

**ENVIRONMENTAL ENHANCEMENT AND  
PROTECTION ACT**

BEING CHAPTER W-3 R.S.A. 2000 (the "Act")

**ENVIRONMENTAL PROTECTION ORDER  
NO. EPO-EPEA-39639**

Alberta Capital Region Wastewater Commission  
23262 Township Rd 540  
Fort Saskatchewan, AB T8L 4A2

**WHEREAS** Alberta Capital Region Wastewater Commission ("ACRWC") is a Regional Wastewater Commission established in 1985 providing service to 13 municipalities in the Alberta Capital;

**WHEREAS** the ACRWC owns and operates a wastewater system for the Alberta Capital Region under *Environmental Enhancement and Protection Act (the "Act")* Approval #486-03-00, as amended;

**WHEREAS** on December 24, 2022 at approximately 1400hrs, the ACRWC reported to Alberta Environment and Protected Areas ("EPA") that a rupture in the wastewater system had resulted in a release of an unknown amount of untreated wastewater onto the bed, shore and into Big Lake;

**WHEREAS** the release occurred within the City of Edmonton, at the end of Range Road 261 (231 Street) at SE-4-055-22 W4, in the Province of Alberta;

**WHEREAS** on December 24, 2022, EPA contacted the ACRWC to ask for incident details and ACRWC stated that they had detected a pressure drop in their wastewater line by a low-pressure alarm;

**WHEREAS** an ACRWC Operator was immediately dispatched to inspect the alarm, and upon arriving noticed an ongoing release of untreated wastewater from a manhole that was flowing overland into Big Lake;

**WHEREAS** between December 24 to 28, 2022, the ACRWC continued spill containment measures by utilizing vacuum trucks, overland portable pumps, and by installing an inflatable plug to divert some of the wastewater to the Spruce Grove Wet Storage Pond;

**WHEREAS** on December 31, 2022, EPA received a written report regarding the release as required by section 111(2) of the Act, and section 4(1) of the *Release Reporting Regulation*;

**WHEREAS** ACRWC was able to estimate that the volume of untreated domestic wastewater that was released into Big Lake from its wastewater system was approximately 1,560 cubic metres;

**WHEREAS** “domestic wastewater” is defined in section 2(2)(m) of the *Activities Designation Regulation* as a composite of liquid and water-carried wastes associated with the use of water for drinking, cooking, cleaning, washing, hygiene, sanitation or other domestic purposes, together with any infiltration and inflow wastewater, that is released into a wastewater collection system;

**WHEREAS** the various waste products in the untreated wastewater are collectively referred to as the “Substances”;

**WHEREAS** several environmental and health impacts could result from the release of the Substances in the untreated wastewater on the aquatic ecosystem of Big Lake, including negative impacts on fish and wildlife populations, oxygen depletion, restrictions on fish harvesting and consumption and restrictions on drinking water consumption;

**WHEREAS** on January 9, 2023, an EPA Environmental Protection Officer conducted a site inspection of the release site and confirmed that the release of the Substances in the untreated wastewater occurred into Big Lake, and that they may cause an adverse effect to the environment;

**WHEREAS** ACRWC contracted with Spencer Environmental Management Services Ltd. (“Spencer”) and Sureway Construction Group Ltd. (“Sureway”) to prepare a clean-up and remediation plan document;

**WHEREAS** on January 20, 2023, Spencer submitted a clean-up and restoration plan submitted on behalf of ACRWC to the Director for review entitled “*Alberta Capital Region Wastewater Commission (ACRWC), Wastewater Release from Manhole 903-MH-175; north end of 231 Street (SW 24-53-26-4) – Cleanup and Restoration Plan*”;

**WHEREAS** Maxwell Harrison, Compliance Manager, Northern Region, has been appointed a Director under the Act for the purposes of issuing Environmental Protection Orders under the Act (the “Director”);

**WHEREAS** the Director is of the opinion that the release of the Substances into Big Lake has occurred, and that the release of the Substances into the environment may cause, is causing or has caused an adverse effect to the aquatic environment of Big Lake and the surrounding environment;

**WHEREAS** the Director has reviewed the January 20, 2023 clean-up and restoration plan from Spencer, and is satisfied with its contents to begin the clean-up and restoration work, though is of the opinion that further remedial work is required to delineate the extent of the release of the Substances on Big Lake, and to remediate the impacts of the Substances on the environment;

**WHEREAS** the Director may issue an Environmental Protection Order under section 113 to the person responsible for the release to take any remedial measures that the Director considers necessary that are specified in section 113;

**WHEREAS** the ARCWC is a “person responsible” for the release of the Substances as the owner and operator of the regional wastewater system from which the release occurred, and they are therefore the “person responsible” in relation to the Substances within the meaning in section 1(tt) of the Act;

