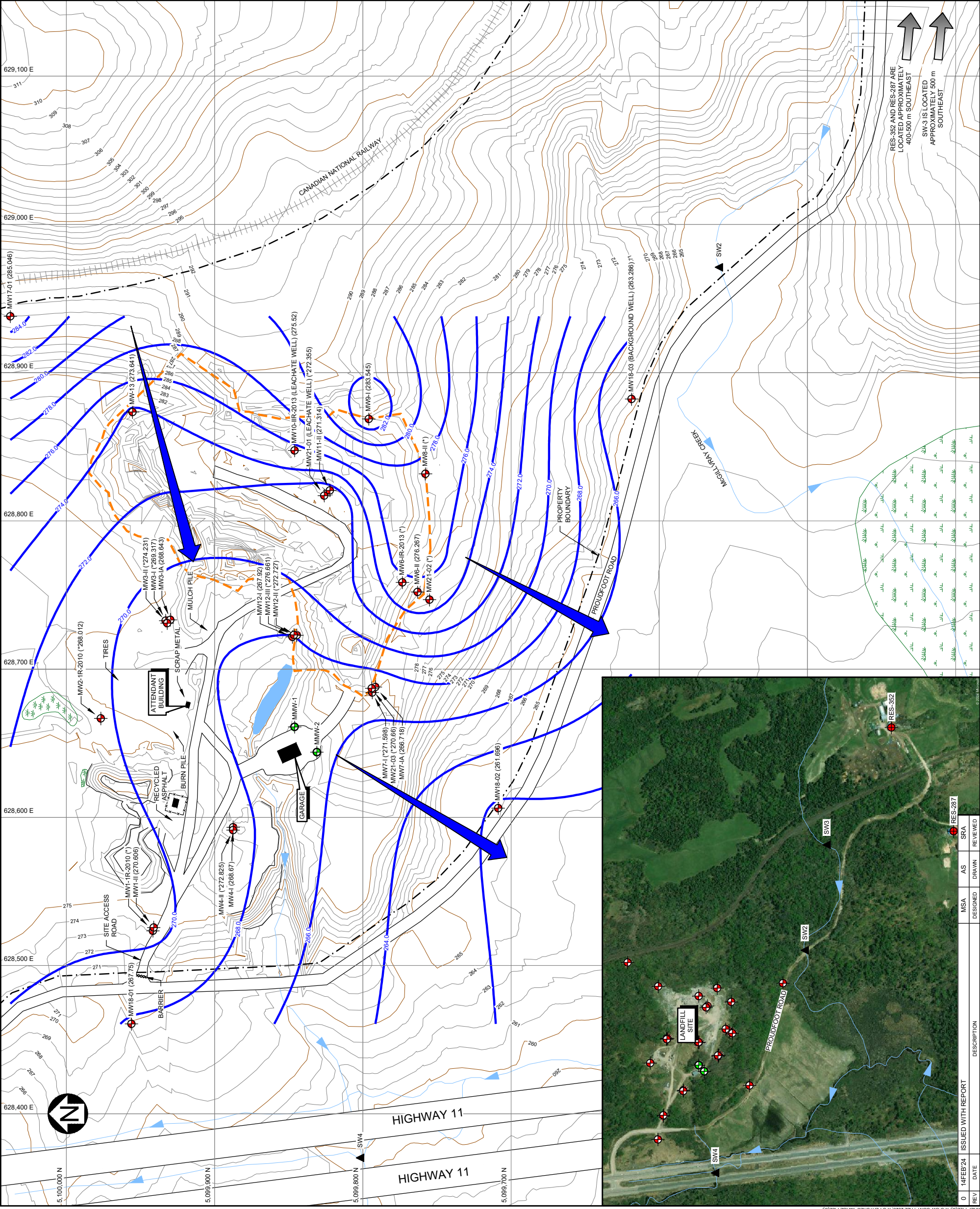
The general assessment process to determine impacts to groundwater consist of an evaluation of the characteristics of the leachate, the background water quality, and an evaluation of whether the downgradient wells are indicating impacts.

Landfill impacts are typically offset through a mechanism known as natural attenuation. Most rural landfills (including the Powassan Landfill) contain buffer areas that promote the assimilation of landfill wastes through dilution, and biological (microbial) interactions.

Groundwater monitoring well MW18-03 is considered representative of background water quality as the well is located cross gradient from the waste fill area. Monitoring wells MW10-IIR-2013, MW21-01, and MW11-II (no longer sampled) are considered representative of leachate impacted groundwater, as the wells are located within the waste fill area of the Landfill.

The current monitoring program includes the evaluation of the Landfill impacts to surface water quality by examining surface water locations upstream and downstream of the Landfill.

Nearby residential wells were also monitored for landfill leachate indicators and water quality parameters.

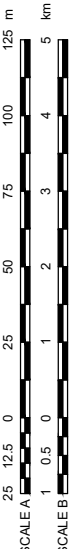


LEGEND:

- WATER
- SWAMP
- FENCE
- DRAINAGE DITCH
- PROPERTY BOUNDARY
- GROUNDWATER ELEVATION CONTOUR (MAMSL)
- LIMIT OF 2022 LANDFILL SURVEY (SEE NOTE 3)
- BUILDING
- METHANE GAS MONITORING WELL
- RESIDENTIAL GROUNDWATER MONITORING WELL
- GROUNDWATER MONITORING WELL
- GROUNDWATER ELEVATION IN METRES ABOVE MEAN SEA LEVEL (MAMSL)
- DATA NOT USED FOR CONTOURING
- RAILWAY
- SURFACE WATER SAMPLING LOCATION
- APPROXIMATE GROUNDWATER FLOW DIRECTION

NOTES:

- COORDINATE GRID IS UTM NAD83 ZONE 17N.
- CONTOURS ARE IN METRES. TOPOGRAPHY CONTOUR INTERVAL IS 1 METRE. GROUNDWATER CONTOUR INTERVAL IS 2 METRES.
- SURFACE CONTOURS WERE GENERATED USING SURVEYS COMPLETED BY TALBOT SURVEYS LTD. (2009), MILLER & URSO (2017), (2019), (2022) AND REGIONAL GIS DATA (2009).
- GROUNDWATER ELEVATION CONTOURS ARE BASED ON FALL 2023 WATER LEVELS IN OVERBURDEN WELLS.



MUNICIPALITY OF POWASSAN

LANDFILL SITE

GROUNDWATER AND SURFACE WATER
SAMPLE LOCATIONS

PJA NO.
NB102-309/14

REV NO.
2

FIGURE 2.1

REV
0

TABLE 2.1

MUNICIPALITY OF POWASSAN
MUNICIPALITY OF POWASSAN LANDFILL

2023 ANNUAL LANDFILL WATER QUALITY MONITORING REPORT
SUMMARY OF SAMPLING DETAILS AND GROUNDWATER LEVELS

Units	Coordinates		Ground Elevation ²	Measured Stick-up	Monitoring Well Depth	Depth to Groundwater			Groundwater Elevation		
	Easting	Northing				Spring 2023	Summer 2023	Fall 2023	Spring 2023	Summer 2023	Fall 2023
						mbPVC	mbPVC	mbPVC	mamsl	mamsl	mamsl
MMW-1	628,661	5,099,846	278.25	0.73	6.29	-	-	-	-	-	-
MMW-2	628,644	5,099,831	277.78	0.8	6.4	-	-	-	-	-	-
MW10-IIR-2013	628,847	5,099,846	286.29	1.0	12.2	8.17	10.92	11.75	279.11	276.35	275.52
	628,821	5,099,822	285.83	0.9	16.8	14.33	14.94	15.37	272.35	271.75	271.31
MW1-1R-2010	628,523	5,099,942	274.30	1.0	6.0	Dry	Dry	Dry	Dry	Dry	Dry
	628,722	5,099,848	276.78	0.8	12.3	9.23	9.37	9.62	268.32	268.17	267.92
MW12-II	628,723	5,099,844	276.89	0.7	8.5	4.77	5.09	4.90	272.86	272.54	272.73
MW 12-III	628,723	5,099,846	276.87	0.5	3.9	0.94	1.00	0.72	276.44	276.38	276.66
MW-13	628,873	5,099,955	280.13	0.8	11.0	5.45	6.42	7.24	275.43	274.46	273.64
MW17-01	628,938	5,100,038	285.49	0.9	2.5	Dry	1.48	1.36	Dry	284.93	285.05
MW1-II	628,526	5,099,941	274.61	0.8	6.3	3.65	4.90	4.80	271.76	270.51	270.61
MW2-1R-2010	628,667	5,099,977	274.40	1.0	12.5	6.94	7.10	7.35	268.43	268.27	268.01
	628,733	5,099,933	275.47	0.9	11.1	6.78	6.97	7.02	269.56	269.37	269.32
MW3-IA	628,733	5,099,930	275.53	0.9	16.7	7.23	7.53	7.76	269.18	268.87	268.64
MW3-II	628,731	5,099,932	275.39	0.9	4.3	2.14	2.19	2.08	274.17	274.13	274.23
MW4-I	628,593	5,099,887	276.25	1.0	11.9	7.86	8.42	8.58	269.39	268.83	268.67
MW4-II	628,591	5,099,888	276.26	1.0	6.9	3.08	6.32	4.47	274.22	270.98	272.83
MW6-II	628,752	5,099,763	278.89	1.0	5.3	2.56	Dry	3.62	277.33	Dry	276.27
MW6-IR-2013	628,758	5,099,773	281.72	0.8	9.5	Dry	Dry	Dry	Dry	Dry	Dry
	628,684	5,099,794	279.82	0.8	12.5	8.77	9.25	9.03	271.86	271.37	271.60
MW7-I	628,688	5,099,792	279.88	0.7	23.1	13.65	13.65	13.87	266.94	266.94	266.72
MW8-II	628,832	5,099,758	281.93	0.8	3.8	2.40	Dry	Dry	280.35	Dry	Dry
MW9-I	628,869	5,099,796	284.00	0.2	2.0	Dry	1.50	0.63	Dry	282.68	283.55
MW18-01	628,461	5,099,956	270.33	0.9	5.2	2.06	3.21	3.46	269.16	268.00	267.75
MW18-02	628,606	5,099,709	262.10	0.8	5.5	1.23	1.64	1.22	261.68	261.28	261.70
MW18-03 (background well)	628,882	5,099,619	266.89	0.8	6.3	4.26	4.57	4.43	263.45	263.15	263.29
	628,817	5,099,826	286.51	0.9	19.6	24.03	14.69	15.05	263.37	272.72	272.36
MW21-01	628,878	5,099,656	279.46	0.9	11.3	Dry	Dry	Dry	Dry	Dry	Dry
MW21-02	628,687	5,099,794	280.63	0.9	10.8	10.87	11.14	10.84	270.63	270.36	270.66
SW2	628,975	5,099,553	262.79	-	-	-	-	-	-	-	-
SW3	629,286	5,099,497	277.55	-	-	-	-	-	-	-	-
SW4	628,383	5,099,806	259.71	-	-	-	-	-	-	-	-

NOTES:

1. "-" DATA ARE NOT AVAILABLE, "mbPVC" - METRES BELOW PVC RISER PIPE, "mbgs" - METRES BELOW GROUND SURFACE, "mamsl" - METRES ABOVE MEAN SEA LEVEL.

2. GROUND ELEVATION DETERMINED FROM MILLER & URSO SURVEYING INC. 2019 & 2022 FOR MW21-01, 02 & 03.

3. GROUND ELEVATION SURVEY COMPLETED BY MILLER & URSO SURVEYING IN JULY 2022 FOR THE NEW WELLS INSTALLED IN 2021.

3.0 GROUNDWATER SAMPLING INFORMATION

3.1 APPLICABLE STANDARDS

The groundwater samples are compared to referenced guidelines presented in the Technical Support Document for Ontario Drinking Water Standards (ODWS), Objectives and Guidelines prepared by the MOE (MECP, 2020) to provide information for the protection of public health through the provision of safe drinking water.

The Technical Support Document identifies the following types of standards:

- **Maximum Acceptable Concentration (MAC) and Interim Maximum Acceptable Concentration (IMAC)** - These criteria are related to human health and include parameters such as nitrates, nitrites, and the metals barium, boron, cadmium, chromium, lead, mercury, selenium and uranium.
- **Aesthetic Objectives (AO)** - These criteria are not related to human health, but relate to taste, odour, or appearance of water. Parameters include dissolved organic carbon (DOC), total dissolved solids (TDS), turbidity, chlorides, sulphates and include the following metals: copper, iron, manganese, sodium, and zinc.
- **Operational Guidelines (OG)** - These guidelines are not related to human health but are intended to ensure the efficient operation of water treatment and distribution systems. Parameters of interest include pH, hardness, and aluminum.

A reasonable use guideline (RUG) concept has also been applied to assess groundwater quality. The reasonable use concept is applied to determine quantitatively the acceptable level of various contaminants originating in a disposal site and impinging on adjacent properties and assessing the suitability of a contaminant attenuation zone at a disposal site. Guideline B-7 (MOECC, 2016a) and Guideline B-7-1 (MOECC, 2016b), are used to set maximum concentrations of parameters for groundwater leaving landfills. The RUG states that water quality (for drinking water) must not be degraded by an amount in excess of 50% of the difference between the background and the ODWS for non-health related parameters and in excess of 25% of the difference between background and the ODWS for health-related parameters.

Groundwater quality data from monitoring well MW18-03 represents background conditions. The guidelines utilize the ODWS type of standard (MAC, IMAC, AO or OG) and the background concentrations to determine the maximum acceptable concentrations of parameters in adjacent properties. RUG values have been calculated on a seasonal basis.

Groundwater quality from monitoring wells MW10-IIR-2013 and MW21-01 (both considered leachate wells for the Landfill) are compared to background well (MW18-03) groundwater results. The leachate wells will help determine if the Landfill has had an affect on groundwater quality.

3.2 SAMPLING PROTOCOLS

Groundwater samples were collected from each well using 5/8" diameter Waterra® tubing and one-way foot valves. Standard QA/QC procedures were followed during sampling and data were recorded on field record sheets. The following is a summary of the sampling protocols:

- Groundwater levels were measured prior to sampling in each well using a clean Solinst Water Level Meter - Model 101.
- Prior to sampling, three well volumes of water were purged (when possible) from each monitoring well using dedicated Waterra® tubing.
- New nitrile gloves were used during sampling at each well.
- In situ groundwater quality data were measured at each well using a Hanna Instruments HI98129 pH/Conductivity/TDS Tester. The instrument was calibrated each day following the manufacturer's instructions prior to use. The instrument was also calibrated by the rental company prior to use.
- The same dedicated Waterra® tubing that was used to purge each well was used to collect the groundwater samples. Samples were collected in labeled clean bottles provided by the laboratory. All sample filtering was completed at the laboratory. Waterra tubing is replaced every year.
- Samples were preserved and stored in coolers with ice packs until they were shipped to SGS.
- All sampling activities, environmental conditions and any unusual conditions were documented on field data sheets.
- Pertinent sampling information was recorded on a Chain of Custody (COC) form and a copy delivered with the samples to SGS.

The water samples from the residential properties were collected from an outside tap/faucet/hose and handled similarly to the groundwater samples collected from the Landfill wells. Water from the tap/faucet/hose was run for 5 minutes prior to sampling.

3.3 MAINTENANCE, REPAIRS AND SAMPLING NOTES

The following section is a description of the maintenance, well repairs and sampling notes for wells which did not immediately produce three well volumes worth of water during the sampling events in 2023.

3.3.1 SPRING 2023 - MAY 8 TO 10, 2023:

- Several of the monitoring wells had an insufficient groundwater recharge rate to purge three well volumes. Once purged dry, the wells were left for a period of approximately 24 hours to return to static groundwater levels, prior to sampling.
- Monitoring wells MW1-1R-2010, MW3-I, MW6-IR-2013, MW7-I, MW12-II, MW17-01, MW21-02 were dry and could not be sampled, and Res-352 was not sampled due to the resident not being available at the time of the spring 2023 sampling event.
- After the spring 2023 sampling event, the monitoring well protective casings with rust, bad paint or without paint, were painted bright red to increase their visibility.

3.3.2 SUMMER 2023 - AUGUST 13 TO 5, 2023:

- Several of the monitoring wells had an insufficient groundwater recharge rate to purge three well volumes prior to sampling. Wells with insufficient recovery were purged dry and left for a period of approximately 24 hours to return to static groundwater levels, prior to sampling.
- Monitoring wells MW1-II, MW1-IR-2010, MW3-I, MW4-I, MW6-II, MW6-IR-2013, MW7-I, MW8-II, MW12-II, MW21-02 and MW21-03 were dry and could not be sampled.

3.3.3 FALL 2023 - OCTOBER 30 TO NOVEMBER 1, 2023:

- Several wells had an insufficient groundwater recharge rate to purge three times the initial well volume prior to sampling. Wells with insufficient groundwater recovery were purged dry and left for a period of approximately 24 hours to return to static groundwater levels, prior to sampling.
- Monitoring wells MW1-II, MW1-IR-2010, MW6-IR-2013, MW7-I, MW8-II, MW21-02 and MW21-03 were dry and could not be sampled.

3.4 GROUNDWATER HYDRAULIC MONITORING RESULTS

Groundwater level measurements were collected from each monitoring well during the Spring, Summer and Fall sampling events. A summary of the 2023 groundwater level measurements is presented in Table 2.1. The water levels ranged from 0.2 (MW12-III) to 23.1 (MW21-01) metres below ground surface (mbgs) throughout the area and varied in level by up to 1.2 metres seasonally (with an average variation of approximately 0.5 m). The groundwater elevations ranged from 262 (MW18-02) to 285 (MW17-01) metres above mean sea level (mamsl).

Figure 2.1 shows the estimated groundwater flow direction using the Fall 2023 water level data. Where nested wells (or triple wells) are present, the water level from the shallowest well was used for contouring. Groundwater is generally following surface topography and flowing in a southwesterly direction towards Highway 11.

3.5 GROUNDWATER QUALITY RESULTS

The groundwater Laboratory Certificates of Analysis are included in Appendix C. Analytical results for 2023 are summarized in Appendix D1, with results above applicable standards highlighted. Appendix D2 provides a summary of the exceedances for each well.

Background water quality results from monitoring well MW18-03 suggest that groundwater is naturally elevated with hardness throughout the year and dissolved manganese during the summer. (hardness and dissolved manganese concentrations typically were above the ODWS and RUG range). These results are similar to the 2022 results when comparing parameters from monitoring well MW18-03.

As indicated in Appendix D2, there were no health-related parameters above the ODWS in 2023 for the monitoring wells and residential samples.

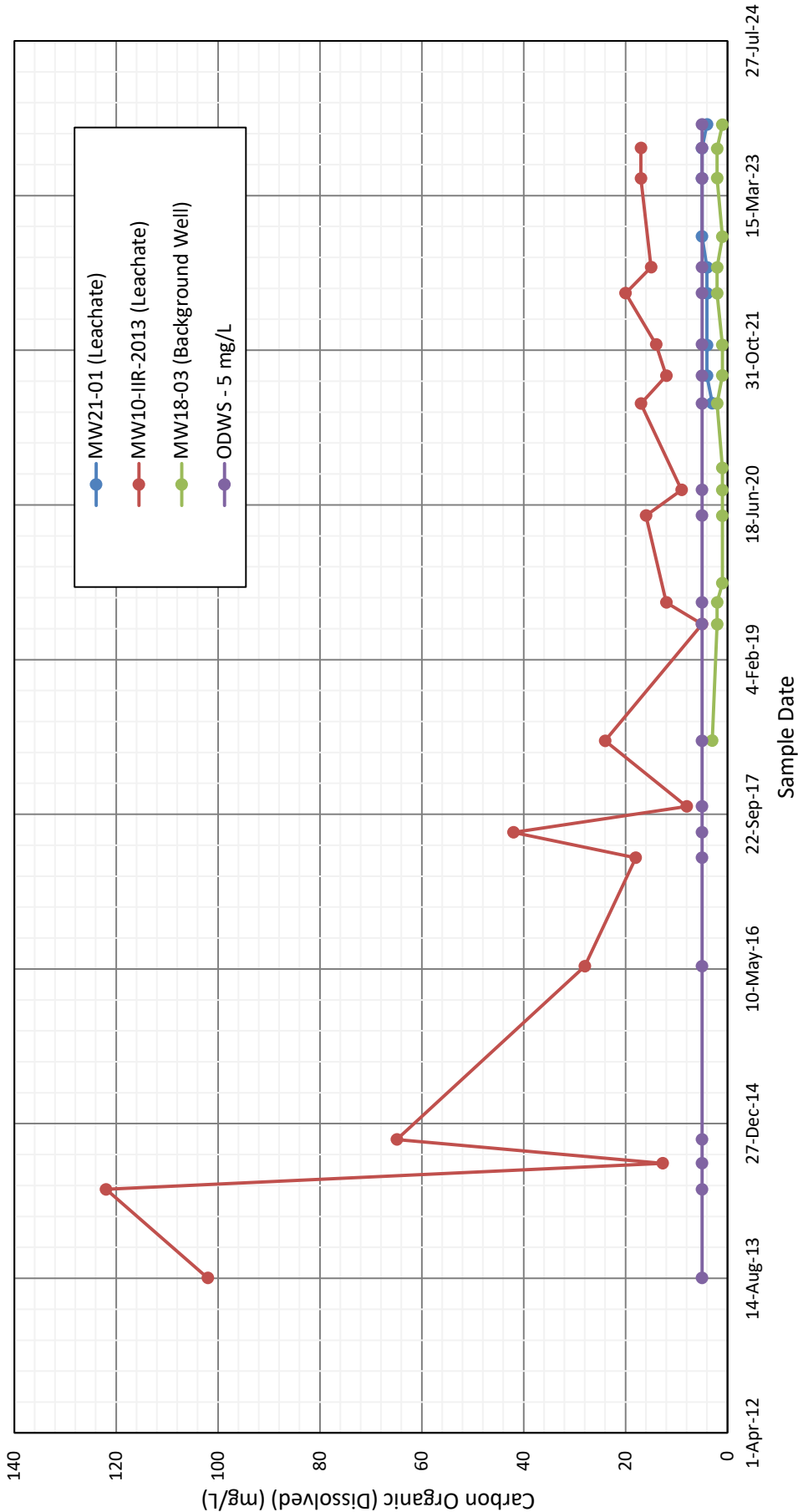
Instances of exceedances of ODWS were either AOs or OGs, which do not have any suspected adverse health effects. ODWS exceedances included; in-situ pH, in-situ temperature, alkalinity, hardness, TDS, dissolved manganese, and DOC.

There were several instances where water quality concentrations exceeded the RUG. The exceedances occurred for in-situ pH, in-situ temperature, alkalinity, hardness, pH, TDS, dissolved chloride, nitrate, dissolved manganese, dissolved sodium and DOC.

Downgradient water quality results (when compared to leachate indicator parameters) indicate leachate impacts. Appendix D3 provides a comparison of leachate indicator concentrations for the background well and leachate wells. The following is notable:

- Monitoring well MW21-01 has leachate indicator concentrations lower than leachate well MW10-IIR-2013 for most parameters, except for TSS.
- Monitoring wells MW3-I, MW3-II, MW4-I, MW4-II, MW6-II, MW12-II, MW12-III, and MW21-03 have leachate indicator concentrations that are similar or higher than leachate well MW10-IIR-2013 and MW21-01 for most parameters except for dissolved manganese when compared to MW21-01. Monitoring well MW3-II had significantly higher concentrations for dissolved iron when compared to summer results from MW10-IIR-2013 and MW21-01.
- Monitoring wells MW18-01, MW18-02 which are located along or near the property boundary downgradient of the Landfill, and MW18-03 near the property boundary cross gradient of the Landfill, have leachate indicator concentrations that are generally lower than the leachate wells, indicating that the groundwater leaving the property is not impacted by the Landfill. The exception to this was dissolved chloride from MW18-01, dissolved sulphate from MW18-01 and MW18-03 and pH in MW18-01, MW18-02 and MW18-03, which was higher than leachate well MW10-IIR-2013 and MW21-01. When compared with MW21-01, MW18-01 had a higher conductivity.

In general, groundwater quality within the Landfill is impacted from the waste fill. However, as it was mentioned in the 2022 annual report (KP, 2022), results from 2023 also show that natural attenuation is occurring sufficiently to deter offsite migration of impacted groundwater, based on water quality from downgradient wells. Figures 3.1 to 3.3 represent a change in concentration for a select parameters throughout the years.



MUNICIPALITY OF POWASSAN

MUNICIPALITY OF POWASSAN LANDFILL

LEACHATE DOC CONCENTRATIONS COMPARED TO BACKGROUND WELL

0

REV

14FEB'24

ISSUED WITH REPORT

DESCRIPTION

MSA

PREP'D

SRA

RWW'D

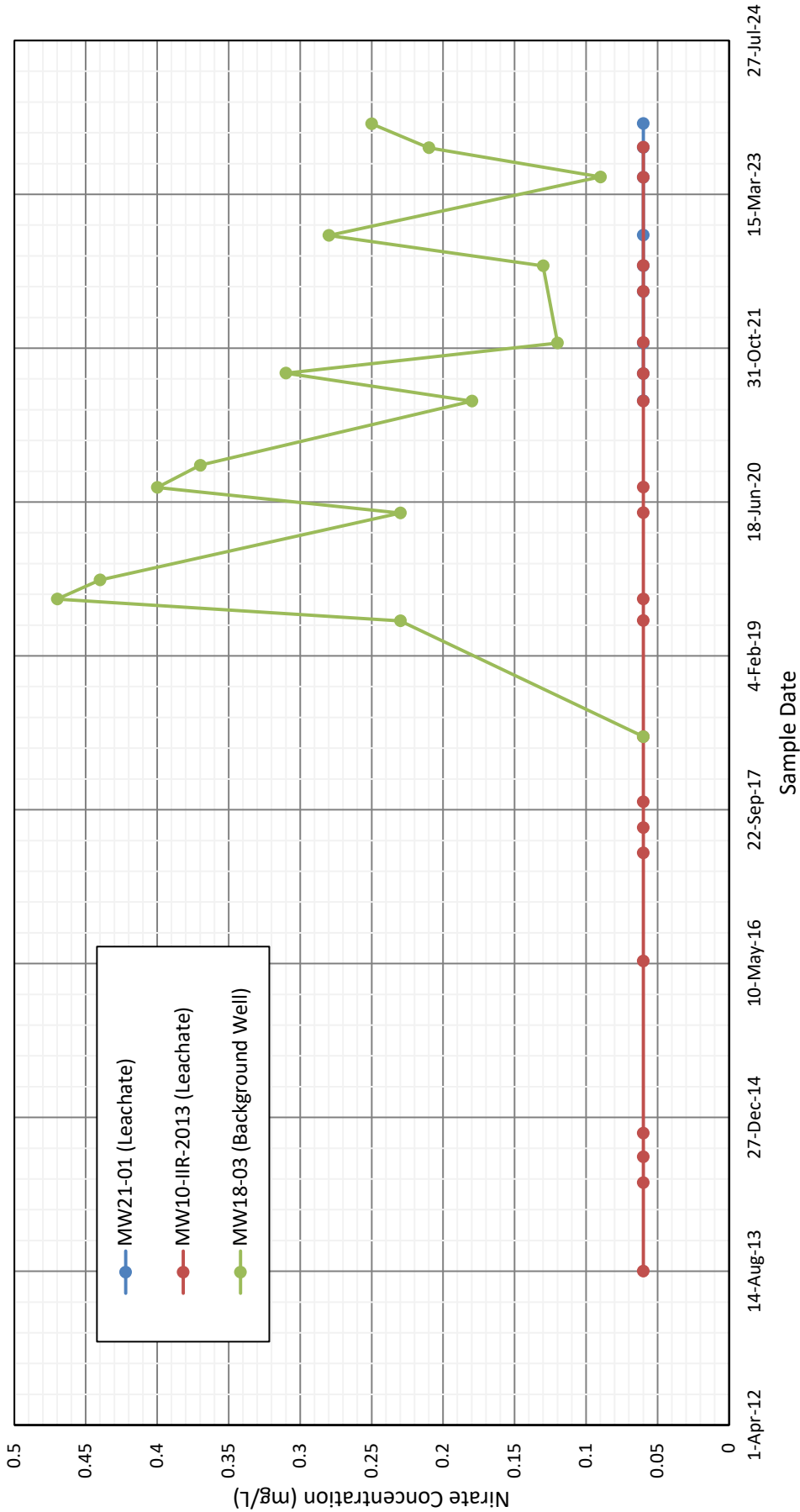
 Knight Piésold
CONSULTING

P/A NO.
NB102-00390/14

REF. NO.
2

FIGURE 3.1

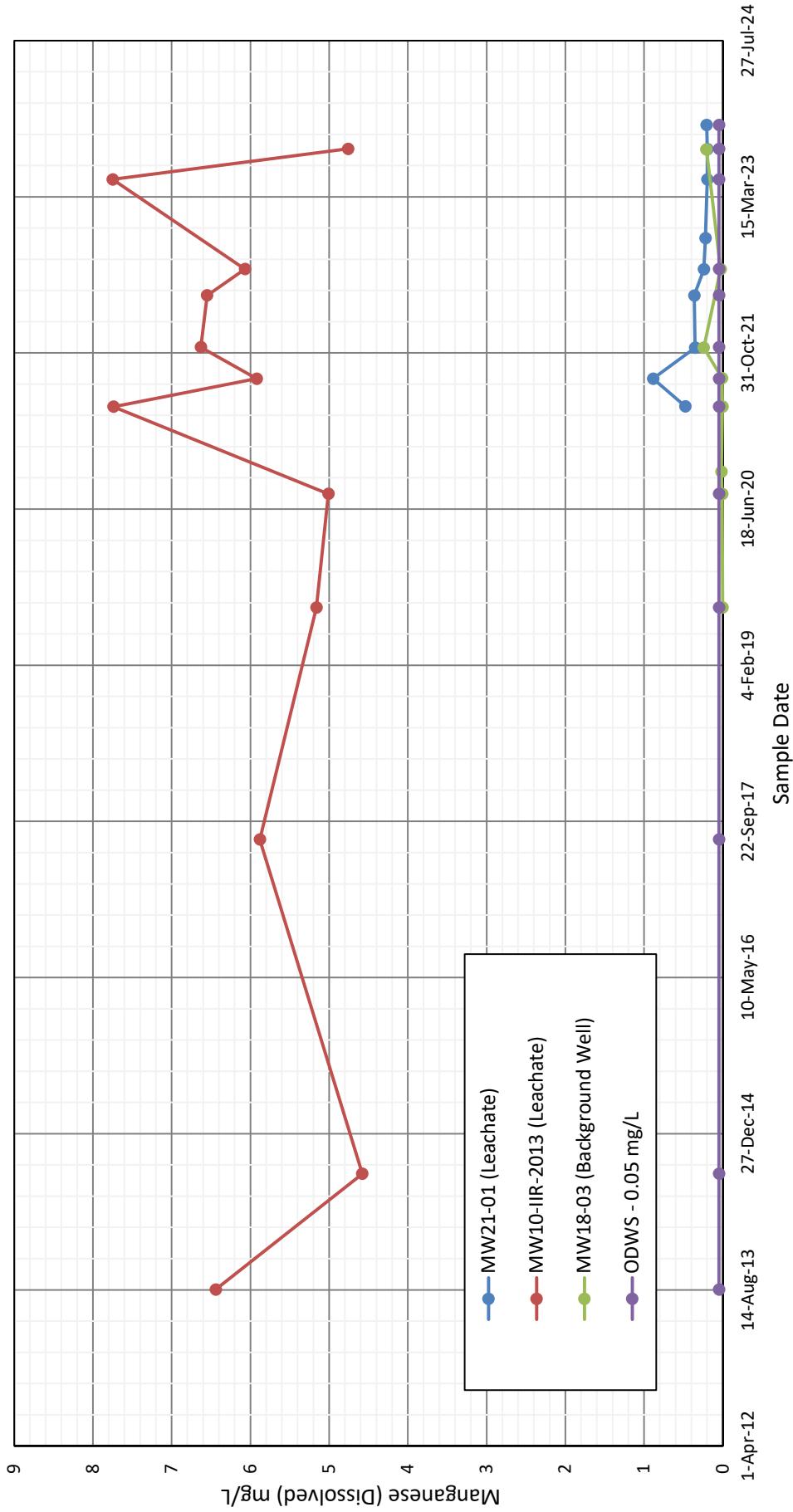
REV
0



NOTES:

1. NITRATE ODWS VALUE IS 10 mg/L. THE ODWS IS NOT SHOWN ON THIS FIGURE.

MUNICIPLAITY OF POWASSAN	
MUNICIPALITY OF POWASSAN LANDFILL	
LEACHATE NITRATE CONCENTRATIONS COMPARED TO BACKGROUND WELL	
 Knight Piésold CONSULTING	P/A NO. NB/102-00390/14
	REF. NO. 2
FIGURE 3.2	
REV 0	



				 Knight Piésold CONSULTING				P/A NO. NB102-00390/14		REF. NO. 2			
				FIGURE 3.3									
				REV 0									

3.5.1 LEACHATE CHARACTERIZATION

Leachate indicator parameters were assessed through the review of water quality results from the leachate wells MW10-IIR-2013, and MW21-01 against background results (MW18-03). A direct comparison of water quality results from the leachate indicator wells to the background well can be seen in Table D3.1.

