COLLINGWOOD

CLEARVIEW TOWNSHIP

Creemore

2024 Annual Wastewater Performance Report

Table of Contents

Acronyms

BOD	Biochemical Oxygen Demand
$CBOD_5$	Five Day Carbonaceous Biochemical Oxygen Demand
Cfu	Colony Forming Units
COD	Chemical Oxygen Demand
DO	Dissolved Oxygen
ECA	Environmental Compliance Approval
E.coli	Thermally tolerant forms of Escherichia
Hg	Mercury
FP	Filtered Phosphorous
GEOMEAN	Average of a set of Products
HP	Horsepower
kg	Kilograms
kW	Kilowatt
MECP	Ministry of the Environment, Conservation and Parks
mg/l	Milligrams per litre
Ml/d	Mega litres per day
m^3/d	Cubic metres per day
NH_3	Ammonia
NO_2	Nitrites
NO_3	Nitrates
pH	Acidity, ‘potential of hydrogen’
STF	Sewage Treatment Facility
SVI	Sludge Volume Index
$TBOD_5$ or BOD_5	Five Day Biochemical Oxygen Demand
TAN	Total Ammonia Nitrogen
TKN	Total Kjeldahl Nitrogen
TP	Total Phosphorous
TS	Total Solids
TSS	Total Suspended Solids
UV	Ultraviolet
VFA	Volatile Fatty Acids
VS	Volatile Solids
WPCP	Wastewater Treatment Plant

Introduction

The Town of Collingwood operates the Creemore Water Pollution Control Plant (WPCP), owned by the Township of Clearview. WPCP has class II certification, and its Wastewater Works Number is 120002683.

This report has been prepared to address the annual performance reporting requirements for the Stayer Water Pollution Control Plant (WPCP) as outlined in the Environmental Compliance Approval (ECA) 3281-AKGR3E issued April 6th, 2017.

The report summarizes the monitoring and operational results and covers the period from January 1, 2024, to December 31, 2024. All compliance objectives and limits have been achieved in 2024 except for the Total Ammonia Nitrogen (TAN) objective in January as further described in the report. The report is submitted to the District Manager of the Ministry of Environment, Conservation and Parks (MECP) by March 31st.

Facility Description

The plant is located on Lot 8, Conc. IV in the Township of Clearview and services the Village of Creemore. The plant was initially designed to service a population of 1,500, the community's commercial core and the Creemore Springs Brewery Ltd. Provisions were made as part of the design for a future plant capacity increase to accommodate a population of 2,500.

Gravity flow from the Community Collection system arrives at Site MH102. An emergency overflow sewer is also connected at this point. The sewage treatment process consists of an influent pumping station, automatic fine screening (with a manually raked bypass raw sewage screen) and a 2-basin membrane filtration technology treatment process, UV disinfection, effluent re-aeration chamber and outfall to the Mad River.

Phosphorus removal is achieved by ferric chloride addition. Sludge Stabilization is accomplished in a single basin aerobic digester equipped with a Zee-Weed membrane system for thickening. Sludge storage /hauling facilities are also provided.

Standby power is provided by a diesel-driven generator.

The Creemore WWTP building has an overall dimension of approximately 34m x 25m and contains the following:

Inlet Pumping Station

- Influent pumping station consisting of a 48.4m^3 wet well.
- Each well is equipped with an ABS submersible pump.
- Each pump has an initial rated capacity of 34.2 L/sec to handle Stage I peak flow. Each pump is capable of being upgraded to 53.7 L/sec to accommodate Stage II peak flow.

Equalization Tank

- One (1) 1,400 m^3 equalization tank with sewage returning to the influent pumping station when peak flow has receded.

Screening

- Influent channel located above the influent pumping room.
- Two channels:
    - 1 - fitted with an automated mechanically cleaned screw screen with a 2 mm screen opening.
    - 1 - bypass channel equipped with a manually cleaned bar screen.

Flow Distribution

- Screened wastewater flows by gravity to the aeration basins.
- Flow is split evenly between the two tanks through a splitter box, which contains an overflow weir and v-notch weir to provide flow equalization.

Biological Treatment (Aeration)

- Two (2) aeration tanks with anoxic and aerobic zones. The anoxic zone is separated from the aerobic zone by a curtain wall with openings to permit flow from the anoxic to the aerobic zone.
- A course bubble diffuser also provides mixing in anoxic zone.
- Each tank also has a submersible re-circulation pump for returning mixed liquor from the aerobic to the anoxic zone and a sludge wasting pump to remove excess biomass to sludge thickener.
- An aerobic environment is maintained in the aerobic portion of the tank with a fine bubble diffused air system.

Membrane Filtration

- Tank ZW-1 holds four (4) Suez modules (Zeeweed) membrane cassettes located in the aerobic zone of the tanks.
- Tank ZW-2 holds four (4) Suez 500D modules (Zeeweed) membrane cassettes located in the aerobic zone of the tanks.
- Associated with the cassettes are the permeate collection headers, air scour distribution pipes for the membranes, pressure and level sensors, oxygen meters, TSS sensors, three (3) permeate pumps, flow meters and turbidity meters, air separation columns, air removal vacuum pumps, associated valves and piping.

Chemical Systems

Phosphorus removal by ferric chloride addition:

- 1 - 25,000 L bulk storage tank – buried
- 1 – 1,400 L day tank
- 2 – chemical addition metering pumps
- 1 – Urea dosing pump for nitrogen stabilization

Membrane Cleaning

Sodium hypochlorite solution consisting of:

- 100 gal. storage tank (12% hypo)
- 4 – chemical addition metering pumps

Citric acid system consisting of:

- 1 – 100 gal. storage tank with mixer
- 2 – chemical addition metering pumps

Disinfection

- Ultraviolet (UV) disinfection consisting of one (1) bank of modules providing a minimum dose of 30,000 micro watts/sec/cm^2 at peak flow rate of 3,140 m^3/d and 70% lamp output and minimum UV transmittance of 65% to provide an effluent target of 100 CFU/100 mL of E.coli. (monthly geometric mean density). A

serpentine weir placed at the end of the channel maintains liquid level within the channel.

Sludge Stabilization

Aerobic Digestion

- One (1) aerobic sludge digestion tank equipped with coarse bubble aeration system.

