REPORT

Environmental Compliance Approval Quarterly Monitoring Report (August to October 2025)

McCarthy Quarry

Submitted to:

Chris Hyde
Ontario Ministry of Environment, Conservation and Parks
Barrie District Office
1203 - 54 Cedar Pointe Drive
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Submitted by:

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CA0052306.5688

November 2025

Distribution List

E-copy - Ontario MECP Barrie District Office

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E-copy - WSP Canada Inc.

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1.0 INTRODUCTION

WSP Canada Inc. (WSP) was retained by GIP Industrial Inc. (GIP) to prepare a quarterly monitoring report for the McCarthy Quarry located in the Township of Ramara, County of Simcoe (Figure 1). The preparation of a quarterly monitoring report is a requirement of the Environmental Compliance Approval (ECA) No. 7737-BH6QEA (the 'ECA') issued on October 22, 2019. A copy of the ECA is provided in Appendix A. The following report is intended to fulfill the requirements of Section 8 (4) of the ECA and documents the results of the monitoring program activities described in Section 6 of the ECA for the period between August and October 2025.

2.0 BACKGROUND

The dewatering activities at the McCarthy Quarry in 2025 are regulated under Permit to Take Water (PTTW) No. 0721-DDKR57 (Formally No. 5184-CQ7MWS), issued on March 12th, 2025 and expiring on January 31st, 2035. Under PTTW No. 0721-DDKR57 GIP is permitted to pump water from the quarry sump at a maximum rate of 4,545 L/min (76 L/sec). The quarry discharge monitoring plan and effluent quality limits are established in the ECA.

The McCarthy Quarry dewatering system includes a sump originally located in the northwest corner of the quarry floor which collects groundwater and surface water (hereafter referred to as "quarry discharge") accumulating at the base of the quarry. The sump is equipped with a pump which is rated for a maximum discharge rate of up to 2,100 L/min (35 L/sec) and is attached to a discharge line. On April 11, 2023, McCarthy staff replaced the pump with a rental from Sunbelt following issues with the previous pump which is currently still in use as of the writing of this report. This pump is rated for a maximum discharge rate of up to 1417 L/min (24 L/sec) and is attached to the discharge line. Water is pumped from the quarry floor up the quarry face via the discharge line to a pipeline that directs the water to a 14,000 m^3 settling pond (Figure 1). GIP finalized set-up of a new sump location in the southeast corner of the quarry floor in March 2022 and started utilized this new sump location for pumping in April 2022. The initial sump location was creating operational issues as GIP was not able to properly dewater the southern portion of the quarry. In addition, the previous set up was very inefficient due to the length of piping required from the sump to the horse-shoe shaped settling pond. The new sump location is shown on the attached Figure 1; GIP has also adjusted the discharge piping that runs from the pump to the horse-shoe shaped settling pond. No changes were made to the discharge pond. The settling pond is equipped with a Hickenbottom control structure via which the water discharges to the roadside ditch along Concession Road 1. The water flows eastward along the north side of Concession Road 1 to a municipal drain and eventually discharges to the Talbot River approximately 1.1 km downstream of the Quarry, which eventually discharges into Lake Simcoe.

3.0 QUARRY DISCHARGE MONITORING PLAN

The technical requirements of the quarry discharge monitoring plan are listed in Section 4 (Effluent [quality] Limits), Section 5 (Effluent – Visual Observations), and Section 6 (Monitoring and Recording) of the ECA. The monitoring requirements consist of:

- Weekly monitoring of the effluent quality (Total Suspended Solids [TSS], oil and grease, phenolics [4AAP] and pH) at the outfall of the settling pond (labelled as SWM POND on Figure 1); and
- Semi-annual monitoring of effluent quality at three locations: 1) the SWM Pond outfall; 2) the culvert along Concession Road 1 at the McCarthy property; and 3) 260 m north of the intersection of Concession Road 1 and the Mara Eldon Boundary Road. The parameters required for semi-annual water quality monitoring (as listed in Table 3 of the ECA) include TSS, copper, lead, nickel, zinc, arsenic, oil and grease, phenolics

(4AAP), hardness (as $CaCO_3$), alkalinity(as $CaCO_3$), conductivity, pH, fluoride, chloride, nitrate (as N), nitrite (as N), sulphate, calcium, magnesium, sodium, potassium, ammonia (as N), dissolved organic carbon, iron, total Kjeldahl nitrogen, phosphorus (total), cadmium, chromium, manganese, anions (sum), cations (sum) and total dissolved solids.

The weekly quarry discharge quality sampling was conducted by McCarthy staff directly from the discharge outfall from the settling pond. However, due to a lack of discharge from the outfall during this period caused from minimal dewatering during August and October leading to the settling pond nearly drying out during this period, no samples were collected by McCarthy staff due to insufficient water discharging from the outflow pipe from the pond. It was also noted by WSP staff during this period that water was not observed discharging from the outfall pipe during the monthly visits. The weekly water quality samples when collected are sent to Bureau Veritas Laboratories of Mississauga, Ontario for analysis. These weekly water quality results when collected are compared to the daily concentration limits of the ECA (Table 1). A monthly average is calculated from the weekly water quality results and compared to the monthly concentration limits of the ECA (Table 2).