A list of select leachate indicator parameters can be seen below with the concentration difference at MW10-IIR-2013 compared to background monitoring well results at MW18-03:

- Conductivity - 189 to 931 $\mu\text{S}/\text{cm}$ above background well concentrations
- Total Dissolved Solids – 106 to 520 mg/L above background well concentrations
- Dissolved Chloride - 10 to 63 mg/L above background well concentrations
- Dissolved Boron - 0.025 to 0.138 mg/L above background well concentrations
- Dissolved Calcium – 38.3 to 106.5 mg/L above background well concentrations
- Dissolved Iron – 10.7 to 0.001 mg/L above background well concentrations
- Dissolved Manganese – 4.551 to 0.011 mg/L above background well concentrations
- Dissolved Organic Carbon – 3 to 15 mg/L above background well concentrations

Elevated concentrations of dissolved iron and dissolved organic carbon can be seen from MW10-IIR-2013 when compared against to the background well results. MW10-IIR-2013 had elevated TDS concentrations compared to both MW18-03 and MW21-01.

Additional parameters were collected and tested at the two leachate wells for biochemical oxygen demand (BOD) and total suspended solids (TSS). MW10-IIR-2013 had higher BOD results when compared to MW21-01 with a maximum result of 10 mg/L. MW21-01 had greater TSS results when compared to MW10-IIR-2013 ranging from 6930 to 2400 mg/L.

3.6 RESIDENTIAL WATER QUALITY

The residential properties are located upgradient of the Landfill. Sample Res-352 was collected from an outdoor tap for the summer and fall sampling event. Sample Res-287 was collected from an outdoor tap for each sampling event. This was the first time Res-287 was sampled since 2019.

The following is a summary of the residential water quality results:

- Elevated levels of hardness, TDS, dissolved chloride, nitrate, dissolved manganese, and dissolved organic carbon were reported from the Res-352 water sample when compared to the background well sample (MW18-03) for the summer and fall sampling events
- Elevated levels of nitrate were reported from the RES-287 water sample when compared to the background well water sample (MW18-03) for all three sampling events
- All concentrations were well below the respective ODWS values apart from in-situ temperature, hardness, TDS, dissolved manganese, and dissolved organic carbon which exceeded the ODWS values

No parameters exceeded the RUG human-health parameters except for Res-287 with the exceedance of RUG for nitrate concentration in spring 2023. Exceedances for ODWS AO/OG guidelines from Res-352 and Res-287 in 2023 were noted in Appendix D1. The exceedances include in-situ temperature, hardness, TDS, manganese, and DOC.

Based on the 2023 water quality results, water quality from Res-352 and Res-287 is not impacted by the Landfill, and there were no exceedances of ODWS for human-health parameters.

3.7 GROUNDWATER QA/QC RESULTS

The data provided by QA/QC samples helps to determine the accuracy and precision of the sample data and whether cross-contamination has occurred. The following QA/QC procedures were followed for the 2023 monitoring program:

- All sampling activities, environmental conditions and any unusual conditions were documented on field data sheets
- Gloves and other protective equipment were worn at all times during sampling
- QA/QC duplicate samples were collected and analysed (approximately 10% of the total number of samples collected)

Relative percent difference (RPD) calculations between the original and duplicate samples were used to determine how close in concentration the samples were for each parameter tested. The results are presented in Appendix D4. As presented, KP flags RPD values of 20% or greater (where the concentrations are greater than 5 times the reporting limit (RL)) and investigates possible causes for the difference. It should be noted that in many cases, an RPD of greater than 20% is due to a very small difference in absolute terms (i.e., the difference between 0.0005 mg/L and 0.0003 mg/L is 50%). These small variations in absolute values could be the result of natural variation in the water and should not be considered a quality control concern for the sampling or the analysis (see results in Appendix D4 for RPD values).

There were several instances (32), throughout the three sampling events (6 duplicate samples), where the RPDs of 20% or higher were found. The instances occurred for chemical oxygen demand, hardness as CaCO₃, nitrate (as N), phosphorus (metal), TDS, dissolved barium, dissolved beryllium, dissolved boron, dissolved cadmium, dissolved calcium, dissolved chromium, dissolved copper, dissolved iron, dissolved magnesium, dissolved manganese, dissolved mercury, dissolved phosphorus, dissolved potassium, dissolved sodium and dissolved zinc.

Despite there being several instances when the RPD was greater than 20%, the absolute difference between concentrations was generally small. The small difference indicates the water quality results are accurate and reliable. However, when comparing RPD for the monitoring well MW21-01 spring sample, the absolute difference between the concentrations throughout most parameters tested, and the concentrations of the duplicate sample (MW21-01) were higher than those of MW21-01. Taking into consideration the RPD was high for this sample, the absolute differences between most of the concentrations were small apart from hardness, phosphorus, barium, boron, calcium, magnesium, and manganese.

4.0 SURFACE WATER SAMPLING INFORMATION

4.1 SAMPLING PROTOCOLS

The following procedures were followed for the collection of surface water samples:

- Samples were collected in labeled; clean bottles provided by the laboratory. When a direct transfer from the surface water feature into laboratory-supplied container was not possible, an un-preserved laboratory bottle was used to transfer the sample into the appropriate sample containers. This transfer bottle was used at one location, then discarded.
- In-situ surface water quality data were measured at each surface water location using a Horiba U-52 multi-parameter meter. The instrument was calibrated following the manufacturer's instructions prior to use. All results were recorded on field data sheets. The instrument was also calibrated by the rental company prior to use.
- Samples were kept cool with ice bags and ice packs.
- New nitrile gloves were used during sampling at each surface sampling location.
- Pertinent sampling information was recorded on a COC form, and a copy was delivered with the samples to SGS.

4.2 APPLICABLE STANDARDS

The surface water sampling results were compared to the Provincial Water Quality Objectives (PWQO; MOEE, 1999).

4.3 SURFACE WATER QUALITY RESULTS

The surface water analytical results are found in Appendix E1. As previously mentioned, surface water sampling location SW3 (McGillivray Creek) is located upstream of the Landfill and downstream of a railway crossing is considered representative of background or natural surface water quality. The water quality results from this location indicate that surface water is naturally elevated in total iron, and total phosphorus above PWQO limits for the summer and fall seasons.

Surface water sample locations SW-2, SW-3 and SW-4 had total iron concentrations, and total phosphorus concentrations above the PWQO guidelines in the summer and fall with the exception of SW-4 which had concentrations above PWQO for all three sampling events. SW-2, SW-3 and SW-4 also had in-situ pH out of the range of 6.5 to 8.5 in the spring and SW-3 out range for spring and summer. When SW-2 and SW-4 are compared against the background surface water location SW-3, the in-situ pH values were similar for the spring and fall season. However, the summer, SW-2 and SW-4 have no similarities to SW-3.

Based on a comparison of upstream (SW-3) and downstream (SW-2 and SW-4) surface water quality, the Landfill is not impacting surface water as the results measured from SW-2 and SW-4 are slightly lower than the results from SW-3.

4.4 QA/QC RESULTS

The following QA/QC procedures were followed for the 2023 surface water monitoring program:

- All sampling activities, environmental conditions and any unusual conditions were documented on field data sheets
- All equipment was operated in accordance with the manufacturer's instructions
- Gloves and other protective equipment were worn at all times during sampling
- QA/QC duplicate samples were collected and analysed (approximately 10% of the total number of samples collected (1 in 10 samples))

QA/QC results are included in Appendix E2. There were several instances (13), throughout the three sampling events (3 duplicate samples), where the RPDs of 20% or higher were found. The instances occurred for chemical oxygen demand, TDS, TSS, total cadmium, total chromium, total copper, total lead and total zinc.

These results with RPDs greater than 20% or greater (where the concentrations are greater than 5 times the reporting limit (RL)) are most likely a result of natural variability and human error. The water quality results should be considered reliable as the differences in concentrations are considered to be small in absolute terms.

5.0 METHANE SAMPLING INFORMATION

5.1 GENERAL

Methane concentrations were measured in two monitoring wells (MMW1 and MMW2) during the three sampling events. The appropriate MOE Guideline (D-4; MOECC, 2016c) and Procedure (D-4-1; MOECC, 2016d) indicates that:

“A mixture of 5% to 15% methane in air will explode if ignited. A concentration of 5% methane in air is the Lower Explosive Limit (LEL) and concentrations equal to or greater than the LEL are considered hazardous. Hazardous conditions are not considered to be present on a landfill, or on the property near a landfill if the concentration of methane in the waste is determined to be less than 10% LEL.”

5.2 ANALYTICAL PROCEDURES AND RESULTS

As per the Powassan Landfill Certificate of Approval (Appendix A) methane readings were measured from methane monitoring wells MMW1 and MMW2. A Landtec GEM2000 was used to measure gaseous concentrations of oxygen and methane upon the initial opening of the monitoring well.

Methane measurements are summarized in Table 5.1. Methane concentrations were measured to be low to not present in 2023, with the exception of the Spring sampling event, in which the LEL was 1.6% in MMW2.

TABLE 3.1
MUNICIPALITY OF POWASSAN
MUNICIPALITY OF POWASSAN LANDFILL
2023 ANNUAL LANDFILL WATER QUALITY MONITORING REPORT
FIELD METHANE MEASUREMENTS

[illegible]

NOTES:
1. A LANDTEC GEM 2000 WAS USED FOR FIELD METHANE MEASUREMENTS.

1. A LANDTIC GEM 2000 WAS USED FOR
2. "-" INDICATES DATA NOT AVAILABLE.

2. "INDICATES DATA NOT AVAILABLE."

6.0 DISCUSSION OF FINDINGS

6.1 LEACHATE CHARACTERIZATION

As mentioned in Section 2.5, leachate indicator parameters (characteristic of Landfill impacts) are assessed through a review of the water quality results from monitoring wells MW10-IIR-2013 and MW21-01, which are located within the waste disposal area of the Landfill. As shown in Appendix D3, when compared to background monitoring well results from MW18-03, leachate well MW10-IIR-2013 had leachate indicator concentrations above background values. These leachate indicators included total suspended solids (TSS), total dissolved solid (TDS), conductivity, dissolved chloride, dissolved boron, dissolved iron, dissolved manganese, and organic carbon (dissolved).

6.2 LANDFILL DERIVED WATER QUALITY IMPACTS

Landfill impacts are determined through a review of leachate indicators within the groundwater and surface water analytical results (described in Section 2.5). The following is a summary of the observed impacts.

Landfill derived parameters are measured in monitoring wells south and southwest of the Landfilled area. In particular, impacted groundwater is suspected to be present in downgradient monitoring wells MW6-II, MW7-I, and within the Landfill at monitoring wells MW3-I, MW3-II, MW4-I, MW4-II, MW12-II, MW12-III, and MW21-03.

There are no Landfill related impacts to residential well Res-352 and Res-287 sampled east and upgradient of the Landfill. The water quality results for the residential wells (Res-352 and Res-287) did indicate slightly elevated hardness above ODWS and elevated dissolved chloride and DOC above ODWS/RUG for Res-352.

The Landfill is not impacting surface water quality as leachate indicator parameters are not evident in samples from downstream locations SW-2 and SW-4.

7.0 CONCLUSIONS

The following general conclusions can be made regarding the water quality based on the 2023 results.

Groundwater:

- Background groundwater quality was found to be generally elevated in: in-situ pH, hardness, TDS and dissolved manganese.
- The groundwater quality at the Landfill was found to be within ODWS guidelines for health-related parameters.
- Health-related RUG exceedances were noted for nitrate (Res-287). This sample location is located Southeast of the Landfill (Upstream).
- Most monitoring wells had exceedances of ODWS non-health related parameters. Non-health parameter exceedances consisted of in situ pH (multiple), in-situ temperature (multiple), alkalinity (multiple), hardness (multiple), laboratory pH (multiple), TDS (multiple), dissolved chloride (MW21-03), dissolved manganese (multiple), and DOC (multiple).
- Elevated levels of hardness, pH, TDS, nitrate, dissolved manganese and DOC were noted in residential well Res-352, when compared to the background well (MW18-03). These concentrations were above the respective ODWS values.
- In situ Methane measurements from wells MMW1 and MMW2 were below the 5% limit in 2023.
- The 2023 Groundwater QA/QC results showed several instances where the RPD was greater than 20%, however, the absolute difference between the concentrations was generally small and insignificant. This small difference indicates the water quality results are accurate and reliable.
- There was a large absolute difference between concentrations for the MW21-01 and the duplicate spring sample making the results inaccurate and not reliable.

Surface Water:

- Based on a comparison of upstream (background) and downstream surface water quality, the Landfill is not impacting surface water.
- The 2023 surface water QA/QC results had 13 RPD values greater than 20%, however the absolute difference between the concentrations was generally small and insignificant. This small difference indicates the water quality results are accurate and reliable.

8.0 RECOMMENDATIONS

The following is recommended based on the 2023 monitoring program results:

- Continue sampling and testing groundwater and surface water three times per year so that trends may continue to be monitored.
- Laboratory results for residential well Res-352 indicated slightly elevated levels of dissolved manganese, and DOC exceeding ODWS guidelines. Future results should be closely monitored to confirm that the parameters remain below the ODWS guidelines. The residential well is upgradient of the Landfill.
- Laboratory results for residential well Res-287 indicated elevated levels of nitrate exceeding RUG. Future results should be closely monitored to confirm that the parameters remain below the ODWS and RUG. The residential well is upgradient of the Landfill.
- Closely monitor the downgradient and background well for any leachate characterization.
- Clearing of brush and long grass by the Municipality near the monitoring wells should be completed prior to each sampling event to ensure easy and safe access to the wells and allow better visibility to avoid bears, sharp objects and any wildlife or potential hazards that may be in the immediate area.
- Several monitoring wells consistently go dry during purging and often don't recover sufficiently within 24 hours to collect a full sample. In these instances, it may be required to allow an additional day for the groundwater level to recover. Alternatively, it may be possible to collect samples using disposable bailers which require less water.

9.0 REFERENCES

- Integrated Earth & Environmental Limited, 1998. Hydrogeological Monitoring Report, Himsworth South Landfill Site, Powassan, Ontario. October 6.
- Knight Piésold Ltd. (KP), 2022. Municipality of Powassan Landfill - 2022 Annual Landfill Water Quality Monitoring Report. January 31. North Bay, Ontario. Ref. No. NB102-309/14-2, Rev 0.
- Ministry of Environment (MOE), 2001. *Amendment to Provisional Certificate of Approval. Number A521701.* June 23.
- Ministry of the Environment (MOE), 2012. *Landfill Standards: A Guideline to the Regulatory and Approval Requirements for New or Expanding Landfilling Sites.* PIBS 7792e.
- Ministry of the Environment and Climate Change (MOECC), 2016a. *Guideline B-7: Incorporation of the Reasonable Use Concept in MOEE Groundwater Management.* Retrieved from: <https://www.ontario.ca/page/guideline-b-7-incorporation-reasonable-use-concept-moe-groundwater-management> (assessed January 12, 2017).
- Ministry of the Environment and Climate Change (MOECC), 2016b. *B-7-1 Determination of Contaminant Limits and Attenuation Zones.* Retrieved from: <https://www.ontario.ca/page/b-7-1-determination-contaminant-limits-and-attenuation-zones> (assessed January 12, 2017).
- Ministry of the Environment and Climate Change (MOECC), 2016c. *O.Reg 347: D-4 Land Use On or Near Landfills and Dumps.* Retrieved from: <https://www.ontario.ca/page/d-4-land-use-or-near-landfills-and-dumps> (assessed January 12, 2017).
- Ministry of the Environment and Climate Change (MOECC), 2016d. *O.Reg. 347: D-4-1 Assessing Methane Hazards from Landfill Sites.* Retrieved from: <https://www.ontario.ca/page/d-4-1-assessing-methane-hazards-landfill-sites> (updated May 18, 2016).
- Ministry of the Environment and Energy (MOEE), 1999. *Water Management: Policies, Guidelines, Provincial Water Quality Objectives of the Ministry of the Environment and Energy, Province of Ontario.* (Reprinted from 1994). ISBN 0-7778-8473-9 rev.
- Ministry of Environment Conservation and Parks (MECP), 2020. *Ontario Drinking Water Quality Standards, 2018.* Under the Safe Water Drinking Act (2002). O.Reg. 169/03.
- The Municipality of Powassan (MOP), 2024. *Waste Management – Waste Collection, 2024.* Retrieved from: <https://www.powassan.net/content/municipal-services/landfill-site-garbage-pickup> (accessed January 18, 2024).

10.0 CERTIFICATION

This report was prepared and reviewed by the undersigned.

Prepared:



Mackenzie Aiken, B.Sc.
Junior Scientist



Reviewed:

Steven R. Aiken, P.Eng..
Manager, Environmental Services

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Approval that this document adheres to the Knight Piésold Quality System:



APPENDIX A

Certificates of Approval

(Pages A-1 to A-16)



Ministry
of the
Environment

Ministère
de
l'Environnement

AMENDMENT TO PROVISIONAL CERTIFICATE OF APPROVAL
WASTE DISPOSAL SITE
NUMBER A521701
Notice No. 1

Corporation of the Municipality of Powassan
70 King Street
Powassan, Ontario
P0H 1Z0

Site Location: 40 Proudfoot Road
Himsworth South Township
District of Parry Sound

You are hereby notified that I have amended Provisional Certificate of Approval No. A521701 issued on August 9, 1971 for the use and operation of a 30 hectare landfill site for receipt and disposal of domestic and commercial wastes, as follows:

to permit the establishment and operation of a Household Hazardous Waste Depot, Waste Disposal Site (Transfer)

for the receipt and transfer of household hazardous waste generated in the geographical area of the District of Parry Sound.

Waste classes 111-114 inclusive, 121-123 inclusive, 131-135 inclusive, 141-150 inclusive, 211-213 inclusive, 221, 222, 231-233 inclusive, 241, 242, 251-254 inclusive, 261-270 inclusive, 281, 282, and 311, as defined in the "New Ontario Waste Classes" dated January 1986, or the most recent revision.

Note: Use of the site for any other type of waste is not approved under this Certificate, and requires obtaining a separate approval amending this Certificate.

For the purpose of this Provisional Certificate of Approval and the terms and conditions specified below, the following definitions apply:

A. DEFINITIONS

- (a) "Act" means the Environmental Protection Act, R.S.O. 1990, C. E-19 as amended;
- (b) "Director" means a Director of the Environmental Assessment and Approvals Branch, Ontario Ministry of the Environment;
- (c) "District Manager" means the District Manager, Timmins District, Ontario Ministry of the Environment;
- (d) "District Office" means the Timmins/North Bay District Office - North Bay Area, Northern Region, Ontario Ministry of the Environment;
- (e) "Ministry" means the Ontario Ministry of the Environment;
- (f) "O. Reg. 347" means Ontario Regulation 347, R.R.O. 1990, as amended;
- (g) "Site" means the Household Hazardous Waste Depot being approved under this Provisional Certificate of Approval amendment, located at 40 Proudfoot Road, Part Lots 15 & 16, Concession 7, Himsworth South Township, District of Parry Sound, Ontario; and
- (h) "Municipality" or "Owner" means the Corporation of the Municipality of Powassan and its employees.

You are hereby notified that this Certificate of Approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

B. GENERAL

2. Except as otherwise provided by these Conditions, the Site shall be designed, developed, used, maintained and operated and all facilities, equipment and fixtures shall be built and installed in accordance with the application for this Provisional Certificate of Approval, dated February 21, 2001, and the plans and specifications listed in Schedule "A".

3. Where there is a conflict between a provision of any document referred to in Condition 2 and the Conditions of this Provisional Certificate of Approval, the Conditions in this Provisional Certificate of Approval shall take precedence.

4. Requirements specified in this Provisional Certificate of Approval are the requirements under the Act. Issuance of this Provisional Certificate of Approval in no way abrogates the Municipality's legal obligations to take all reasonable steps to avoid violating other applicable provisions of the Act and other legislation and regulations and to obtain any other approvals required by legislation.

5. Requirements of this Provisional Certificate of Approval are severable. If any requirement of this Provisional Certificate of Approval, or the application of any requirement of this Provisional Certificate of Approval to any circumstance, is held invalid, the application of such requirement to other circumstances and the remainder of this Provisional Certificate of Approval shall not be affected thereby.

6. The Municipality must ensure compliance with all terms and Conditions of this Provisional Certificate of Approval. Any non-compliance constitutes a violation of the Act and its grounds for enforcement.

7. The Municipality shall ensure that all correspondence made pursuant to this Provisional Certificate of Approval reference this Provisional Certificate of Approval number.

8. The Municipality shall notify the Director in writing of any of the following changes within thirty (30) days of the change occurring:

(a) i. change of Owner or operator of the Site or both;

ii. change of address or address of the new Owner;

iii. change of partners where the Owner or operator is or at any time becomes a partnership, and a copy of the most recent declaration filed under the Business Names Act, 1991 shall be included in the notification to the Director;

iv. any change of name of the corporation where the Owner or operator is or at any time becomes a corporation, and a copy of the most current "Initial Notice or Notice of Change" (form 1 or 2 of O. Reg. 182, Chapter C-39, R.R.O. 1990 as amended from time to time), filed under the Corporations Information Act shall be included in the notification to the Director;

v. change in directors or officers of the corporation where the Owner or operator is or at any time becomes a corporation, and a copy of the most current "Initial Notice or Notice of Change" as referred to in 8(a)(iv), supra; and,

(b) In the event of any change in ownership of the Site, the Owner shall notify in writing the succeeding owner of the existence of this Provisional Certificate of Approval, and a copy of such notice shall be forwarded to the Director.

9. The Municipality shall allow Ministry personnel, or a Ministry authorized representative(s), upon presentation of credentials, to:

(a) carry out any and all inspections authorized by Section 156, 157 or 158 of the Act, Section 15, 16, or 17 of the Ontario Water Resources Act, R.S.O. 1990, or Section 19 or 20 of the Pesticides Act, R.S.O. 1990, as amended from time to time, of any place to which this Provisional Certificate of Approval relates; and,

without restricting the generality of the foregoing to:

- (b) i. enter upon the premises where the records required by the Conditions of this Provisional Certificate of Approval are kept;
- ii. have access to and copy, at any reasonable time, any records required by the Conditions of this Provisional Certificate of Approval;
- iii. inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations required by the Conditions of this Provisional Certificate of Approval; and,
- iv. sample and monitor at reasonable times for the purposes of assuring compliance with the Conditions of this Provisional Certificate of Approval.

10. (a) The Municipality shall, forthwith upon request of the Director, District Manager, or Provincial Officer (as defined in the Act), furnish any information requested by such persons with respect to compliance with this Provisional Certificate of Approval, including but not limited to, any records required to be kept under this Provisional Certificate of Approval; and,

(b) In the event the Municipality provides the Ministry with information, records, documentation or notification in accordance with this Provisional Certificate of Approval (for the purposes of this Condition referred to as "Information"),

- i. the receipt of Information by the Ministry;
- ii. the acceptance by the Ministry of the Information's completeness or accuracy; or
- iii. the failure of the Ministry to prosecute the Municipality, or to require the Municipality to take any action, under this Provisional Certificate of Approval or any statute or regulation in relation to the Information shall not be construed as an approval, excuse or justification by the Ministry of any act or omission of the Municipality relating to the Information, amounting to non-compliance with this Provisional Certificate of Approval or any statute or regulation.

11. Any information relating to this Provisional Certificate of Approval and contained in Ministry files may be made available to the public in accordance with the provisions of the Freedom of Information and Protection of Privacy Act, R.S.O. 1990, C. F-31.

12. All records and monitoring data required by the Conditions of this Certificate of Approval must be kept on the Site for a minimum period of two (2) years.

C. SITE OPERATIONS

13. The operation of this Site is limited to the receipt and transfer of household hazardous waste consisting of waste classes 111-114 inclusive, 121-123 inclusive, 131-135 inclusive, 141-150 inclusive, 211-213 inclusive, 221, 222, 231-233 inclusive, 241, 242, 251-254 inclusive, 261-270 inclusive, 281, 282, and 311, as defined in the "New Ontario Waste Classes" dated January 1986, or the most recent revision.

14. (a) The Site may only receive and transfer waste during the hours of 8:00 a.m. to 4:00 p.m., Monday to Saturday or as agreed upon, in writing, by the District Manager.

(b) No waste shall be stored at the Site for longer than 3 months without written consent of the District Manager.

15. The total amount of hazardous waste stored on-site, at any time, shall not exceed 4,000 litres or equivalent (4 cubic metres).

16. The Site shall be maintained in a secure manner, such that unauthorized persons cannot enter the Site.

17. Incoming waste shall be inspected by trained personnel, prior to being accepted at the Site, to ensure that the Site is approved to accept that type of waste.

18. No radioactive wastes shall be accepted at this Site; and,

(a) No PCBs (243) shall be accepted at this Site. Oil and oil-based paints which have been manufactured prior to 1972; or whose manufacturing date cannot be determined, may contain PCBs and shall be handled in the manner prescribed;

(i) The oil and oil-based paints shall not be mixed (bulked) with other paints prior to testing. Paints which are lab-packed are not considered to be mixed under this Certificate;

(ii) The oil and oil-based paints shall be tested by a certified laboratory for PCB content and shall be handled in the manner outlined in subcondition 18(a)(iii) if found to contain PCBs;

(iii) If the oil and oil-based paints are found to have PCBs at or above levels identified in subcondition 18(a)(iv), it shall be forthwith reported to the District Manager and shall be managed in accordance with Regulation 362/92 and stored or removed from the Site to an approved PCB storage Site, in accordance with written instructions from the District Manager;

(iv) The oil and oil-based paints shall not be distributed for reuse if they have any measurable PCB content. The oil and oil-based paint is considered to be a PCB waste, if measured levels are equal to or greater than 50 parts per million;

(b) Except as specified in subcondition 18(a)(iv), paints collected at the Site may be returned or sold to the general public for reuse provided all transactions are recorded by invoice. Information on the type and volume of paint returned to the public through this Site shall be recorded in the report specified in Condition 33; and,

(c) Scavenging of waste at this Site shall not be permitted except in accordance with Condition 18 (b).

