

to

Report # WWW 2019-008

Ministry of the Environment,
Conservation and Parks

Ministère de l'Environnement, de la Protection
de la nature et des Parcs

Provincial Officer's Report

Order Number
1-L4E0C

To:

KAWARTHA LAKES, THE CORPORATION OF THE CITY OF
12 PEEL ST
LINDSAY ON K9V 3L8
Canada

The Corporation Of The City Of Kawartha Lakes

Site:

267 BEAVER Road,
OMEMEE, ON, K0L 2W0,
Canada

Observations

1. Authority to Issue Order

I have the authority as a Provincial Officer to issue Orders under the OWRA to further the purpose of the OWRA, namely, to provide for the conservation, protection and management of Ontario's waters and for their efficient and sustainable use, in order to promote Ontario's long-term environmental, social and economic well-being.

This Order is being issued pursuant to my authority under section 16.1, 16.2 and subsection 104(2) of the Ontario Water Resources Act.

2. Definitions

For the purpose of this Order, the following terms shall have the meanings described below:

"CKL or Orderee" means the Corporation of the City of Kawartha Lakes.

"ECA" means Environmental Compliance Approval, No. 2737-B4DH46 issued September 28, 2018, under Part II.1 of the Environmental Protection Act.

"EPA" means Environmental Protection Act, R.S.O.1990, C. E32.

"LSSDS" means Large Subsurface Disposal System .

"Ministry or MECP" means the Ministry of the Environment, Conservation and Parks.

"Monitoring Wells" means all 17 wells as identified on the attached Figure 5, dated November 12, 2018 of Azimuth Environmental Consulting, Inc. report no. AEC 18-311, including: MW103, MW104B, MW115B, MW102B, MW116B, MW114B, MW113B, MW111B, MW101B, MW110, MW1, MW2, MW105B, MW106B, MW109B, MW107B, MW108B.

"OWRA" means the Ontario Water Resources Act, R.S.O.1990, C. O.40.

"OCWA" means the Ontario Clean Water Agency which is the operating authority for the Sewage Works.

"Order" means Provincial Officer's Order Number 1-L4E0C dated May 7, 2019, as it may be amended from time to time.

"Provincial Officer" means the undersigned Provincial Officer or, in the event that the undersigned is unable to act, any other Provincial Officer authorized to act pursuant to the EPA and the OWRA.

"Qualified Person" means a person who has obtained the appropriate education and training and has demonstrated experience and expertise in the areas relating to the work required to be carried out by this Order.

"Sewage Works" means the Omemee Waste Water Lagoon system as defined in ECA No. 2737-B4DH46.

"Site" means the property municipally known as 267 Beaver Road, Omemee, Ontario

"Spray Irrigation System" means the existing network of piping, pumps, spray irrigators and all other related spray irrigation equipment located at the Site for the purpose of on-site effluent disposal via spray irrigation.

3. DESCRIPTION OF THE ORDEREE AND THE SITE

The Sewage Works is located at the Site and is owned by the Corporation of the City of Kawartha Lakes. The Sewage Works is operated by the Ontario Clean Water Agency and is subject to approval under the Ontario Water Resources Act.

4. EVENTS LEADING UP TO THIS ORDER

Prior to December 31, 2015, CKL was authorized to spray irrigate treated effluent, as a special operation condition within in ECA No. 2548-9PPMSK. This condition was included as part of the ECA to allow sufficient time for CKL to transition from the spray irrigation operations to the newly constructed LSSDS which was commissioned in the Fall of 2013. The LSSDS was constructed to provide for the long-term effluent disposal for the Sewage Works. Since its commissioning, the LSSDS, a component of the Sewage Works, has experienced several malfunctions, including poor infiltration of sewage leading to sewage break-out. These performance issues have required that CKL implement contingency measures, including limiting the storage capacity of the Sewage Works, undertaking additional studies and assessments on the effectiveness of the various treatment components of the LSSDS, and to request that the Ministry permit the use and operation of the Spray Irrigation System, on a temporary basis, in order to prevent or eliminate an uncontrolled discharge of sewage to the natural environment.