No water quality samples were collected by McCarthy staff or by WSP staff for the October semi-annual surface water sampling program. This was due to limited discharge from the outfall at the pond caused by minimal dewatering during this period resulting in the water level in the settling pond not reaching high enough to allow for water to exit through the outfall of the settling pond. As noted prior, due to the quarry only dewatering for one day over this period, the settling pond was observed to be nearly dried out during the October sampling visit. It was noted also that for the semi-annual surface water sampling locations, both SW1 and SW2 were dry during the visit.

4.0 MONITORING RESULTS

All laboratory certificates of analysis for the August 2025 to October 2025 monitoring period for the weekly monitoring events are normally provided in Appendix B when samples have been collected. Results of the quarry discharge sample analyses are summarized below:

- The daily discharge rate between August 2025 to October 2025 was below the permitted rate of 4,545 L/min (76 L/sec) (Table 4). Dewatering at the site was reported to occur for 1 day of the August to October period.
- No surface water sampling occurred during this period due to a lack of dewatering outside of one day causing the settling pond to nearly dry out resulting in no water being observed to discharge from the outfall. SW1 and upstream SW2 were both observed to be dry during the October sampling visit. A second attempt at the surface water sampling will occur in November if sufficient water is present at these locations.

5.0 CLOSURE

We trust this report meets your current requirements. Should you have any questions please do not hesitate to contact the undersigned.

Signature Page

WSP Canada Inc.

Colin Imrie, P.Geo.
Junior Hydrogeologist

Sean McFarland, Ph.D., P.Geo.
Senior Hydrogeologist, Senior Principal/Fellow

CSI/SM/lb

https://wsponlinecan.sharepoint.com/sites/ca-ca0052306.5688/shared documents/06. deliverables/eca aug to oct 2025/ca0052306.5688-r-rev0-eca quarterly report - 28nov2025.docx

Tables

Table 1: McCarthy Pond Weekly Water Quality Results (August to October 2025)

	Unit	Reportable Detection Limit (RDL)	PWQO [1]	Daily Concentration Limit[2]	McCarthy Quarry		
Sample ID					**Pond**		
Date					-	-	-
pH	pH	n/a		6.0-9.5	-	-	-
Total Suspended Solids	mg/L	1		30	-	-	-
Total Oil and Grease	mg/L	0.5	Note 3	30	-	-	-
Phenols (4AAP)	mg/L	<0.0010		0.04	-	-	-

Notes

1. Provincial Water Quality Objectives (PWQO); shaded cells denote PWQO exceedance; some PWQOs are dependent on other water quality parameters hence the range in guideline values, refer to PWQO notes.
2. Daily Concentration Limit; bolded values denote exceedances in the Environmental Compliance Approval (ECA) daily concentration limits.
3. The PWQO for Oil and Grease indicates that oil or petrochemicals should not be present in concentrations that: can be detected as a visible film, sheen or discolouration on the surface, can be detected by odour, can cause tainting of edible organisms, can form detectable deposits on shorelines and bottom sediments.
4. Results that are preceeded by "<" denote concentrations that are below the laboratory Reportable Detection Limit (RDL).

Table 2: McCarthy Pond Monthly Water Quality Results (August to October 2025)

	Unit	Reportable Detection Limit (RDL)	PWQO [1]	Monthly Concentration Limit[2]	McCarthy Quarry		
Sample ID					**Pond**		
Date					August	September	October
Total Suspended Solids	mg/L	1		15	-	-	-
Total Oil and Grease	mg/L	0.5	Note 3	15	-	-	-
Phenols (4AAP)	mg/L	<0.0010		0.02	-	-	-

Notes

1. Provincial Water Quality Objectives (PWQO); shaded cells denote PWQO exceedance; some PWQOs are dependent on other water quality parameters hence the range in guideline values, refer to PWQO notes.
2. Monthly Concentration Limit; bolded values denote exceedances in the Environmental Compliance Approval (ECA) monthly concentration limits.
3. The PWQO for Oil and Grease indicates that oil or petrochemicals should not be present in concentrations that: can be detected as a visible film, sheen or discolouration on the surface, can be detected by odour, can cause tainting of edible organisms, can form detectable deposits on shorelines and bottom sediments.
4. Results that are preceeded by "<" denote concentrations that are below the laboratory Reportable Detection Limit (RDL).