19. All storage of liquid wastes shall be in accordance with this Ministry's publication "Guidelines of Environmental Protection Measures at Chemical Storage Facilities" dated October 1978.

20. Storage containers shall be clearly labeled indicating the type and nature of the hazardous waste stored as required by regulation. All points of access to the Site shall be posted to warn that the area contains hazardous materials. Smoking restrictions shall be adhered to and non-smoking signs posted as required by regulation.

21. Hazardous wastes that are received and stored on Site are expected to be in amounts which can be safely handled on the Site. In the event that larger amounts are received than anticipated, the Township shall have extra drums and lab-packed containers available on the premises for the storage of the additional waste collected. When Site capacity is reached, arrangements for the removal of waste from the Site shall be made as soon as possible, but in any event, within five (5) working days of receipt of the waste(s). Records shall be maintained each time the capacity is exceeded and maintained on-site in the report specified in Condition 34; and

22. Where applicable, all wastewater must be discharged in accordance with the Ontario Water Resources Act, R.S.O. 1990 and any Municipal Sewer Use By-Law(s).

23. All wastes generated at the Site must be managed and disposed in accordance with the Act and O. Reg. 347.

24. (a) The Municipality shall ensure that the Site is not operated unless all air approvals under Section 9 of the Act, where applicable, have been obtained.

(b) At no time is burning or incineration of materials at the Site permitted under this Provisional Certificate of Approval except in accordance with the Site's landfill operations manual.

(c) At no time is burning or incineration of material permitted within 30 metres of the Hazardous Waste Depot.

25. The Municipality must routinely conduct a visual inspection of the following areas to ensure the Site is secure and that no off-site impacts such as vermin, vectors, odour, dust, and litter result from the operation of the facility:

(a) loading/unloading area(s); and,

(b) transfer area(s), including storage area(s).

26. (a) Prior to operating the Site, the Municipality shall prepare an operations manual for use by Site personnel. The operations manual shall contain the following;

- (i) outline the responsibilities of Site personnel;
- (ii) personnel training protocols;
- (iii) receiving, screening and manifesting procedures;
- (iv) unloading, handling and storage procedures;
- (v) site inspections, spill, upset and leakage recording procedures;
- (vi) procedures for recording and responding to public complaints; and
- (vii) a generic outline of the annual report described under Condition 34;

(b) A copy of this operations manual shall be kept at the Site, must be accessible to personnel at all times and must be updated as required.

(c) Prior to operating at the Site, the operations manual shall be submitted to the District Manager for review and approval.

27. All operators of the Site shall be trained with respect to the following areas:

- (a) terms, conditions and operating requirements of this Certificate;
- (b) operation and management of the facility;
- (c) an outline of the responsibilities of Site personnel;
- (d) personnel training protocols;
- (e) any environmental concerns pertaining to the wastes to be transferred;
- (f) proper receiving and recording procedures (including recording procedures of wastes which are refused at the Site);
- (g) waste paint identification, analysis information and separating procedures;
- (h) proper storage, handling, sorting and shipping procedures;
- (i) occupational health and safety concerns pertaining to the wastes;
- (j) relevant waste management legislation, and regulations, including the Act, and O. Reg. 347; and,
- (k) procedures to be followed in the event of an emergency situation.

D. CONTINGENCY PLAN

28. By July 1, 2001, the Municipality shall have in place a Spill Contingency and Emergency Response Plan for the operation of the Transfer Site. The Plan shall include, but is not necessarily limited to:

- (a) emergency response procedures to be undertaken in the event of a spill or process upset, including specific clean up methods for each individual waste;
- (b) a list of contingency equipment and spill clean up materials, including names and telephone numbers of waste management companies available for emergency response; and,
- (c) a notification protocol, with names and telephone numbers of persons to be contacted, including Municipality personnel, the Ministry of the Environment District Office and the Spills Action Centre, the local Fire and Police Departments, the local Municipality, the local Medical Officer of Health, and the Ministry of Labour.

29. A copy of the Spill Contingency and Emergency Response Plan shall be kept on the Site at all times, in a central location available to all staff, and a copy shall be submitted to the District Manager, the local Municipality and the Fire Department by July 1, 2001.

30. (a) The Municipality shall ensure that the contingency equipment and materials outlined in the Spill Contingency and Emergency Response Plan are immediately available on the Site at all times, in a good state of repair, and fully operational; and,

(b) The Municipality shall ensure that all operating personnel are fully trained in the use, of the contingency equipment and related materials, and in the procedures to be employed in the event of an emergency.

31. The Municipality shall immediately take all measures necessary to contain and clean up any spill or leak which may result from the operation at this Site.

32. All spills and upsets shall be immediately reported to the Ministry's Spills Action Centre at (416) 325-3000 or 1-800-268-6060 and shall be recorded in the log book as to the nature of the spill or upset, and the action taken for clean-up, correction and prevention of future occurrences.

E. RECORD KEEPING

33. The Municipality shall maintain, at the Site, a log book which records on each day of operation, the following information:

- (a) date of record;
- (b) types, quantities and source of waste received;
- (c) quantities of waste stored on the Site;
- (d) quantities and destination of waste shipped from the Site;
- (e) paints collected at the Site that have been returned or sold to the general public for reuse and the volume of paint returned to the public through this Site;
- (f) results of the inspection required under Condition 25, including the name and signature of the person conducting the inspection; and,
- (g) any spills or upsets as noted in Condition 32.

F. ANNUAL REPORT

34. By March 31, 2002, and on an annual basis thereafter, the Municipality shall retain on-site an annual report covering the previous calendar year. Each report shall include, as a minimum, the following information:

- (a) a summary of the type and quantity of all incoming and outgoing wastes;
- (b) any environmental and operational problems, that could negatively impact the environment, encountered during the operation of the Site and during the facility inspections and any mitigative actions taken;
- (c) a statement as to compliance with all Conditions of this Provisional Certificate of Approval and with the inspection and reporting requirements of the Conditions herein; and,
- (d) any recommendations to minimize environmental impacts from the operation of the Site and to improve Site operations and monitoring programs in this regard.

G. CLOSURE PLAN

35. (a) The Municipality must submit, for approval by the Director, a written Closure Plan for the Site four (4) months prior to closure of the Site. This plan must include, as a minimum, a description of the work that will be done to facilitate closure of the Site and a schedule for completion of that work; and,

(b) Within ten (10) days after closure of the Site, the Municipality must notify the Director, in writing, that the Site is closed and that the Site Closure Plan has been implemented.

SCHEDULE "A"

1. Application for a Provisional Certificate of Approval for a Waste Disposal Site, dated February 21, 2001 and signed by J. Gauthier, Municipality of Powassan.
2. Letter dated April 23, 2001 from J. Butchart, MOE, to B. Hachkowski, Municipality, requesting additional information.
3. Facsimile dated April 27, 2001 from B. Hachkowski, Municipality, to J. Butchart, MOE, providing supporting documentation.

The reasons for this amendment to the Certificate of Approval are as follows:

1. The reason for the definitions is to simplify the wording of the subsequent conditions and to define the specific meaning of terms as used in this Provisional Certificate of Approval.
2. The reason for Conditions 2 and 34 is to ensure that the Site is operated in accordance with the application and supporting information submitted by the Applicant, and not in a manner which the Director has not been asked to consider.
3. The reason for Conditions 3, 4, 5, 6, 7, 8, 10, 11 and 12 is to clarify the legal rights and responsibilities of the Applicant.
4. The reason for Condition 9 is to ensure that appropriate Ministry staff have access to the operations of the Site which are approved under this Provisional Certificate of Approval. The Condition is supplementary to the powers of entry

afforded a Provincial Officer pursuant to the Environmental Protection Act, the Ontario Water Resources Act and the Pesticides Act, as amended.

5. The reason for Conditions 13, 15 and 33 is to ensure that the types and amounts of waste received at the Site are in accordance with that approved under this Provisional Certificate of Approval.
6. The reason for Conditions 16 and 17 is to minimize the risk of unauthorized entry and to ensure the Site is only operated in the presence of trained personnel.
7. The reason for Conditions 14, 18, 19, 20, 21, 22, 23, 24, 25, 30, 31 and 32 is to ensure that the Site is operated in a manner which does not result in a nuisance or a hazard to the health and safety of the environment or people.
8. The reason for Condition 26, 27, 28 and 29 is to ensure that staff are properly trained in the operation of the equipment used at the Site and emergency response procedures. This will minimize the possibility of spills occurring and will enable staff to deal promptly and effectively with any spills that do occur.
9. The reason for Condition 35 is to ensure that the Site is closed in accordance with Ministry standards and to protect the health and safety of the public and the environment.

This Notice shall constitute part of the approval issued under Provisional Certificate of Approval No.A521701 dated August 9, 1971.

In accordance with Section 139 of the Environmental Protection Act, R.S.O. 1990, Chapter E-19, as amended, you may by written notice served upon me and the Environmental Appeal Board within 15 days after receipt of this Notice, require a hearing by the Board. Section 142 of the Environmental Protection Act, provides that the Notice requiring the hearing shall state:

1. The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The Certificate of Approval number;
6. The date of the Certificate of Approval;
7. The name of the Director;
8. The municipality within which the waste disposal site is located;

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Appeal Board
2300 Yonge St., 12th Floor
P.O. Box 2382
Toronto, Ontario
M4P 1E4

AND

The Director
Section 39, *Environmental Protection Act*
Ministry of the Environment
2 St. Clair Avenue West, Floor 12A
Toronto, Ontario
M4V 1L5

*** Further information on the Environmental Appeal Board's requirements for an appeal can be obtained directly from the Board at: Tel: (416) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca**

The above noted waste disposal site is approved under Section 39 of the Environmental Protection Act.

DATED AT TORONTO this 14th day of May, 2001

Dave Staseff, P.Eng.
Director
Section 39, *Environmental Protection Act*

JB/
c: District Manager, MOE Timmins/North Bay
Gary Leis, Almaguin Recycling Initiative
Brian Hachkowski, Integrated Earth & Environmental Limited



**AMENDMENT TO PROVISIONAL CERTIFICATE OF APPROVAL
WASTE DISPOSAL SITE**

NUMBER A521701

Notice No. 1

Issue Date: October 31, 2008

The Corporation of the Municipality of Powassan
466 Main St P.O. Box 250
Powassan, Ontario
P0H 1Z0

Site Location: 40 Proudfoot Road
Powassan Municipality, District of Parry Sound
P0H 1Z0

You are hereby notified that I have amended Provisional Certificate of Approval No. A521701 issued on May 28, 1981 for the use and operation of a 30 hectare landfill site for the receipt and disposal of domestic and commercial wastes, amended May 8, 2001 and June 14, 2001 for the establishment and operation of household hazardous waste depot, waste disposal site (transfer) for the receipt and transfer of household hazardous waste, as follows:

I Approval is hereby granted for the construction of garage for the purpose of storage of an on-site landfill trash compactor and loader in accordance with the documentation provided in item 4 and 5 of Schedule "A".

Condition 36 is hereby added as follows :

36. The *Owner* shall submit to the *Director* for approval by no later than August 30, 2009 an up to date Design and Operations Report for the facility that includes as a minimum the following information:

- (a) waste types to be landfilled at the site, the service area and handling of the waste received at the site but unacceptable for landfilling or the recycling activities;
- (b) location and description of the access road, the on-site roads at the Site and the impact of the increased traffic to the Site;
- (c) description and location of the fencing and the gate(s);
- (d) details of the signs required at the Site, including the sign at the front gate and the signs at the various locations throughout the Site;
- (e) screening of the Site from the public, both visual and the protection from the noise impact;
- (f) details of the clean surface water drainage from the Site and any works required to prevent extraneous surface water from contacting the active working face;
- (g) description of the fill method, the equipment used at the Site, the areas used for various fill methods of landfilling, and timelines for various phases of the Site development;
- (h) the operating hours of the Site and the hours for the various activities to be undertaken at the Site, including waste compaction, waste coverage, clean wood burning and removal of wastes collected for transfer;
- (i) details on winter operations;
- (j) thickness of the daily cover, frequency of the application, characteristics of the material and its source and the method of application;
- (k) thickness of the intermediate cover, frequency of the application, characteristics of the material and its source and the method of application;
- (l) the equipment used, the frequency and the procedures used for waste compaction;
- (m) details on Site supervision and monitoring of the activities at the Site, including inspections of the incoming wastes;
- (n) details on handling of other wastes, including the types and amounts of wastes handled, storage locations, storage

facility design/description and the frequency of removal from the Site;
(o) details on housekeeping practices undertaken to control noise, dust, litter, odour, rodents, insects and other disease vectors, scavenging birds or animals;
(p) location of the wood burning area and the procedures for the burning, including frequency, supervision and measures to keep the unacceptable waste from the burn area;
(q) details on the closure of the Site, including the description of the final cover and its estimated permeability, its thickness, the source of the final cover material, the thickness of the top soil and the vegetation proposed for the closed waste mound, as well as the timeframe for the progressive waste coverage;
(r) monitoring program for the surface and groundwater;
(s) site-specific trigger mechanism program for the implementation of the groundwater and surface water contingency measures and a description of such measures;
(t) landfill gas control or management required at the Site;
(v) maintenance activities proposed for the Site and for the monitoring well network, including the type of the activities, the frequency of the activities and the personnel responsible for them;
(w) inspection activities proposed for the Site, including the frequency of the activities and the personnel responsible for them;
(x) details of training provided for the personnel responsible for the activities at the Site;
(y) contingency plans for the emergency situations that may occur at the Site;
(z) storm water management, including the location and the design of any works required;
(aa) any other information relevant to the design and operation of the Site or the information required by the District Manager.

II The following item is hereby added to Schedule "A":

4. Application dated March 8, 2008 with supporting documentation and cover letter dated June 24, 2008 signed by Brian M. Hachkowski, Principal, Integrated Earth & Environmental Limited.

5. Letter dated October 3, 2008 with supporting documentation from Brian M. Hachkowski, Principal, Integrated Earth & Environmental Limited.

The reasons for this amendment to the Certificate of Approval are as follows:

To allow the Owner to construct a building for the purpose of storage of an on-site landfill trash compactor and loader.

The reason for condition 36 is to update the current certificate of approval to reflect the current operation of the landfill site.

This Notice shall constitute part of the approval issued under Provisional Certificate of Approval No. A521701 dated May 28, 1981

In accordance with Section 139 of the Environmental Protection Act, R.S.O. 1990, Chapter E-19, as amended, you may by written notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the Environmental Protection Act, provides that the Notice requiring the hearing shall state:

1. The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The Certificate of Approval number;
6. The date of the Certificate of Approval;
7. The name of the Director;
8. The municipality within which the waste disposal site is located;

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
655 Bay Street, 15th Floor
Toronto, Ontario
M5G 1E5

AND

The Director
Section 39, *Environmental Protection Act*
Ministry of the Environment
2 St. Clair Avenue West, Floor 12A
Toronto, Ontario
M4V 1L5

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca**

The above noted waste disposal site is approved under Section 39 of the Environmental Protection Act.

DATED AT TORONTO this 31st day of October, 2008

Tesfaye Gebrezghi, P.Eng.
Director
Section 39, *Environmental Protection Act*

HV/
c: District Manager, MOE North Bay
Brian Hachkowski, Integrated Earth & Environmental Ltd.



Ministry of the Environment
Ministère de l'Environnement

**AMENDMENT TO PROVISIONAL CERTIFICATE OF APPROVAL
WASTE DISPOSAL SITE**

NUMBER A521701

Notice No. 2

Issue Date: June 23, 2011

The Corporation of the Municipality of Powassan
466 Main St P.O. Box 250
Powassan
Ontario, L0H 1Z0

Site Location: 40 Proudfoot Rd
Powassan Municipality
District of Parry Sound, P0H 1Z0

You are hereby notified that I have amended Provisional Certificate of Approval No. A521701 issued on May 28, 1981 and amended on May 8, 2001, June 14, 2001, and October 31, 2008 for use and operation of a 30 hectare landfill site , as follows:

Condition 36 is hereby revoked and the following Conditions are added to the Certificate:

36. Groundwater and surface water monitoring programs and the analysis of the data shall be carried out with consideration given to details outlined in Items 1 and 2, Schedule "A" of this Certificate.

37. All groundwater monitoring wells shall be properly maintained and or decommissioned in accordance with Regulation 903.

38. The Owner shall ensure that the groundwater, surface water and landfill gas monitoring programs, as detailed in the table below, are carried out by a qualified person.

Surface Water Monitoring/ Locations: SW2, SW3, SW4	Frequency: Three times per year in Spring, Summer and Fall, at least 60 days apart.	Parameters: Listed in Column 3, Schedule 5 of Landfill Standards: A Guideline on the Regulatory and Approval Requirements for New or Expanding Landfilling Sites (MOE, May 1998)
Groundwater Monitoring/ Locations: MW1-1R-2010, MW1-II, MW2-1R-2010, MW3-I, MW3-IA, MW3-II, MW4-I, MW4-II, MW6-I, MW6-II, MW7-I, MW7-II, MW7-IA, MW8-II, MW10-II, MW11-II, MW12-I, MW12-II, MW12-III, MW13, and the two private wells located to the south of the Site.	Frequency: Three times per year in spring, summer and fall.	Parameters: For summer parameters listed in Column 1, Schedule 5 of Landfill Standards: A Guideline on the Regulatory and Approval Requirements for New or Expanding Landfilling Sites (MOE, May 1998) For spring and fall parameters listed in Column 2, Schedule 5 of Landfill Standards: A Guideline on the Regulatory and Approval Requirements for New or Expanding Landfilling Sites (MOE, May 1998)
Landfill Gas Monitoring/ Locations: MMW1 and MMW2	Frequency: Three times per year in spring, summer and fall.	Parameter: Methane gas

Design and Operation Plan:

39. The Owner shall submit to the Director for approval a design and operation plan by no later than January 31, 2013. The design and operation plan shall include but not be limited to the following information:

- a) a Site plan and a legal survey of the Site, showing the location of legal boundaries, roads, fences, gates, buildings, Site topography and any other significant features;
- b) detailed plans for the design and operation of the Site, various phases of Site development, base contours and cell preparation work, current and final Site contours and conditions;
- c) a report, including survey data if needed, on the waste already disposed of at the Site, maximum theoretical capacity of the Site, the remaining capacity and the expected closure date;
- d) details of use and application of daily cover, interim cover and final cover including the progressive capping and closure of the Site;
- e) a detailed description of waste receiving protocols including record keeping, testing procedures and other methods used to ensure that wastes are properly characterized and safely disposed of;
- f) details on on-site roads and their maintenance, fencing and Site security, signs, visual screening, measures for dust, odour, noise, litter, vector and vermin control;
- g) details on surface water drainage and any storm water management works required;
- h) details on a surface water toxicity testing and a mitigation plan to address concerns with ammonia levels in McGillvray Creek;
- i) a description of all environmental protection measures at the Site, including but not limited to the groundwater, surface water and landfill gas monitoring programs, specific trigger mechanism and contingency plans, for bringing the Site up to

current standards of practice;

j) a complete discussion on compliance with Ministry Acts, Regulations, and Guidelines including the Guideline B-7 – Incorporation of the Reasonable Use Concept Into MOEE Groundwater Management Activities (MOE, 1994) , Provincial Water Quality Objectives;

k) a discussion on landfill gas generation, subsurface migration, controls and monitoring;

l) details on Site supervision, inspection, record keeping, maintenance activities and staff training and contingency plans for the emergency situations that may occur at the Site;

m) details on any other activity which may take place at the Site including but not be limited to collection of household hazardous waste, collection of recyclables and composting of leaf and yard waste; and

n) a discussion on the contaminating life span of the Site.

The following items are added to Schedule "A":

1. Memorandum dated November 29, 2010, from Eva Maciaszk, Surface Water Specialist, Technical Support Section, Ministry of the Environment, containing comments on surface water issues at the Site.
2. Memorandum dated January 22, 2010, from Shannon Innis, Hydrogeologist, Technical Support Section, Ministry of the Environment, containing comments on groundwater issues at the Site.
3. Letter dated February 24, 2011, from Nafiseh Pourhassani, P. Eng., EAAB, Ministry of the Environment, containing comments on design and operation of the Site.
4. Letter dated April 29, 2011, from Steven R. Aiken, P. Eng. and Ken D. Embree, P. Eng., Knight Piesold Consulting in response to the Ministry of the Environment comments.

The reasons for this amendment to the Certificate of Approval are as follows:

1. Conditions 36, 37, and 38 are added to ensure a consistent and comprehensive monitoring plan is carried out at the Site.
2. Condition 39 is added to ensure that a stand alone design and operation plan which addressed all issues of concern with the Site is submitted for approval by the Director.

This Notice shall constitute part of the approval issued under Provisional Certificate of Approval No. A521701 dated May 28, 1981 and subsequent amendments.

In accordance with Section 139 of the Environmental Protection Act, R.S.O. 1990, Chapter E-19, as amended, you may by written notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the Environmental Protection Act, provides that the Notice requiring the hearing shall state:

1. The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The Certificate of Approval number;
6. The date of the Certificate of Approval;
7. The name of the Director;

8. The municipality within which the waste disposal site is located;

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
655 Bay Street, 15th Floor
Toronto, Ontario
M5G 1E5

AND

The Director
Section 39, *Environmental Protection Act*
Ministry of the Environment
2 St. Clair Avenue West, Floor 12A
Toronto, Ontario
M4V 1L5

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca**

The above noted waste disposal site is approved under Section 39 of the Environmental Protection Act.

DATED AT TORONTO this 23rd day of June, 2011

Tesfaye Gebrezghi, P.Eng.
Director
Section 39, *Environmental Protection Act*

NP/
c: District Manager, MOE North Bay
Garry Keown, The Corporation of the Municipality of Powassan

APPENDIX B

Site Photos

(Pages B-1 to B-3)

POWASSAN LANDFILL

2023 ANNUAL LANDFILL WATER QUALITY MONITORING REPORT



PHOTO 1 – New coat of paint at MW12-I, II, III after sampling (Spring, 2023).



PHOTO 2 – Upstream of SW-3 (Summer, 2023).



PHOTO 3 – Surface Water Sample Collection at SW-4 between the North and Southbound lane of Hwy 11 (Fall, 2023).



PHOTO 4 – Top of the Landfill at the Northeast end (Spring, 2022).



PHOTO 5 – MW8-II (Fall, 2023).



PHOTO 6 –MW-13 (Fall, 2023).



PHOTO 7 – MW-13 Purge Water (Fall, 2023).



PHOTO 8 – MW18-03 (Spring, 2022).

POWASSAN LANDFILL

2023 ANNUAL LANDFILL WATER QUALITY MONITORING REPORT



PHOTO 9 – MW21-01 (Leachate Well) (Fall, 2023).



PHOTO 10 – Methane Monitoring Well – MMW-1 (Summer, 2023).



PHOTO 11 – MW12-II (Summer, 2023).



PHOTO 12 – Uncovered Landfill Waste (Summer, 2023).



PHOTO 13 – MW1-IR-2010 (Summer, 2023).



PHOTO 14 – MW3-II (Fall, 2023).



PHOTO 15 – MW2-1R-2010 Purge Water (Summer, 2022).



PHOTO 16 – Surface Water Sample Collection SW-4 (Summer, 2023).

POWASSAN LANDFILL

2023 ANNUAL LANDFILL WATER QUALITY MONITORING REPORT



PHOTO 17 – SW2 Sampling Location
Downstream (Summer, 2023).

Facing



PHOTO 18 – MW18-03 – Background Well Purge Water
(Summer, 2023).



PHOTO 19 – MW21-02 (Fall, 2022).



PHOTO 20 – MW17-01 (Summer, 2023).



PHOTO 21 – MW18-01 (Fall, 2023).



PHOTO 22 – MW6-II (Fall, 2023).



PHOTO 23 – Shredded uncovered Landfill Waste (Fall, 2023).



PHOTO 24 – MW7-IA (Summer 2023).

APPENDIX C

Certificates of Analysis

(Pages C-1 to C-28)



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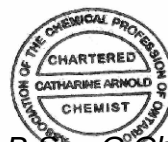
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MAC - Maximum Acceptable Concentration
 AO/OG - Aesthetic Objective / Operational Guideline
 MDL - SGS Method Detection Limit

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 Environment, Health & Safety





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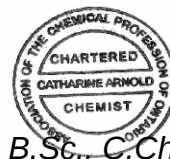
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Sample MW21-01-DUP had visually higher particulates in the bottle as compared to sample MW21-01. This was reflected in the TSS results.

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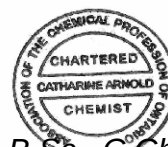
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AO/OG - Aesthetic Objective / Operational Guideline
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Sample ID	Sample Date & Time	Temp Upon Receipt °C	pH No unit	Alkalinity mg/L as CaCO3	CO3 mg/L as CaCO3	HCO3 mg/L as CaCO3	Conductivity uS/cm	TDS mg/L
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MAC - Maximum Acceptable Concentration
AO/OG - Aesthetic Objective / Operational Guideline
MDL - SGS Method Detection Limit

Catharine Arnold
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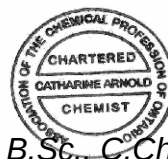
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Environment, Health & Safety





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Page 1 of 3

Results relate only to the sample tested. Data reported represents the sample submitted to SGS. Reproduction of this analytical report in full or in part is prohibited without prior written approval. Please refer to SGS General Conditions of Services located at <https://www.sgs.ca/en/terms-and-conditions> (Printed copies are available upon request.) Test method information available upon request. "Temperature Upon Receipt" is representative of the whole shipment and may not reflect the temperature of individual samples. SGS Canada Inc. Environment-Health & Safety statement of conformity decision rule does not consider uncertainty when analytical results are compared to a specified standard or regulation.



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MAC - Maximum Acceptable Concentration
 AO/OG - Aesthetic Objective / Operational Guideline
 MDL - SGS Method Detection Limit

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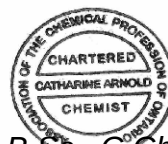
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MAC - Maximum Acceptable Concentration
 AO/OG - Aesthetic Objective / Operational Guideline
 MDL - SGS Method Detection Limit

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 Environment, Health & Safety



APPENDIX D

Groundwater Analytical Results

Appendix D1

Summary of Groundwater Quality Results

Appendix D2

Summary of Groundwater Exceedances

Appendix D3

Select Leachate Parameters Compared to Background Water Quality

Appendix D4

Summary of Groundwater QA/QC Results

APPENDIX D1

Summary of Groundwater Quality Results

(Pages D1-1 to D1-4)

TABLE D.1

MUNICIPALITY OF POWASSAN
MUNICIPALITY OF POWASSAN LANDFILL SITE

2023 ANNUAL LANDFILL WATER QUALITY MONITORING REPORT SUMMARY OF GROUNDWATER QUALITY RESULTS

Printed: Feb-13-24 13:21

Site ID	Guideline or Standard	MDL	ODWS	MW18-03 (Background)	Spring 2023	Summer 2023	Fail 2023	MW1-HI	MW1-IR-2010	MW3-1	MW3-II	MW3-1A						
Date Sampled				10-May-23	13-Aug-23	30-Oct-23	Spring 2023	Summer 2023	Reasonable Use Guideline (C/m) Cm = Cb + x(Cr-Cb)	8-May-23	13-Aug-23	30-Oct-23	8-May-23	14-Aug-23	31-Oct-23	9-May-23	14-Aug-23	31-Oct-23
In Situ Parameters																		
Measured Stick-up m	-	-	-	0.63	0.63	0.84	-	-	-	-	-	-	0.95	0.97	0.97	0.97	0.84	0.905
Depth to Water (below top of PVC) m	-	-	-	4.264	4.565	4.43	-	-	-	-	-	-	6.95	7.056	7.35	7.25	6.97	7.25
Depth to Water (below top of PVC) m	-	-	-	4.264	4.565	4.43	-	-	-	-	-	-	6.95	7.056	7.35	7.25	6.97	7.25
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Depth to Water (below top of PVC) m	-	-	-	4.264	4.565	4.43	-	-	-	-	-	-	6.95	7.056	7.35	7.25	6.97	7.25
Depth to Water (below top of PVC) m	-	-																

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MUNICIPALITY OF POWASSAN
MUNICIPALITY OF POWASSAN LANDFILL SITE

2023 ANNUAL LANDFILL WATER QUALITY MONITORING REPORT SUMMARY OF GROUNDWATER QUALITY RESULTS

Page 3 of 4

2023 ANNUAL LANDFILL WATER QUALITY MONITORING REPORT SUMMARY OF GROUNDWATER QUALITY RESULTS

Page 4 of 4

APPENDIX D2

Summary of Groundwater Exceedances

(Page D2-1)

TABLE D2.1
MUNICIPALITY OF POWASSAN
MUNICIPALITY OF POWASSAN LANDFILL
2022 ANNUAL LANDFILL WATER QUALITY MONITORING REPORT
SUMMARY OF GROUNDWATER EXCEEDANCES

Site ID	MW18-03 (Background)	MW1-1I	MW1-1R-2010	MW2-1R-2010	MW3-1I	MW3-1I	MW3-1A	MW4-1I	MW4-1I	MW6-1I	MW6-IR-2013 (Dry)	MW7-1 (Dry)	MW7-1A	MW8-1I	MW10-1R-2013 (Leachate)	MW12-1I	MW12-1II	MW12-1II	MW13	MW17-01 (Previous Background)	MW18-01	MW18-02	MW21-01 (Leachate)	MW21-02 (Dry)	MW21-03	RES-352	RES-287
In Situ Parameters																											
pH (In Situ)				X			X	X	X	X			X	X						X		X					X
Temperature (In Situ) °C							X	X	X	X			X							X		X					X
Physical Tests																											
Alkalinity (Total as CaCO3)					X	X	X	X	X	X			X	X	X	X	X	X	X	X		X					X
Hardness as CaCO3	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X				X
pH of Dissolved Solids					X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X				X
Dissolved Anions																											
Chloride																											
Sulphate																											
Nutrients																											
Nitrate (as N)																											X
Dissolved Metals																											
Barium																											
Boron																											
Cadmium																											
Lead																											
Manganese	X				X			X	X				X		X		X					X				X	
Mercury																											
Sodium																	X										
Organics																											
Carbon Organic (Dissolved)					X	X	X	X	X	X																	
Semi Volatile Organics																											
1,4-Dichlorobenzene																											
BTEX																											
Benzene																											
Toluene																											

Print File: 13-24-13-24

NOTES:
1. HIGHLIGHTED CELLS WITH "X" TEXT INDICATE EXCEEDANCE RELATIVE TO OWS AND/OR RUG GUIDELINES DURING ONE OR MULTIPLE SAMPLING EVENTS IN 2022.
2. OWS REFERS TO THE TECHNICAL SUPPORT DOCUMENT FOR OYARD DRINKING WATER STANDARDS, OBJECTIVES AND GUIDELINES (MECH, 2021).