Sludge Thickener

- A sludge thickener consisting of a 500D membrane cassette and pumps for extracting and returning the liquid portion to the inlet works, back pulse/aerator flush pump and a transfer pump for transferring thickened sludge to the aerobic digester is also employed.

Sludge Holding Tank

- One (1) glass lined steel storage tank with a capacity of 1,400 m^3; located outside of the treatment plant building equipped with a mixing system.
- Underground pumping station housing one sludge loading/mixing pump and associated valving.

Air Blower Room

- Blower room contains seven (7) blowers for process air requirements, two (2) air compressors with one (1) air dryer to supply instrument air.
- Three (3) air blowers, two (2) duty and one (1) standby to supply supplemental air to the diffuser grid in the aeration tanks.
- Two (2) air blowers, one (1) duty and one (1) standby to supply cyclic air scour to the membrane cassettes.
- Two (2) air blowers to supply air to the aerobic digester diffuser grid and the air scour for the membrane cassettes.

Standby Power

- 1 - 375 kW diesel generator set to provide stand-by power capability.

Annual Average Performance Assessment

Effluent Objectives and Limits

- Effluent Compliance Limits (concentrations and loadings) are prescribed in Section 7 (2) of the ECA 3281-AKGR3E. The objectives and limits are summarized below in Tables 1A and 1B.

Table 1A: Effluent Objectives	
Effluent Parameter	**Concentration Objective (mg/L unless otherwise indicated)**
$CBOD_5$	5.0
TSS	5.0
TP	0.1
TAN	1.0 (May 1 – Nov 30) 3.0 (Dec 1 – April 30)
E. Coli	100 organisms per 100 mL monthly geometric mean density

Table 1B: Effluent Concentration Limits		
Effluent Parameter	**Monthly Average Concentration (mg/L unless otherwise indicated)**	**Monthly Average Loading, kg/d**
$CBOD_5$	10	14.0
TSS	10	14.0
TP	0.2	0.28
TAN		
May 1 to November 1	2.0	2.8
December 1 to April 30	4.0	5.6
DO	4.0 (minimum level)	-
pH Range	6.0 – 9.5	-
E. coli	200 CFU/100 mL (monthly geometric mean density)	-

Note: Compliance for all parameters except pH and E. coli bacteria is based on a monthly average concentration/loading. Compliance for E. coli is based on a monthly geometric mean density. Section 7 (2) d. requires that the pH of the effluent be maintained within the range 6.0 to 9.5, inclusive, at all times.

Compliance (Concentration and Loading)

- There were no compliance limit exceedances in 2024

Objectives

- The monthly average TAN objective of 3.0 mg/L was not met in January with an average concentration of 3.99 mg/L. A letter sent to the MECP is included in Appendix C.

The monthly flow and process quality data are summarized in Appendix B.

Effluent Sampling Requirements, Monitoring and Recording

Compliance Testing and Analysis

- Monitoring requirements are specified under Condition 9 of the ECA. Twenty–four (24) hour composite samples of raw sewage are required to be collected monthly and analyzed for BOD_5, TSS, TP, and TKN. Twenty–four (24) hour composite samples of final effluent are required to be collected weekly and analyzed for $CBOD_5$, TSS, TP, and TAN. Grab samples of final effluent are required to be collected weekly for analysis for E. coli, temperature, pH, and DO. The plant's current regular monitoring program exceeds these minimum requirements.
- Compliance sampling and analysis of raw sewage is carried out weekly. Twenty–four (24) hour composite samples are collected using an automatic sampler for analysis of BOD_5, TSS, TP, and TKN.
- Compliance sampling and analysis of final effluent is carried out weekly. Twenty–four (24) hour composite samples are collected using a refrigerated automatic sampler for analysis of $CBOD_5$, TSS, TP, and TKN, NH_3, NO_2, and NO_3. Grab samples of final effluent are also collected weekly for analysis of E. coli. Lastly, grab samples are collected a minimum of once a week and tested for pH and temperature.
- Except for the samples collected for pH and temperature testing, analysis for all compliance samples is carried out by an external contract laboratory, Testmark Laboratories LTD.
- The plant also complies with Guideline F-10-1 concerning sampling and analysis requirements which satisfies condition 2.1 (d).
- The temperature and pH of the final effluent is taken in the field at the time of NH_3 sampling. The Creemore WWTP external sampling program is attached as Appendix A.
- All external laboratory analysis results are reported in the Municipal Utility Monitoring forms which are submitted electronically to wastewater reporting and are used in generating the annual plant performance report.

In-house Testing and Analysis for Process Control

- Influent and final effluent samples are collected on Monday, Tuesday, Wednesday and Thursday. Grab samples are also obtained for other process streams as required for process control purposes. All samples are analyzed on-site or at the Collingwood WWTP laboratory using techniques in standard methods or using approved methods for HACH DR/2010 Spectrophotometer.

- The Creemore WWTP internal sampling program is enclosed in Appendix A.

Flow Measurement

- Magnetic flow meters are used to monitor both raw sewage and final effluent flows.
- Both the influent and final effluent flows are trended through the SCADA system.
- The meters are calibrated annually for accuracy to within +/- 5%of actual flow rate within the range of 10% to 100% of the full-scale reading to satisfy 9 (6) of the ECA.

Date 2024	Equipment Calibrated/Maintained	Pass/Fail	Comments
June 24	Influent flowmeter	Pass	
June 24	Effluent flowmeter	Pass	
June 24	Wet Well #1 level indicator	Pass	
June 24	Wet Well #2 level indicator	Pass	

Capacity Assessment

	Design	Current year
Maximum average daily flow in m^3/d	Stage 1: 860 & 1,400 Stage 2	571
% of capacity based on Average Daily Flow		66.3% of Stage 1

- The Annual average daily flow has fallen within the limit for this reporting period.
- The annual average performance data is summarized in Appendix B.

Sludge Management

- Waste activated sludge is aerobically digested at the Creemore WWTP. Digested sludge is pumped to an outdoor sludge storage tank equipped with submersible mixers. Stabilized biosolids are spread on licensed agricultural land as a nutrient and soil conditioner.