Table 3: McCarthy Semi-Annual Water Quality Monitoring Results

	Unit	Reportable Detection Limit (RDL)	PWQO [1]	Interim PWQO [2]	ECA Effluent Limits	McCarthy Quarry		
Sample ID						Pond	SW1	SW2
Date						-	-	-
Field Measured Parameters								
Conductivity	µS/cm							
pH	pH	n/a	6.5-8.5		6.0-9.5			
Temperature	°C	n/a						
Calculated Parameters								
Hardness (CaCO3)	mg/L	1.0						
Inorganics								
Total Ammonia-N	mg/L	0.050						
Conductivity	ms/cm	0.001						
Total Dissolved Solids	mg/L	10						
Fluoride (F-)	mg/L	0.10						
Total Kjeldahl Nitrogen (TKN)	mg/L	0.10						
Dissolved Organic Carbon	mg/L	0.50						
pH	pH	N/A	6.5-8.5		6.0-9.5			
Phenols-4AAP	mg/L	0.0010	0.001		0.04			
Total Phosphorus	mg/L	0.020		0.03[5b]				
Total Suspended Solids	mg/L	10			30			
Dissolved Sulphate (SO4)	mg/L	1						
Alkalinity (Total as CaCO3)	mg/L	1.0						
Dissolved Chloride (Cl)	mg/L	1						
Nitrite (N)	mg/L	0.010						
Nitrate (N)	mg/L	0.10						
Petroleum Hydrocarbons								
Total Oil & Grease	mg/L	0.50	Note 3		30			
Metals								
Total Arsenic (As)	ug/L	1	100	5				
Total Cadmium (Cd)	ug/L	0.09	0.2	0.1-0.5[5d]				
Dissolved Calcium (Ca)	mg/L	0.05						
Total Calcium (Ca)	ug/L	200						
Total Chromium (Cr)	ug/L	5	1-89[5e]					
Total Copper (Cu)	ug/L	0.9	5	1-5[5f]				
Total Iron (Fe)	ug/L	100	300					
Total Lead (Pb)	ug/L	0.5	5-25[5g]	1-5[5h]				
Dissolved Magnesium (Mg)	mg/L	0.05						
Total Magnesium (Mg)	ug/L	50						
Total Manganese (Mn)	ug/L	2						
Total Nickel (Ni)	ug/L	1	25					
Dissolved Potassium (K)	mg/L	1						
Total Potassium (K)	ug/L	200						
Dissolved Sodium (Na)	mg/L	0.5						
Total Sodium (Na)	ug/L	100						
Total Zinc (Zn)	ug/L	5	30	20				

1. Provincial Water Quality Objectives (PWQO); shaded cells denote PWQO exceedance; some PWQOs are dependent on other water quality parameters hence the range in guideline values, refer to PWQO notes.

2. Interim Provincial Water Quality Objectives (Interim PWQO); *shaded cells and italics denote Interim PWQO exceedance*; some PWQOs are dependent on other water quality parameters hence the range in guideline values, refer to PQWO notes.

3. The PWQO for Oil and Grease indicates that oil or petrochemicals should not be present in concentrations that: can be detected as a visible film, sheen or discolouration on the surface, can be detected by odour, can cause tainting of edible organisms, can form detectable deposits on shorelines and bottom sediments.

4. Results that are preceeded by "<" denote concentrations that are below the laboratory Reportable Detection Limit (RDL).

5a. Aluminum (Interim):

- At pH 4.5 to 5.5 the Interim PWQO is 15 ug/L based on inorganic monomeric aluminum measured in clay-free samples.
- At pH >5.5 to 6.5, no condition should be permitted which would increase the acid soluble inorganic aluminum concentration in clay-free samples to more than 10% above natural background concentrations for waters representative of that geological area of the Province that are unaffected by man-made inputs.
- At pH >6.5 to 9.0, the Interim PWQO is 75 ug/L based on total aluminum measured in clay-free samples.
- If natural background aluminum concentrations in water bodies unaffected by manmade inputs are greater than the numerical Interim PWQO (above), no condition is permitted that would increase the aluminum concentration in clay-free samples by more than 10% of the natural background level.

5b. Phosphorus (Interim):

- Current scientific evidence is insufficient to develop a firm Objective at this time.
- Accordingly, the following phosphorus concentrations should be considered as general guidelines which should be supplemented by site-specific studies:

(a) To avoid nuisance concentrations of algae in lakes, average total phosphorus concentrations for the ice-free period should not exceed 20 ug/L;

(b) A high level of protection against aesthetic deterioration will be provided by a total phosphorus concentration for the ice-free period of 10 ug/L or less. This should apply to all lakes naturally below this value;

(c) Excessive plant growth in rivers and streams should be eliminated at a total phosphorus concentration below 30 ug/L.

5c. Beryllium:	If Hardness <75 mg/L (CaCO3), use 11 ug/L If Hardness >75 mg/L (CaCO3), use 1100 ug/L
5d. Cadmium: (Interim)	If Hardness 0-100 mg/L (CaCO3), then use 0.1 ug/L If Hardness >100 mg/L (CaCO3), then use 0.5 ug/L
5e. Chromium	1 ug/L for hexavalent chromium (Cr VI) 8.9 ug/L for trivalent chromium (Cr III)
5f. Copper: (Interim)	If Hardness as CaCO3 (mg/L) is 0 - 20, then use 1 ug/L If Hardness as CaCO3 (mg/L) is >20, then use 5 ug/L
5g. Lead:	If Alkalinity as CaCO3 (mg/L) is < 20, use 5 ug/L If Alkalinity as CaCO3 (mg/L) is 20 to 40, use 10 ug/L If Alkalinity as CaCO3 (mg/L) is 40 to 80, use 20 ug/L If Alkalinity as CaCO3 (mg/L) is > 80, use 25 ug/L
5h. Lead: (Interim)	If Hardness as CaCO3 (mg/L) is < 30, then use 1 ug/L If Hardness as CaCO3 (mg/L) is 30 to 80, then use 3 ug/L If Hardness as CaCO3 (mg/L) is > 80, then use 5 ug/L