REV	DESCRIPTION	DATE
001	ISSUED WITH REPORT	2023-02-24

APPENDIX D3

Select Leachate Parameters Compared to Background Water Quality

(Page D3-1)

TABLE D3.1

MUNICIPALITY OF POWASSAN
MUNICIPALITY OF POWASSAN LANDFILL

2023 ANNUAL LANDFILL WATER QUALITY MONITORING REPORT
SELECT LEACHATE PARAMETERS COMPARED TO BACKGROUND WATER QUALITY

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Site ID	MW18-03 (Background)			MW10-11R-2013 (Leachate)			MW21-01 (Leachate)		
Date Sampled	10-May-23	13-Aug-23	30-Oct-23	9-May-23	15-Aug-23	31-Oct-23	9-May-23	14-Aug-23	31-Oct-23
Physical Tests									
Alkalinity (Total as CaCO ₃)	117	127	129	516	596	DRY	224	231	232
Bicarbonate Alkalinity	117	127	129	516	596		224	231	232
Biochemical Oxygen Demand	-	-	-	10	-		<4	-	<4
Chemical Oxygen Demand	<8	<8	<8	62	52		15	14	14
Conductivity µS/cm	259	299	289	1020	1230		461	501	478
Hardness as CaCO ₃	133	122	142	562	444		247	230	241
pH	6.92	7.91	7.43	6.77	7.24		6.95	7.79	7.46
Total Dissolved Solids	200	214	151	629	734		269	286	257
Total Suspended Solids	-	-	-	718	-		6930	1870	2400
Dissolved Anions									
Chloride (Dissolved)	6	3	2	69	62	DRY	15	12	12
Dissolved Metals									
Boron	0.01	0.01	0.009	0.148	0.065	DRY	0.045	0.036	0.035
Calcium	24.1	24	26.5	131	103		65.9	62.3	61.3
Iron	<0.007	-	<0.007	10.7	9		0.008	-	<0.007
Manganese	-	0.209	-	7.75	4.76		0.198	0.198	0.206
Organics									
Carbon Organic (Dissolved)	2	2	1	17	17	DRY	5	5	4

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NOTES:

1. SAMPLES ANALYZED BY SGS CANADA INC. IN LAKEFIELD, ON.
2. VALUES IN mg/L UNLESS OTHERWISE INDICATED.
3. VALUES INDICATE IN RED TEXT EXCEEDANCES OF THE RUG.
4. HIGHLIGHTED VALUES INDICATE EXCEEDANCES OF THE ODWS.

REV	DATE	ISSUED WITH REPORT	DESCRIPTION	MSA PREP'D	SRA REV'D
0	14FEB24				

APPENDIX D4

Summary of Groundwater QA/QC Results

(Page D4-1)

TABLE D4.1
MUNICIPALITY OF POWASSAN
MUNICIPALITY OF POWASSAN LANDFILL
2023 ANNUAL LANDFILL WATER QUALITY MONITORING REPORT
SUMMARY OF GROUNDWATER QA/QC RESULTS

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Site ID	RL	MW21-01 09/May/2023	MW21-01-DUP 09/May/2023 (Duplicate)	RPD	MW18-03 10/May/2023	MW18-03-DUP 10/May/2023 (Duplicate)	RPD	MW21-01 14/Aug/2023	MW21-01-DUP 14/Aug/2023 (Duplicate)	RPD	MW3-1A 15/Aug/2023 (Duplicate)	RPD	MW18-03 30/Oct/2023 (Duplicate)	MW21-01 31/Oct/2023 (Duplicate)	RPD
Physical Tests															
Alkalinity (Total as CaCO ₃)	2	225	224	0.45	117	119	1.69	229	231	0.87	64	3.17	129	232	0.78
Bicarbonate Alkalinity	2	225	224	0.45	117	119	1.69	229	231	0.87	64	3.17	129	232	0.78
Carbonate Alkalinity	2	<4	<4	0.00	-	-	-	-	-	-	-	-	<4	<4	0.00
Chemical Oxygen Demand	8	10	15	40.00	<8	<8	0.00	16	14	13.33	<8	0.00	<8	14	16
Conductivity µS/cm	2	448	461	2.86	259	267	3.04	492	501	1.81	157	5.23	289	478	1.25
Hardness as CaCO ₃	0.05	0.11	247	199.82	133	133	0.00	225	230	2.20	64.5	2.19	142	241	0.42
pH	0.05	6.88	6.95	1.01	6.92	6.72	2.93	7.75	7.79	0.51	7.45	0.13	7.43	7.46	1.33
Total Dissolved Solids	3	331	269	20.67	200	183	8.88	306	286	6.76	-	-	-	1870	77.38
Dissolved Anions															
Chloride (Dissolved)	1	14	15	6.90	6	6	0.00	12	12	0.00	2	0.00	2	12	8.70
Sulphate (Dissolved)	2	17	19	11.11	49	46	6.32	16	15	6.45	10	0.00	22	15	0.00
Nutrients															
Ammonia (Total)	0.1	<0.1	<0.1	-	<0.1	<0.1	0.00	<0.1	<0.1	0.00	<0.1	0.00	<0.1	<0.1	0.00
Nitrate (as N)	0.06	<0.06	<0.06	-	0.09	0.12	28.57	<0.06	<0.06	0.00	0.15	0.00	0.25	<0.06	0.00
Nitrite (as N)	0.03	<0.03	<0.03	-	-	-	-	<0.03	<0.03	0.00	<0.03	0.00	<0.03	<0.03	0.00
Nitrogen Kjeldahl (Total)	0.5	<0.5	<0.5	-	-	-	-	<0.5	<0.5	0.00	<0.5	0.00	-	-	-
Phosphorus (Metal)		1.5	5.65	116.08	-	-	-	2.28	1.84	21.36	0.08	28.57	-	3.28	3.31
Dissolved Metals															
Arsenic	0.0002	<0.0002	0.0006	-	-	-	-	0.0006	0.0006	0.00	<0.0002	0.00	-	0.0004	0.0005
Barium	0.00002	0.0104	0.0945	160.34	0.0448	0.0457	1.99	0.0925	0.098	5.77	0.0311	1.95	0.0455	0.0977	1.62
Beryllium	0.000007	<0.00007	0.00002	>20	-	-	-	-	-	-	-	-	-	-	-
Boron	0.002	0.004	0.045	167.35	0.01	0.008	22.22	0.039	0.036	8.00	0.011	-	0.009	0.035	5.88
Cadmium	0.000003	<0.000003	0.000022	>20	-	-	-	0.0001	0.00018	57.14	0.000006	53.33	-	0.00046	0.00055
Calcium	0.01	0.03	65.9	199.82	24.1	24.4	1.24	80.5	62.3	2.93	15	0.67	26.5	61.3	17.82
Chromium	0.00008	<0.00008	0.00012	>20	-	-	-	0.00017	0.00019	11.11	0.00032	32.73	-	0.00018	0.00011
Copper	0.0002	<0.0002	0.0022	>20	-	-	-	0.0004	0.0007	54.55	0.0004	-	-	<0.0007	5.71
Iron	0.007	<0.007	0.008	-	<0.007	0.013	>20	0.288	-	-	0.011	31.58	<0.007	<0.007	0.00
Lead	0.00001	<0.00009	<0.00009	0.00	-	-	-	<0.00009	<0.00009	0.00	<0.00009	0.00	-	<0.00009	0.0009
Magnesium	0.001	0.01	20	199.80	17.7	17.7	0.00	18	18.2	1.10	6.59	4.50	18.4	21.2	1.43
Manganese	0.00001	0.00018	0.198	199.64	-	-	-	0.199	0.198	0.50	0.00545	15.63	-	0.206	0.209
Mercury	0.003	<0.00001	<0.00001	0.00	-	-	-	0.00002	<0.00001	>20	<0.00001	0.00	-	<0.00001	0.00
Phosphorus	0.00300	<0.003	0.008	>20	-	-	-	<0.003	<0.003	0.00	<0.003	0.00	-	0.008	0.01
Potassium	0.009	<0.009	6.72	>20	-	-	-	5.88	5.96	1.35	1.93	0.52	-	6.82	2.46
Sodium	0.01	<0.01	9.01	>20	11.5	11.6	0.87	8.2	8.26	0.73	4.9	3.11	11.1	9.56	1.58
Zinc	0.002	<0.002	0.049	>20	-	-	-	0.045	0.048	6.45	0.002	0.00	-	0.061	1.65
Organics															
Carbon Organic (Dissolved)	1	5	5	0.00	2	2	0.00	5	5	0.00	1	0.00	1	4	0.00
Phenols	0.002	<0.002	<0.002	0.00	-	-	-	<0.002	<0.002	-	<0.002	0.00	-	<0.002	0.00
Volatile Organics															
Acetone	0.03	<0.03	<0.03	0.00	-	-	-	<0.03	<0.03	0.00	-	-	-	-	-
Dichloromethane	0.0005	<0.0005	<0.0005	0.00	-	-	-	<0.0005	<0.0005	0.00	-	-	-	-	-
Methyl ethyl ketone	0.02	-	-	-	-	-	-	<0.02	<0.02	0.00	-	-	-	-	-
Vinyl Chloride	0.0002	<0.0002	<0.0002	0.00	-	-	-	<0.0002	<0.0002	0.00	-	-	-	-	-
Semi Volatile Organics															
1,4-Dichlorobenzene (SVO)	0.0005	<0.0005	<0.0005	0.00	-	-	-	<0.0005	<0.0005	0.00	-	-	-	-	-
BTEX															
Benzene	0.0005	<0.0005	<0.0005	0.00	-	-	-	-	-	-	-	-	-	-	-
Toluene	0.0005	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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- NOTES:**
1. SAMPLES WERE ANALYZED BY SGS CANADA INC. IN LAKEFIELD, ON
 2. RPD - RELATIVE PERCENT DIFFERENCE CALCULATED USING: 100*ABSOLUTE VALUE((RESULT-T-DUP RESULT)/((RESULT+DUP RESULT)/2).
 3. **VALUES IN RED BOLD HAVE 20% OR GREATER RELATIVE PERCENT DIFFERENCE (RPD)**
 4. "-" INDICATES THAT DATA ARE NOT AVAILABLE
 5. WHERE ONE OR BOTH RESULTS ARE BELOW THE REPORTABLE DETECTION LIMIT, RPD HAS NOT BEEN CALCULATED.
 6. RL REFERS TO THE LABORATORY REPORTING LIMIT.
 7. UNITS ARE IN mg/L, UNLESS OTHERWISE STATED.

REV	4/SEP/24	ISSUED WITH REPORT NR 102-309-14-2	MSA PREP'D	SSA RW/VD
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APPENDIX E

Surface Water Analytical Results

Appendix E1

Summary of Surface Water Results

Appendix E2

Summary of Surface Water QA/QC Results

APPENDIX E1

Summary of Surface Water Results

(Page E1-1)

TABLE E1.1

MUNICIPALITY OF POWASSAN
MUNICIPALITY OF POWASSAN LANDFILL

2023 ANNUAL LANDFILL WATER QUALITY MONITORING REPORT
SUMMARY OF SURFACE WATER RESULTS

Site ID	RL	PWQO	SW-2 (Downstream)		SW-3 (Upstream/Background)		SW-4 (Downstream)	
Date/Time Sampled			May 8, 2023	October 30, 2023	May 8, 2023	August 13, 2023	May 8, 2023	October 30, 2023
In Situ Parameters								
Conductivity (In Situ) µS/cm	-	-	0.016	0.056	0.014	0.142	0.061	0.242
Oxygen Dissolved (In Situ) (mg/L)	-	-	9.94	14.69	15.87	16.18	10.09	11.41
Temperature (In Situ) °C	-	-	8.29	16.18	6.38	16.76	9.93	17.39
pH (In Situ)	-	6.5 to 8.5	5.96	7.98	6.93	8.96	6.18	7.91
Turbidity (In Situ) NTU	-	-	540	6.5	2.7	11.8	584	316
Total Dissolved Solids (In Situ) g/L	-	-	0.01	0.036	0.026	0.092	0.04	0.157
Physical Tests								
Alkalinity (Total as CaCO3)	2	25% of Background Value	8	25	10	25	12	29
Bicarbonate Alkalinity	2	-	8	25	10	25	12	29
Biochemical Oxygen Demand	2	-	<4	<4	<4	<4	<4	<4
Chemical Oxygen Demand	8	-	<8	31	15	44	15	47
Conductivity µS/cm	2	-	28	50	29	54	124	193
Hardness as CaCO3 (Total)	0.05	-	10.8	23.9	10.7	26.6	15.9	-
pH	0.05	6.5 to 8.5	7.2	6.93	7.1	6.93	7.22	6.94
Total Dissolved Solids	3	-	34	51	<30	57	63	154
Total Suspended Solids	2	-	4	10	5	12	4	7
Dissolved Anions								
Chloride (Dissolved)	1	-	1	2	1	1	36	51
Suphate (Dissolved)	2	-	3	<2	2	<2	3	<2
Nutrients								
Ammonia (Total)	0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nitrate (as N)	0.06	-	<0.06	0.1	0.08	0.16	<0.06	<0.06
Nitrate+Nitrite (Dissolved)	0.03	-	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Nitrite (as N)	0.06	-	-	0.1	0.06	0.16	-	<0.06
Nitrogen Kjeldahl (Total)	0.5	-	<0.5	<0.5	<0.5	0.9	<0.5	0.7
Total Metals								
Arsenic	0.0002	0.005	<0.0002	0.0003	<0.0002	0.0004	<0.0002	0.0003
Barium	0.00002	-	0.0112	0.0124	0.0106	0.021	0.0216	0.0328
Boron	0.002	0.2	0.003	0.006	0.003	0.007	0.004	0.007
Cadmium	0.000003	0.0001 to 0.0005 ⁴	0.00001	0.00001	0.000013	0.000018	0.000011	0.000016
Chromium	0.00008	0.0089	0.00281	0.00123	0.00045	0.00169	0.00039	0.00077
Copper	0.0002	0.001 to 0.005 ⁴	0.0007	0.0013	0.0007	0.0019	0.0008	0.001
Iron	0.007	0.3	0.258	1.12	0.45	1.56	0.321	1.59
Lead	0.00001	0.001 to 0.005 ⁴	0.00011	0.00027	<0.00009	0.00039	0.00014	0.00029
Mercury	0.00001 to 0.01	0.0002	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Phosphorus (Metal)	0.003	0.03	0.013	0.063	0.014	0.101	0.011	0.041
Zinc	0.002	0.02	0.003	0.005	0.002	0.005	0.003	0.004
Dissolved Metals								
Aluminum	0.001	-	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Organics								
Phenols	0.001 to 0.002	0.005	-	-	-	-	-	-
Petroleum Hydrocarbons								
F1 (C6-C10)	0.025	-	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
F1-BTEX (C6-C10)	0.025	-	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
F2 (C10-C16)	0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
F3 (C16-C34)	0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
F4 (C34-C50)	0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BTEX								
Benzene	0.0005	0.1	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Ethylbenzene	0.0005	0.008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
M/P-Xylene	0.0005	-	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
O-Xylene	0.0005	0.04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toluene	0.0005	0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Xylene	0.0005	-	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

NOTES:

1. SAMPLES WERE ANALYZED BY SGS CANADA INC. IN LAKEFIELD, ON.

2. PWQO - MINISTRY OF THE ENVIRONMENT ONTARIO, WATER MANAGEMENT: POLICIES, GUIDELINES, PROVINCIAL WATER QUALITY OBJECTIVES OF THE MINISTRY OF ENVIRONMENT AND ENERGY, PROVINCE OF ONTARIO. 1994. REPRINTED FEBRUARY 1999.

3. ALKALINITY SHOULD NOT BE DECREASED BY MORE THAN 25% OF THE NATURAL CONCENTRATION. **SW3** IS CONSIDERED THE BACKGROUND LOCATION.

4. PWQO GUIDELINES IS DEPENDENT ON HARDNESS VALUE.

5. **BOLDED AND HIGHLIGHTED VALUES INDICATE EXCEEDANCES OF THE PWQO.**

6. UNITS ARE IN mg/L UNLESS OTHERWISE STATED.

7. RL REFERS TO THE LABORATORY REPORTING LIMIT.

APPENDIX E2

Summary of Surface Water QA/QC Results

(Page E2-1)

TABLE E2.1
MUNICIPALITY OF POWASSAN
MUNICIPALITY OF POWASSAN LANDFILL

2023 ANNUAL LANDFILL WATER QUALITY MONITORING REPORT
SUMMARY OF SURFACE WATER QA/QC RESULTS

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Site ID	RL	SW-3	SW-3-DUP	RPD	SW-4	SW-4-DUP	RPD	SW-3	SW-3-DUP	RPD
Date Sampled										
Physical Tests										
Alkalinity (Total as CaCO ₃)	2	10	12	18.18	29	29	0.00	12	11	8.70
Bicarbonate Alkalinity as CaCO ₃	2	10	12	18.18	29	29	3.17	12	11	8.70
Biochemical Oxygen Demand	2	<4	<4	0.00	<4	<4	0.00	<4	<4	0.00
Chemical Oxygen Demand	8	15	17	12.50	47	33	35.00	22	27	20.41
Conductivity µS/cm	2	29	30	3.39	193	191	1.04	37	36	2.74
Hardness as CaCO ₃ (Total)	0.05	10.7	10.9	1.85	-	-	-	14.6	14.5	0.69
pH	0.05	7.21	7.28	0.97	6.94	6.9	0.58	7.07	6.95	1.71
Total Dissolved Solids	3	<30	<30	0.00	154	106	36.92	431	566	27.08
Total Suspended Solids	2	5	5	0.00	7	6	15.38	5	3	50.00
Dissolved Anions										
Chloride (Dissolved)	1	1	1	0.00	51	51	0.00	<1	<1	0.00
Sulphate (Dissolved)		2	<2	0.00	<2	<2	0.00	<2	<2	0.00
Nutrients										
Ammonia (Total)	0.1	<0.1	<0.1	0.00	<0.1	<0.1	0.00	<0.1	<0.1	0.00
Nitrate (as N)	0.06	0.08	0.07	13.33	<0.06	<0.06	0.00	0.08	0.08	0.00
Nitrite (as N)	0.03	<0.03	<0.03	0.00	<0.03	<0.03	0.00	<0.03	<0.03	0.00
Nitrate+Nitrite (Dissolved)	0.06	-	-	0.00	<0.06	<0.06	0.00	0.08	0.08	0.00
Nitrogen Kjeldahl (Total)	0.5	<0.5	0.5	0	0.7	0.8	13.33	<0.5	<0.5	0.00
Total Metals										
Arsenic	0.0002	<0.0002	<0.0002	0.00	0.0003	0.0004	0.00	<0.0002	<0.0002	0.00
Barium	0.00002	0.0106	0.0102	3.85	0.0328	0.0339	3.30	0.0109	0.0109	0.00
Boron	0.002	0.003	0.003	0.00	0.007	0.007	0.00	0.004	0.004	0.00
Cadmium	0.000003	0.000013	0.000009	36.36	0.000016	0.000014	13.33	0.000011	0.000008	31.58
Chromium	0.00008	0.00045	0.00481	165.78	0.00077	0.00088	13.33	0.00039	0.00048	20.69
Copper	0.0002	0.0007	0.0007	0.00	0.001	0.0011	9.52	0.0007	0.0025	112.50
Iron	0.007	0.248	0.27	8.49	1.59	1.62	1.87	0.539	0.493	8.91
Lead	0.00001	<0.00009	0.00012	>20	0.00029	0.00032	9.84	0.00013	0.00014	0.00
Phosphorus (Metal)	0.003	0.014	0.015	6.90	0.041	0.04	2.47	0.033	0.031	6.25
Zinc	0.002	0.002	0.003	40.00	0.004	0.004	0.00	0.003	0.005	50.00
Organics										
Phenols	0.001	<0.002	<0.002	-	<0.002	<0.002	0.00	<0.002	<0.002	0.00
Petroleum Hydrocarbons										
F1 (C6-C10)	0.025	<0.025	<0.025	0.00	<0.025	<0.025	0.00	<0.025	<0.025	0.00
F1-BTEX (C6-C10)	0.025	<0.025	<0.025	0.00	<0.025	<0.025	0.00	<0.025	<0.025	0.00
F2 (C10-C16)	0.1	<0.1	<0.1	0.00	<0.1	<0.1	0.00	<0.1	<0.1	0.00
F3 (C16-C34)	0.2	<0.2	<0.2	0.00	<0.2	<0.2	0.00	<0.2	<0.2	0.00
F4 (C34-C50)	0.2	<0.2	<0.2	0.00	<0.2	<0.2	0.00	<0.2	<0.2	0.00
BTEX										
Benzene	0.0005	<0.0005	<0.0005	0.00	<0.0005	<0.0005	0.00	<0.0005	<0.0005	0.00
Ethylbenzene	0.0005	<0.0005	<0.0005	0.00	<0.0005	<0.0005	0.00	<0.0005	<0.0005	0.00
m/p-Xylene	0.0005	<0.0005	<0.0005	0.00	<0.0005	<0.0005	0.00	<0.0005	<0.0005	0.00
O-Xylene	0.0005	<0.0005	<0.0005	0.00	<0.0005	<0.0005	0.00	<0.0005	<0.0005	0.00
Toluene	0.0005	<0.0005	<0.0005	0.00	<0.0005	<0.0005	0.00	<0.0005	<0.0005	0.00
Xylene	0.0005	<0.0005	<0.0005	0.00	<0.0005	<0.0005	0.00	<0.0005	<0.0005	0.00

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NOTES:

- SAMPLES WERE ANALYZED BY SGS CANADA INC. IN LAKEFIELD, ON.
- RPD - RELATIVE PERCENT DIFFERENCE CALCULATED USING: 100*(ABSOLUTE VALUE((RESULT-DUP RESULT)/((RESULT+DUP RESULT)/2)).
- VALUES IN RED BOLD HAVE 20% OR GREATER RELATIVE PERCENT DIFFERENCE (RPD) AND ARE 5 TIMES GREATER THAN THE RL.**
- "-" INDICATES THAT DATA IS NOT AVAILABLE.
- WHERE ONE OR BOTH RESULTS ARE BELOW THE REPORTABLE DETECTION LIMIT, RPD HAS NOT BEEN CALCULATED.
- RL REFERS TO THE LABORATORY REPORTING LIMIT.
- UNITS ARE IN mg/L UNLESS OTHERWISE STATED.

0	14FEB24	ISSUED WITH REPORT	NSA	SRA
REV	DATE	DESCRIPTION	PREPD	RWDD



The Corporation of the
City of North Bay
200 McIntyre Street East,
P.O. Box 360
North Bay, Ontario
Canada P1B 8H8
Tel: (705) 474-0400

RECEIVED
JAN 16 2024
The Municipality of Powassan

January 2, 2024

Municipality of Powassan
P.O. Box 250
466 Main Street
Powassan ON
P0H 1Z0

Re: Participation in the City of North Bay's Household Hazardous Waste Program

The City of North Bay is once again inviting surrounding municipalities to participate in the City's Household Hazardous Waste Program.

North Bay City Council has agreed to accept household hazardous waste from participating municipalities that share in the operating and disposal costs. Due to the increase in costs for the proper disposal of household hazardous waste, the cost per municipality will increase to \$4 per dwelling based on the most up to date census.

The cost for the residents of the Municipality of Powassan to safely dispose their hazardous waste at the North Bay HHWD is as follows:

Total Dwellings	1381
Cost Per Dwelling	\$4
Total Cost	\$5,524

If you are interested in participating in this program, please contact me at 705-474-0400 ext. 5221 or by email at victoria.thomas@northbay.ca

Sincerely,

16-25-64930

Victoria Thomas
Environmental Control Officer



Ontario Clean Water Agency **Agence Ontarienne Des Eaux**

Powassan Lagoons

Annual Operating Report

January 1, 2023 to December 31, 2023

Prepared by
Ontario Clean Water Agency
February 2, 2024

ECA Annual Report Requirements #7092-9XLLAN

ECA Requirement	Section in Report
11.5 a. a summary and interpretation of all monitoring data and a comparison to the effluent limits outlined in Condition 7, including an overview of the success and adequacy of the Works;	a), b), c), i), f)
11.5 b. a description of any operating problems encountered and corrective actions taken;	b), c), i)
11.5 c. a summary of all maintenance carried out on any major structure, equipment, and apparatus, mechanism or thing forming part of the Works;	c)
11.5 d. a summary of any effluent quality assurance or control measures undertaken during the reporting period;	d)
11.5 e. a summary of the calibration and maintenance carried out on all effluent monitoring equipment;	e)
11.5 f. a description of efforts made and results achieved in meeting the Effluent Objectives of Condition 6;	a), f)
6. 3 The Owner shall include in all reports submitted in accordance with Condition 11 a summary of the efforts made and results achieved under this Condition;	a), f)
11.5 g. a tabulation of the volume of sludge generated in the reporting period and an outline of anticipated volumes to be generated in the next reporting period and a summary of the locations to where the sludge was disposed;	g)
11.5 h. a summary of any complaints received during the reporting period and any steps taken to address the complaints;	h)
11.5 i. a summary of all By-pass, Overflow, Spill or abnormal discharge events;	i)
11.5 j. a copy of all Notice of Modifications submitted to the Water Supervisor as a result of Schedule B, Section 1, with a status report on the implementation of each modification;	j)
11.5 k. a report summarizing all modifications completed as a result of Schedule B, Section 3;	k)
11.5 l. any other information the Water Supervisor requires from time to time;	l)
m. Additional Information.	m)

The Ontario Clean Water Agency (OCWA) acts as the operating authority for the Powassan wastewater treatment system under contract with the Municipality of Powassan. The enclosed 2023 Report for the above-referenced facility summarizes the performance and related activities in accordance with Environmental Compliance Approval (ECA) 7092-9 LLAN; Section 11(5). Environmental Compliance Approval was issued June 24, 2015.

a.) A summary and interpretation of all monitoring data and a comparison to the effluent limits outlined in Condition 7, including an overview of the success and adequacy of the Works;

In 2023, there were four (4) lagoon cells released.

The spring controlled seasonal release of the lagoons was completed after the liquid surface in the lagoon had become substantially free of ice cover, terminating within sixty (60) days thereafter, as specified in the ECA. The total volume of lagoon discharge over the spring seasonal release period was 136,597 cubic meters (m³). The total number of discharge days was 31 days beginning May 10 and ending June 9. Lagoons became ice free on April 14. In an effort to meet the effluent limits and objectives, both the South Cell 1 and North Cell 2 lagoons were treated with ferric sulphate prior to discharge.

The fall controlled seasonal release of the lagoons was completed between the dates of Oct. 15 and Nov. 30, as specified in the ECA. The total volume of lagoon discharge over the fall release period was 86,578 m³. The total number of discharge days was 37 days beginning Oct. 16 and ending Nov. 21. In an effort to meet the effluent limits and objectives, both the North Cell 2 and Old Cell 3 lagoon were treated with ferric sulphate prior to discharge.

The total controlled release from the lagoons for the year 2023 was 223,175 m³.

Monitoring Program as per above-referenced ECA:

Source (Composite)	Parameter	Frequency	Method
Influent	Flow (m ³)	Daily	Meter
Raw	BOD ₅ , TSS, TP, TKN	Quarterly	External (Lab)
Lagoon Cell Content (at least 7 days prior to discharge.)	cBOD ₅ , TSS, TP, pH	Once	External (Lab)
Effluent – During Discharge	Flow (m ³)	Daily	Calculated
	cBOD ₅ , TSS, TP, TAN, unionized ammonia, Temp., pH	5 times per seasonal discharge	External (Lab) Field pH and Temperature

An OCWA operator collects a grab sample of raw sewage on a monthly basis and sends it to an accredited laboratory for analysis. Results are forwarded to OCWA and entered into the process database.