In the Spring of 2015, CKL hired Golder and Associates Ltd. to perform a geotechnical investigation on the LSSDS due to ongoing operational issues. On June 30, 2015, Golder and Associates indicated in their Geotechnical Report Project No. 1414875, that the infiltration capability of the existing soil was less than that expected in the original design report for the LSSDS, and that this could be considered as the main contributing factor for the LSSDS malfunction and cause of the observed break-outs. Recommendations to address this and other issues noted with the LSSDS were provided in Golder's Geotechnical Report. In August 2015, CKL communicated to the Ministry that due to the significant cost of the proposed options in Golder's Geotechnical Report, CKL would not be undertaking any significant activity for the remainder of 2015, however CKL had intentions to rehabilitate the area beds in 2016 .

In the Spring of 2016, the Ministry's Peterborough District Office through discussion with the Ministry's Approvals Branch, provided permission for the Spray Irrigation System to be used as an emergency provision until the issues with the LSSDS were addressed. This conditional approval would be based on written request to the Ministry being provided in a timely fashion prior to spraying. A written response back from the Ministry would allow for authorization. Spray irrigation operating requirements were required to be consistent with those conditions outlined in ECA No. 2548-9PPMSK prior to the spray irrigation expiration.

On June 15, 2018, the Ministry held a meeting at the Peterborough District Office with CKL and OCWA to discuss the current status of Sewage Works. At the meeting, the Ministry addressed the ongoing use of the Spray Irrigation System on an emergency basis and requested that CKL provide an action plan which outlined how CKL would address the on-going operational issues with the LSSDS. Additionally, during the meeting, the Ministry advised CKL that they would need to retain the services of a Qualified Person, to analyze and interpret all groundwater data and assess for any impacts, as a result of the continued use of the Spray Irrigation System.

On September 15, 2018, the Ministry was provided with an action plan from CKL's Qualified Person, Greer Galloway Consulting Engineers. This action plan included site and distribution bed investigation work, lab analysis and pilot testing. All proposed site assessment work was estimated to be completed prior to the end of 2018. On completion of the site assessment a rehabilitation proposal would be created and provided to both CKL and the Ministry.

On January 7, 2019, the Ministry provided technical recommendations based on a review of the submitted Hydrogeological Impact

Assessment Report (Azimuth Environmental Consulting, Inc. report no. AEC 18-311, November 9, 2018), specifically regarding groundwater monitoring and analysis, as well as the impact assessments for the on-going use of the Spray Irrigation System, including:

- Groundwater level monitoring and groundwater quality sampling to be expanded to all 17 Monitoring Wells which include those on the Lagoon Property as well as the Sanderson Pit Property;
- In addition to those parameters required to be analyzed in the current ECA No. 2737-B4DH46, samples are to include Ammonia Nitrogen;
- All total phosphorous samples are to be field filtered and acidified prior to lab submission;
- All water quality sampling and water level monitoring to be conducted on a quarterly basis for the next 3 years; and
- A trend analysis report for the sampling is to be reported to the Ministry annually.

On January 25, 2019, the site proposal conceptual design was provided to the Ministry and included recommendations for additional pre-treatment of raw sewage effluent from the lagoons, the addition of 4 new infiltration cells into the existing infiltration area to replace the current system, and the addition of 3 new infiltration cells to the northwest of the current infiltration area. The proposal also discussed infiltration bed permeability to be improved through the addition of clear stone into the disposal trenches. The next steps proposed include pre-treatment pilot testing to occur in the summer of 2019, to determine specifics prior to completion of the detailed design.

CKL's Qualified Person, Greer Galloway, anticipates completion of the detailed design in 2019, based on the results of the pilot testing and construction of the design to take place in early 2020.

On April 18, 2019, the Ministry's Environmental Assessment and Permissions Branch confirmed that the proposed pilot project could proceed as a pre-authorized modification under Condition 10 (Limited Operational Flexibility) of ECA No. 2737-B4DH46. This pilot project is subject to the requirements of the condition outlined in the ECA.

I am of the opinion, that the requirements specified in the attached Order are necessary or advisable so as to prevent or reduce the risk of any discharge of contaminants, namely sewage, into the natural environment from the Site, or to prevent, decrease or eliminate an adverse effect to the natural environment or human health that may result from the discharge of contaminants(s), namely sewage in, on or under the Site.