Table 4: Measured Water Volume and Rate of Discharge from Quarry Sump

Date	Start	Stop	Total Sec.	Total Min.	Total Litres	Rate of Taking (L/sec)	Rate of Taking (L/min)
ECA Permitted Rate					**6,550,000**	**76**	**4,545**
1-Aug-25	NO PUMP		0	0	-	-	-
2-Aug-25	NO PUMP		0	0	-	-	-
3-Aug-25	NO PUMP		0	0	-	-	-
4-Aug-25	NO PUMP		0	0	-	-	-
5-Aug-25	NO PUMP		0	0	-	-	-
6-Aug-25	NO PUMP		0	0	-	-	-
7-Aug-25	NO PUMP		0	0	-	-	-
8-Aug-25	NO PUMP		0	0	-	-	-
9-Aug-25	NO PUMP		0	0	-	-	-
10-Aug-25	NO PUMP		0	0	-	-	-
11-Aug-25	NO PUMP		0	0	-	-	-
12-Aug-25	NO PUMP		0	0	-	-	-
13-Aug-25	NO PUMP		0	0	-	-	-
14-Aug-25	NO PUMP		0	0	-	-	-
15-Aug-25	NO PUMP		0	0	-	-	-
16-Aug-25	NO PUMP		0	0	-	-	-
17-Aug-25	NO PUMP		0	0	-	-	-
18-Aug-25	NO PUMP		0	0	-	-	-
19-Aug-25	NO PUMP		0	0	-	-	-
20-Aug-25	NO PUMP		0	0	-	-	-
21-Aug-25	NO PUMP		0	0	-	-	-
22-Aug-25	NO PUMP		0	0	-	-	-
23-Aug-25	NO PUMP		0	0	-	-	-
24-Aug-25	NO PUMP		0	0	-	-	-
25-Aug-25	NO PUMP		0	0	-	-	-
26-Aug-25	NO PUMP		0	0	-	-	-
27-Aug-25	NO PUMP		0	0	-	-	-
28-Aug-25	NO PUMP		0	0	-	-	-
29-Aug-25	NO PUMP		0	0	-	-	-
30-Aug-25	NO PUMP		0	0	-	-	-
31-Aug-25	NO PUMP		0	0	-	-	-
1-Sep-25	NO PUMP		0	0	-	-	-
2-Sep-25	NO PUMP		0	0	-	-	-
3-Sep-25	NO PUMP		0	0	-	-	-
4-Sep-25	NO PUMP		0	0	-	-	-
5-Sep-25	NO PUMP		0	0	-	-	-
6-Sep-25	NO PUMP		0	0	-	-	-
7-Sep-25	NO PUMP		0	0	-	-	-
8-Sep-25	NO PUMP		0	0	-	-	-
9-Sep-25	NO PUMP		0	0	-	-	-
10-Sep-25	NO PUMP		0	0	-	-	-
11-Sep-25	NO PUMP		0	0	-	-	-

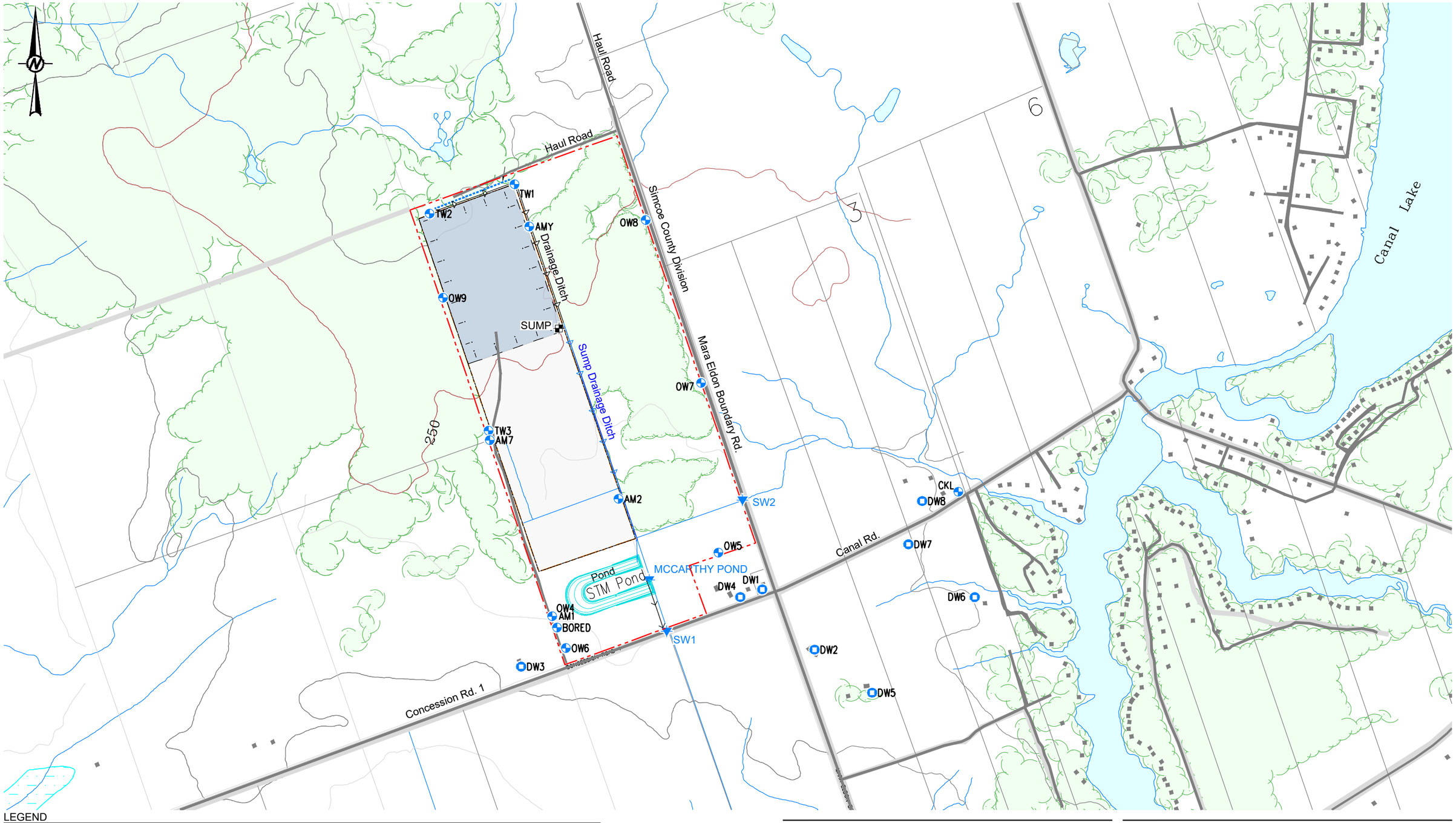
Table 4: Measured Water Volume and Rate of Discharge from Quarry Sump