The lagoon cell contents are sampled and analyzed for compliance parameters prior to release. Results are utilized to dictate whether or not the lagoon cell contents meet the prescribed effluent quality requirements specified in the ECA. They are also used to indicate the need for batch chemical dosage prior to discharge and to achieve the necessary reductions in phosphorus concentrations. The ECA requires the minimum sampling consisting of collection and analysis of 5 samples per seasonal discharge. Which means that one sample must be taken at the start of discharge, at 25 , 50 and 75 drawdown, also at the end of the discharge. The practice is to collect and analyze lagoon effluent at each foot of lagoon drawdown during the period of release.

The total discharge from each cell is estimated and recorded by an established engineering technique based on the lagoon dimensions and drawdown.

The ponds are to be operated to provide two controlled discharges: spring (after the liquid surface in the lagoon had become substantially free of ice cover, terminating within sixty (60) days thereafter) and fall (not earlier than October 15 and not later than November 30).

Based on the above monitoring program, the sewage works provided successful and adequate treatment. All limits and objectives met; thus showing adequate and successful treatment. See table below and sections that follow for further information on the success and adequacy of the works.

Furthermore, there were fall discharge TSS exceedances in 2021 and 2022, but in 2023 the limit was successfully met. Lagoons were operated, sampled and monitored as per normal; however, more Ferric Sulphate was used to treat the affected North Cell lagoons during the Fall 2023 season. During the 2023 season, no measurement of the sludge depth (see section g.); however, the TSS results for the North and South Cells do appear to be getting better as the dredging has taken place a number of years ago. During the 2023 fall season, the content results were very good for the Old Cell so less Ferric Sulphate was used due to the content sample results. However, noticed higher TSS in Old Cell Effluent during discharge so more Ferric Sulphate will be used next year in the Old Cell. Also, the influent/raw TSS and TP concentrations were a bit lower in 2023 than 2022.

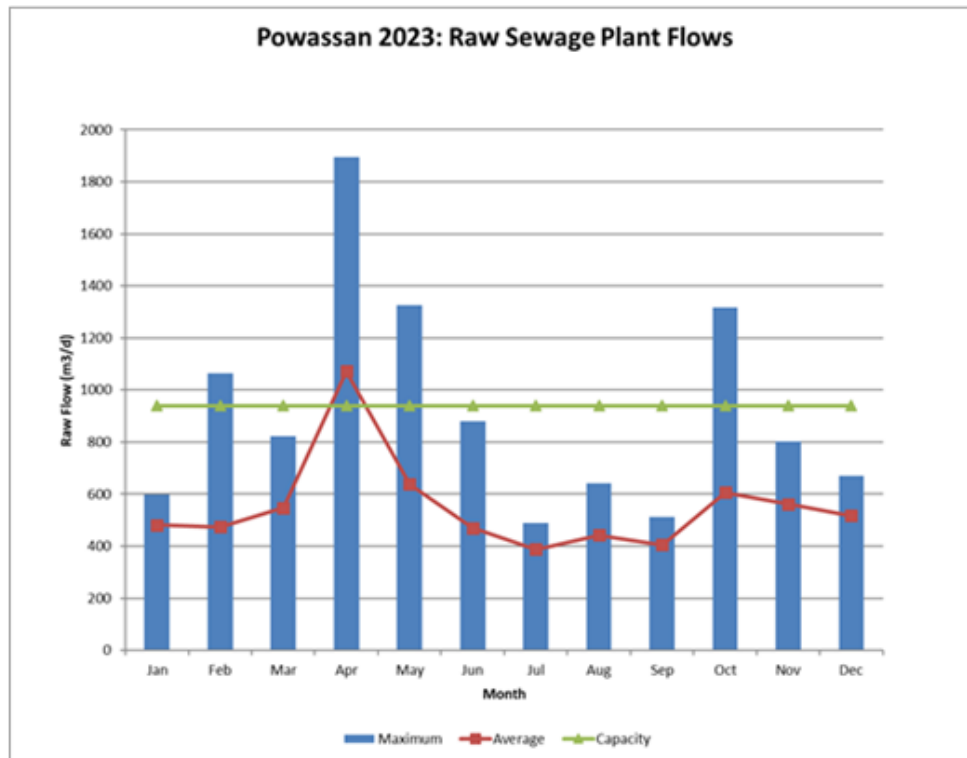
2023 Influent/Effluent Quality Data:

Source	Parameter	Spring Average		Fall Average	Compliance	Objectives
Effluent	cBOD ₅ (mg/L)	10.30		4.5	25.0 mg/L	20 mg/L
	TSS (mg/L)	16.30		18.70	25.0 mg/L	20 mg/L
	T. Phos (mg/L)	0.34		0.34	1.0 mg/L	0.8 mg/L
	Field pH Max	8.19		7.16	9.5	9.0
	Field pH Min	6.83		6.70	6.0	6.5
	Field Temperature (°C)	18.6		7.4	-	-
	Total Ammonia-N (mg/L)	8.8		2.4	-	-
	Unionized Ammonia (mg/L)	0.102		0.003	-	-
	<i>E.coli</i> (CFU/100 mL)	7.4 (GEO MEAN)		9.4 (GEO MEAN)	-	-
		Average	Minimum	Maximum		
Influent/Raw	BOD ₅ (mg/L)	209.58	81	408		
	TSS (mg/L)	156.5	74	226		
	T.Phos (mg/L)	3.12	1.18	5.08		
	TKN (mg/L)	24.78	9.8	45.1		

Non-compliance with respect to the effluent concentration is deemed to have occurred when the seasonal average concentration of a minimum of five (5) samples per discharging cell taken during the discharge period exceeds the corresponding concentration set out above.

2023 Monthly Raw Influent

Month	Monthly Total Flow (m ³)	Average Daily Flow (m ³ /d)	Peak Daily Flow (m ³ /d)
January	14905.5	480.82	599.4
February	13274.1	474.08	1065.3
March	16957.8	547.03	823
April	32156.2	1071.87	1896.1
May	19780.1	638.07	1326.5
June	14068.5	468.95	878.9
July	12012.18	387.49	488.7
August	13729.2	442.88	640.8
September	12137.98	404.6	511.3
October	18782.6	605.89	1318
November	16866	562.2	801.2
December	16050.1	517.75	670.9
Average		549.92	
Maximum			1896.1
TOTAL	200720.3		



The Raw Sewage from both the Clark Street and St. Gregory School sewage lift stations (SLS) are pumped independently directly to the lagoons and the flow is monitored by Mag flow meters at each station. The operator takes readings daily and total flows are calculated and recorded on a daily log sheet and later transferred to OCWA's database. The total discharge from each cell (effluent) is estimated and recorded by an established engineering technique based on the lagoon dimensions and drawdown.

The maximum daily influent/raw flow of (1896.1 m³/d) occurred in April 2023 and was approximately 202% of the average day rated influent capacity.

The annual average daily flow for 2023 (549.92 m³/d) was approximately 58.5% of the rated day capacity (940 m³/d). This shows the adequacy of the works as the system is well below the rated capacity; showing that the treatment amount is adequate.

Refer to *Appendix B* for raw (influent) sample data.

Table for Annual Flow Comparison & Trending of Annual Flows

Year	Total Raw Sewage Flow m³/d	Avg Day Sewage Flow m³/d	Max Day Sewage Flow m³/d	Avg Day % of rated capacity 940 m³/d
2023	200,720	550	1896	59
2022	180,914	496	1432	53
2021	190,198	521	1801	55
2020	181,033	495	1497	53
2019	228,970	627	2406	67
2018	204,566	560	1893	60
2017	255,702	701	2588	75
2016	200,750	549	2970	58
2015	215,628	590	2,577	59
2014	278,009	762	2,860	76
2013	254,762	698	2,315	69.8
2012	248,030	677	2,042	68
2011	283,219	775	2364	77
2010	288,195	796	1,731	80
2009	345,437	946	2,696	95
2008	235,728	1026	3,106	103
2007	328,365	900	2,040	90

Therefore the 2023 total raw sewage flow is slightly higher from the total raw sewage flow in 2022.

b.) A description of any operating problems encountered and corrective actions taken;

Plant Bypasses and Alarms

All raw sewage flows to the lagoon are directed through the community's Clark Street and St. Gregory stations. Consequently, any bypass from these locations is defined as a "collection system" bypass under the current ECA. In the event of very high sewage levels in the station wet well, raw sewage would flow from the well, through an overflow pipe to Genessee Creek.

Establishing a sodium hypochlorite drip would normally disinfect bypasses. There are no users immediately downstream within 3.5 kilometers (km). The operator is familiar with the requirements to report all bypass incidents to the Ministry of the Environment's Spills Action Center (MOE SAC). They are further aware of the need to record the approximate volume and duration of all bypasses on the OCWA form and all relevant bypass particulars on the operation spills/bypass/leak report forms.

The pumping station wet wells are equipped with high level alarms to alert of an impending or existing raw sewage bypass condition. The alarms are connected to a red light above the station. Also, OCWA has in place a continuous monitoring and backup automated alarm system that calls

out pages to an on-call operator should a high level condition occur at either of the two lift stations.

The Powassan Lagoons operated well in 2023 with no operational problems and met all limits and objectives under condition 7 of ECA. However, there were two sewage lift station events that occurred; see section i.)

c.) A summary of all maintenance carried out on any major structure, equipment, and apparatus, mechanism or thing forming part of the Works;

Plant maintenance, including non-scheduled maintenance, is monitored using Maximo; a preventative maintenance software program. All routine and preventative maintenance was conducted as scheduled in 2023. A summary of maintenance performed is available in *Appendix D*.

d.) A summary of any effluent quality assurance or control measures undertaken during the reporting period;

Effluent quality assurance is maintained in number of ways: The effluent parameters specified in the above table 2023 Influent/Effluent Quality Data on page 5: are analyzed by an accredited laboratory. The results are reviewed on a regular basis to ensure compliance with site's objectives and limits. Annual sample calendars issued as reminder of required sampling.

Effluent control measures include: In-house tests for pH are conducted by licensed Operators for monitoring purposes using Standard Methods and the data generated from these tests is used to determine the treatment efficiency while maintaining process control. All in-house monitoring equipment is calibrated based on the manufactures recommendations. Pre-discharge cell contents samples are collected and analyzed for effluent parameters prior to discharge. The results are used to determine the amount of Ferric Sulphate required. Ferric Sulphate is used for total phosphorus and TSS removal. The amount of Ferric Sulphate is determined using a spreadsheet that uses the content sample results and determines an appropriate amount of Ferric Sulphate. Also, more Ferric Sulphate may be added based on historical results. Finally, the total discharge from each cell (effluent) is estimated and recorded by an established engineering technique based on the lagoon dimensions and drawdown.

e.) A summary of the calibration and maintenance carried out on all effluent monitoring equipment;

St. Gregory Street SLS and Clark Street SLS flow meter inspection/verification completed in October 2023.

f.) A description of efforts made and results achieved in meeting the Effluent Objectives of Condition 6;

OCWA uses a number of best efforts to achieve the Effluent Objectives. Ferric sulphate used with seasonal batch treatment in an effort to meet all objectives and limits.

Operational staff has current and appropriate level of certification for the operation of the facility and continue to learn and achieve knowledge of the process and equipment. Staff also has a high level of regulatory competence.

The mechanical elements in the facility are regularly inspected, well maintained and kept in good repair. OCWA uses a computerized maintenance management program which generates works orders to ensure maintenance of equipment is proactively performed.

Raw wastewater and effluent samples are collected as required and analyzed by SGS Labs, an accredited laboratory. OCWA reviews these results on a regular basis to ensure compliance with ECA objective and limits.

Operations, maintenance and emergency procedures are available to ensure facilities are operated in compliance with applicable legal instruments. Facility staff has access to a network of operational compliance and support experts at the region and corporate levels.

All effluent objectives were met during the spring and fall discharge. The objective for carbonaceous biochemical oxygen demand (cBOD₅) is 20 mg/L, spring average was 10.30 mg/L and fall average was 4.5 mg/L. The objective for total suspended solids (TSS) is 20 mg/L, spring average was 16.30 mg/L and fall average was 18.70 mg/L. The objective for total phosphorus (TP) is 0.8 mg/L, spring average was 0.34 mg/L and fall average was 0.34 mg/L. To meet these objectives the lagoon cells are dosed with ferric sulphate. The objective for pH is 6.5 – 9.0 at all times. Spring discharge maximum was 8.19 and minimum was 6.83; therefore, objective met at all times. Fall discharge maximum was 7.16 and minimum was 6.70; therefore, objective met at all times.

Continuous efforts were made to meet the Effluent Objectives in 2023:

1. Development of the sampling plan which meets or exceeds the minimum sample requirements as required in the ECA.
2. Routine inspection of the lagoons for berm stability, odours, and condition of cell contents including visual inspection to ensure effluent does not contain oil or other substance in amounts sufficient to create a visible film or sheen or foam or discolouration on the surface of the receiving waters, and is essentially free of any floating material.
3. Ensuring that chemicals are being dosed as required. (With proper content sampling, monitoring and batch treatment)
4. Calibration of the pH meter before use.
5. Performing preventative maintenance activities in accordance with work order schedules.
6. Monitoring treatment processes through review of lab results.
7. Annual calibration of flow meters.
8. Monitoring sludge depth as per section g.).

Furthermore, due to the nature of the system, it always operates under normal operating conditions. Any abnormal condition that may occur would be a bypass, overflow or spill event, which already has procedures to deal with. Any abnormal condition can be found in section i).

Refer to *Appendix A - Lagoon Release Reports* for complete lagoon effluent sample data.

g.) A tabulation of the volume of sludge generated in the reporting period and an outline of anticipated volumes to be generated in the next reporting period and a summary of the locations to where the sludge was disposed;

During the 2023 operating year, no sludge was removed. Sludge has been removed on an as needed basis. North Cell 2 was dredged in 2018. South Cell 1 was dredged in 2016. OCWA has taken sludge measurements in South Cell 1 and Old Cell 3 during the fall treatment of 2019. The amount of sludge in these two cells is relatively low with an average sludge depth in Cell 1 of 1.67 inches and an average sludge depth in Cell 3 of 6 inches. The sludge depth will be measured approximately every 5 years while completing lagoon treatment. It is anticipated that the sludge volume will remain approximately the same during future years. The Municipality of Powassan may dredge Old Cell 3 in the near future, and if so, they will dispose of sludge at the nearby landfill.

h.) A summary of any complaints received during the reporting period and any steps taken to address the complaints;

There were no complaints received for the 2023 reporting period.

i.) A summary of all By-pass, Overflow, Spill or abnormal discharge events;

Type of incident: Clark St. Sewage Lift Station Bypass

SAC Ref No.: 1-34JTS9

Start Date Time: April 5, 2023 1400 hrs.

Termination: April 7, 2023 0100 hrs.

Duration: 35 hours

Approximate volume: 3000 m³

Details: Heavy precipitation and warm temperatures overwhelming pumping station resulting in Bypass.

Receiver: Genesee Creek

Actions: Super-chlorinated raw sewage entering overflow header with collection of samples and monitoring.

Reporting: Verbal reports to MOE SAC and MOH, emailed to EC and MOE SAC as required, also notification made to local MECP inspector Erin Spires and owner via email.

Type of incident: Clark St. Sewage Lift Station Spill due to Mechanical Failure

SAC Ref No.: 1-4K5U1Z

Start Date Time: December 28, 2023 1645

Termination: December 28, 2023 1735 hrs

Duration: 50 minutes

Approximate volume: 10 m³

Details: Generator failure to activate following power outage with delay in alarm notification resulting in station bypass/spill.

Receiver: Genesee Creek

Actions: Raw sewage super-chlorinated entering overflow header. Collection of samples not possible due to delay in notification until power restoration at which point station level immediately reduced. Primary and backup alarming evaluation with reconfiguration to ensure multiple notifications and monitoring.

Reporting: Verbal reports to MOE SAC and MOH, emailed to EC and MOE SAC as required, also notification made to local MECP inspector Erin Spires and owner via email.

Refer to *Appendix C* for bypass sample data.

j.) A copy of all Notice of Modifications submitted to the Water Supervisor as a result of Schedule B, Section 1, with a status report on the implementation of each modification;

No modifications made as a result of Schedule B, Section 1 in 2023.

k.) A report summarizing all modifications completed as a result of Schedule B, Section 3;

No modifications made as a result of Schedule B, Section 3. No normal or emergency operational modifications were performed in 2023.

l.) Any other information the Water Supervisor requires from time to time;

There was one MECP inspection on October 20, 2023. MECP inspection report noted four non-compliances. Please see items below and action plans.

NC-1 – Referred to an Environmental Incident Report form that the inspector issued a non-compliance because the form did not show the level of treatment. The sheet did show no chlorination; however, did not specifically say the level of treatment. Action plan: Update Environmental incident report form to have a section that says “Level of Treatment.” At this time, correct any other issues with fax number etc..

NC-2 – Referred to a TSS exceedance in 2022 which was reported and info can be found in previous 2022 Powassan Lagoon Annual Report. Action plan: Continue to monitor the untreated content sample results and determine the appropriate amount of Ferric Sulphate to use. Attempt to use more Ferric Sulphate when necessary in order to meet all effluent limits and objectives. In 2023, did not exceed TSS. There is very little method of control for lagoon facilities with seasonal batching in their ECAs.

NC-3 – Referred to annual reporting requirements not being consistent or met. Current annual report did contain sections a-l as per section 11.5 of ECA 7092-9 LLAN. Action plan: Create a document to place at the beginning of our annual reports. This document will have each ECA requirement in one column and the next column will have which section of the annual report satisfies this requirement. Multiple sections may be used to satisfy a requirement and this will be noted.

NC-4 – Referred to two gauges that were working intermittently on the generator at Clark St. SLS. Inspector issued a non-compliance for this. May 2022 the issue with the gauges was noted in work order 2721384. At this point, the generator technician was informed and they started to track this item in their system, while trying to source the gauges. Verbal and email communications from the generator technician confirmed the gauges were obsolete and could not be located, they continued to try and source different type of gauges that would work. Email from generator technician confirming these gauges are not essential to the operation of the generator. Action plan: Work order summary provided to inspector an email dated September 11, 2023 at 1:45 PM. In the summary you can see the readings for RPM in the work logs. The generator round sheets have all the info, including AMP meter readings since April 2023. This

shows the intermittent working gauges are working now. Thus the definition of intermittent issue. The generator technician will continue to search for alternate gauges.

The final MECP report is pending at the time of this report; however, the findings above are confirmed and the action plans have been accepted by the MECP.

m.) Additional Information.

Capital Upgrades or Major Equipment Replacement:

- Replaced emergency lighting at Clark St. SLS

Operational Highlights Include:

- Spring release: South Cell 1 and North Cell 2 Lagoons ferric sulphate treatment May 2, 2023. South Cell 1 treated with 2002 imperial gallons (IMPG) and North Cell 2 treated with 1418 IMPG.
- Annual generator service completed in September 2023.
- Fall release: North Cell 2 and Old Cell 3 Lagoon ferric sulphate treatment September 20, 2023. North Cell 2 treated with 1500 IMPG and Old Cell 3 treated with 450 IMPG.
- Clark St. SLS cleaned.

Description of the Works:

The Town of Powassan Sewage System consists of gravity sewer mains that flow to two pumping stations with submersible Flygt pumps and associated force mains and controls serving the Town of Powassan. The force mains from the lift stations discharge into a three-cell stabilization pond (lagoon) located on part of Lots 17 and 18, Concession III, Township of Himsworth South.

OCWA employees operate the wastewater treatment system. OCWA maintains raw sewage flow data, raw sewage monthly sample analysis data, lagoon pre-release data, and lagoon release effluent analysis data in an electronic process database.

Wastewater Collection System

Pumping Station number (No.) 1, the Clark Street SLS is located in Lot 16, Concession II, in the Town of Powassan, approximately 103 meters (m) North of Clark Street and approximately 250 m East of Highway 11 in a field behind the Public Library. It is equipped with two submersible pumps each rated at 2,179 liters per minute (L/min) at 21 feet (ft.) total dynamic head (TDH), complete with controls, and an emergency overflow bypass to Genessee Creek; the station pumps directly to the lagoons. The standby 100 kilowatt (kW) emergency generator that provides emergency power for this station during power outages became operational early on 2010.

Pumping Station No. 2, the St. Gregory Station is located on Lot 17 approximately 20 m south of the Genessee Creek, at the North East corner of the schoolyard. It is equipped with two Flygt submersible pumps each rated at 1800 L/min (30.2 liters per second (L/s)) at 15.1 m or 50 ft. TDH, complete with controls and an emergency overflow bypass to Genessee Creek; the station

pumps directly to the lagoons. This station utilizes standby power capabilities from a 65 kW emergency diesel generating station located at the nearby Water Treatment Plant.

Waste Stabilization Ponds (Lagoons)

The Powassan Wastewater Treatment systems consist of three cell lagoons. Cell 2 South and Cell 1 North have a combined surface area of 7.2 ha depth of 1.8 m each with a storage capacity of 140,500 m³. Cell 3, referred to as the Old Cell, is the original single cell waste stabilization pond approximately 2.83 ha depth of 1.5 m with a storage capacity of 39,700 m³. These are complete retention lagoons that are seasonally released. The lagoon discharges are conducted in the spring and fall of the year. Pre-discharge sample analysis results are utilized to dictate the need for batch chemical treatment with ferric sulphate for phosphorus removal and TSS removal. The lagoons discharge to Genessee Creek - South River - Lake Nipissing after treatment. There are no significant downstream users within 3.5 km.

Registration of the Wastewater Works:

Municipal Location:	Town of Powassan
Org Unit:	5747
Facility(Proj) Number:	201376201
Works Number:	10000613
ECA: Sewage Works	7092-9 LLAN Issued 24 June, 2015 revokes ECA No. 1040-7U2QV6 1040-7U2QV6 Issued 12 August, 2009 revokes ECA No. 3-1429-80-006 (for install 100 kW natural gas gen set)
ECA: Air	3319-7TQQBE Issued 09 July 2009 revokes ECA No. 3-0523-83-006
Facility Classification:	WWC Level II Certificate 1802 issued December 19, 1991 WWT Level I Certificate 1803 issued December 19, 1991
Area(s) Serviced:	Town of Powassan
Population Serviced:	1000 approx.
Total Design Capacity:	940 m ³ /d

Best Regards,

Joshua Gravelle
Process Compliance Technician
North Eastern Ontario Hub
705-568-7000

Appendix A

Lagoon Release Reports

RELEASE REPORT FOR THE POWASSAN LAGOONS
SPRING RELEASE YEAR 2023

UAL

ORG # 5747

TYPE OF SAMPLE	CELL	DATE COLLECTED	DATE RECEIVED	CBOD ₅ mg/L	TSS mg/L	pH	TP mg/L	Temp. Celcius	TAN mg/L	Unionized Ammonia mg/L	Ecoli CFU/100ml
CONTENT	North	20-Apr-23	21-Apr-23	22.0	43.00	7.45	0.98				
	South	20-Apr-23	21-Apr-23	34.0	53.00	7.63	0.98				
	Old										
TREATED	North	04-May-23	05-May-23	9.0	39.00	7.57	0.23				
	South	11-May-23	12-May-23	4.0	18.00	8.05	0.23				
	Old										

		DATE	DATE	CBOD ₅	TSS	Field pH	TP	Field Temp.	TAN	Unionized Ammonia	Ecoli
CELL South DRAWDOWN	1st Sample	24-May-23	25-May-23	14.00	15.00	7.44	0.17	15.5	6.3	0.049	20
	2nd Sample	28-May-23	30-May-23	22.00	17.00	8.00	0.15	20.3	4.5	0.175	2
	3rd Sample	01-Jun-23	03-Jun-23	6.00	7.00	6.83	0.26	23.3	5.1	0.017	2
	4th Sample	05-Jun-23	06-Jun-23	7.00	18.00	7.01	0.91	23.1	9.5	0.048	2
	5th Sample	09-Jun-23	10-Jun-23	12.00	15.00	7.28	0.80	19.0	14.9	0.103	20
	6th Sample										

		DATE	DATE	CBOD ₅	TSS	Field pH	TP	Field Temp.	TAN	Unionized Ammonia	Ecoli
CELL North DRAWDOWN	1st Sample	10-May-23	11-May-23	6.00	21.00	7.72	0.12	15.5	7.90	0.116	8
	2nd Sample	14-May-23	16-May-23	12.00	12.00	8.19	0.09	18.6	7.80	0.409	20
	3rd Sample	18-May-23	19-May-23	8.00	13.00	7.09	0.10	15.9	8.60	0.031	4
	4th Sample	22-May-23	23-May-23	4.00	14.00	6.92	0.17	18.8	9.90	0.03	2
	5th Sample	24-May-23	25-May-23	12.00	31.00	7.03	0.63	15.8	13.10	0.041	120
	6th Sample										

		DATE	DATE	CBOD ₅	TSS	Field pH	TP	Field Temp.	TAN	Unionized Ammonia	Ecoli
CELL Old	1st Sample										
DRAWDOWN	2nd Sample										
	3rd Sample										
	4th Sample										
	5th Sample										
	6th Sample										

		CBOD ₅	TSS	Field pH	Field pH	TP	Field Temp.	TAN	Unionized Ammonia	Ecoli
South Cell#1 AVG CONC OVER DISCHARGE PERIOD		12.2	14.4	6.8	8.0	0.5	20.2	8.1	0.08	5.0
North Cell #2 AVG CONC OVER DISCHARGE PERIOD		8.4	18.20	6.92	8.19	0.2	16.9	9.46	0.13	11
Old Cell #3 AVG CONC OVER DISCHARGE PERIOD		#DIV/0!	#DIV/0!	0.00	0.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#NUM!
Seasonal Avg Conc Over Spring Discharge Period		10.3	16.30	6.83	8.19	0.34	18.6	8.8	0.102	7.4
Seasonal Concentration Limits per Powassan Lagoon C of A		25.0	25.0	6.00	9.50	1.00				
				min						
					max					

NOTES/COMMENTS

Averages calculated following WSER protocol.

3 Cell seasonal discharge lagoon. Treated with ferric sulfate prior to release when Total Phosphorus reduction is required.

Cell #1 = South Cell = 3.60 HA x 1.8 m depth = 70,250 m³

Cell #2 = North Cell = 3.60 HA x 1.8 m depth = 70,250 m³

Cell #3 = Old Cell = 2.83 HA x 1.5 m depth = 39,700 m³

Spring Release: Discharge commencing after the liquid surface in the lagoon has become substantially free of ice cover, terminating within sixty (60) days thereafter

The Effluent pH is to be maintained between 6.0 to 9.5 at all times to meet compliance

Compliance is on Seasonal Average Concentrations of CBOD5, Total Phosphorus and Suspended Solids

A minimum of five samples are required during each discharge period from each discharging cell

WSER requirements: TSS is to be tested at least 1 time per discharge (or bi-weekly if discharge >30 days)

WSER requirements: CBOD5 is to be tested at least 1 time per discharge (or bi-weekly if discharge >30 days)

WSER Effluent limits: CBOD5 and TSS = Annual average of 25 mg/L

DATE RELEASE STARTED:
DATE RELEASE STOPPED:
of Discharge Days
Approximate Daily Flow (m³/d)

CELL #1 South	24-May-23
	09-Jun-23
	17
	3902.76

AMOUNT OF CHEMICAL USED
DISCHARGE VOLUME

2002 IMPG
66,347

treated on May 9, 2023

DATE RELEASE STARTED:
DATE RELEASE STOPPED:
of Discharge Days
Approximate Daily Flow (m³/d)

CELL #2 North	10-May-23
	24-May-23
	15
	4683.33

AMOUNT OF CHEMICAL USED
DISCHARGE VOLUME

1418 IMPG
70,250

treated on May 2, 2023

DATE RELEASE STARTED:
DATE RELEASE STOPPED:
of Discharge Days
Approximate Daily Flow (m³/d)

CELL #3 Old	

AMOUNT OF CHEMICAL USED
DISCHARGE VOLUME

Tot.# of Spring discharge days

31

* the lagoons became ice free on :

14-Apr-23

TOTAL LAGOON EFFLUENT VOLUME DISCHARGE (m³) :

136,597

60 days after:

12-Jun-23

ORG # 5747

RELEASE REPORT FOR THE POWASSAN LAGOONS
FALL RELEASE YEAR 2023

UAL - Late Delivery of samples

TYPE OF SAMPLE	CELL	DATE COLLECTED	DATE RECEIVED	CBOD ₅ mg/L	TSS mg/L	pH	TP mg/L	Temp. Celcius	TAN mg/L	Unionized Ammonia mg/L	Ecoli CFU/100ml
CONTENT											
	North	06-Sep-23	07-Sep-23	5.0	18.00	8.35					
	South						1.04				
TREATED	Old	06-Sep-23	07-Sep-23	4.0	6.00	7.76	0.57				
	North	04-Oct-23	05-Oct-23	7.0	17.00	7.65	0.12				
	South										
	Old	04-Oct-23	05-Oct-23	4.0	6.00	7.53	0.10				

CELL South	1st Sample	DATE	DATE	CBOD ₅	TSS	Field pH	TP	Field Temp.	TAN	Unionized Ammonia	Ecoli
DRAWDOWN	2nd Sample										
	3rd Sample										
	4th Sample										
	5th Sample										
	6th Sample										

CELL North	1st Sample	DATE	DATE	CBOD ₅	TSS	Field pH	TP	Field Temp.	TAN	Unionized Ammonia	Ecoli
DRAWDOWN	2nd Sample	01-Nov-23	02-Nov-23	4.00	8.00	7.16	0.14	6.4	3.40	0.007	4
	3rd Sample	06-Nov-23	07-Nov-23	4.00	5.00	6.85	0.13	6.5	3.80	0.004	8
	4th Sample	10-Nov-23	11-Nov-23	4.00	5.00	6.90	0.14	5.8	3.80	0.004	4
	5th Sample	15-Nov-23	16-Nov-23	4.00	18.00	7.11	0.18	5.8	4.00	0.007	14
	6th Sample	17-Nov-23	18-Nov-23	4.00	11.00	6.92	0.19	6.5	4.00	0.005	14
		21-Nov-23	22-Nov-23	4.00	9.00	6.95	0.18	2.2	5.80	0.005	20

CELL Old	1st Sample	DATE	DATE	CBOD ₅	TSS	Field pH	TP	Field Temp.	TAN	Unionized Ammonia	Ecoli
DRAWDOWN	2nd Sample	16-Oct-23	17-Oct-23	5.0	15.00	7.01	0.37	11.00	0.10	0.001	18.00
	3rd Sample	19-Oct-23	20-Oct-23	4.0	12.00	7.05	0.31	11.60	0.10	0.001	4.00
	4th Sample	23-Oct-23	24-Oct-23	6.0	50.00	7.05	0.70	10.20	0.10	0.001	8.00
	5th Sample	29-Oct-23	31-Oct-23	4.0	36.00	6.70	0.77	9.10	0.40	0.001	14.00
	6th Sample	1-Nov-23	2-Nov-23	6.0	37.00	6.91	0.64	6.10	0.90	0.001	12.00

South Cell#1 AVG CONC OVER DISCHARGE PERIOD											
North Cell #2 AVG CONC OVER DISCHARGE PERIOD											
Old Cell #3 AVG CONC OVER DISCHARGE PERIOD											
Seasonal Avg Conc OVER Fall DISCHARGE PERIOD											
Seasonal Concentration Limits per Powassan Lagoon C of A											
				CBOD ₅	TSS	Field pH	Field pH	TP	Field Temp.	TAN	Ecoli
				#DIV/0!	#DIV/0!	0.00	0.00	#DIV/0!	#DIV/0!	#DIV/0!	#NUM!
				4.0	9.33	6.85	7.16	0.2	5.5	4.13	9
				5.0	30.000	6.70	7.05	0.56	9.60	0.32	9.9345078
				4.5	18.7	6.70	7.16	0.34	7.4	2.4	9.4
				25.0	25.0	6.0	9.5	1.00			

NOTES/COMMENTS

Averages calculated following WSER protocol.