- Sludge produced at the Creemore WWTP meets the quality criteria specified in the Ontario Guidelines for Sewage Sludge Utilization on Agricultural lands. Sludge is applied in accordance with these guidelines and the conditions set out in the site Certificate of Approvals. However, sludge disposal through direct utilization on land is not practical during winter months, during periods of inclement weather, and when agricultural fields are inaccessible. The provincial guidelines for biosolids utilization on land recommend municipalities provide six (6) months of sludge storage facilities. The outdoor storage tank has a volume of 1400m^3.
- Sludge disposal operations are currently contracted to a private hauler, Region of Huronia Environmental Services Limited, R. R. #1, New Lowell, Ontario, L0M 1N0. This firm possesses a valid C of A #7383-4LAHXD authorizing it to transport processed organic waste from the Creemore WWTP to approved organic conditioning sites.
- A total volume of 2,819.60 m^3 of biosolids was disposed of from the Creemore facility in 2024. A summary of the locations of where the sludge was disposed is included in Appendix D.
- A Sludge volume of 2,900.00 m^3 is predicted for the year 2025 due to growth.
- Samples of aerobic sludge are collected twice monthly and sent for metals, E. coli, and nutrient analysis to Testmark Laboratories Ltd in Mississauga, Ontario.
- This sampling frequency satisfies the recommended sampling requirements for sludge as outlined under section 3 of the “Guidelines.”

Bypasses, Overflows and Spills

- There were no bypasses or overflows in 2024
- A chemical spill occurred on May 16th as a result of an overfilling of the underground bulk storage tank. The spill was reported to SAC and an update of events was sent to the MECP. The e-mail is included in Appendix C.

Maintenance

- There were no urgent repairs performed in 2024 that affected the performance of the WPCP.
- Routine preventative maintenance was performed throughout the year in accordance with the recommendations of the original equipment manufacturer.
- Calibrations were carried out on the flow metering equipment and a summary is included.
- Semi-annual inspections and maintenance on the standby generator and monthly operations test, inspection, and maintenance were completed.
- Maintenance records are kept for each piece of equipment at the plant and are available at the plant for viewing.

2024 Maintenance Tracking	
ZW#1	Installed backflow preventer
ZW#2	Installed backflow preventer
Generator room	Replaced Louvre Controller
ZW#1	Replaced control board for DO/TSS monitoring
ZW#2	Replaced turbidity meter

Citric acid cleaning tank	Replaced pump
Membrane cleaning tanks	Replaced pump impeller and mechanical seals
ARI valves	Completed refurbishment
Underground chemical storage tank	Replaced tank lid and flange fittings/connections
B-86-A compressor	Rebuilt
B-85-1 compressor	Rebuilt
2 UV lights and quartz sleeve	Replaced

Complaints

- There were no complaints in 2024.

Comments

- The plant continues to receive high strength wastewater (in terms of soluble BOD_5, SS, & TP) from the Creemore Springs Brewery.
- Foaming continues to occur sporadically in the aeration basins and has been an operational difficulty throughout 2024. It is believed that the cause of the foaming is due to loading discharges from brewery waste.
- Due to the manufacturer installation problems that occurred with the ZW#1 membranes in 2021 and the subsequent problems that arose in 2022 it had been determined that a new pedestal support system and guide rails needed to be engineered, fabricated and installed. The installation took place in March of 2024 and was completed.

Appendix A Sampling and Process control

Composite samples are taken on both the influent and final effluent flow. Samples are taken Monday – Thursday, depending on staffing.

Samples are analyzed using procedures from the most current edition of "Standard Methods for the Examination of Water and Wastewater" and approved methods for HACH DR 2010 Spectrophotometer.

Samples are obtained by the operators and returned to the Collingwood Lab for analysis (pH, DO &Temp are done on site at the time sample is taken). Operators are responsible for obtaining sufficient samples for the laboratory technician.

In-House Sampling			
Unit Process	**Type Sample**	**Parameters Tested**	**Frequency**
Influent	Composite	pH, TSS, TP, NH3	Daily M-T
Aeration I. Mixed Liquor	Grab	TSS	Daily M-T
Sludge Stabilization I. Thickened sludge II. Digested sludge	Grab Grab	TS & VS TS & VS	As required As required
Final Effluent	Grab Composite	TSS, pH, DO, Temp, TP, NH3 TSS, pH, DO, Temp, TP, NH3	Monday Tuesday, Wednesday, Thursday

External Lab Analysis			
Unit Process	**Type Sample**	**Parameters Tested**	**Frequency**
Influent	Composite	TP, TSS, BOD_5, TAN TKN, N03, N02	Weekly
Effluent	Composite Grab	TSS, $CBOD_5$, TP, TAN N03, N02, TKN E-Coli	Weekly Weekly
Bio solids (Aerobic Sludge)	Grab	TS, VS, ICAP, TP,NH3, TKN, anions, E-Coli	Twice/Month

- Samples are sent to an outside Lab to supplement the testing done in-house and provide a QA/QC check.

- The external lab is an accredited lab, and these results are reported on the monthly MUMPS forms.