Date	Start	Stop	Total Sec.	Total Min.	Total Litres	Rate of Taking (L/sec)	Rate of Taking (L/min)
ECA Permitted Rate					**6,550,000**	**76**	**4,545**
12-Sep-25	NO PUMP		0	0	-	-	-
13-Sep-25	NO PUMP		0	0	-	-	-
14-Sep-25	NO PUMP		0	0	-	-	-
15-Sep-25	NO PUMP		0	0	-	-	-
16-Sep-25	NO PUMP		0	0	-	-	-
17-Sep-25	NO PUMP		0	0	-	-	-
18-Sep-25	NO PUMP		0	0	-	-	-
19-Sep-25	NO PUMP		0	0	-	-	-
20-Sep-25	NO PUMP		0	0	-	-	-
21-Sep-25	NO PUMP		0	0	-	-	-
22-Sep-25	NO PUMP		0	0	-	-	-
23-Sep-25	NO PUMP		0	0	-	-	-
24-Sep-25	NO PUMP		0	0	-	-	-
25-Sep-25	NO PUMP		0	0	-	-	-
26-Sep-25	NO PUMP		0	0	-	-	-
27-Sep-25	NO PUMP		0	0	-	-	-
28-Sep-25	NO PUMP		0	0	-	-	-
29-Sep-25	NO PUMP		0	0	-	-	-
30-Sep-25	NO PUMP		0	0	-	-	-
1-Oct-25	NO PUMP		0	0	-	-	-
2-Oct-25	NO PUMP		0	0	-	-	-
3-Oct-25	NO PUMP		0	0	-	-	-
4-Oct-25	NO PUMP		0	0	-	-	-
5-Oct-25	NO PUMP		0	0	-	-	-
6-Oct-25	NO PUMP		0	0	-	-	-
7-Oct-25	NO PUMP		0	0	-	-	-
8-Oct-25	NO PUMP		0	0	-	-	-
9-Oct-25	NO PUMP		0	0	-	-	-
10-Oct-25	NO PUMP		0	0	-	-	-
11-Oct-25	NO PUMP		0	0	-	-	-
12-Oct-25	NO PUMP		0	0	-	-	-
13-Oct-25	NO PUMP		0	0	-	-	-
14-Oct-25	NO PUMP		0	0	-	-	-
15-Oct-25	NO PUMP		0	0	-	-	-
16-Oct-25	NO PUMP		0	0	-	-	-
17-Oct-25	NO PUMP		0	0	-	-	-
18-Oct-25	NO PUMP		0	0	-	-	-
19-Oct-25	NO PUMP		0	0	-	-	-
20-Oct-25	NO PUMP		0	0	-	-	-
21-Oct-25	NO PUMP		0	0	-	-	-
22-Oct-25	7:00 AM	5:00 PM	36000	600	850,200	24	1,417
23-Oct-25	NO PUMP		0	0	-	-	-

Table 4: Measured Water Volume and Rate of Discharge from Quarry Sump

Date	Start	Stop	Total Sec.	Total Min.	Total Litres	Rate of Taking (L/sec)	Rate of Taking (L/min)
ECA Permitted Rate					**6,550,000**	**76**	**4,545**
24-Oct-25	NO PUMP		0	0	-	-	-
25-Oct-25	NO PUMP		0	0	-	-	-
26-Oct-25	NO PUMP		0	0	-	-	-
27-Oct-25	NO PUMP		0	0	-	-	-
28-Oct-25	NO PUMP		0	0	-	-	-
29-Oct-25	NO PUMP		0	0	-	-	-
30-Oct-25	NO PUMP		0	0	-	-	-
31-Oct-25	NO PUMP		0	0	-	-	-
			Totals		850,200		1

Figures



LEGEND

- Property Boundary
- Approximate Licenced Boundary
- Approximate Extent of Quarry
- Private Well Monitoring Location
- Observation Well Monitoring Location
- Surface Water Sampling Location

REFERENCES AND NOTES

1. Projection UTM NAD83 Zone 17
2. Mapping based on ESRI Geography Network OBM Features and 2012 Road Network
3. All Mapped features are Approximate and Not to Scale

0 250 500
1:10,000 METRES

CLIENT
GIP AGGREGATES INC.