3 Cell seasonal discharge lagoon. Treated with ferric sulfate prior to release when Total Phosphorus reduction is required.

South Cell = 3.60 HA x 1.8 m depth = 70,250 m³

North Cell = 3.60 HA x 1.8 m depth = 70,250 m³

Old Cell = 2.83 HA x 1.5 m depth = 39,700 m³

Fall Release: Not earlier than Oct. 15, not later than Nov. 30.

The Effluent pH is to be maintained between 6.0 to 9.5 at all times to meet compliance, must be taken in Field with Field Temperature

Compliance is on Seasonal Average Concentrations of CBOD5, Total Phosphorus and Total Suspended Solids

A minimum of five samples are required during each discharge period from each discharging cell

WSER requirements: TSS is to tested at least 1 time per discharge (or bi-weekly if discharge >30 days)

WSER requirements: CBOD5 is to tested at least 1 time per discharge (or bi-weekly if discharge >30 days)

WSER Effluent limits: CBOD5 and TSS = Annual average of 25 mg/L

DATE RELEASE STARTED:

DATE RELEASE STOPPED:

of Discharge Days

Approximate Daily Flow (m³/d)

CELL South

AMOUNT OF CHEMICAL USED (imp. gal.)

DISCHARGE VOLUME (m³)

DATE RELEASE STARTED:

DATE RELEASE STOPPED:

of Discharge Days

Approximate Daily Flow (m³/d)

CELL North
01-Nov-23
21-Nov-23
20
2927.10

AMOUNT OF CHEMICAL USED (imp. gal.)

DISCHARGE VOLUME (m³)

1500
58,542

DATE RELEASE STARTED:

DATE RELEASE STOPPED:

of Discharge Days

Approximate Daily Flow (m³/d)

CELL Old
16-Oct-23
01-Nov-23
17
1649.16

AMOUNT OF CHEMICAL USED (imp. gal.)

DISCHARGE VOLUME (m³)

450
28,036

treated on 20-Sep-23

Tot.# of Fall discharge days

37

TOTAL LAGOON EFFLUENT VOLUME DISCHARGE (m³) :

86,578

Appendix B

Raw (Influent) Sample Data

Report extracted 01/19/2024 10:29

Facility Org Number:
Facility Works Number:
Facility Name:
Facility Owner:
Facility Classification:
Receiver:
Total Design Capacity:

5747
110000613
POWASSAN WASTEWATER TREATMENT LAGOON
Municipality: The Corporation of the Municipality of Powassan
Class 1 Wastewater Treatment
Genesee Break to South River to South Bay of Lake Nipissing
940.0 m3/day

Powassan Wastewater Treatment Lagoon
Raw (Influent) Sample Data
From: 01/01/2023 to 31/12/2023

	01/2023	02/2023	03/2023	04/2023	05/2023	06/2023	07/2023	08/2023	09/2023	10/2023	11/2023	12/2023	Total	Avg	Max	Min
Raw / Biochemical Oxygen Demand: BOD5 - mg/L																
Count Lab	1	1	1	1	1	1	1	1	1	1	1	1	12			
Max Lab	159	250	263	81	241	187	232	187	201	408	86	220			408	
Mean Lab	159	250	263	81	241	187	232	187	201	408	86	220		209.583		
Min Lab	159	250	263	81	241	187	232	187	201	408	86	220				81
Raw / Flow - m³/d																
Count IH	31	28	31	30	31	30	31	31	30	31	30	31	365			
Max IH	599.4	1065.3	823	1896.1	1326.5	878.9	488.7	640.8	511.3	1318	801.2	670.9			1896.1	
Mean IH	480.82	474.08	547.03	1071.87	638.07	468.95	387.49	442.88	404.6	605.89	562.2	517.75		549.92		
Min IH	397.9	360	400.7	751.1	442.6	374.1	337	308.5	333.8	346	406.6	396.9				308.5
Total IH	14905.5	13274.1	16957.8	32156.2	19780.1	14068.5	12012.18	13729.2	12137.98	18782.6	16866	16050.1	200720.3			
Raw / Total Kjeldahl Nitrogen: TKN - mg/L																
Count Lab	1	1	1	1	1	1	1	1	1	1	1	1	12			
Max Lab	19.9	14.9	20.4	9.8	25.5	29.7	31.9	30.7	45.1	29.8	16.6	23			45.1	
Mean Lab	19.9	14.9	20.4	9.8	25.5	29.7	31.9	30.7	45.1	29.8	16.6	23		24.775		
Min Lab	19.9	14.9	20.4	9.8	25.5	29.7	31.9	30.7	45.1	29.8	16.6	23				9.8
Raw / Total Phosphorus: TP - mg/L																
Count Lab	1	1	1	1	1	1	1	1	1	1	1	1	12			
Max Lab	2.92	1.6	2.51	1.18	4.68	3.08	4.22	4.12	5.08	3.12	1.78	3.09			5.08	
Mean Lab	2.92	1.6	2.51	1.18	4.68	3.08	4.22	4.12	5.08	3.12	1.78	3.09		3.115		
Min Lab	2.92	1.6	2.51	1.18	4.68	3.08	4.22	4.12	5.08	3.12	1.78	3.09				1.18
Raw / Total Suspended Solids: TSS - mg/L																
Count Lab	1	1	1	1	1	1	1	1	1	1	1	1	12			
Max Lab	158	139	162	114	215	135	226	168	171	161	74	155			226	
Mean Lab	158	139	162	114	215	135	226	168	171	161	74	155		156.5		
Min Lab	158	139	162	114	215	135	226	168	171	161	74	155				74

Appendix C

Bypass/Overflow Sample Data

**SGS Canada Inc.**

P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - K0L 2H0
Phone: 705-652-2000 FAX: 705-652-6365

Works #: 110000613**Project :** PO#017470

14-April-2023

OCWA-Near North (Powassan Lagoon)**Attn :** Josh Gravelle

213 Whitewood Ave. West, PO Box 1495
New Liskeard, ON
P0J 1P0, Canada

Phone: 705-672-5549 Ext. 222

Fax:

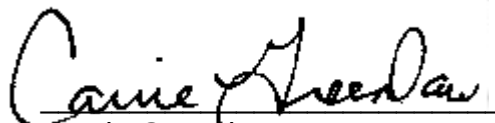
Date Rec. : 06 April 2023**LR Report:** CA13162-APR23**Copy:** #2

CERTIFICATE OF ANALYSIS

Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	6: PrBy PBy2-Bypass @ Clark Street Sewage Lift Stn
Sample Date & Time					05-Apr-23 15:35
Sampled By					Darren Aljoe
Temperature Upon Receipt [°C]	---	---	---	---	9.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	06-Apr-23	16:57	11-Apr-23	14:33	58
Total Suspended Solids [mg/L]	11-Apr-23	14:39	13-Apr-23	11:15	253
pH [No unit]	10-Apr-23	13:36	11-Apr-23	10:18	6.89
Phosphorus (total) [mg/L]	11-Apr-23	14:23	13-Apr-23	07:36	0.74
Total Kjeldahl Nitrogen [as N mg/L]	12-Apr-23	07:59	14-Apr-23	15:27	5.8
E. Coli [cfu/100mL]	06-Apr-23	16:26	10-Apr-23	12:44	NDOGEC

NDOGEC - No Data: Overgrown with E.coli



Carrie Greenlaw
Project Specialist,
Environment, Health & Safety

**SGS Canada Inc.**

P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - K0L 2H0
Phone: 705-652-2000 FAX: 705-652-6365

Works #: 110000613**Project :** PO#017470

14-April-2023

OCWA-Near North (Powassan Lagoon)**Attn :** Josh Gravelle

213 Whitewood Ave. West, PO Box 1495
New Liskeard, ON
P0J 1P0, Canada

Phone: 705-672-5549 Ext. 222
Fax:

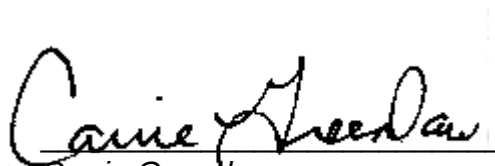
Date Rec. : 06 April 2023**LR Report:** CA13163-APR23**Copy:** #2

CERTIFICATE OF ANALYSIS

Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	6: PrBy PBy2-Bypass @ Clark Street Sewage Lift Stn
Sample Date & Time					05-Apr-23 15:40
Sampled By					Dan Finnigan
Temperature Upon Receipt [°C]	---	---	---	---	9.0
Carbonaceous Biochemical Oxygen Demand [(CBOD5) mg/L]	06-Apr-23	16:57	11-Apr-23	14:33	37
Total Suspended Solids [mg/L]	11-Apr-23	14:39	13-Apr-23	11:15	43
pH [No unit]	10-Apr-23	13:36	11-Apr-23	10:18	7.04
Phosphorus (total) [mg/L]	11-Apr-23	14:23	13-Apr-23	07:36	0.71
Total Kjeldahl Nitrogen [as N mg/L]	12-Apr-23	07:59	14-Apr-23	15:27	5.6
E. Coli [cfu/100mL]	06-Apr-23	16:26	10-Apr-23	12:44	NDOGEC

NDOGEC - No Data: Overgrown with E.coli



Carrie Greenlaw
Project Specialist,
Environment, Health & Safety

Appendix D
Maintenance Summary

Workorder Summary Report

Report Start Date: Jan 1, 2023 12:00 AM	
Report End Date: Dec 31, 2023 11:59 PM	
Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3162521	0000296003	GENERATOR NATURAL GAS GENSET Clark Street	5747, Clark SPS, Facility	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator Inspection/ Functional Test (1m) 5747	CLOSE	1/1/23 12:00 AM	1/10/23 06:12 PM	1/10/23 06:12 PM	Diesel Generator Inspection/ Functional Test (1m) 5747 -January 09, 2023. Dan Finnigan performed the monthly Generator/ Functional test.. All fluid levels were checked, belts inspected, battery charging system, etc. The generator transfer button was pressed and the start command to the generator was initiated. While running, the system was observed for leaks or any other deficiencies. The following generator values were recorded while running: RPM's= 1825 Oil Level = Full Coolant Temp=160 Deg.F Battery Voltage= 12.0 V Oil Pressure 60 psi Hrs at start: 501.2 Hrs at stop: 501.5
3171377			5747, Powassan WWTL	OPER	Health and Safety	1	YEARS	WHMIS/MSDS/NSF Review And Update (1y) 5747	CLOSE	1/1/23 12:00 AM	1/24/23 09:13 AM	1/24/23 09:13 AM	WHMIS/MSDS/NSF Review And Update (1y) 5747 -Reviewed status of SDS sheets, updated as required.

Workorder Summary Report

Report Start Date: Jan 1, 2023 12:00 AM	
Report End Date: Dec 31, 2023 11:59 PM	
Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3171506			5747, Powassan WWTL	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 5747	CLOSE	1/1/23 12:00 AM	1/10/23 05:28 PM	1/10/23 05:28 PM	Health And Safety Inspection (1m) 5747 - Dan Finnigan conducted the monthly H&S Inspection on January 09, 2023 which consisted of checking/ verifying the following items: 1. Spill Kit: all items were available 2. Safety Signage (all intact and visible) 3. First aid kit 4. Hearing protection earmuffs 5. Emergency lighting (was not working) 6. Emergency Eyewash (bottles are within use before date) 7. Fire Extinguisher 8. CO Monitor
3171536			5747, Powassan WWTL	OPER	Inspection	1	YEARS	Daily O&M Activities (1y) 5747	COMP	1/1/23 12:00 AM	1/3/24 09:56 AM	1/3/24 09:56 AM	
3171577			5747, Powassan WWTL	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5747	CLOSE	1/1/23 12:00 AM	1/10/23 06:09 PM	1/10/23 06:09 PM	TPM Inspection/Maintenance (1m) 5747 -Completed by Dan Finnigan on January 09, 2023. The operation of all sewage station lift pumps were visually and audibly observed at both St. Gregory's Lift Station and the Clark Street Lift station. Pump #1 at St. Gregory SLS seemed a little noisy but pump output was normal. The control panels were also checked for functionality with nothing unusual noted. Ventilation screens at the Clark Station were in good condition, and there was nothing else to report.

Workorder Summary Report

Report Start Date: Jan 1, 2023 12:00 AM	
Report End Date: Dec 31, 2023 11:59 PM	
Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details								
WO #	Asset ID	Asset Description	Location Description	Type	Class	Inspection	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3171590			5747, Powassan WWTL	PM		Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5747	CLOSE	1/1/23 12:00 AM	1/31/23 01:57 PM	1/31/23 01:57 PM	Critical Alarm/Dialer Testing (1m) 5747 -Conducted by Dan Finnigan on January 30, 2023. Both sewage pumps were turned off in "hand" and the wet well level was allowed to rise until the High Level alarm setpoint was reached. It was verified by receiving the WIN911 alarm once the alarm condition was met. The on-call operator received the alarm call-out and both pumps were turned back on to pump down the level. Both sewage pumps were shut off in Auto when the level returned to normal settings in less than 10 minutes of pumping.
3176499			5747, Powassan WWTL	OPER		Compliance	1	MONTHS	WISKI Review (1m) 5747	CLOSE	1/1/23 12:00 AM	1/10/23 04:55 PM	1/10/23 04:55 PM	WISKI Review (1m) 5747 -WISKI Review (1m) for the month of December 2022 was completed on January 05, 2022 by Dan Finnigan. All values were checked and entered, lab data entries were reviewed, and this Work Order closed off.

Workorder Summary Report

Report Start Date: Jan 1, 2023 12:00 AM	
Report End Date: Dec 31, 2023 11:59 PM	
Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3216545	0000296003	GENERATOR NATURAL GAS GENSET Clark Street	5747, Clark SPS, Facility	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator Inspection/ Functional Test (1m) 5747	CLOSE	2/1/23 12:00 AM	3/1/23 02:28 PM	3/1/23 02:28 PM	Diesel Generator Inspection/ Functional Test (1m) 5747 -Curtis Green performed the monthly Generator/Functional test on February 23, 2023. All fluid levels were checked, belts inspected, battery charging system, etc. The generator transfer button was pressed and the start command to the generator was initiated. While running, the system was observed for leaks or any other deficiencies. The following generator values were recorded while running: RPM's= 1840 Oil Level = Full Coolant Temp=130 Deg.F Battery Voltage= 12 V Oil Pressure 60 psi Hrs at start: 502.4 Hrs at stop: 502.8
3222287			5747, Powassan WWTL	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 5747	CLOSE	2/1/23 12:00 AM	3/1/23 02:21 PM	3/1/23 02:21 PM	-Curtis Green conducted the monthly H&S Inspection on February 23, 2022 which consisted of checking/verifying the following items: 1. Spill Kit: all items were available 2. Safety Signage (all intact and visible) 3. First aid kit 4. Hearing protection earmuffs 5. Emergency lighting (not working) 6. Emergency Eyewash (bottles are within use before date) 7. Fire Extinguisher 8. CO Monitor

Workorder Summary Report

Report Start Date: Jan 1, 2023 12:00 AM	
Report End Date: Dec 31, 2023 11:59 PM	
Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3222298			5747, Powassan WWTL	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5747	CLOSE	2/1/23 12:00 AM	3/1/23 02:13 PM	3/1/23 02:13 PM	TPM Inspection/Maintenance (1m) 5747 -Completed by Curtis Green on February 23, 2022. The operation of all sewage station lift pumps were visually and audibly observed at both St. Gregory's Lift Station and the Clark Street Lift station. Pump #1 at St. Gregory SLS seemed a little noisy but pump output was normal. The control panels were also checked for functionality with nothing unusual noted. Ventilation screens at the Clark Station were in good condition, and there was nothing else to report.
3222308			5747, Powassan WWTL	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5747	CLOSE	2/1/23 12:00 AM	3/2/23 05:22 PM	3/2/23 05:22 PM	Critical Alarm/Dialer Testing (1m) 5747 -There was an actual High Level event that occurred on Feb 15, 2023 during a warm winter melt and rainfall event. The high level float was activated, and True Steel contacted the on call operator within minutes.
3225480			5747, Powassan WWTL	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5747	CLOSE	2/1/23 12:00 AM	4/13/23 01:48 PM	4/13/23 01:48 PM	

Workorder Summary Report

Report Start Date: Jan 1, 2023 12:00 AM	
Report End Date: Dec 31, 2023 11:59 PM	
Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3246367			5747, Clark SPS	CALL	Compliance	0		Powassan Clark St. Sewage Stm Well High Level	CLOSE		2/15/23 05:15 PM	2/15/23 10:30 PM	Powassan Clark St. Sewage Stm Well High Level - 16:01--Received WIN911 Alarm for Clark Street High Wet Well Level 17:20--Received True Steel notification of High Level Float. Checked forecast: rain event has ended with a brief amount of rain expected later tonight. Reviewed trending: trending has flatlined but no more precipitation in the forecast. 22:00-Onsite to inspect wet well: inspection shows high level was at least 20 inches below overflow with no signs of overflow (chlorine pucks are dry, wet level below, etc.). Both pumps are running and High Level float is almost disengaged. 22:30--High level float is now disengaged and wet well level is back to normal.
3258082	0000296003	GENERATOR NATURAL GAS GENSET Clark Street	5747, Clark SPS, Facility	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator Inspection/ Functional Test (1m) 5747	CLOSE	3/1/23 12:00 AM	3/17/23 12:01 PM	3/17/23 12:01 PM	Diesel Generator Inspection/ Functional Test (1m) 5747 -March 16, 2023. Dan Finnigan performed the monthly Generator/ Functional test.. All fluid levels were checked, belts inspected, battery charging system, etc. The generator transfer button was pressed and the start command to the generator was initiated. While running, the system was observed for leaks or any other deficiencies. The following generator values were recorded while running: RPM's= n/a Oil Level = Full Coolant Temp= 165 Deg.F Battery Voltage= 12.0 V Oil Pressure 59 psi Hrs at start: 503.1 Hrs at stop: 503.6

Workorder Summary Report

Report Start Date:		Jan 1, 2023 12:00 AM	
Report End Date:		Dec 31, 2023 11:59 PM	
Location:		5747*	
Work Order Type:		CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:			

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3264647		5747, Powassan WWTL		PM	Inspection	1	YEARS	Electrical Equipment Inspection/Service (1y) 5747	CLOSE	3/1/23 12:00 AM	9/26/23 07:48 AM	9/26/23 07:48 AM	ESA Inspection - Logbook and Facility Review, no defects present at time of Inspection
3264657	0000126968	LAGOON CELL 01 SOUTH POWASSAN	5747, Powassan WWTL, Process	PM	Refurbish/Replace/Repair	1	MONTHS	Lagoon South Inspection (1y) 5747	CLOSE	3/1/23 12:00 AM	6/21/23 11:20 AM	6/21/23 11:20 AM	Lagoon South Inspection (1y) 5747 - Multiple Cell inspections were conducted prior to chemical treatment for the Spring Release. May 09, 2023: OCWA staff onsite and treated South Cell with Ferric. May 24, 2023: Started the release of the South Cell June 09, 2023: Ended the release of the South Cell. Inspections did not reveal any unusual activity or damage to the cells.
3264683	0000126967	LAGOON CELL 02 NORTH POWASSAN	5747, Powassan WWTL, Process	PM	Refurbish/Replace/Repair	1	MONTHS	Lagoon North Inspection (1y) 5747	CLOSE	3/1/23 12:00 AM	6/21/23 11:23 AM	6/21/23 11:23 AM	
3264706	0000126969	LAGOON CELL 03 POWASSAN	5747, Powassan WWTL, Process	PM	Refurbish/Replace/Repair	1	MONTHS	Lagoon Old Inspection (1y) 5747	CLOSE	3/1/23 12:00 AM	6/21/23 11:29 AM	6/21/23 11:29 AM	Lagoon Old Inspection (1y) 5747 -April 11, 2023: Sewage flow diverted to the Old cell while sampling and release activities are ongoing in the North / South Cells. May 24, 2023: Old Cell was isolated and sewage was diverted back to the North Cell. Inspections did not reveal any unusual activity or damage to the cells.

Workorder Summary Report

Report Start Date: Jan 1, 2023 12:00 AM	
Report End Date: Dec 31, 2023 11:59 PM	
Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3264725			5747, Powassan WWTL	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 5747	CLOSE	3/1/23 12:00 AM	3/7/23 11:40 AM	3/7/23 11:40 AM	Health And Safety Inspection (1m) 5747 - Dan Finnigan conducted the monthly H&S Inspection on March 03, 2023, which consisted of checking/ verifying the following items: 1. Spill Kit: all items were available 2. Safety Signage (all intact and visible) 3. First aid kit 4. Hearing protection earmuffs 5. Emergency lighting (removed for repair / replacement) 6. Emergency Eyewash (bottles are within use before date) 7. Fire Extinguisher 8. CO Monitor
3264736			5747, Powassan WWTL	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5747	CLOSE	3/1/23 12:00 AM	3/7/23 11:42 AM	3/7/23 11:42 AM	TPM Inspection/Maintenance (1m) 5747 - TPM Inspection/Maintenance (1m) 5747 Completed by Dan Finnigan on March 03, 2023. The operation of all sewage station lift pumps were visually and audibly observed at both St. Gregory's Lift Station and the Clark Street Lift station. Pump #1 at St. Gregory SLS seemed a little noisy but pump output was normal. The control panels were also checked for functionality with nothing unusual noted. Ventilation screens at the Clark Station were in good condition, and there was nothing else to report.

Workorder Summary Report

Report Start Date: Jan 1, 2023 12:00 AM	
Report End Date: Dec 31, 2023 11:59 PM	
Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3264741			5747, Powassan WWTL	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5747	CLOSE	3/1/23 12:00 AM	3/17/23 11:59 AM	3/17/23 11:59 AM	Critical Alarm/Dialer Testing (1m) 5747 - Conducted by Dan Finnigan on March 16, 2023. Both sewage pumps were turned off in “hand” and the wet well level was allowed to rise until the High Level alarm setpoint was reached (via WIN911). The WIN911 Autodialer was triggered and messaged the operator and both pumps were turned back on to pump down the level. Both sewage pumps were shut off in Auto when the level returned to normal settings in less than 5 minutes of pumping.
3268199			5747, Powassan WWTL	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5747	CLOSE	3/1/23 12:00 AM	3/2/23 05:19 PM	3/2/23 05:19 PM	WISKI Review (1m) 5747 -WISKI Review (1m) for the month of February 2023 was completed on March 2, 2023 by Dan Finnigan. All values were checked and entered, lab data entries were reviewed, and this Work Order closed off.

Workorder Summary Report

Report Start Date: Jan 1, 2023 12:00 AM	
Report End Date: Dec 31, 2023 11:59 PM	
Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3303180	0000296003	GENERATOR NATURAL GAS GENSET Clark Street	5747, Clark SPS, Facility	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator Inspection/ Functional Test (1m) 5747	CLOSE	4/1/23 12:00 AM	4/17/23 09:49 PM	4/17/23 09:49 PM	Diesel Generator Inspection/ Functional Test (1m) 5747 -April 14, 2023. Dan Finnigan performed the monthly Generator/ Functional test.. All fluid levels were checked, belts inspected, battery charging system, etc. The generator transfer button was pressed and the start command to the generator was initiated. While running, the system was observed for leaks or any other deficiencies. The following generator values were recorded while running: RPM's= 1805 Oil Level = Full Coolant Temp=180 Deg.F Battery Voltage= 12.0 V Oil Pressure 59 psi Hrs at start: 503.70 Hrs at stop: 504.00
3310169			5747, Powassan WWTL	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 5747	CLOSE	4/1/23 12:00 AM	4/17/23 09:47 PM	4/17/23 09:47 PM	Health And Safety Inspection (1m) 5747 - Dan Finnigan conducted the monthly H&S Inspection on April 06, 2023, which consisted of checking/ verifying the following items: 1. Spill Kit: all items were available 2. Safety Signage (all intact and visible) 3. First aid kit 4. Hearing protection earmuffs 5. Emergency lighting (removed for repair / replacement) 6. Emergency Eyewash (bottles are within use before date) 7. Fire Extinguisher 8. CO Monitor

Workorder Summary Report

Report Start Date: Jan 1, 2023 12:00 AM	
Report End Date: Dec 31, 2023 11:59 PM	
Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3310218			5747, Powassan WWTL	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5747	CLOSE	4/1/23 12:00 AM	4/17/23 09:46 PM	4/17/23 09:46 PM	TPM Inspection/Maintenance (1m) 5747 -Completed by Dan Finnigan on April 14, 2023. The operation of all sewage station lift pumps were visually and audibly observed at both St. Gregory's Lift Station and the Clark Street Lift station. Pump #1 at St. Gregory SLS seemed a little noisy but pump output was normal. The control panels were also checked for functionality with nothing unusual noted. Ventilation screens at the Clark Station were in good condition, and there was nothing else to report.
3310223			5747, Powassan WWTL	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5747	CLOSE	4/1/23 12:00 AM	4/17/23 09:53 PM	4/17/23 09:53 PM	Critical Alarm/Dialer Testing (1m) 5747 -On April 06, 2023 the on-call operator was notified via True Steel about a True High Level Alarm. The Alarm light came on and True Steel notified the operator. The high level was caused by a very quick snow melt on a warm day. Once the temperature cooled down the pumps pumped the level down and the alarm light came off and the alarm was reset.
3314498			5747, Powassan WWTL	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5747	CLOSE	4/1/23 12:00 AM	4/13/23 02:22 PM	4/13/23 02:22 PM	WISKI Review (1m) 5747 -WISKI Review (1m) for the month of March 2023 was completed on April 13, 2023 by Dan Finnigan. All values were checked and entered, lab data entries were reviewed, and this Work Order closed off.

Workorder Summary Report

Report Start Date: Jan 1, 2023 12:00 AM	
Report End Date: Dec 31, 2023 11:59 PM	
Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3339699		5747, Clark SPS		CALL	Compliance	0		Powassan Clark St. Sewage Stn Well High Level	CLOSE		4/10/23 06:03 PM	4/10/23 09:40 PM	Powassan Clark St. Sewage Stn Well High Level - 18:03--Received WIN911 Alarm for Clark Street High Wet Well Level 18:15--Checked Clark Street wet well level: approximately 12 feet below overflow level. No rain forecast for today but mild temperatures contributing to infiltration, etc. 21:40--Reviewed trending online: wet well level is at 7.48 meters and appears to be dropping. Will monitor remotely. Increased WIN911 alarm setpoint to maximum level before "blanking" of signal to prevent reoccurrence of alarms
3341595		Powassan Wastewater Treatment Lagoon		OPER	Predictive Maintenance	0		Powassan Spring 2023 Lagoon Treatment	CLOSE		5/15/23 10:29 AM	5/15/23 10:29 AM	Powassan Spring 2023 Lagoon Treatment -On Tuesday May 2, 2023 Don Michaud and Tim Fraser treated Powassan South Lagoon with 1630 Imp/Gallons of Ferric Sulfate. On Tuesday May 2, 2023 Don Michaud and Tim Fraser treated Powassan South Lagoon with 1630 Imp/Gallon - Correction on Log. On Tuesday May 2, 2023 Don Michaud and Tim Fraser treated Powassan North Lagoon with 1630 Imp/Gallons of Ferric Sulfate. Powassan Spring 2023 Lagoon Treatment - On Tues May 9, 2023 Don Michaud and Tim F treated Powassan South Lagoon with 2002 Imp/Gal of Ferric Sulfate.