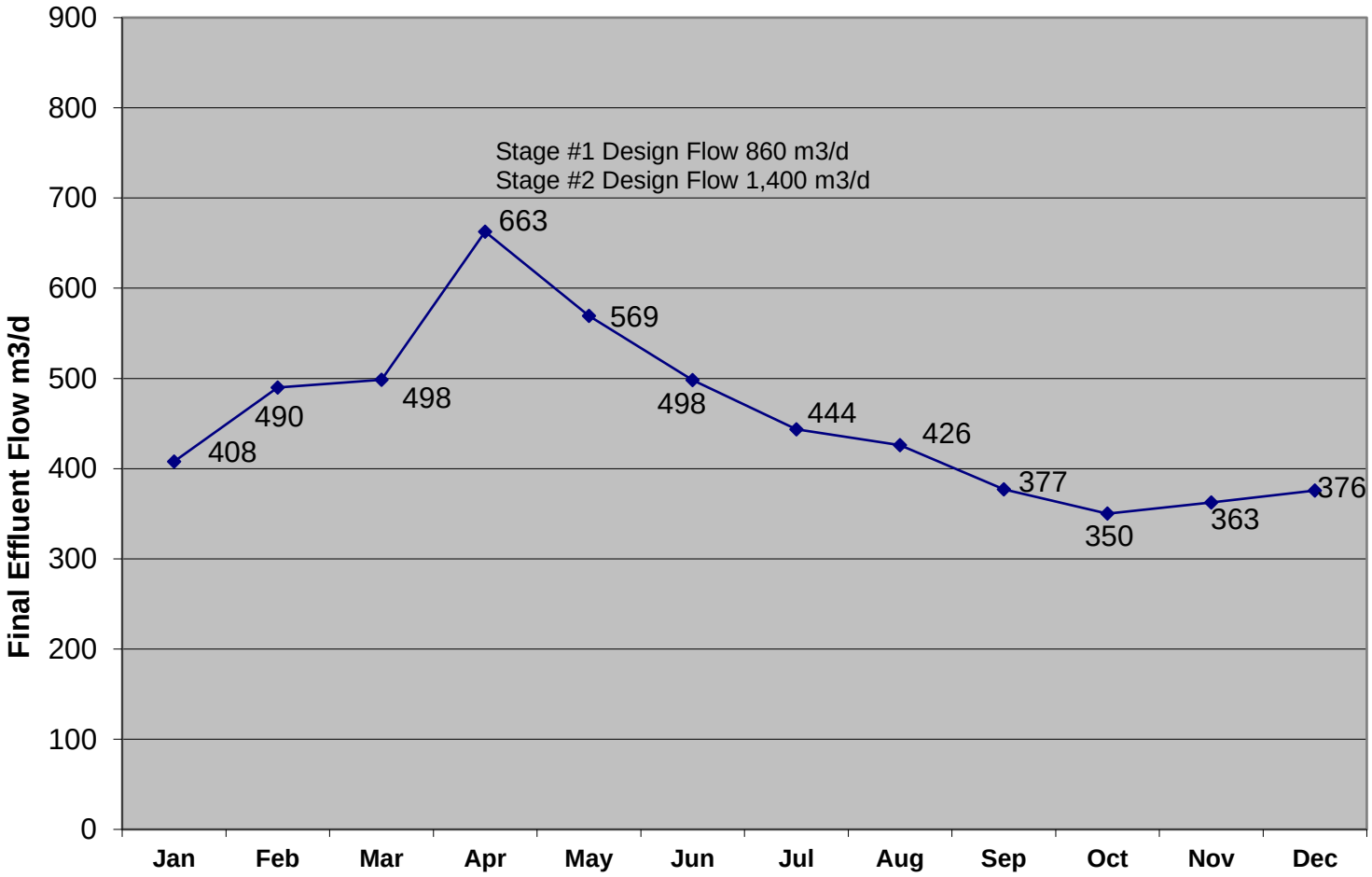
Appendix B Monthly Flow and Process Quality Data

CREEMORE

WPCP PERFORMANCE EVALUATION 2024

2024	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean	ECA Criteria
FLOWS (m^3/d)														
Influent														
ADF	351	360	407	571	452	370	398	382	326	303	313	313	379	
Total	10,886	10,440	12,223	17,122	14,014	11,095	12,349	11,833	9,790	9,382	9,395	9,692	138,221	
Max Day	411	415	527	716	667	485	512	504	420	395	400	399		
Min Day	295	316	314	433	338	165	329	300	236	243	249	255		
Final Effluent														
ADF	408	490	498	663	569	498	444	426	377	350	363	376	453	
Total	12,647	14,209	14,955	19,880	17,651	14,941	13,756	13,211	11,307	10,852	10,875	11,652	165,936	
Max Day	539	826	774	868	907	632	566	541	478	446	470	501		
Min Day	321	325	332	475	405	395	328	339	277	257	262	258		
BOD5 (mg/L)														
Influent	904	1170	1018	1008	1072	993	1002	1295	1243	420	1395	1052	1048	
Effluent **CBOD5**	1.6	1.3	2.8	1.3	1.3	1.9	1.1	1.0	1.6	1.1	1.2	1.0	1.4	10.0 mg/L
BOD5 (kg/d)														
Effluent average loading	0.71	0.64	0.44	0.69	0.89	0.85	0.50	0.35	0.44	0.40	0.37	0.40		14.0 kg/d
	Compliance is a monthly average concentration of 10.0 mg/L and a monthly average loading of 14.0 kg/d in the Final Effluent													
SS (mg/L)														
Influent	230	342	379	278	302	276	342	345	231	305	218	305	296	
Effluent	3.5	2.7	1.4	1.2	1.9	2.0	1.4	1.3	1.6	2.8	1.3	2.2	1.9	10.0 mg/L
SS (kg/d)														
Effluent average loading	1.61	1.22	0.47	0.66	1.36	0.90	0.00	0.47	0.41	1.11	0.43	0.85		14.0 kg/d
	Compliance is a monthly average concentration of 10.0 mg/L and a monthly average loading of 14.0 kg/d in the Final Effluent													
TP (mg/L)														
Influent	13.6	28.8	17.0	10.3	17.3	12.8	10.5	16.6	12.9	13.6	10.0	17.3	15	
Effluent	0.07	0.10	0.04	0.03	0.05	0.05	0.04	0.04	0.06	0.05	0.05	0.03	0.05	0.2 mg/L
TP (kg/d)														
Effluent average loading	0.033	0.046	0.010	0.014	0.029	0.021	0.016	0.014	0.016	0.019	0.015	0.011		0.28 kg/d
	Compliance is a monthly average concentration of 0.2 mg/L and a monthly average loading of 0.28 kg/d in the Final Effluent													
TAN (mg/L)														
Influent	40.4	28.3	25.4	17.8	20.2	29.4	18.8	16.8	23.5	29.1	29.6	46.1	27	
Effluent	3.99	0.38	0.20	0.12	0.09	0.10	0.09	0.11	0.17	0.11	0.12	1.10	0.55	
TAN (kg/d)														
Effluent average loading	1.58	0.17	0.05	0.06	0.06	0.05	0.04	0.00	0.05	0.04	0.04	0.43		
May 1 to Nov 31	Compliance is a monthly average concentration of 2.0 mg/L and a monthly average loading of 2.8 kg/d in the Final Effluent													
Dec 1 to Apr 30	Compliance is a monthly average concentration of 4.0 mg/L and a monthly average loading of 5.6 kg/d in the Final Effluent													
DO (mg/L)														
Feff min value	5.6	5.0	6.9	6.0	4.9	4.5	4.4	4.4	4.3	5.1	4.9	5.5		
Feff max value	6.0	7.1	7.8	7.5	5.7	5.4	5.5	5.9	4.3	5.1	5.8	7.1		>4.0 mg/L
	Compliance means maintaining a minimum dissolved oxygen concentration of 4.0 mg/L in the final effluent													
E-Coli (CFU/100mL)														
Effluent	3	12	34	2	3	30	2	10	2	3	1	4		200/100mL
	Compliance means the monthly geometric mean density of E-Coli does not exceed 200 organisms / 100mL of Final Effluent													
pH														
Feff min value	6.6	6.9	7.1	7.0	7.4	7.2	7.3	7.2	6.8	6.9	6.4	6.1		>, = 6.0
Feff max value	7.8	7.9	8.1	8.2	8.3	8.1	8.2	7.7	7.9	7.5	7.5	7.8		<, = 9.5
	Compliance means maintaining the pH of the final effluent within the limits 6.0 to 9.5													
TKN														
Influent	58.30	58.5	40.9	31.40	36.4	51.8	41.6	60.6	56.8	65.6	68.3	78.7	54.0	
Effluent	2.54	1.10	0.78	0.48	0.62	2.95	2.00	2.88	2.85	2.28	5.83	1.82	2.2	