PROJECT
STAN McCARTHY QUARRY

CONSULTANT
wsp

YYYY-MM-DD	2024-09-12
PREPARED	JPR
DESIGN	
REVIEW	CSI
APPROVED	DPD

TITLE
LOCATION MAP

PROJECT No.	CONTROL	Rev.	FIGURE
CA0023633	0002	----	1

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

0 25 mm

Path: \\corp.pbwan.net\CA\CAMIS\300\CTX_Data\SM\Clients\Coco_Paving\McCarthy_Quarry\99_PROJ\CA0023633\40_PROD\0002-2024-PTTW\ | File Name: CA0023633-0002-CH-0001.dwg

APPENDIX A

ECA No. 7737-BH6QEA

Ontario

Ministry of the Environment, Conservation and Parks
Ministère de l'Environnement, de la Protection de la nature et des Parcs

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 7737-BH6QEA
Issue Date: October 22, 2019

QBJR Aggregates Inc.
949 Wilson Avenue
Toronto, Ontario
M3K 1G2

Site Location: McCarthy Quarry
Lot 1, Concession 1,
Original Township of Mara
Township of Ramara
County of Simcoe
L0K 1B0

You have applied under section 20.2 of Part II.1 of the Environmental Protection Act, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:

sewage works for the collection, transmission, treatment and disposal of stormwater and groundwater collecting within the confines of the Quarry, consisting of the following:

- one (1) sump, measuring 20 metres long, 10 metres wide and 3 metres deep, located at the base of the quarry floor, equipped with two (2) submersible pumps each rated at 38 litres per second with a suction intake approximately one (1) metre above the bottom of the sump, discharging to a settling pond via a 203 millimetre diameter pipeline; and

- one (1) horse-shoe shaped settling pond with an approximate volume of 14,000 cubic metres (at elevation 248.2 metres), with a Hickenbottom control structure equipped with a 150 millimetre diameter orifice plate, discharging to the roadside ditch along Concession Road 1 with ultimate discharge to the Talbot River via a private ditch.

all other controls, electrical equipment, instrumentation, piping, pumps, valves and appurtenances essential for the proper operation of the aforementioned sewage works.

all in accordance with supporting documents listed in **Schedule A**.

For the purpose of this environmental compliance approval, the following definitions apply:

"Application" means the application for an environmental compliance approval submitted to the Ministry for approval by or on behalf of the Owner and dated August 8, 2019.

"Approval" means this environmental compliance approval, any schedules attached to it, and the Application;

"Director" means a person appointed by the Minister pursuant to section 5 of the EPA for the purposes of Part II.1 of the EPA;

"District Manager" means the District Manager of the appropriate local District Office of the Ministry, where the Works are geographically located;

"EPA" means the *Environmental Protection Act, R.S.O. 1990, c.E.19* , as amended;

"Ministry" means the ministry of the government of Ontario responsible for the EPA and OWRA and includes all officials, employees or other persons acting on its behalf;

"Owner" means QBJR Aggregates Inc., and includes its successors and assignees;

"OWRA" means the *Ontario Water Resources Act, R.S.O. 1990, c. O.40* , as amended; and

"Works" means the sewage works described in the Approval.

You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. GENERAL CONDITION

(1) The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Works is notified of this Approval and the terms and conditions herein and shall take all reasonable measures to ensure any such person complies with the same.

(2) Except as otherwise provided by these terms and conditions, the Owner shall design, build, install, operate and maintain the Works in accordance with this Approval.

(3) Where there is a conflict between a provision of this environmental compliance approval and any document submitted by the Owner, the conditions in this environmental compliance approval shall take precedence. Where there is a conflict between one or more of the documents submitted by the Owner, the Application shall take precedence

unless it is clear that the purpose of the document was to amend the Application

(4) Where there is a conflict between the documents listed in the Schedule A, and the application, the application shall take precedence unless it is clear that the purpose of the document was to amend the application.

(5) The terms and conditions of this Approval are severable. If any term and condition of this environmental compliance approval, or the application of any requirement of this environmental compliance approval to any circumstance, is held invalid or unenforceable, the application of such condition to other circumstances and the remainder of this Approval shall not be affected thereby.

(6) The issuance of, and compliance with the conditions of, this Approval does not:

a) relieve any person of any obligation to comply with any provision of any applicable statute, regulation or other legal requirement, including, but not limited to, the obligation to obtain approval from the local conservation authority necessary to construct or operate the sewage Works; or

b) limit in any way the authority of the Ministry to require certain steps be taken to require the Owner to furnish any further information related to compliance with this Approval.

2. CHANGE OF OWNER

(1) The Owner shall notify the District Manager and the Director, in writing, of any of the following changes within **thirty (30) days** of the change occurring:

(a) change of address of Owner or operating authority;

(b) change of Owner or operating authority or both, including address of new Owner or operating authority, or both;

(c) change of partners where the Owner or operating authority is or at any time becomes a partnership, and a copy of the most recent declaration filed under the *Business Names Act, R.S.O. 1990, c. B.17* ; and

(d) change of name of the corporation where the Owner or operator is or at any time becomes a corporation, and a copy of the "Initial Return" or "Notice of Change" filed under the *Corporations Information Act, R.S.O. 1990, c. C.39* , shall be included in the notification to the District Manager.

(2) In the event of any change in ownership of the Works, the Owner shall notify in writing the succeeding owner of the existence of this Approval, and a copy of such notice shall be

forwarded to the District Manager.

(3) The Owner shall ensure that all communications made pursuant to this condition refer to the number at the top of this environmental compliance approval.