**THEREFORE**, I, Maxwell Harrison, Director, pursuant to section 113(1) of the *Environmental Protection and Enhancement Act*, HEREBY ORDER THAT the ACRWC:

1. Conduct the remedial activities as outlined in the “*Alberta Capital Region Wastewater Commission (ACRWC), Wastewater Release from Manhole 903-MH-175; north end of 231 Street (SW 24-53-26-4) – Cleanup and Restoration Plan*” prepared by Spencer Environmental Management Services Ltd. on behalf of the Alberta Capital Region Wastewater Commission, dated January 20, 2023.
2. The work described in the Clean-up and Restoration Plan (with the exception of monitoring activities, which shall be conducted in accordance with Clauses 6-8 of this Order) shall be completed no later than **March 31, 2023**.

#### **Water Management Plan for Withdrawal and Flushing**

3. On or before **February 17, 2023**, shall submit to the Director a Water Management Plan for Withdrawal and Flushing (Water Management Plan) for the impacted area of Big Lake from the release of the Substances.
4. The Water Management Plan required by clause 2, shall include a proposal to withdraw water from Big Lake, to flush any of the Substances found on the bank and shore of the Lake, and remove and dispose of the resulting mixture of water and Substances from the flushing. At a minimum, the Plan shall include each of the following:
  - i) A detailed description of the techniques that will be used for withdrawal of water from Big Lake in the vicinity of the release the Water Body;
  - ii) A detailed description of all of the following:
    - a. pump locations,
    - b. pumping rates,
    - c. discharge locations, and
    - d. Estimated volume of the withdrawal;
  - iii) A map depicting all of the following:
    - a. the release site and an outline of the proposed extent of the withdrawal,
    - b. discharge locations; and
    - c. pump locations;
  - v) A detailed proposal for any water quality monitoring of parameters that will be monitored during the flushing of the impacted affected areas of Big Lake.

- vi) A schedule of implementation for the Water Management Plan that shall have a completion date of no later than **March 31, 2023.**
5. ARCWC shall implement the Water Management Plan in accordance with the Director's written authorization and the approved schedule of implementation.

### **Water Body Monitoring Plan**

6. On or before **March 1, 2023,** ARCWC shall submit a water body monitoring plan to the Director to conduct sampling and assess the water quality of Big Lake, and the potential for the Substances in the released untreated wastewater to travel to downstream areas and/or into the Sturgeon River following the work carried out in Clauses 1 to 5 of this Order.
7. The Water Body Monitoring Plan shall include, at a minimum, each of the following:
  - a. A detailed description of how the entirety of the Release Site and any potentially impacted areas of Big Lake will be monitored throughout the implementation of the Clean-up and Restoration Plan, including, at minimum:
    - i. The water quality parameters that will be monitored, including but not limited to NH<sub>3</sub>, COD, BOD, pH, TSS, total phosphorus, total ammonia-nitrogen, total and dissolved metals, total coliforms, Escherichia coli, and enterococcus using QPCR (qualitative polymerase chain reaction);
    - ii. The locations from which samples will be collected;
    - iii. The locations downstream from which samples will be collected;
    - iv. The points of discharge from Big Lake from which samples will be collected;
    - v. The frequency of the collection and analyses of all samples; and
    - vi. Comparison of results to Environmental Quality Guidelines for Alberta Surface Waters, 2018.
  - b. A schedule of implementation for the Water Body Monitoring Plan, which shall have completion date of no later than **August 31, 2023.**
8. ACRWC shall implement the Water Body Monitoring Plan in accordance with the Director's written authorization and the approved schedule of implementation.

### **Monitoring Report**

9. On or before **September 30, 2023,** ACRWC shall, provide a written monitoring report to the Director prepared and signed off by its qualified environmental professional summarizing all the monitoring work that has been carried out in the Water Body Monitoring Plan.

DATED at the City of Edmonton in the Province of Alberta, this 3<sup>rd</sup> day of February, 2023.

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Maxwell Harrison  
Compliance Manager  
North Region – Capital District

**Section 91 of the *Environmental Protection and Enhancement Act* may provide a right of appeal against this decision to the Alberta Environment Appeals Board. There may be a strict time limit for filing such an appeal. A copy of section 91 is enclosed.**

**For further information, please contact the Board Secretary at:  
Alberta Environmental Appeals Board  
# 30 6 Peace Hills Trust Tower, 10011-109 Street,  
Edmonton, Alberta, TSJ 3S8  
Telephone 780-427-6207; Fax 780-427-4693.**

**Notwithstanding the above requirements, ARCWC shall obtain all other necessary approvals or authorizations required to comply with this order.**

**Take notice that this environmental protection order is a remedial tool only, and in no way precludes any enforcement proceedings being taken regarding this matter under the *Environmental Protection and Enhancement Act* or any other legislation.**