2024 MONTHLY AVERAGE FINAL EFFLUENT FLOW



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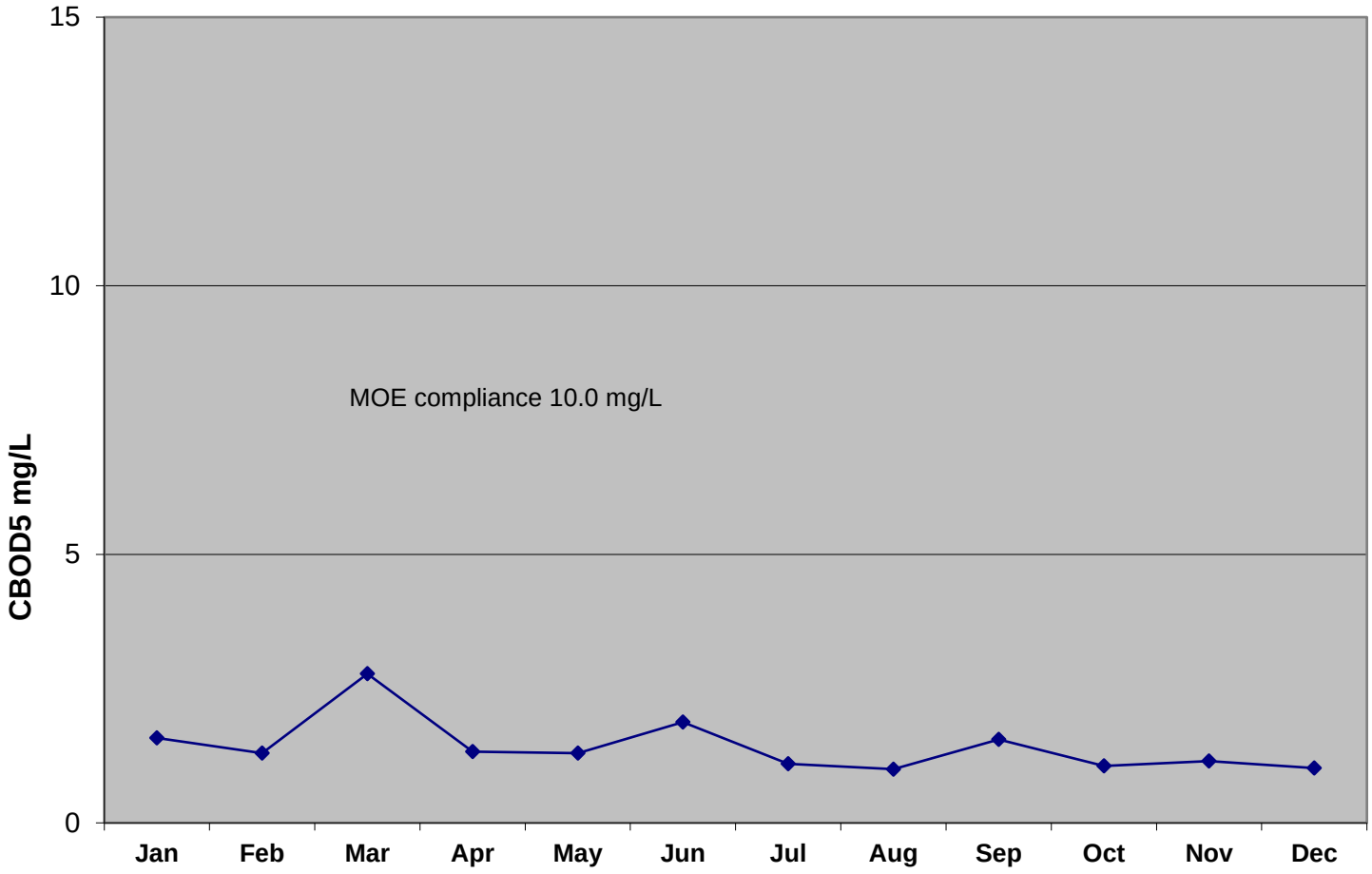
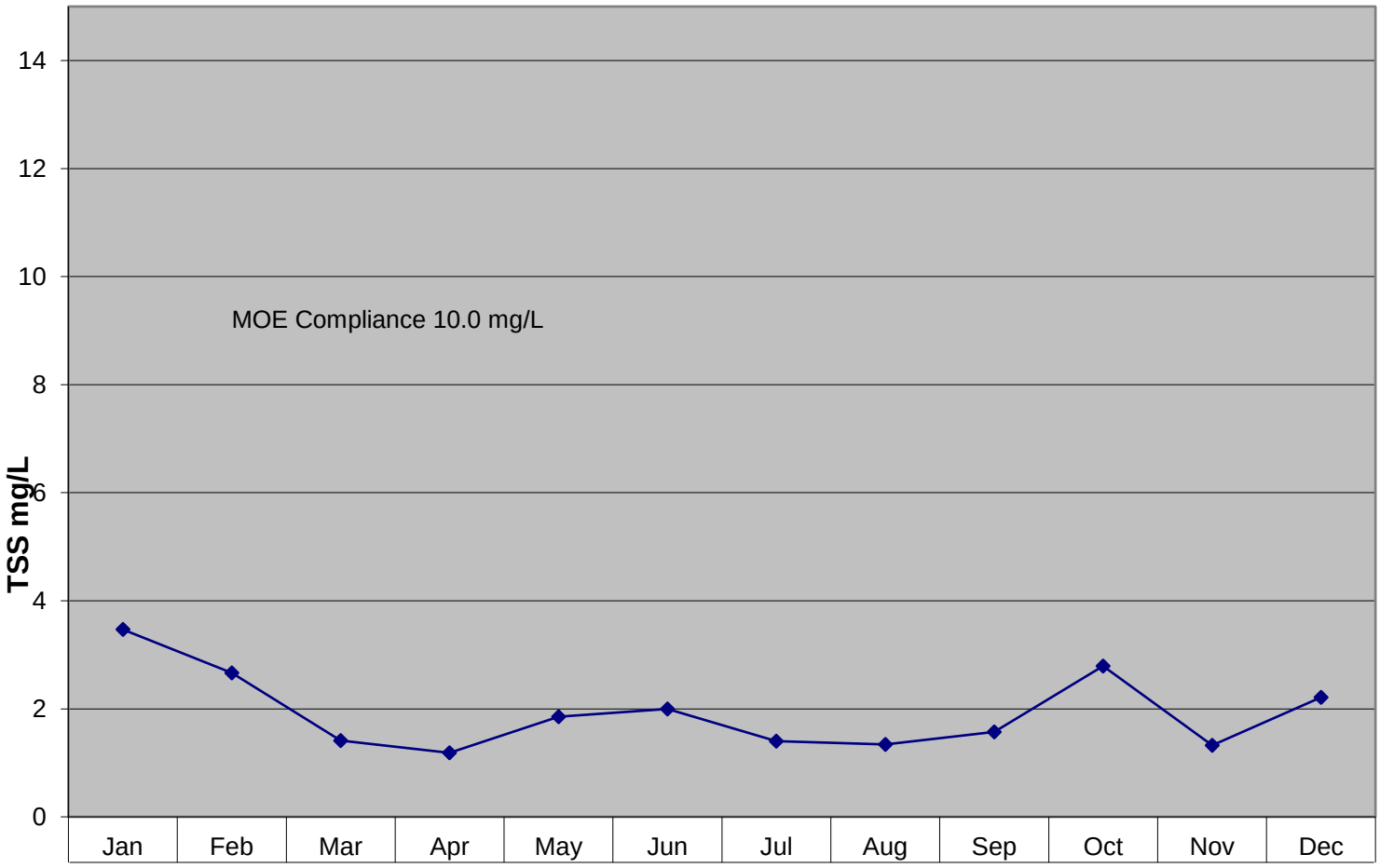
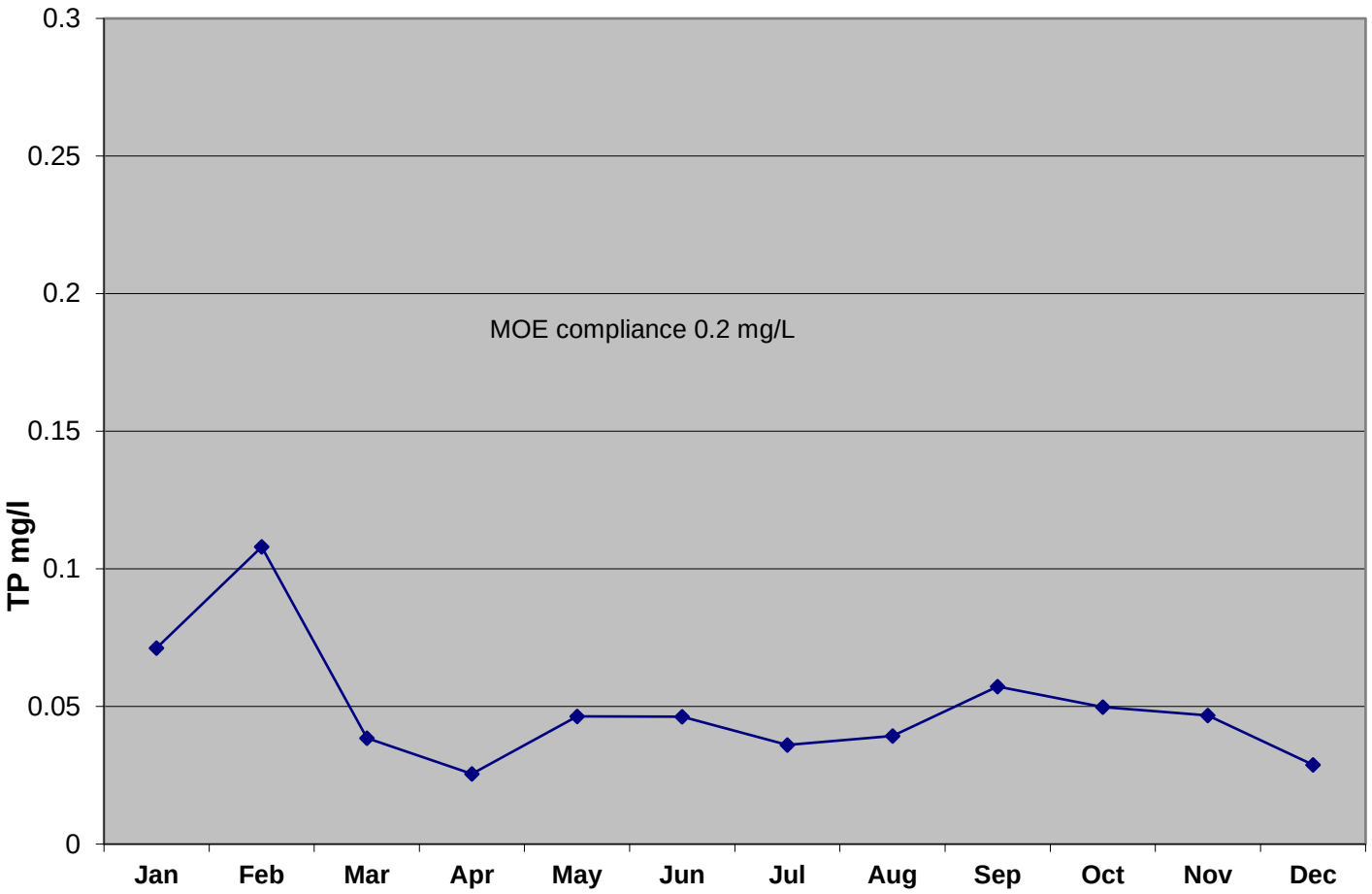