Therefore, the attached Order is issued under sections 16.1, 16.2 and subsection 104(2) of the OWRA, to implement preventative measures, namely, the use and operation of the on-site Spray Irrigation System in accordance with the requirements set out in the attached Order, to ensure the public health and protection of the local groundwater and/or surface waters at and in the vicinity of the Site, such that they are not adversely impacted by an uncontrolled release of sewage to the natural environment.

Offence(s)

Suspected Violation(s)/Offence(s)

Act – Regulation – Section

Description



Bryan Armstrong
Provincial Officer
Badge Number: 1850

Provincial Officer's Order

Environmental Protection Act, R.S.O. 1990, c.E 19 (EPA)
Nutrient Management Act, R.S.O. 2002, c.4 (NMA)
Ontario Water Resources Act, R.S.O. 1990, c.O. 40 (OWRA)
Pesticides Act, R.S.O. 1990, c. P11 (PA)
Safe Drinking Water Act, S.O. 2002, c.32 (SDWA)

Order Number
1-L4E0C

To: KAWARTHA LAKES, THE CORPORATION OF THE CITY OF
12 PEEL ST
LINDSAY ON K9V 3L8
Canada

The Corporation Of The City Of Kawartha Lakes

Site: WW OMEMEE LAGOON
267 BEAVER Road,
OMEMEE, ON, K0L 2W0,
Canada

Work Ordered

Pursuant to my authority under Sections 16.1, 16.2, and subsection 104(2) of the OWRA, I hereby Order the Corporation of the City of Kawartha Lakes to do the following:

1. Commencing immediately upon service of this Provincial Officer's Order implement a temporary spray irrigation discharge program of effluent from the Site, via the Spray Irrigation System, on an as needed basis, in accordance with the following conditions:

(1) the disposal of effluent is via spray irrigation only and effluent is applied only on the spray irrigation zones, as identified on the attached Figure 3, dated October 15, 2018 of Azimuth Environmental Consulting, Inc. report no. AEC 18-31;

(2) the spray irrigation to these lands must be done in such a manner as to restrict off site migration of the effluent. Visual inspection of the site and drainage tiles shall be completed daily to ensure that no effluent from the spray irrigation area is being discharged directly or indirectly into any surface waters. The daily inspections, complete with observations and actions taken, if required, shall be recorded within a logbook, to be made available for inspection by Ministry staff, when requested.

(3) no spray irrigation is to take place:

- a) on frozen ground or between December 15th and before April 15th in any given year unless written approval is granted by the District Manager;
- b) on days when precipitation is forecast;
- c) if there is ponding of effluent. If ponding occurs, spray irrigation must immediately cease until ponding dissipates. Should ponding occur, adequate time is to be allowed before recommencing the spray irrigation, in order to allow the area to dry to a degree that would preclude immediate recurrence of ponding or runoff;
- d) if surface water run-off is occurring. This includes any flows discharging from field tiles that service the spray irrigation fields; and
- e) within 20m of any surface watercourse or drain or 90m of any water well.

2. Ground water level monitoring and ground water quality sampling shall be expanded to all 17 Monitoring Wells which include those on the Lagoon Property as well as the Sanderson Pit Property .

3. All wells referenced in item no.2 to be analyzed for those parameters noted in ECA No. 2737-B4DH46 and shall also include Ammonia Nitrogen .

4. All total phosphorous samples shall be field filtered and acidified prior to lab submission.

5. All water quality sampling and water level monitoring shall be conducted on a quarterly basis for the next 3 years, quarterly meaning every 3 month period with at least 60 days but not more than 120 days between samples.

6. A trend analysis report for the annual sampling program shall be reported to the Ministry no later than March 31st of the proceeding calendar year.

7. Provide written notification to the undersigned Provincial Officer, no later than 24 hours prior to the anticipated seasonal start date of the use and operation of the Spray Irrigation System, as permitted by this Order.

8. Provide written notification to the undersigned Provincial Officer, no later than 24 hours after the cessation of the seasonal use and operation of the Spray Irrigation System, as permitted by this Order.