Workorder Summary Report

Report Start Date: Jan 1, 2023 12:00 AM	
Report End Date: Dec 31, 2023 11:59 PM	
Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule				Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3341611			5747, Clark SPS	CALL	Inspection	0		5747 Powassan Clark Street SPS High Level Alarm	CLOSE		4/22/23 02:45 PM	4/22/23 07:15 PM	Powassan Clark Street SPS - Received WIN911 High Level Alarm Clark SPS. Received Monitoring Station High Level Alarm Clark SPS. Clark Station inspection shows Level approximately 1.5 ft from Overflow precipitation subsiding. Flow Rate @ 1986 L/min. Prepared Calcium Hypochlorite in Overflow as Station elevation close to Bypass. Station Level static at 1 ft below Overflow for 30 minute duration. Station level reduced 2.5 ft below Overflow with end to forecast precipitation.
3353141	0000296003	GENERATOR NATURAL GAS GENSET Clark Street	5747, Clark SPS, Facility	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator Inspection/ Functional Test (1m) 5747	CLOSE	5/1/23 12:00 AM	5/15/23 02:13 PM	5/15/23 02:13 PM	Diesel Generator Inspection/ Functional Test (1m) 5747 - Curtis Green performed the monthly Generator/Functional test on April 12, 2023. All fluid levels were checked, belts inspected, battery charging system, etc. The generator transfer button was pressed and the start command to the generator was initiated. While running, the system was observed for leaks or any other deficiencies. The following generator values were recorded while running: RPM's= 1825 Oil Level = Full Coolant Temp=180 Deg.F Battery Voltage= 11.5 V Oil Pressure 54 psi Hrs at start: 504.0 Hrs at stop: 504.7

Workorder Summary Report

Report Start Date:		Jan 1, 2023 12:00 AM	
Report End Date:		Dec 31, 2023 11:59 PM	
Location:		5747*	
Work Order Type:		CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:			

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3359077	0000126968	LAGOON CELL 01 SOUTH POWASSAN	5747, Powassan WWTL, Process	PM	Inspection	1	MONTHS	Lagoon Cell 01South Powassan Insp/Service (1m/6m/1y) 5747	CLOSE	5/1/23 12:00 AM	6/19/23 08:27 AM	6/19/23 08:27 AM	Lagoon Cell 01South Powassan Insp/Service (1m/6m/1y) 5747 -Dan Finnigan inspected the associated lagoon during the monthly RAW sewage sample collection on May 28, 2023. The lagoon berm was inspected and found to be in good condition, the level was checked and found to be below the overflow level, and there were no other unusual observations.
3359087	0000126967	LAGOON CELL 02 NORTH POWASSAN	5747, Powassan WWTL, Process	PM	Inspection	1	MONTHS	Lagoon Cell 02 North Powassan Insp/Service (1m/6m/1y) 5747	CLOSE	5/1/23 12:00 AM	6/19/23 08:28 AM	6/19/23 08:28 AM	Lagoon Cell 02 North Powassan Insp/Service (1m/6m/1y) 5747 -Dan Finnigan inspected the associated lagoon during the monthly RAW sewage sample collection on May 28, 2023. The lagoon berm was inspected and found to be in good condition, the level was checked and found to be below the overflow level, and there were no other unusual observations.
3359109	0000126969	LAGOON CELL 03 POWASSAN	5747, Powassan WWTL, Process	PM	Inspection	1	MONTHS	Lagoon Cell 03 Powassan Inspection/Service (1m/6m/1y) 5747	CLOSE	5/1/23 12:00 AM	6/19/23 08:28 AM	6/19/23 08:28 AM	Lagoon Cell 03 Powassan Inspection/Service (1m/6m/1y) 5747 -Dan Finnigan inspected the associated lagoon during the monthly RAW sewage sample collection on May 28, 2023. The lagoon berm was inspected and found to be in good condition, the level was checked and found to be below the overflow level, and there were no other unusual observations.

Workorder Summary Report

Report Start Date: Jan 1, 2023 12:00 AM	
Report End Date: Dec 31, 2023 11:59 PM	
Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3359129			5747, Powassan WWTL	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 5747	CLOSE	5/1/23 12:00 AM	5/15/23 02:16 PM	5/15/23 02:16 PM	Health And Safety Inspection (1m) 5747 - Curtis Green conducted the monthly H&S Inspection on April 12, 2023 which consisted of checking/verifying the following items: 1. Spill Kit: all items were available 2. Safety Signage (all intact and visible) 3. First aid kit 4. Hearing protection earmuffs 5. Emergency lighting (not working) 6. Emergency Eyewash (bottles are within use before date) 7. Fire Extinguisher 8. CO Monitor
3359147			5747, Powassan WWTL	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5747	CLOSE	5/1/23 12:00 AM	5/15/23 02:18 PM	5/15/23 02:18 PM	TPM Inspection/Maintenance (1m) 5747 - Completed by Curtis Green on April 12, 2023. The operation of all sewage station lift pumps were visually and audibly observed at both St. Gregory's Lift Station and the Clark Street Lift station. Pump #1 at St. Gregory SLS noisy but pump output was normal. The control panels were also checked for functionality with nothing unusual noted. Ventilation screens at the Clark Station were in good condition, and there was nothing else to report.

Workorder Summary Report

Report Start Date:		Jan 1, 2023 12:00 AM	
Report End Date:		Dec 31, 2023 11:59 PM	
Location:		5747*	
Work Order Type:		CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:			

WorkOrder				PM Schedule				Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3359152			5747, Powassan WWTL	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5747	CLOSE	5/1/23 12:00 AM	5/15/23 02:23 PM	5/15/23 02:23 PM	Critical Alarm/Dialer Testing (1m) 5747 -Conducted by Curtis Green on April 12, 2023. Both sewage pumps were turned off in “hand” and the wet well level was allowed to rise until the High Level alarm setpoint was reached (via WIN911). The WIN911 Autodialer was triggered and messaged the operator and both pumps were turned back on to pump down the level. Both sewage pumps were shut off in Auto when the level returned to normal settings in about 20 minutes of pumping.
3362162			5747, Powassan WWTL	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5747	CLOSE	5/1/23 12:00 AM	5/16/23 04:16 PM	5/16/23 04:16 PM	
3385515			Powassan Wastewater Treatment Lagoon	OPER	Compliance	0		Collect Weekend Lagoon Discharge Sample for Release	CLOSE		5/16/23 10:48 AM	5/16/23 10:48 AM	Collect Weekend Lagoon Discharge Sample for Release - Scheduled overtime for Dan Finnigan collecting weekend lagoon discharge samples required for release.

Workorder Summary Report

Report Start Date: Jan 1, 2023 12:00 AM	
Report End Date: Dec 31, 2023 11:59 PM	
Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3398018	0000296003	GENERATOR NATURAL GAS GENSET Clark Street	5747, Clark SPS, Facility	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator Inspection/ Functional Test (1m) 5747	CLOSE	6/1/23 12:00 AM	6/7/23 09:23 AM	6/7/23 09:23 AM	Diesel Generator Inspection/ Functional Test (1m) 5747 - June 01, 2023, Dan Finnigan performed the monthly Generator/Functional test.. All fluid levels were checked, belts inspected, battery charging system, etc. The generator transfer button was pressed and the start command to the generator was initiated. While running, the system was observed for leaks or any other deficiencies. The following generator values were recorded while running: RPM's= 1825 Oil Level = Full Coolant Temp=185 Deg.F Battery Voltage= 11.8 V Oil Pressure 50 psi
3404615	0000126968	LAGOON CELL 01 SOUTH POWASSAN	5747, Powassan WWTL, Process	PM	Inspection	1	MONTHS	Lagoon Cell 01 South Powassan Insp/Service (1m/6m/1y) 5747	CLOSE	6/1/23 12:00 AM	6/19/23 08:30 AM	6/19/23 08:30 AM	Lagoon Cell 01 South Powassan Insp/Service (1m/6m/1y) 5747 -Dan Finnigan inspected the associated lagoon during the monthly RAW sewage sample collection on June 05, 2023. The lagoon berm was inspected and found to be in good condition, the level was checked and found to be below the overflow level, and there were no other unusual observations.
3404625	0000126967	LAGOON CELL 02 NORTH POWASSAN	5747, Powassan WWTL, Process	PM	Inspection	1	MONTHS	Lagoon Cell 02 North Powassan Insp/Service (1m/6m/1y) 5747	CLOSE	6/1/23 12:00 AM	6/19/23 08:30 AM	6/19/23 08:30 AM	Lagoon Cell 02 North Powassan Insp/Service (1m/6m/1y) 5747 -Dan Finnigan inspected the associated lagoon during the monthly RAW sewage sample collection on June 05, 2023. The lagoon berm was inspected and found to be in good condition, the level was checked and found to be below the overflow level, and there were no other unusual observations.

Workorder Summary Report

Report Start Date: Jan 1, 2023 12:00 AM	
Report End Date: Dec 31, 2023 11:59 PM	
Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3404647	0000126969	LAGOON CELL 03 POWASSAN	5747, Powassan WWTL, Process	PM	Inspection	1	MONTHS	Lagoon Cell 03 Powassan Inspection/Service (1m/6m/1y) 5747	CLOSE	6/1/23 12:00 AM	6/19/23 08:31 AM	6/19/23 08:31 AM	Lagoon Cell 03 Powassan Inspection/Service (1m/6m/1y) 5747 -Dan Finnigan inspected the associated lagoon during the monthly RAW sewage sample collection on June 05, 2023. The lagoon berm was inspected and found to be in good condition, the level was checked and found to be below the overflow level, and there were no other unusual observations.
3404662			5747, Powassan WWTL	OPER	Compliance	1	YEARS	Facility Emergency Plan Review (1y) 5747	CLOSE	6/1/23 12:00 AM	6/27/23 02:55 PM	6/27/23 02:55 PM	Facility Emergency Plan Review (1y) 5747 -Reviewed and updated all sections as per PCT on July 26, 2023
3404663			5747, Powassan WWTL	OPER	Compliance	2	YEARS	Operation/Sop Manual Review And Update (2y) 5747	CLOSE	6/1/23 12:00 AM	6/27/23 02:58 PM	6/27/23 02:58 PM	Operation/Sop Manual Review And Update (2y) 5747 -Reviewed and updated all sections as per PCT on July 26, 2023
3404670			5747, Powassan WWTL	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 5747	CLOSE	6/1/23 12:00 AM	6/7/23 09:18 AM	6/7/23 09:18 AM	Health And Safety Inspection (1m) 5747 -Dan Finnigan conducted the monthly H&S Inspection on June 01, 2023, which consisted of checking/verifying the following items: 1. Spill Kit: all items were available 2. Safety Signage (all intact and visible) 3. First aid kit 4. Hearing protection earmuffs 5. Emergency lighting (removed for repair / replacement) 6. Emergency Eyewash (bottles are within use before date) 7. Fire Extinguisher 8. CO Monitor

Workorder Summary Report

Report Start Date: Jan 1, 2023 12:00 AM	
Report End Date: Dec 31, 2023 11:59 PM	
Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3404681		5747, Powassan WWTL		PM	Health and Safety	1	YEARS	Fire Protection System Inspection (1y) 5747	COMP	6/1/23 12:00 AM	11/21/23 04:10 PM	11/21/23 04:10 PM	Fire Protection System Inspection (1y) 5747 November 20, 2023 Picked up Fire Extinguisher from Clark Street lift station and brought to Callander for third party inspection. Returned to Clark Street once it passed inspection.
3404684		5747, Powassan WWTL		PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5747	CLOSE	6/1/23 12:00 AM	6/7/23 09:16 AM	6/7/23 09:16 AM	TPM Inspection/Maintenance (1m) 5747 -Completed by Dan Finnigan on June 01, 2023. The operation of all sewage station lift pumps were visually and audibly observed at both St. Gregory's Lift Station and the Clark Street Lift station. Pump #1 at St. Gregory SLS seemed a little noisy but pump output was normal. The control panels were also checked for functionality with nothing unusual noted. Ventilation screens at the Clark Station were in good condition, and there was nothing else to report.
3404689		5747, Powassan WWTL		PM	Refurbish/ Replace/Repair	1	YEARS	Tank Inspection (1y) 5747	COMP	6/1/23 12:00 AM	10/6/23 08:15 AM	10/6/23 08:15 AM	Tank Inspection (1y) 5747 -Curtis Green was onsite with Muskoka HydroVac on Wednesday September 27, 2023 for a thorough cleaning of the Clark Street lift station. The lift station was inspected and there were no other deficiencies notes that were not already mentioned via management. Dan Finnigan inspected the St. Gregory lift station on Friday September 29, 2023 during the monthly TPM work order and there were no deficiencies noted.

Workorder Summary Report

Report Start Date: Jan 1, 2023 12:00 AM	
Report End Date: Dec 31, 2023 11:59 PM	
Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3404693			5747, Powassan WWTL	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5747	CLOSE	6/1/23 12:00 AM	6/7/23 09:20 AM	6/7/23 09:20 AM	Critical Alarm/Dialer Testing (1m) 5747 -Conducted by Dan Finnigan on June 01, 2023. Both sewage pumps were turned off in “hand” and the wet well level was allowed to rise until the High Level alarm sepoint was reached (via WIN911). The WIN911 Autodialer was triggered and messaged the operator and both pumps were turned back on to pump down the level. Both sewage pumps were shut off in Auto when the level returned to normal settings in less than 5 minutes of pumping.
3408273			5747, Powassan WWTL	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5747	CLOSE	6/1/23 12:00 AM	7/20/23 02:52 PM	7/20/23 02:52 PM	WISKI Review (1m) 5747 -Entered RAW flow data into WISKI for May 2023 WISKI Review (1m) 5747 -July 20, 2023--Completed Spring Release report and entered data into WISKI
3446348	0000296003	GENERATOR NATURAL GAS GENSET Clark Street	5747, Clark SPS, Facility	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator Inspection/ Functional Test (1m) 5747	CLOSE	7/1/23 12:00 AM	8/31/23 10:13 AM	8/31/23 10:13 AM	Diesel Generator Inspection/ Functional Test (1m) 5747 - July 17, 2023. Dan Finnigan performed the monthly Generator/ Functional test.. All fluid levels were checked, belts inspected, battery charging system, etc. The generator transfer button was pressed and the start command to the generator was initiated. While running, the system was observed for leaks or any other deficiencies.

Workorder Summary Report

Report Start Date: Jan 1, 2023 12:00 AM	
Report End Date: Dec 31, 2023 11:59 PM	
Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3453118	0000126968	LAGOON CELL 01 SOUTH POWASSAN	5747, Powassan WWTL, Process	PM	Inspection	1	MONTHS	Lagoon Cell 01South Powassan Insp/Service (1m/6m/1y) 5747	CLOSE	7/1/23 12:00 AM	7/18/23 11:16 AM	7/18/23 11:16 AM	Lagoon Cell 01South Powassan Insp/Service (1m/6m/1y) 5747 -Dan Finnigan inspected the associated lagoon during the monthly RAW sewage sample collection on July 17, 2023. The lagoon berm was inspected and found to be in good condition, the level was checked and found to be below the overflow level, and there were no other unusual observations.
3453128	0000126967	LAGOON CELL 02 NORTH POWASSAN	5747, Powassan WWTL, Process	PM	Inspection	1	MONTHS	Lagoon Cell 02 North Powassan Insp/Service (1m/6m/1y) 5747	CLOSE	7/1/23 12:00 AM	7/18/23 11:17 AM	7/18/23 11:17 AM	Lagoon Cell 02 North Powassan Insp/Service (1m/6m/1y) 5747 -Dan Finnigan inspected the associated lagoon during the monthly RAW sewage sample collection on July 17, 2023. The lagoon berm was inspected and found to be in good condition, the level was checked and found to be below the overflow level, and there were no other unusual observations.
3453162	0000126969	LAGOON CELL 03 POWASSAN	5747, Powassan WWTL, Process	PM	Inspection	1	MONTHS	Lagoon Cell 03 Powassan Inspection/Service (1m/6m/1y) 5747	CLOSE	7/1/23 12:00 AM	7/18/23 11:17 AM	7/18/23 11:17 AM	Lagoon Cell 03 Powassan Inspection/Service (1m/6m/1y) 5747 -Dan Finnigan inspected the associated lagoon during the monthly RAW sewage sample collection on July 17, 2023. The lagoon berm was inspected and found to be in good condition, the level was checked and found to be below the overflow level, and there were no other unusual observations.

Workorder Summary Report

Report Start Date: Jan 1, 2023 12:00 AM	
Report End Date: Dec 31, 2023 11:59 PM	
Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule				Workorder Details				WorkLog Detail
Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish				
3453274	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 5747	CLOSE	7/1/23 12:00 AM	8/31/23 10:11 AM	8/31/23 10:11 AM	Health And Safety Inspection (1m) 5747 -Dan Finnigan conducted the monthly H&S Inspection on July 17, 2023 which consisted of checking/ verifying the following items: 1. Spill Kit: all items were available 2. Safety Signage (all intact and visible) 3. First aid kit 4. Hearing protection earmuffs 5. Emergency lighting (removed for repair / replacement) 6. Emergency Eyewash (bottles are within use before date) 7. Fire Extinguisher 8. CO Monitor		
3453313	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5747	CLOSE	7/1/23 12:00 AM	8/31/23 10:12 AM	8/31/23 10:12 AM	TPM Inspection/Maintenance (1m) 5747 - Completed by Dan Finnigan on July 17, 2023. The operation of all sewage station lift pumps were visually and audibly observed at both St. Gregory's Lift Station and the Clark Street Lift station. Pump #1 at St. Gregory SLS seemed a little noisy but pump output was normal. The control panels were also checked for functionality with nothing unusual noted. Ventilation screens at the Clark Station were in good condition, and there was nothing else to report.		

Workorder Summary Report

Report Start Date: Jan 1, 2023 12:00 AM	
Report End Date: Dec 31, 2023 11:59 PM	
Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3453318			5747, Powassan WWTL	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5747	CLOSE	7/1/23 12:00 AM	8/31/23 10:16 AM	8/31/23 10:16 AM	Critical Alarm/Dialer Testing (1m) 5747 -Conducted by Dan Finnigan on July 17, 2023. Both sewage pumps were turned off in “hand” and the wet well level was allowed to rise until the High Level alarm sepoint was reached (via WIN911 and True Steel). Both True Steel and the WIN911 Autodialer were triggered and messaged the operator and both pumps were turned back on to pump down the level. Both sewage pumps shut off in Auto when the level returned to normal settings in less than 10 minutes of pumping.
3456772			5747, Powassan WWTL	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5747	CLOSE	7/1/23 12:00 AM	7/20/23 02:54 PM	7/20/23 02:54 PM	WISKI Review (1m) 5747 -July 13, 2023: entered WISKI flow data and checked lab entries, etc. WISKI Review (1m) 5747 -July 20, 2023--Completed Spring Release report and entered data into WISKI
3479933			5747, Clark SPS	CAP	Predictive Maintenance	0		Powassan Clark Street Lift Station HydroVac Cleaning	CLOSE		9/29/23 11:22 AM	9/29/23 11:22 AM	Powassan Clark Street Lift Station HydroVac Cleaning -July 06, 2023: Created new W/O in order to schedule Muskoka Hydro Vac for Clark Street Station cleaning Powassan Clark Street Lift Station HydroVac Cleaning - Completed Sep 27, 2023
3493568	0000296003	GENERATOR NATURAL GAS GENSET Clark Street	5747, Clark SPS, Facility	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator Inspection/ Functional Test (1m) 5747	CLOSE	8/1/23 12:00 AM	8/9/23 09:51 AM	8/9/23 09:51 AM	

Workorder Summary Report

Report Start Date:		Jan 1, 2023 12:00 AM	
Report End Date:		Dec 31, 2023 11:59 PM	
Location:		5747*	
Work Order Type:		CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:			

WorkOrder					PM Schedule		Workorder Details						
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3499559	0000126968	LAGOON CELL 01 SOUTH POWASSAN	5747, Powassan WWTL, Process	PM	Inspection	1	MONTHS	Lagoon Cell 01South Powassan Insp/Service (1m/6m/1y) 5747	CLOSE	8/1/23 12:00 AM	8/9/23 09:52 AM	8/9/23 09:52 AM	Lagoon Cell 01South Powassan Insp/Service (1m/6m/1y) 5747 -Dan Finnigan inspected the associated lagoon during the monthly RAW sewage sample collection on August 02, 2023. The lagoon berm was inspected and found to be in good condition, the level was checked and found to be below the overflow level, and there were no other unusual observations.
3499569	0000126967	LAGOON CELL 02 NORTH POWASSAN	5747, Powassan WWTL, Process	PM	Inspection	1	MONTHS	Lagoon Cell 02 North Powassan Insp/Service (1m/6m/1y) 5747	CLOSE	8/1/23 12:00 AM	8/9/23 09:53 AM	8/9/23 09:53 AM	Lagoon Cell 02 North Powassan Insp/Service (1m/6m/1y) 5747 -Dan Finnigan inspected the associated lagoon during the monthly RAW sewage sample collection on August 02, 2023. The lagoon berm was inspected and found to be in good condition, the level was checked and found to be below the overflow level, and there were no other unusual observations.
3499613	0000126969	LAGOON CELL 03 POWASSAN	5747, Powassan WWTL, Process	PM	Inspection	1	MONTHS	Lagoon Cell 03 Powassan Inspection/Service (1m/6m/1y) 5747	CLOSE	8/1/23 12:00 AM	8/9/23 09:54 AM	8/9/23 09:54 AM	Lagoon Cell 03 Powassan Inspection/Service (1m/6m/1y) 5747 -Dan Finnigan inspected the associated lagoon during the monthly RAW sewage sample collection on August 02, 2023. The lagoon berm was inspected and found to be in good condition, the level was checked and found to be below the overflow level, and there were no other unusual observations.

Workorder Summary Report

Report Start Date:		Jan 1, 2023 12:00 AM	
Report End Date:		Dec 31, 2023 11:59 PM	
Location:		5747*	
Work Order Type:		CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:			

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3499675			5747, Powassan WWTL	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 5747	CLOSE	8/1/23 12:00 AM	8/9/23 09:56 AM	8/9/23 09:56 AM	Health And Safety Inspection (1m) 5747 -Dan Finnigan conducted the monthly H&S Inspection on August 04, 2023, which consisted of checking/verifying the following items: 1. Spill Kit: all items were available 2. Safety Signage (all intact and visible) 3. First aid kit 4. Hearing protection earmuffs 5. Emergency lighting (removed for repair / replacement) 6. Emergency Eyewash (bottles are within use before date) 7. Fire Extinguisher 8. CO Monitor
3499686			5747, Powassan WWTL	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5747	CLOSE	8/1/23 12:00 AM	8/9/23 09:57 AM	8/9/23 09:57 AM	TPM Inspection/Maintenance (1m) 5747 - Completed by Dan Finnigan on August 04, 2023. The operation of all sewage station lift pumps were visually and audibly observed at both St. Gregory's Lift Station and the Clark Street Lift station. Pump #1 at St. Gregory SLS seemed a little noisy but pump output was normal. The control panels were also checked for functionality with nothing unusual noted. Ventilation screens at the Clark Station were in good condition, and there was nothing else to report.
3499691			5747, Powassan WWTL	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5747	CLOSE	8/1/23 12:00 AM	8/9/23 10:00 AM	8/9/23 10:00 AM	

Workorder Summary Report

Report Start Date: Jan 1, 2023 12:00 AM	
Report End Date: Dec 31, 2023 11:59 PM	
Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3502442			5747, Powassan WWTL	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5747	CLOSE	8/1/23 12:00 AM	9/13/23 03:07 PM	9/13/23 03:07 PM	WISKI Review (1m) 5747 -WISKI Review (1m) for the month of July 2023 was completed on September 13, 2023 by Dan Finnigan. All values were checked and entered, lab data entries were reviewed, and this Work Order closed off.
3538050	0000296003	GENERATOR NATURAL GAS GENSET Clark Street	5747, Clark SPS, Facility	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator Inspection/ Functional Test (1m) 5747	COMP	9/1/23 12:00 AM	10/26/23 09:46 AM	10/26/23 09:46 AM	Diesel Generator Inspection/ Functional Test (1m) 5747 - Generator was test run and serviced by Val's Equipment on September 11, 2023 All fluid levels were checked, belts inspected, battery charging system, etc. The generator transfer button was pressed and the start command to the generator was initiated. While running, the system was observed for leaks or any other deficiencies. The following generator values were recorded while running: RPM's= 1800 Oil Level = Full Coolant Temp=160 Deg.F Battery Voltage= 12 V Oil Pressure 55 psi Hrs at start: 507.8 Hrs at end: 508.4
3544437	0000126968	LAGOON CELL 01 SOUTH POWASSAN	5747, Powassan WWTL, Process	PM	Inspection	1	MONTHS	Lagoon Cell 01South Powassan Insp/Service (1m/6m/1y) 5747	CLOSE	9/1/23 12:00 AM	9/13/23 08:52 AM	9/13/23 08:52 AM	Lagoon Cell 01South Powassan Insp/Service (1m/6m/1y) 5747 -Dan Finnigan inspected the associated lagoon during the monthly RAW sewage sample collection on September 06, 2023. The lagoon berm was inspected and found to be in good condition, the level was checked and found to be below the overflow level, and there were no other unusual observations.

Workorder Summary Report

Report Start Date: Jan 1, 2023 12:00 AM	
Report End Date: Dec 31, 2023 11:59 PM	
Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3544470	0000126967	LAGOON CELL 02 NORTH POWASSAN	5747, Powassan WWTL, Process	PM	Inspection	1	MONTHS	Lagoon Cell 02 North Powassan Insp/Service (1m/6m/1y) 5747	CLOSE	9/1/23 12:00 AM	9/13/23 08:53 AM	9/13/23 08:53 AM	
3544489	0000126969	LAGOON CELL 03 POWASSAN	5747, Powassan WWTL, Process	PM	Inspection	1	MONTHS	Lagoon Cell 03 Powassan Inspection/Service (1m/6m/1y) 5747	CLOSE	9/1/23 12:00 AM	9/13/23 08:54 AM	9/13/23 08:54 AM	Lagoon Cell 02 North Powassan Insp/Service (1m/6m/1y) 5747 -Dan Finnigan inspected the associated lagoon during the monthly RAW sewage sample collection on September 06, 2023. The lagoon berm was inspected and found to be in good condition, the level was checked and found to be below the overflow level, and there were no other unusual observations.
3544504			5747, Powassan WWTL	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 5747	COMP	9/1/23 12:00 AM	10/26/23 09:48 AM	10/26/23 09:48 AM	Health And Safety Inspection (1m) 5747 - Dan Finnigan conducted the monthly H&S Inspection on September 29, 2023 which consisted of checking/verifying the following items: 1. Spill Kit: all items were available 2. Safety Signage (all intact and visible) 3. First aid kit 4. Hearing protection earmuffs 5. Emergency lighting (a new unit was picked up and installed: tested and working) 6. Emergency Eyewash (bottles are within use before date) 7. Fire Extinguisher 8. CO Monitor

Workorder Summary Report

Report Start Date: Jan 1, 2023 12:00 AM	
Report End Date: Dec 31, 2023 11:59 PM	
Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3544515			5747, Powassan WWTL	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5747	COMP	9/1/23 12:00 AM	10/26/23 09:51 AM	10/26/23 09:51 AM	TPM Inspection/Maintenance (1m) 5747 -Completed by Dan Finnigan on September 29, 2023. The operation of all sewage station lift pumps were visually and audibly observed at both St. Gregory's Lift Station and the Clark Street Lift station. Pump #1 at St. Gregory SLS seemed a little noisy but pump output was normal. The control panels were also checked for functionality with nothing unusual noted. Ventilation screens at the Clark Station were in good condition, and there was nothing else to report.