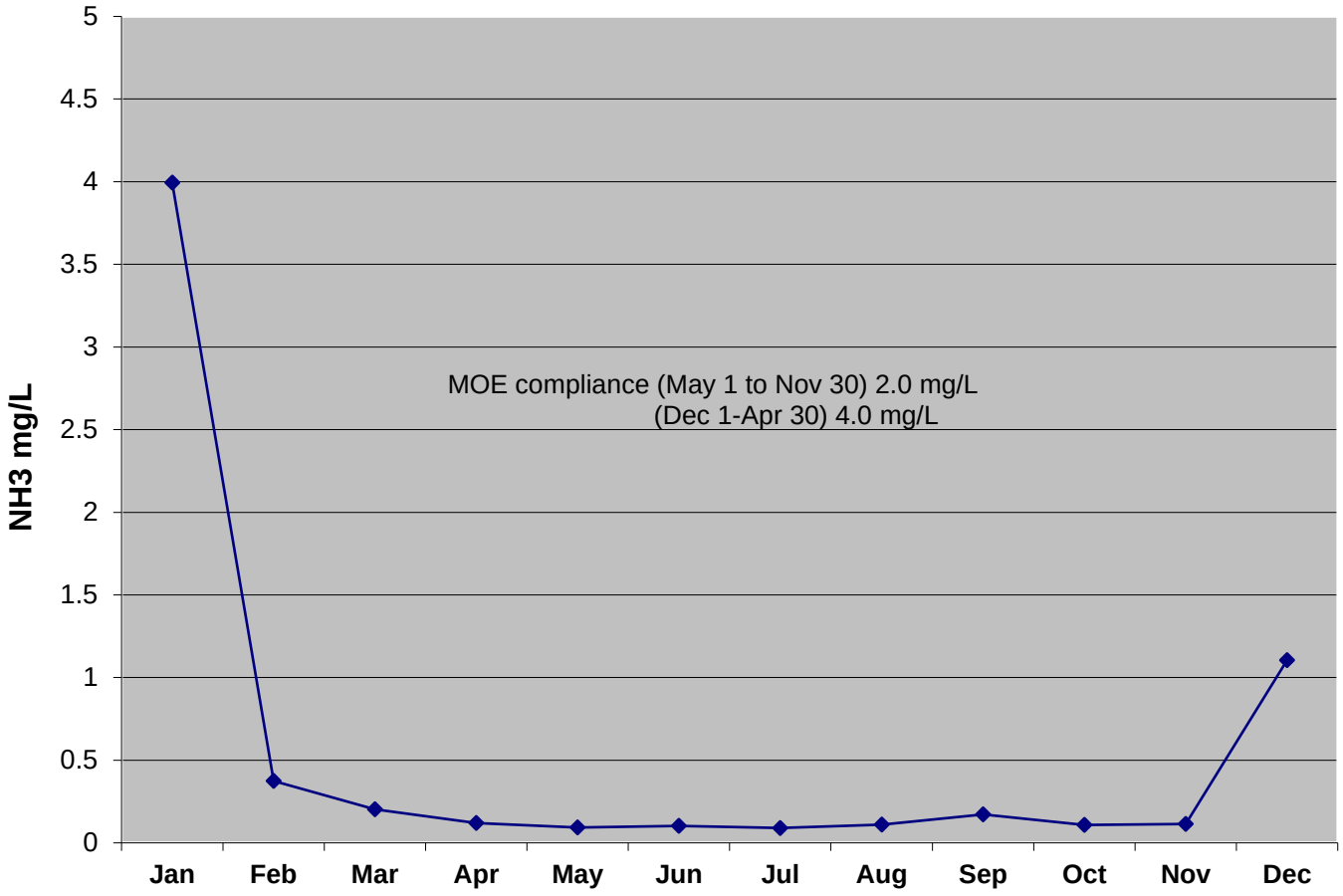
2024 MONTHLY AVERAGE FINAL EFFLUENT TSS



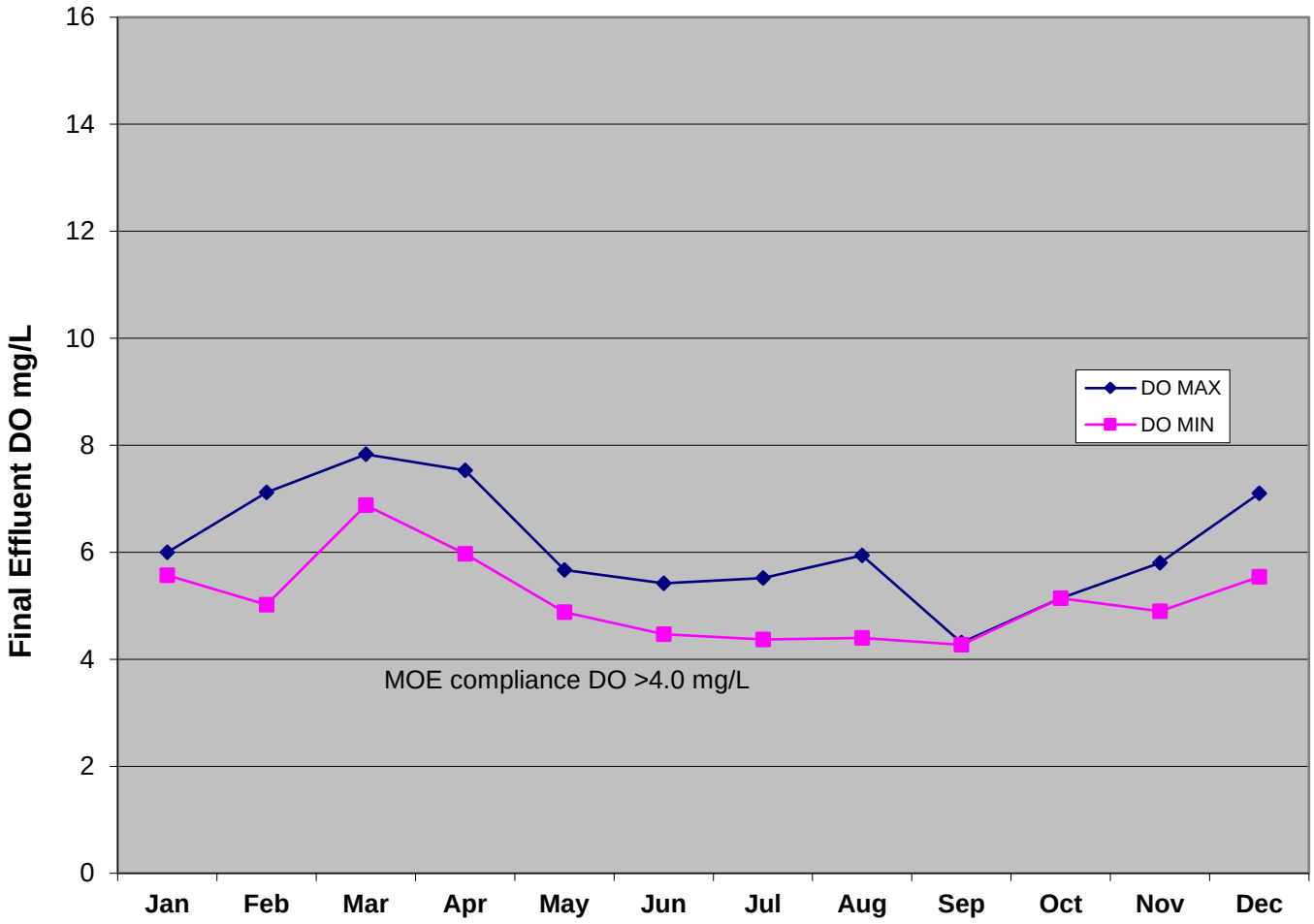
2024 MONTHLY AVERAGE FINAL EFFLUENT TP



2024 MONTHLY AVERAGE FINAL EFFLUENT NH3



2024 MONTHLY AVERAGE FINAL EFFLUENT DO



Appendix B Exceedance & Corrective Actions

February 14, 2024
Ministry of Environment, Conservation and Parks
Barrie District Office
Unit 1201, 54 Cedar Point Drive
Barrie, Ontario, L4N 5R7

Attention: Aaron Mattson, Drinking Water Inspector
I am writing to notify you about our January objective exceedance for Ammonia at the Creemore WPCP.
Although the final effluent average is still within our monthly limit, we wanted to let you know of our objective exceedance as you were part of the Urea supplementation project taking place in Creemore that contributed to our higher-than-normal ammonia concentration. The Creemore WPCP monthly average concentration objective is 3.0 mg/L, the limit is 4.0 mg/L and our average for the month was 3.99 mg/L. TAN Single sample results: Jan 3 – 0.28 mg/L; Jan 10 – 0.25 mg/L; Jan 17 – 19.00 mg/L (the day following the over-dosage); Jan 24 – 0.21 mg/L; Jan 31 – 0.23 mg/L
Findings:
On January 16, 2024, The Creemore operator discovered the dosing pump that supplies Urea to the wet well of the plant malfunctioned and dosed at approximately 31 times the daily amount. The operator took the pump out of service and found it was caused by the crystallization of Urea in the check valve of the pump. The valve remained stuck in the open position which caused the chemical tank to siphon into the wet well.
Corrective action:
The operator cleaned all the components and piping to clear any more crystallized urea and has implemented regular cleaning of the equipment to attempt to prevent this issue from reoccurring.

Regards,
Brad Regts
bregts@collingwood.ca
1 (705) 441-4218

From: Jennifer Adams <jadams@collingwood.ca>
Sent: May 17, 2024 10:06 AM
To: Mattson, Aaron (MECP) <Aaron.Mattson@ontario.ca>