3. OPERATION AND MAINTENANCE

(1) The Owner shall prepare an operations manual of the Works that includes, but is not limited to, the following information:

(a) operating procedures for routine operation of the Works;

(b) inspection programs, including frequency of inspection, for the Works and the methods or tests to be employed to detect when maintenance is necessary;

(c) repair and maintenance programs, including the frequency of repair and maintenance for the Works;

(d) contingency plans and procedures for dealing with a potential spill, bypasses or any other abnormal situations, including notifying the District Manager of the situation; and

(e) procedures for receiving and responding to public complaints.

(2) The Owner shall ensure that the Works and related equipment and appurtenances which are installed or used to achieve compliance with this Approval are properly operated and maintained.

(3) The Owner shall inspect the sump, discharge pump and settling pond on a monthly basis and keep a log or record of the inspections at the Quarry.

(4) The Owner shall carry out on an as-needed basis, specific maintenance requirements like removing build-up, associated with the sump, pump and settling pond.

(5) The Owner shall, upon identification of a loss of oil and fuel, take immediate action to prevent the further occurrence of such loss and prevent the spill from entering into the sump and/or the settling pond.

(6) In furtherance of, but without limiting the generality of, the obligation imposed by subsection (2), the Owner shall ensure that equipment and material for the containment, clean-up and disposal of oil and fuel and materials contaminated with oil or fuel are kept on hand and in good repair for immediate use in the event of:

(a) loss of oil or fuel during refuelling or equipment maintenance;

(b) a spill within the meaning of Part X of the Environmental Protection Act; and/or

(c) the identification of an abnormal amount of oil or fuel in the sump and/or settling pond.

4. EFFLUENT LIMITS

(1) The Owner shall construct, operate and maintain the Works such that the concentrations of the materials named below as effluent parameters are not exceeded in the effluent from the Works.

Table 1 - Effluent Limits		
Effluent Parameter	**Daily Concentration** (milligrams per litre unless otherwise indicated)	**Monthly Average Concentration** (milligrams per litre unless otherwise indicated)
Column 1	Column 2	Column 3
Oil and Grease	30	15
Phenolics (4AAP)	0.04	0.02
Total Suspended Solids	30	15
pH of the effluent maintained between 6.0 to 9.5, inclusive, at all times		

(2) For the purposes of determining compliance with and enforcing subsection (1):

(a) non-compliance with respect to a Daily Concentration is deemed to have occurred when any single grab sample analyzed for a parameter named in Column 1 of subsection (1) is greater than the corresponding daily concentration set out in Column 2 of subsection (1);

(b) non-compliance with respect to an Monthly Average Concentration is deemed to have occurred when the arithmetic mean concentration of all samples taken in a month, analyzed for a parameter named in Column 1 of subsection (1) is greater than the corresponding monthly average concentration set out in Column 3 of subsection (1); and

(c) non-compliance with respect to pH is deemed to have occurred when any single measurement is outside of the indicated range.

5. EFFLUENT - VISUAL OBSERVATIONS

(1) Notwithstanding any other condition in this Approval, the Owner shall ensure that the effluent from the Works is essentially free of floating and settleable solids and does not contain oil or any other substance in amounts sufficient to create a visible film, sheen or foam on the receiving waters.

(2) Notwithstanding any other condition in this Approval, the Owner shall ensure that the

effluent from the Works shall not cause flooding or erosion to the downstream receiver and in particular Road flooding.

6. MONITORING AND RECORDING

The Owner shall, upon the Issuance of this Approval, carry out the following monitoring program:

(1) All samples and measurements taken for the purposes of this Approval are to be taken at a time and in a location characteristic of the quality and quantity of the effluent stream over the time period being monitored.

(2) Samples shall be collected and analyzed at the following sampling point, at the sampling frequencies and using the sample type specified for each parameter listed:

Table 2 - Effluent Monitoring	
Sample Point	Outfall of settling pond approximately 150 metres north of Concession 1 (i.e. end of pipe discharge).
Frequency	Weekly
Sample Type	Grab
Parameters	Oil and Grease, Phenolics (4AAP), and Total Suspended Solid (TSS).

Table 3 - Effluent and Surface Water Monitoring	
Sample Point	1. Outfall of settling pond approximately 150 metres north of Concession 1 (i.e. end of pipe discharge). 2. Box culvert on Eldon-Ramara Townline approximately 260 metres north of the intersection of Ramara Concession 1 and Eldon-Ramara Townline (i.e. upgradient of end of pipe discharge). 3. 80 centimetre CSP located at Concession 1 Road on McCarthy property (i.e. downgradient of end of pipe discharge).
Frequency	Semi-Annually during discharge event.
Sample Type	Grab
Parameters	Total Suspended Solids, Copper, Lead, Nickel, Zinc, Arsenic, Oil and Grease, Phenolics (4AAP), Hardness (as $CaCO_3$), Alkalinity(as $CaCO_3$), Conductivity, pH, Fluoride, Chloride, Nitrate (N), Nitrite (N), Sulphate, Calcium, Magnesium, Sodium, Potassium, Ammonia (N), Dissolved Organic Carbon, Iron, Total Kjeldahl Nitrogen, Phosphorus (Total), Cadmium, Chromium, Manganese, Anion (Sum), Cation (Sum) and Total Dissolved Solids.

(3) The methods and protocols for sampling, analysis and recording shall conform, in order of precedence, to the methods and protocols specified in the following:

(a) the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater" (August 1994), ISBN 0-7778-1880-9, as amended from time to time by more recently published editions; and

(b) the publication "Standard Methods for the Examination of Water and Wastewater" (21st edition), as amended from time to time by more recently published editions.