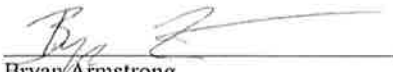
9. On completion of the proposed pilot study, to evaluate the effectiveness of the pre-treatment options, CKL shall provide the undersigned Provincial Officer, with a written report summarizing the findings of the study. The summary shall include what these findings mean in terms of the success-fullness of pre-treatment. This written report shall be provided to the Ministry no later than 60 days after the completion of the study .

A. While this Order is in effect, a copy or copies of this order shall be posted in a conspicuous place.

B. While the Order is in effect, report in writing, to the District or Area Office, any significant changes of operation, emission, ownership, tenancy or other legal status of the facility or operation.

This Order is being issued for the reasons set out in the annexed Provincial Officer's Report which forms part of the Order.

Issued at The City of Kawartha Lakes this 08/05/2019 (dd/mm/yyyy)


Bryan Armstrong
Badge Number: 1850
Peterborough District

APPEAL/REVIEW INFORMATION

REQUEST FOR REVIEW

You may request that this order be reviewed by the Director. Your request must be made in writing (or orally with written confirmation) within seven days of service of this order and sent by mail or fax to the Director at the address below. In the written request or written confirmation you must,

- specify the portions of this order that you wish to be reviewed;
- include any submissions to be considered by the Director with respect to issuance of the order to you or any other person and with respect to the contents of the order;
- apply for a stay of this order, if necessary; and provide an address for service by one of the following means:
 1. Mail
 2. Fax

The Director may confirm, alter or revoke this order. If this order is revoked by the Director, you will be notified in writing. If this order is confirmed or amended by order of the Director, the Director's order will be served upon you. The Director's order will include instructions for requiring a hearing before the Environmental Review Tribunal.

DEEMED CONFIRMATION OF THIS ORDER

If you do not receive oral or written notice of the Director's decision within seven days of receipt of your request, this order is deemed to be confirmed by order of the Director and deemed to be served upon you.

You may require a hearing before the Environmental Review Tribunal if, within 15 days of service of the confirming order deemed to have been made by the Director, you serve written notice of your appeal on the Environmental Review Tribunal and the Director. Your notice must state the portions of the order for which a hearing is required and the grounds on which you intend to rely at the hearing. Except by leave of the Environmental Review Tribunal, you are not entitled to appeal a portion of the order or to rely on grounds of appeal that are not stated in the notice requiring the hearing. Unless stayed by the Environmental Review Tribunal, the order is effective from the date of service.

Written notice requiring a hearing must be served personally or by mail upon:

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

and

Director (Provincial Officer Orders)
Ministry of the Environment, Conservation and Parks

Where service is made by mail, it is deemed to be made on the fifth day after the date of mailing and the time for requiring a hearing is not extended by choosing service by mail.

Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal by

Tel: (416) 212-6349

Fax: (416) 326-5370

www.ert.gov.on.ca

FOR YOUR INFORMATION

- Unless stayed by the Director of the Environmental Review Tribunal, this order is effective from the date of service. Non-compliance with the requirements of this order constitutes an offence.
- The requirements of this order are minimum requirements only and do not relieve you from complying with the following:
 - Any applicable federal legislation;
 - Any applicable provincial requirements that are not addressed in the order; and
 - Any applicable municipal law.
- The requirements of this order are severable. If any requirement of this order or the application of any requirement to any circumstances is held invalid, the application of such requirement to other circumstances and the remainder of the order are not affected.
- Further orders may be issued in accordance with the legislation as circumstances require.
- The procedures to request a review by the Director and other information provided above are intended as a guide. The legislation should be consulted for additional details and accurate reference.

Appendix

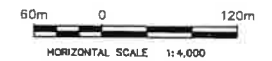
Figure 3 – Spray Irrigation Zones


Figure 5 – Monitoring Wells



LEGEND:

- Approx. Property Boundary
- Sanderson Pit Property
- ⊕ Monitoring Well Locations
- Spray Irrigation Zones



 ARLTH ENVIRONMENTAL CONSULTING, INC.	
Sewage Works	
267 Beaver Rd., Ormeau, ON	
DATE ISSUED	September 2018
CREATED BY:	JLM
PROJECT NO.	18-311
REFERENCE	The Greer Galloway Group Inc.
Figure No.	3