Workorder Summary Report

Report Start Date: Jan 1, 2023 12:00 AM	
Report End Date: Dec 31, 2023 11:59 PM	
Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3544520			5747, Powassan WWTL	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5747	COMP	9/1/23 12:00 AM	10/26/23 09:56 AM	10/26/23 09:56 AM	Critical Alarm/Dialer Testing (1m) 5747 -The critical alarm was tested during a True Event on September 24 at 10:05 AM. During an area wide power outage the backup generator failed to start after multiple attempts. The wet well level rose to the WIN911 and Telus Alarm monitoring levels and notified the on-call operator. The operator arrived to find the level several feet below the overflow level. He started the backup generator and the pumps began to pump down the wet well level until all alarms were restored.
3547492			5747, Powassan WWTL	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5747	CLOSE	9/1/23 12:00 AM	9/13/23 03:08 PM	9/13/23 03:08 PM	WISKI Review (1m) 5747 -WISKI Review (1m) for the month of August 2023 was completed on September 13, 2023 by Dan Finnigan. All values were checked and entered, lab data entries were reviewed, and this Work Order closed off.
3573445			Powassan Wastewater Treatment Lagoon	OPER	Predictive Maintenance	0		Powassan Fall 2023 Lagoon Treatment	CLOSE		9/25/23 08:41 AM	9/25/23 08:41 AM	Order Details - KEMIRA PIX-312 BULK 1,815.30 Dry Kg 5.7900 CAD/DKG CAD 10,510.59 CN code: 2833290000 Net weight: 14,675.000 KG Gross weight: 14,675.000 KG % Fe Delivery no / Date:85990643 / 09/19/2023 UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Ferric sulfate), 8, PGIII, RQ Country of Origin: CA 16,200.000 KG

Workorder Summary Report

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Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3575086			5747, Clark SPS	CALL	Inspection	0		5747 Powassan Clark Street SPS High Level Alarm	CLOSE		9/24/23 09:00 AM	9/24/23 10:45 AM	Powassan Clark Street SPS High Level Alarm - Received Power Failure Alarm following utility area outage. Station Inspection with Generator Fail to Start on power failure. Inspection of Wetwell with level approximately 6 feet below overflow. Following repeat attempts resetting Generator after failed Automatic starts successful activation with Station Pump displacement to Lagoon. Received WIN911 and monitoring station High Wetwell Level Alarm.
3586775	0000296003	GENERATOR NATURAL GAS GENSET Clark Street	5747, Clark SPS, Facility	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator Inspection/ Functional Test (1m) 5747	COMP	10/1/23 12:00 AM	10/30/23 10:54 PM	10/30/23 10:54 PM	Diesel Generator Inspection/ Functional Test (1m) 5747 - October 27, 2023. Dan Finnigan performed the monthly Generator/ Functional test.. All fluid levels were checked, belts inspected, battery charging system, etc. The generator transfer button was pressed and the start command to the generator was initiated. While running, the system was observed for leaks or any other deficiencies. The following generator values were recorded while running: RPM's= 1830 Oil Level = Full Coolant Temp=182 Deg.F Battery Voltage= 12.0 V Oil Pressure 58 psi Hrs at start: 513.4 Hrs at stop: 514.2

Workorder Summary Report

Report Start Date:		Jan 1, 2023 12:00 AM	
Report End Date:		Dec 31, 2023 11:59 PM	
Location:		5747*	
Work Order Type:		CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:			

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3592824	0000126968	LAGOON CELL 01 SOUTH POWASSAN	5747, Powassan WWTL, Process	PM	Inspection	1	MONTHS	Lagoon Cell 01South Powassan Insp/Service (1m/6m/1y) 5747	COMP	10/1/23 12:00 AM	11/16/23 02:32 PM	11/16/23 02:32 PM	Lagoon Cell 01South Powassan Insp/Service (1m/6m/1y) 5747 -Dan Finnigan inspected the associated lagoon during the monthly RAW sewage sample collection on October 04, 2023. The lagoon berm was inspected and found to be in good condition, the level was checked and found to be below the overflow level, and there were no other unusual observations.
3592834	0000126967	LAGOON CELL 02 NORTH POWASSAN	5747, Powassan WWTL, Process	PM	Inspection	1	MONTHS	Lagoon Cell 02 North Powassan Insp/Service (1m/6m/1y) 5747	COMP	10/1/23 12:00 AM	11/16/23 02:35 PM	11/16/23 02:35 PM	
3592868	0000126969	LAGOON CELL 03 POWASSAN	5747, Powassan WWTL, Process	PM	Inspection	1	MONTHS	Lagoon Cell 03 Powassan Inspection/Service (1m/6m/1y) 5747	COMP	10/1/23 12:00 AM	11/16/23 02:37 PM	11/16/23 02:37 PM	Lagoon Cell 03 Powassan Inspection/Service (1m/6m/1y) 5747 -Dan Finnigan inspected the associated lagoon during the monthly RAW sewage sample collection on October 04, 2023. The lagoon berm was inspected and found to be in good condition, the level was checked and found to be below the overflow level, and there were no other unusual observations.

Workorder Summary Report

Report Start Date: Jan 1, 2023 12:00 AM	
Report End Date: Dec 31, 2023 11:59 PM	
Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3592927			5747, Powassan WWTL	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 5747	COMP	10/1/23 12:00 AM	10/30/23 10:50 PM	10/30/23 10:50 PM	Health And Safety Inspection (1m) 5747 - Dan Finnigan conducted the monthly H&S Inspection on October 27, 2023 which consisted of checking/verifying the following items: 1. Spill Kit: all items were available 2. Safety Signage (all intact and visible) 3. First aid kit 4. Hearing protection earmuffs 5. Emergency lighting (a new unit was picked up and installed: tested and working) 6. Emergency Eyewash (bottles are within use before date) 7. Fire Extinguisher 8. CO Monitor
3592964			5747, Powassan WWTL	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5747	COMP	10/1/23 12:00 AM	10/30/23 10:51 PM	10/30/23 10:51 PM	TPM Inspection/Maintenance (1m) 5747 - Completed by Dan Finnigan on October 27, 2023. The operation of all sewage station lift pumps were visually and audibly observed at both St. Gregory's Lift Station and the Clark Street Lift station. Pump #1 at St. Gregory SLS seemed a little noisy but pump output was normal. The control panels were also checked for functionality with nothing unusual noted. Ventilation screens at the Clark Station were in good condition, and there was nothing else to report.

Workorder Summary Report

Report Start Date: Jan 1, 2023 12:00 AM	
Report End Date: Dec 31, 2023 11:59 PM	
Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3592981		5747, Powassan WWTL		PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5747	COMP	10/1/23 12:00 AM	10/30/23 10:57 PM	10/30/23 10:57 PM	Critical Alarm/Dialer Testing (1m) 5747 -A fall rain event that started on October 26th triggered both the Telus Alarms High Wet Well alarm as well as the WIN911 alarm multiple times. The wet well levels were observed both remotely and onsite, and no overflow level was reached. When the rain event ended the pumps continued to draw down the level until the shut off was reached and the alarms were reset.
3596902		5747, Powassan WWTL		OPER	Compliance	1	MONTHS	WISKI Review (1m) 5747	COMP	10/1/23 12:00 AM	10/13/23 08:21 AM	10/13/23 08:21 AM	WISKI Review (1m) 5747 -WISKI Review (1m) for the month of September 2023 was completed on October 13, 2023 by Dan Finnigan. All values were checked and entered, lab data entries were reviewed, and this Work Order closed off.
3622381		5747, Clark SPS, Process		CALL	Inspection	0		5747 Powassan Clark Street SPS High Level Alarm	COMP		10/8/23 07:00 PM	10/8/23 08:15 PM	Powassan Clark Street SPS High Level Alarm - Received High Wetwell Level Alarm. Reviewed Wonderware with Station Level @ 6.41 metres. Adjusted WIN911 High Level Alarm Setpoint to 9.0 metres.
3622383		5747, Fairview SPS, Process		CALL	Inspection	0		5747 Powassan Clark Street SPS High Level Alarm	COMP		10/8/23 08:30 PM	10/8/23 11:00 PM	Powassan Clark Street SPS High Level Alarm - Received WIN911 High Wetwell Level Alarm. Milltronics Level displaying 9.87 metres. Inspected Wetwell with Level approximately six feet from overflow. Pumps 1 and 2 displacement averaging 1160 L/min. Precipitation expected to continue into the following day.

Workorder Summary Report

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Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3622384			5747, Clark SPS, Process	CALL	Inspection	0		5747 Powassan Clark Street SPS High Level Alarm	COMP		10/9/23 01:00 AM	10/9/23 04:30 AM	5747 Powassan Clark Street SPS High Level Alarm - Received repeat WIN911 High Wetwell Level Alarm. Inspected Wetwell with Level remaining several feet below overflow. Monitred system remotely. Reviewed Wonderware with Wetwell Level @ 8.48 metres following gradual reduction. 5747 Powassan Clark Street SPS High Level Alarm - Received subsequent repeat High Wetwell Level Alarms with delayed system restore. Wetwell Level from previous weather experiencing heavy precipitation subject to gradual reduction. Early morning residential use negatively impacted station with surcharging resulting in repeat alarming. Wetwell subject to gradual reduction followed by repeat alarming from system users. System monitored remotely.

Workorder Summary Report

Report Start Date:		Jan 1, 2023 12:00 AM	
Report End Date:		Dec 31, 2023 11:59 PM	
Location:		5747*	
Work Order Type:		CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:			

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3623877			5747, Clark SPS, Process	CALL	Inspection	0		5747 Powassan Clark Street SPS High Level Alarm	COMP		10/9/23 06:15 AM	10/9/23 08:00 AM	5747 Powassan Clark Street SPS High Level Alarm -Received subsequent repeat High Wetwell Level Alarms with delayed system restore following previous site inspections with station monitoring for sewage overflow. Wetwell Level from previous weather experiencing heavy precipitation subject to gradual reduction. Early morning residential use negatively impacted station while recovering with surcharging that resulted in alarming. Wetwell subject to gradual reduction followed by repeat alarming from system users during routine activity. System monitored remotely. Station Level fluctuations continued with eventual stabilization to normal operation.

Workorder Summary Report

Report Start Date: Jan 1, 2023 12:00 AM	
Report End Date: Dec 31, 2023 11:59 PM	
Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3625126		5747, Clark SPS		CALL	Compliance	0		Powassan Clark St. Sewage Stn Well High Level	COMP	10/26/23 10:30 PM	10/27/23 09:30 AM		Powassan Clark St. Sewage Stn Well High Level - Thursday October 26, 2023 22:18--Received and acknowledged Telus Alarms High Wet Well level for Clark Street Pumping Station 22:30--Logged onto Wonderware remotely to review trending: Level is slowly rising with decreased precipitation forecast. Will monitor remotely Friday October 27, 2023 01:43--Received and acknowledged Telus Alarms High Wet Well level for Clark Street Pumping Station 01:45--Logged onto Wonderware remotely to review trending: Level is slowly rising and Radar forecast shows rain event slowing down and eventual end within 2 hrs. 02:47--Received and acknowledged WIN911 Alarm for Clark Street High Wet Well Level. Reviewed trending: level has reached blanking level on transducer (approximately 10 feet below overflow and forecast call for intermittent rain in the next several hours. Will monitor remotely and check the station in a few hours. 05:20--Received and acknowledged WIN911 Alarm for Clark Street High Wet Well Level. Reviewed trending: level was pumped down below the WIN911 setpoint then increased again to the blanking level on transducer (approximately 10 feet below overflow). Forecast calls for intermittent rain in the next several hours. 07:30--Onsite to observe wet well level. Level is approximately 6 feet below overflow with no evidence of the level reaching the overflow pipe.

Workorder Summary Report

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Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
													Observations indicate the level reached approximately 18 inches below overflow through the night. Observation of overflow ditch indicates no outflow into Genesee Creek. Slightly misting and both pumps operating normally to bring down the level.
3625324		Powassan Wastewater Treatment Lagoon		CORR	Compliance	0		Powassan Clark St Flow meter Verification 5747	COMP		10/30/23 09:05 AM	10/30/23 09:05 AM	Powassan Clark St Flow meter Verification 5747 - Powassan Clark St Flow meter Verification 5747 for 2023 Completed by Don Michaud on Thursday October 19, 2023.
3625325		Powassan Wastewater Treatment Lagoon		CORR	Compliance	0		Powassan St Gregory Flow meter Verification 5747	COMP		10/30/23 09:10 AM	10/30/23 09:10 AM	Powassan St Gregory Flow meter Verification 5747 - Powassan St Gregory Flow meter Verification 5747 was completed by Don Michaud on Thursday October 19, 2023.

Workorder Summary Report

Report Start Date: Jan 1, 2023 12:00 AM	
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Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3634740	0000296003	GENERATOR NATURAL GAS GENSET Clark Street	5747, Clark SPS, Facility	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator Inspection/ Functional Test (1m) 5747	COMP	11/1/23 12:00 AM	11/16/23 08:01 AM	11/16/23 08:01 AM	Diesel Generator Inspection/ Functional Test (1m) 5747 - November 08, 2023. Dan Finnigan performed the monthly Generator/ Functional test.. All fluid levels were checked, belts inspected, battery charging system, etc. The generator transfer button was pressed and the start command to the generator was initiated. While running, the system was observed for leaks or any other deficiencies. The following generator values were recorded while running: RPM's= 1830 Oil Level = Full Coolant Temp=178 Deg.F Battery Voltage= 12.0 V Oil Pressure 53 psi Hrs at start: 514.2 Hrs at stop: 514.7
3640429	0000126968	LAGOON CELL 01 SOUTH POWASSAN	5747, Powassan WWTL, Process	PM	Inspection	1	MONTHS	Lagoon Cell 01South Powassan Insp/Service (1m/6m/1y) 5747	COMP	11/1/23 12:00 AM	11/16/23 02:41 PM	11/16/23 02:41 PM	Lagoon Cell 01South Powassan Insp/ Service (1m/6m/1y) 5747 -Dan Finnigan inspected the associated lagoon during the monthly RAW sewage sample collection on November 01, 2023. The lagoon berm was inspected and found to be in good condition, the level was checked and found to be below the overflow level, and there were no other unusual observations.
3640439	0000126967	LAGOON CELL 02 NORTH POWASSAN	5747, Powassan WWTL, Process	PM	Inspection	1	MONTHS	Lagoon Cell 02 North Powassan Insp/Service (1m/6m/1y) 5747	COMP	11/1/23 12:00 AM	11/16/23 02:42 PM	11/16/23 02:42 PM	

Workorder Summary Report

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Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3640461	0000126969	LAGOON CELL 03 POWASSAN	5747, Powassan WWTL, Process	PM	Inspection	1	MONTHS	Lagoon Cell 03 Powassan Inspection/Service (1m/6m/1y) 5747	COMP	11/1/23 12:00 AM	11/16/23 02:43 PM	11/16/23 02:43 PM	Lagoon Cell 03 Powassan Inspection/Service (1m/6m/1y) 5747 -Dan Finnigan inspected the associated lagoon during the monthly RAW sewage sample collection on November 01, 2023. The lagoon berm was inspected and found to be in good condition, the level was checked and found to be below the overflow level, and there were no other unusual observations.
3640479			5747, Powassan WWTL	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 5747	COMP	11/1/23 12:00 AM	11/16/23 08:38 AM	11/16/23 08:38 AM	Health And Safety Inspection (1m) 5747 -Dan Finnigan conducted the monthly H&S Inspection on November 08, 2023 which consisted of checking/verifying the following items: 1. Spill Kit: all items were available 2. Safety Signage (all intact and visible) 3. First aid kit 4. Hearing protection earmuffs 5. Emergency lighting (a new unit was picked up and installed: tested and working) 6. Emergency Eyewash (bottles are within use before date) 7. Fire Extinguisher 8. CO Monitor

Workorder Summary Report

Report Start Date: Jan 1, 2023 12:00 AM	
Report End Date: Dec 31, 2023 11:59 PM	
Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3640492			5747, Powassan WWTL	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5747	COMP	11/1/23 12:00 AM	11/16/23 08:41 AM	11/16/23 08:41 AM	TPM Inspection/Maintenance (1m) 5747 -Completed by Dan Finnigan on November 08, 2023. The operation of all sewage station lift pumps were visually and audibly observed at both St. Gregory's Lift Station and the Clark Street Lift station. Pump #1 at St. Gregory SLS seemed a little noisy but pump output was normal. Pump #1 Output at Clark Street was about half of normal. Don Michaud unplugged the pump on Friday November 10 and output was restored. The control panels were also checked for functionality with nothing unusual noted. Ventilation screens at the Clark Station were in good condition, and there was nothing else to report.
3640497			5747, Powassan WWTL	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5747	COMP	11/1/23 12:00 AM	11/16/23 08:45 AM	11/16/23 08:45 AM	Critical Alarm/Dialer Testing (1m) 5747 -Conducted by Dan Finnigan on November 08, 2023. Both sewage pumps were turned off in "hand" and the wet well level was allowed to rise until the High Level alarm setpoint was reached. The Telus alarm was triggered and messaged the operator and both pumps were turned back on to pump down the level. Both sewage pumps shut off in Auto when the level returned to normal.
3642933			5747, Powassan WWTL	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5747	COMP	11/1/23 12:00 AM	12/22/23 09:39 AM	12/22/23 09:39 AM	WISKI Review (1m) 5747 -Entered WISKI Data, calculated flows for lagoon release, reviewed sampling entries, etc.
3665579	0000086556	METER FLOW POWASSAN WWTL (CLARKE STREET) OLD LIFT STN	5747, Clark SPS, Process	PM	Calibration	1	YEARS	Meter Flow Powassan WWTL Clark Street Calibration (1y) 5747	COMP	1/1/24 12:00 AM	1/3/24 02:13 PM	1/3/24 02:13 PM	Completed October 19, 2023 - Report located on Shared Drive

Workorder Summary Report

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Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3665582	0000086563	METER FLOW 1 POWASSAN WWTL. ST.GREGORY SCHOOL PUMPING STATION #2	5747, Faireview SPS, Process	PM	Calibration	1	YEARS	Meter Flow 1 Powassan WWTL St. Gregory Calibration (1y) 5747	COMP	1/1/24 12:00 AM	1/3/24 02:14 PM	1/3/24 02:14 PM	Completed October 19, 2023 - Report located on the shared drive.
3675773	0000296003	GENERATOR NATURAL GAS GENSET Clark Street	5747, Clark SPS, Facility	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator Inspection/ Functional Test (1m) 5747	COMP	12/1/23 12:00 AM	12/11/23 08:04 AM	12/11/23 08:04 AM	Diesel Generator Inspection/ Functional Test (1m) 5747 -December 05, 2023. Dan Finnigan performed the monthly Generator/ Functional test.. All fluid levels were checked, belts inspected, battery charging system, etc. The generator transfer button was pressed and the start command to the generator was initiated. While running, the system was observed for leaks or any other deficiencies. The following generator values were recorded while running: RPM's= 1875 Oil Level = Full Coolant Temp= 165 Deg.F Battery Voltage= 12.2 V Oil Pressure 62 psi Hrs at start: 515.3 Hrs at stop: 516.0
3682387	0000126968	LAGOON CELL 01 SOUTH POWASSAN	5747, Powassan WWTL, Process	PM	Inspection	1	MONTHS	Lagoon Cell 01South Powassan Insp/Service (1m/6m/1y) 5747	COMP	12/1/23 12:00 AM	12/11/23 08:10 AM	12/11/23 08:10 AM	Lagoon Cell 01South Powassan Insp/ Service (1m/6m/1y) 5747 -Dan Finnigan inspected the associated lagoon during the monthly RAW sewage sample collection on December 05, 2023. The lagoon berm was inspected and found to be in good condition, the level was checked and found to be below the overflow level, and there were no other unusual observations.

Workorder Summary Report

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Location:	5747*
Work Order Type:	CALL,CAP,CORR,EMER,OPER,PM
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3682397	0000126967	LAGOON CELL 02 NORTH POWASSAN	5747, Powassan WWTL, Process	PM	Inspection	1	MONTHS	Lagoon Cell 02 North Powassan Insp/Service (1m/6m/1y) 5747	COMP	12/1/23 12:00 AM	12/11/23 08:11 AM	12/11/23 08:11 AM	Lagoon Cell 02 North Powassan In -Dan Finnigan inspected the associated lagoon during the monthly RAW sewage sample collection on December 05, 2023. The lagoon berm was inspected and found to be in good condition, the level was checked and found to be below the overflow level, and there were no other unusual observations.
3682419	0000126969	LAGOON CELL 03 POWASSAN	5747, Powassan WWTL, Process	PM	Inspection	1	MONTHS	Lagoon Cell 03 Powassan Inspection/Service (1m/6m/1y) 5747	COMP	12/1/23 12:00 AM	12/11/23 08:12 AM	12/11/23 08:12 AM	Lagoon Cell 03 Powassan Inspection/Service (1m/6m/1y) 5747 -Dan Finnigan inspected the associated lagoon during the monthly RAW sewage sample collection on December 05, 2023. The lagoon berm was inspected and found to be in good condition, the level was checked and found to be below the overflow level, and there were no other unusual observations.
3682437			5747, Powassan WWTL	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 5747	COMP	12/1/23 12:00 AM	12/11/23 08:00 AM	12/11/23 08:00 AM	Health And Safety Inspection (1m) 5747 - Dan Finnigan conducted the monthly H&S Inspection on December 05, 2023 which consisted of checking/ verifying the following items: 1. Spill Kit: all items were available 2. Safety Signage (all intact and visible) 3. First aid kit 4. Hearing protection earmuffs 5. Emergency lighting (tested and working) 6. Emergency Eyewash (bottles are within use before date) 7. Fire Extinguisher 8. CO Monitor

Workorder Summary Report

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Location: 5747*	
Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3682448		5747, Powassan WWTL		PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5747	COMP	12/1/23 12:00 AM	12/11/23 08:02 AM	12/11/23 08:02 AM	TPM Inspection/Maintenance (1m) 5747 -Completed by Dan Finnigan on December 05, 2023. The operation of all sewage station lift pumps were visually and audibly observed at both St. Gregory's Lift Station and the Clark Street Lift station. Pump #1 at St. Gregory SLS seemed a little noisy but pump output was normal. The control panels were also checked for functionality with nothing unusual noted. Ventilation screens at the Clark Station were in good condition, and there was nothing else to report.
3682453		5747, Powassan WWTL		PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5747	COMP	12/1/23 12:00 AM	12/11/23 08:07 AM	12/11/23 08:07 AM	Critical Alarm/Dialer Testing (1m) 5747 -Conducted by Dan Finnigan on December 05, 2023. Both sewage pumps were turned off in "hand" and the wet well level was allowed to rise until the High Level alarm setpoint was reached. The Telus alarm was triggered and messaged the operator and both pumps were turned back on to pump down the level. Both sewage pumps shut off in Auto when the level returned to normal.
3684766		5747, Powassan WWTL		OPER	Compliance	1	MONTHS	WISKI Review (1m) 5747	COMP	12/1/23 12:00 AM	12/22/23 09:48 AM	12/22/23 09:48 AM	WISKI Review (1m) 5747 -Entered WISKI data and calculated lagoon release data for entry. Checked lab uploads, etc.

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Work Order Type: CALL,CAP,CORR,EMER,OPER,PM	
Work Order Class:	

WorkOrder				PM Schedule		Workorder Details							
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3707605		5747, Clark SPS		CALL	Inspection	0		5747 Powassan Clark Street SPS High Level Alarm	COMP		12/28/23 05:30 PM	12/29/23 01:00 AM	5747 Powassan Clark Street SPS High Level Alarm - Received Power Failure Alarm followed by High Level Alarm. Received WIN911 Clark Street High Level Alarm. Received WIN911 Clark Street High Level Alarm with system restore. Reviewed Wonderware with Station Level @ 8.1 metres with Flow @ 1006 L/min. Trending review shows Clark Street SPS Control Power Loss occurring at 1550 hours with Pumps 1 and 2 no longer displacing due to Generator failing to activate. Trending flatlined at 1620 hours until 1735 with utility power restoration. Pumps 1 and 2 immediately activated reducing station level. Performed visual inspection of Wetwell with difficulty determining if Bypass event occurred due to significant moisture. Confirmed presence of Calcium Hypochlorite in perforated assembly immediately located in Overflow Header. Performed inspection of Genesee Creek near Overflow Header observing small quantity of foam confirming event occurrence. Contacted MECP SAC speaking to Environmental Officer Bilal Kidwai with Reference 1-4K5U1Z. Event reported duration from 1645 hours to 1735 with approximate volume 10 cubic metres subject to disinfection from Calcium Hypochlorite stored in perforated assembly located immediately inside Overflow Header. Sampling requirement of 2 sets not possible due to brief time. Contacted NBPSD Health Unit. Contacted by NBPSD Health Unit Inspector Rohan Makdani. Details



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Work Order Class:	

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
													of the event provided to Inspector. Prepared Environmental Incident Report and transmitted to MECF SAC, MOH, Environment Canada, OCWA and Municipality of Powassan.

Ministry of Northern Development

Regional Economic Development Branch

70 Foster Drive, Suite 200
Sault Ste. Marie ON P6A 6V8
Telephone: 807-475-1648

Ministère du Développement du Nord

Direction du Développement économique Régional

70, promenade Foster, bureau 200
Sault Ste. Marie ON P6A 6V8
Téléphone: 807-475-1648



February 2, 2024

To whom it may concern:

The Ministry of Northern Development is moving forward with the modernization of the *Northern Services Boards Act* (NSBA) in alignment with the *Modernizing Ontario for People and Businesses Act, 2020*. The NSBA has not undergone a review since 1999, and the ministry is looking for feedback on potential burden reduction initiatives through changes to the NSBA. Local Services Boards located in the unincorporated territory in Northern Ontario are governed under the NSBA.

The ministry is seeking public feedback on matters which include the following:

- Modernizing NSBA administration processes (i.e., opportunity to align to digital / technological advancements);
- Improving clarity related to the definition of powers;
- Aligning Local Services Board (LSBs) and government fiscal schedules / year;
- Timing of LSB elections and length of terms of office;
- Providing services outside of the geographical boundaries (i.e., mutual aid (fire response / emergency services));
- Reviewing legislated financial requirements (i.e., review report by certified accountant vs. audit); and
- Flexibility in establishing LSB rules / procedures related to in-camera and public board meetings.

As part of seeking public feedback, the following items are considered out of scope:

- Increases to LSB Program funding;
- Increased responsibility relating to additional powers beyond the current nine (9) powers (fire protection, recreation, water supply, sewage, roads, garbage collection, public library services, street or area lighting and emergency telecommunications);
- Additional types of services (i.e., property planning matters, landfill site operations, etc.); and
- Discussion on amalgamation with neighboring municipalities.

As part of the consultation process, all Ontarians are able to provide comment through the Regulatory Registry. We encourage you to take the time to provide feedback to matters that may be of interest.

The link to the Ontario Regulatory Registry [Red Tape Reduction- Northern Services Boards Act Modernization \(ontariocanada.com\)](https://forms.office.com/r/5qCvy25M91) Copy and paste the link below into the address toolbar to complete the survey questions: <https://forms.office.com/r/5qCvy25M91>

Should you have additional questions relating to the modernization of the Northern Services Board Act please contact the LSB program coordinator Elizabeth Norman, at Elizabeth.Norman@ontario.ca.

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Regards,

A handwritten signature in blue ink, reading "Melanie Muncaster".

Melanie Muncaster
Director Regional Economic Development Branch



RORAB SHRINE CLUB



Serving the community since 1927

1260 Brookes St. North Bay, Ontario P1B 2P1

January 24, 2024 Allison Quinn
Acting Clerk
Municipality of Powassan
250 Clark Street, Box 250, Powassan ON P0H 1Z0

RECEIVED
FEB 12 2024
Municipality of Powassan

Dear Ms. Quinn:

The Shriners of North Bay and area would like to reserve Saturday June 15, 2024 as a Tag Day.

The Primary role of the Shrine is to support the operation of the various Shrine Hospitals for Children in North America, and particularly the Montreal Shrine Hospital for Children. It is our belief that no child, or family, should have to experience undue financial hardship because of the disease or sickness, or be denied medical services. There are several children in the North Bay/Nipissing area who have and or currently receive ongoing care at our Montreal Hospital because of the support of the local Rorab Shrine Club.

Annually the Rorab Shrine Club conducts a Tag Day in order to promote the work of the club, and to raise funds. In the past, we have been granted generous cooperation from both the Municipality of Powassan, and the various merchants of the area who allow us to tag on their properties. We are respectfully requesting that Saturday June 17, 2023 be set aside as Shriners Tag Day by the Municipality of Powassan.

Unfortunately, no merchants have responded to our request at this time.

Sincerely,

Alan Immel
Rorab Shrine Club Secretary



RECEIVED

FEB 06 2024

Municipality of Powassan

January 22, 2024

Mayor Peter McIsaac
Corporation of the Municipality of Powassan
PO Box 250
POWASSAN, ON P0H 1Z0

Dear Mayor McIsaac:

We are writing today to thank you for the Powassan's January annual payment of \$37,359 towards your \$747,168 pledge.

Your continued support helps us achieve our mutual goal of providing more advanced levels of care *close to home*. We deeply appreciate and depend on your help. To date, your contributions total \$597,732.

Thanks to your investment we continue to evolve; and today, the North Bay Regional Health Centre (NBRHC) is an accredited, unique health services provider with three primary roles. We provide acute care services to North Bay and surrounding communities, we are the district referral centre providing physician specialist services to the area, and we are northeast Ontario's specialized mental health service provider.

Today, your hospital is working around the clock to prepare for and care for patients, close to home. Donations are ensuring our front-line staff have the tools, technology and advanced medical equipment to respond to our community's healthcare needs.

Powassan citizens recently demonstrated again that hospital care is one of their highest priorities and many contributed gifts to the *Seeing More Clearly Campaign* for an MRI and More. This support made it possible for us to invest \$10M towards state-of-the-art digital diagnostic imaging equipment for our new health centre.

NBRHC practices continuous quality improvement involving patients, staff, physicians and volunteers in improving the delivery of care. The Health Information System (HIS) Project, also known regionally as One Person. One Record. One System is a collaborative effort amongst 23 hospitals in the NE region to enhance patient care by creating a single system to digitally share patient records. This technology will enable high-quality clinical care.

Once again, we thank you for your commitment to the health of your community. Together we are enhancing your healthcare, close to home.

Yours truly,

Paul Heinrich
President and CEO

James A. Graham
Board Chair

cc: Maureen Lang

February 2024

February 2024							March 2024						
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
4	5	6	7	8	9	10	3	4	5	6	7	8	9
11	12	13	14	15	16	17	10	11	12	13	14	15	16
18	19	20	21	22	23	24	17	18	19	20	21	22	23
25	26	27	28	29			24	25	26	27	28	29	30
							31						

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
Jan 28	29	30	31	Feb 1	2	3
4	5	6 Council	7 NAPB Recreation Committee	8 DSSAB	9	10
11	12	13	14	15	16 12:00am	17 Winter Carnival
18 Winter Carnival	19 Office Closed - Family Day	20 Council GSMNP	21 Eastholme Board 6:10pm Maple Syrup Festival	22	23	24
25	26 Library Board Meeting	27	28 NBMCA	29	Mar 1	2