(4) The Owner shall measure, record and calculate the discharge rate and volume from the Works on a daily basis during discharging period.

(5) The Owner shall retain for a minimum of **five (5) years** from the date of their creation, all records and information related to or resulting from the monitoring activities required by this Approval.

7. RECEIVER INSPECTION

(1) The Owner shall, at least once per year, undertake a visual inspection of the downstream ditches for evidence of erosion and/or flooding and shall report the observations in the annual report.

8. REPORTING

(1) The Owner shall report to the District Manager or designate, any exceedance of any parameter specified in condition 4 orally, forthwith, and in writing within **seven (7) days** of the exceedance.

(2) In addition to the obligations under Part X of the EPA, the Owner shall, within **ten (10) working days** of the occurrence of any reportable spill as defined in Ontario Regulation 675/98, bypass or loss of any product, by-product, intermediate product, oil, solvent, waste material or any other polluting substance into the environment, submit a full written report of the occurrence to the District Manager describing the cause and discovery of the spill or loss, clean-up and recovery measures taken, preventative measures to be taken and schedule of implementation.

(3) The Owner shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.

(4) The Owner shall submit quarterly reports of the information obtained under condition 6 within **30 days** of the end of each quarter.

(5) The Owner shall prepare, and submit to the District Manager, a **performance report**, on

an annual basis, on or before March 31st. The reports shall contain, but shall not be limited to, the following information:

(a) a summary and interpretation of all monitoring data and a comparison to the effluent limits outlined in condition 4, including an overview of the success and adequacy of the sewage Works;

(b) a description of any operating problems encountered and corrective actions taken;

(c) a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the sewage works;

(d) a summary of any effluent quality assurance or control measures undertaken in the reporting period;

(e) any other information the District Manager requires from time to time.

The reasons for the imposition of these terms and conditions are as follows:

1. Condition 1 is imposed to ensure that the Works are built and operated in the manner in which they were described for review and upon which approval was granted. This condition is also included to emphasize the precedence of Conditions in the Approval and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review. Condition 1.(6) is included to emphasize that the issuance of this Approval does not diminish any other statutory and regulatory obligations to which the Owner is subject in the construction, maintenance and operation of the Works. The Condition specifically highlights the need to obtain any necessary conservation authority approvals. The Condition also emphasizes the fact that this Approval doesn't limit the authority of the Ministry to require further information.

2. Condition 2 is included to ensure that the Ministry records are kept accurate and current with respect to approved Works and to ensure that subsequent owners of the Works are made aware of the Approval and continue to operate the works in compliance with it.

3. Condition 3 is included to ensure that a comprehensive operations manual governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the Owner and made available to the Ministry. Such a manual is an integral part of the operation of the Works. Its compilation and use should assist the owner in staff training, in proper plant operation and in identifying and planning for contingencies during possible abnormal conditions. The manual will also act as a benchmark for Ministry staff when reviewing the Owner's operation of the Works. The condition is also included to ensure that the Works will be operated and maintained in a manner enabling compliance with the terms and conditions of this Approval, such that the environment is protected and deterioration, loss, injury or damage to

any person or property is minimised and/or prevented.

4. Conditions 4 and 5 are imposed to ensure that the effluent discharged from the Works to the environment meets the Ministry's effluent quality requirements thus minimizing environmental impact on the receiver.

5. Condition 6 is included to enable the Owner to evaluate and demonstrate the performance of the Works, on a continual basis, so that the Works are properly operated and maintained at a level which is consistent with the design objectives and effluent limits specified in the Approval and that the Works does not cause any impairment to the receiver.

6. Condition 7 is included in order to determine if the ongoing discharge of quarry water is having a negative impact on the downstream ditches so that abatement measures can be taken to prevent such occurrences.

7. Condition 8 is included to provide a performance record for future references, to ensure that the Ministry is made aware of problems as they arise, and to provide a compliance record for all the terms and conditions outlined in this Approval, so that the Ministry can work with the Owner in resolving any problems in a timely manner.

SCHEDULE 'A'

1. Environmental Compliance Approval Application for Industrial Sewage Works submitted by John Easton, P.Geo., Golder Associates Ltd., and signed by Mr. Anthony Rossi, Director Land Development & Government Relations, QBJR Aggregates Inc., dated August 8, 2019; and all supporting documentation and information.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 4731-987KM8 issued on October 15, 2013.

In accordance with Section 139 of the Environmental Protection Act, 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:

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

Pursuant to subsection 139(3) of the Environmental Protection Act, a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.

The Notice should also include:

1. The name of the appellant;
2. The address of the appellant;
3. The environmental compliance approval number;
4. The date of the environmental compliance approval;
5. The name of the Director, and;
6. The municipality or municipalities within which the project is to be engaged in.

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, Suite 1500
Toronto, Ontario
M5G 1E5

AND

The Director appointed for the purposes of Part II.1 of the Environmental Protection Act
Ministry of the Environment, Conservation and Parks
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or www.ert.gov.on.ca**

The above noted activity is approved under s.20.3 of Part II.1 of the Environmental Protection Act.

DATED AT TORONTO this 22nd day of October, 2019

Fariha Pannu.

Fariha Pannu, P.Eng.
Director
appointed for the purposes of Part II.1 of the
Environmental Protection Act

AA/

c: District Manager, MECP Barrie District Office
John Easton, P.Geo., Golder Associates Ltd.

APPENDIX B

Water Quality Data

wsp.com