



March 6, 2019

Jonathan Lampman
Infrastructure Supervisor
Municipality of North Middlesex
229 Parkhill Main St
Parkhill, ON, N0M 2K0

Re: Historical information on the acceptance of Septage at the Ailsa Craig WWTP

Dear Mr. Lampman

On behalf of the Ontario Clean Water Agency we are providing information regarding the acceptance of septage at the Ailsa Craig WWTP.

Historical Information

- Receiving septage has created multiple issues and non-compliance events at the Ailsa Craig WWTP. It could be assumed that haulers are including waste from portable toilets in addition to municipal septic tank waste. Chemicals used in the portable toilets can cause a negative effect in the process and operations.
- Previously when septage was received into this plant the pH had to be adjusted with the addition of sodium hydroxide into the head of the system to reduce process treatment issues. (reporting non compliances to Ministry of the Environment, Conservation and Parks (MECP))
- The present Environmental Compliance Approval (ECA) does not allow for this chemical addition; if accepting septage is to be considered, prior approval & ECA addition would need to be made to allow for pH adjustment as needed. .
- If the MECP approves a pilot study to allow pH adjustment at this location or if the ECA is opened and additional chemical addition allowed a chemical dosing system would have to be designed (engineered) and installed in order to compensate the negative effects. This may include additional H&S related equipment. (Eyewash/Shower Station). Opening up the ECA for approvals and having additional chemical & added operational time will incur additional costs to the Municipality.
- If the septage receiving tank needs to be cleaned out; there is a considerable buildup of grit in the bottom of this tank; this was identified in previous capital recommendations but not completed to date.
- the two pumps were removed and are being used as backups elsewhere in the plant or are in need of repair/ replacement.
- septage receiving tank have a limited holding volume (70 m³ design)
- septage flow meter would need to be recalibrated/verified before reinstatement
- also important to **note**:, chemical addition, engineering may not correct the negative effects at the Alisa Craig WWTP when receiving septage, unknown plant upsets may result in cancelling future receiving of septage if needed.

Quote from the last MECP Inspection Report; 2015 Jim Miller

In accordance with section 53(1) Subject to section 47.3 of the Environmental Protection Act, no person shall use, operate, establish, alter, extend or replace new or existing sewage works except under and in accordance with an environmental compliance approval. 2010, c. 16, Sched. 7, s. 3 (9).

Here a number of questions and answers that both Council and Municipal staff would have to review and approve prior to the acceptance of septage.

1. Impact on our AC WWTP operations without chemical addition – non compliances would be reported to the MECP. Risk to the Environment.
2. Capital expenditure to get it back up and running – all estimated cost for the following - opening up the ECA for chemical addition - \$2,500, engineered chemical addition/pump system with purchase of equipment – \$5,000, engineered/purchase of Eyewash/Shower Station (H&S issue Sodium Hydroxide) – \$10,000, septage tank clean out - \$1,500. Flow Meter calibration- \$100, Pump Maintenance \$3,500., Minimum Total Estimated Cost - \$22,600.
3. Operational expense to keep the receiving – all estimated cost for the following - running chemical addition \$200 monthly, tank clean out annually - \$1500. Flow Meter calibration- \$100 annually, Pump Maintenance \$3500 replacement over 5 years. Minimum Total Estimated Cost– annually will be \$2,000.00.
4. Safety related to matter – always a risk to environmental spills when receiving septage, risk associated with handling chemicals sodium hydroxide – causes severe skin burns and severe eye damage when contact is made, risk associated to inhalation, need well ventilated area. Engineering design of system required.
5. Hours of Operation – hard to say as we would be totally dependent on when we receive, once a month or it may be more?
6. Amounts we can receive - septage receiving tank have a limited holding volume (70 m³ design)

If Council approves these recommendations OCWA would provide final quotes for approval.

Sincerely,



Rod Dupuis
Senior Operations Manager, RDupuis@ocwa.com
Ontario Clean Water Agency