Cc: Todd Patton <tpatton@clearview.ca>; Bradley Regts <bregts@collingwood.ca>; Dale Lightheart <dlightheart@clearview.ca>; Tyler Barrette <tbarrette@collingwood.ca>
Subject: Creemore chemical tank spill

CAUTION -- EXTERNAL E-MAIL - Do not click links or open attachments unless you recognize the sender.

Good morning Aaron,

As a follow-up to our conversation, I want to make you aware that we have contracted Region of Huronia Environmental Services to clean up the Ferric Chloride from the driveway after an overflow of the underground chemical tank yesterday. Below are some point form notes as to what is currently in place.

- Yesterday late afternoon (May 16th) the ROHES hydrovac vacuumed any liquid sitting on top of the ground.
- This morning (May 17th) ROHES has used their mini excavator to scrape approx. 3 inches of gravel and will start loading it in a bin for disposal
- Dale Lightheart from Clearview Township is going to assess the situation and advise if their sweeper needs to sweep some residual markings on the road that came off the tires of the chemical delivery truck.
- Jenn Adams to advise when the full clean-up is complete and Tyler Barrette to call SAC to close out the report.

Please let me know if further information is required.

Thanks
Jenn

Jennifer Adams
Supervisor, Wastewater Treatment Operations
Environmental Services

Town of Collingwood
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Appendix D Sludge Disposal Location Summary

Creemore 2024 NASM Spreading

NASM#	Storage	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total
Rohes storage lagoon														0
24224					596									596
24224						440								440
24138									498					498
61571									504					504
ROHES lagoon #5											781			781
														0
														0
														0
														0
														0
														0
														0
														0
														0
														0
														0
														0
Total	**0**	**0**	**0**	**0**	**596**	**440**	**0**	**0**	**1,002**	**0**	**781**	**0**	**0**	**2,820**

Yellow highlight represents sludge taken for storage