

ENVIRONMENTAL PROTECTION AND ENHANCEMENT ACT

BEING CHAPTER E-12 R.S.A. 2000 (the "Act")

ENFORCEMENT ORDER NO. EO-2013/03-SR

Dockman & Associates Ltd.
225 First Avenue N.W.
Airdrie, Alberta, T4B 2M8

Michael Louis Dockman
PO Box 80144
RPO Tower Lane,
Airdrie, Alberta T4B 2V8

[Collectively hereinafter referred to as the "Parties"]

WHEREAS Dockman & Associates Ltd. holds Approval No. 151716-00-00 [the "Approval"] for the construction, operation and reclamation of the East Airdrie (Sharp Hill) Waterworks System [the "Waterworks System"] on land legally described as the NE ¼ of 28-026-29-W4M in Rocky View County, near Balzac, in the Province of Alberta [the "Lands"];

WHEREAS Michael Louis Dockman is the sole Director of Dockman & Associates Ltd;

WHEREAS the Approval expires on June 1, 2013;

WHEREAS on March 20, 2012, an Alberta Environment and Sustainable Resource Development (ESRD) Inspector attended at the Lands to conduct an inspection of the Waterworks System and observed numerous deficiencies and contraventions of the Approval, including, but not limited to:

- There was no Level I certified operator directly supervising the day-to-day operation of the water treatment plant and the water distribution system, contrary to clause 4.2.2 of the Approval;
- Several exceedences of the limit for daily fluoride residual, contrary to clause 5.1.1 of the Approval, and failures to take immediate corrective action, contrary to clause 4.5.2 of the Approval;
- Failure to notify homes serviced by the waterworks system when the fluoride residual in the treated water exceeded 1.0mg/L on two consecutive days, contrary to clause 4.5.3 of the Approval;
- Failure to monitor in accordance with Table 6-1, contrary to clause 6.1.1 of the Approval;
- Failure to report in accordance with Table 6-1, contrary to clause 6.1.2 of the Approval;
- Failure to monitor for turbidity and fluoride in raw, treated and reject water, contrary to clause 6.1.4 of the Approval;

- Failure to compile and maintain monthly waterworks reports, contrary to clause 6.1.5 of the Approval;
- Failure to compile an annual waterworks report, contrary to clause 6.1.7 of the Approval;
- Failures to immediately report approval contraventions to the Director, contrary to clause 2.1.1 of the Approval; and
- Failures to submit a written report to the Director, within 7 days of the approval contravention contrary to clause 2.1.3 of the Approval;

WHEREAS on April 11, 2012, ESRD sent to Dockman & Associates Ltd. and Michael Dockman, a letter identifying that the Waterworks System had failed the Risk Based Inspection Assessment (RBI) portion of the inspection, and setting out the deficiencies and contraventions observed at the March 20, 2012 inspection. The April 11, 2012 letter also requested that within 30 days, the Parties respond in writing as to what actions will be taken to come back into compliance with the Approval;

WHEREAS on April 23, 2012 ESRD received from the Parties a letter disputing the findings of the March 20, 2012 inspection;

WHEREAS on February 28, 2013, an AESRD Inspector attended at the Lands to conduct the annual inspection of the Waterworks System and observed numerous deficiencies and contraventions of the Approval, including, but not limited to:

- Failure to conduct equipment calibrations as required by clause 2.3.3 of the Approval;
- Failure to have a Level I certified operator directly supervising the day-to-day operation of the water treatment plant and the water distribution system, contrary to clause 4.2.2 of the Approval;
- Several exceedences of the limit for daily fluoride residual, contrary to clause 5.1.1 of the Approval, and failures to take immediate corrective action, contrary to clause 4.5.2 of the Approval;
- Failure to notify homes services by the waterworks system when the fluoride residual in the treated water exceeded 1.0mg/L on two consecutive days, contrary to clause 4.5.3 of the Approval;
- Failure to monitor in accordance with Table 6-1, contrary to clause 6.1.1 of the Approval;
- Failure to report in accordance with Table 6-1, contrary to clause 6.1.2 of the Approval;
- Failure to monitor for turbidity and fluoride in raw, treated and reject water, contrary to clause 6.1.4 of the Approval;
- Failure to compile and maintain monthly waterworks reports, contrary to clause 6.1.5 of the Approval;
- Failure to compile and submit an annual waterworks report, contrary to clauses 6.1.7 and 6.1.9 of the Approval;

- Failures to immediately report approval contraventions to the Director, contrary to clause 2.1.1 of the Approval; and
- Failures to submit a written report to the Director, within 7 days of the approval contravention, contrary to clause 2.1.3 of the Approval;

WHEREAS on March 21, 2013, ESRD sent to Dockman & Associates Ltd. and Michael Dockman, a letter identifying that the waterworks system had failed the Risk Based Inspection Assessment (RBI) portion of the inspection and setting out the deficiencies and contraventions observed at the February 28, 2013 inspection. The March 21, 2013 letter also requested that within 30 days, the Parties respond in writing as to what actions will be taken to come back into compliance with Approval No.: 151716-00-00;

WHEREAS the Parties have failed to satisfactorily rectify any of the deficiencies and non-compliances identified in either of the April 11, 2012 and March 21, 2013 letters

WHEREAS ESRD has received information from the Parties that arrangements and agreements with the Rocky View Water Co-op Ltd (RVWC) have been reached, through which RVWC has agreed to supply water to the Waterworks System as a large bulk water customer;

WHEREAS Michael Dockman has stated that his intentions are to complete a connection to the RVWC pipeline and use RVWC's water to supply treated potable water to the current Waterworks System customers, through the existing Waterworks System infrastructure;

WHEREAS Craig Knaus, District Compliance Manager, Southern Region [the "Director"] has been appointed a Director under the *Environmental Protection and Enhancement Act* [EPEA] for the purposes of issuing Enforcement Orders;

WHEREAS the Director is of the opinion that the Parties contravened section 149 of EPEA by exceeding the daily fluoride residual limits set out in the Approval

WHEREAS the Director is of the further opinion that the Parties contravened the Approval, as described above, each contravention of which is an offence under section 227(e) of EPEA;

THEREFORE, I, Craig Knaus, District Compliance Manager, Southern Region, pursuant to section 210 of the *Environmental Protection and Enhancement Act*, DO HEREBY ORDER:

Monitoring, Operation and Reporting

1. For the purposes of this Order, all of the definitions contained in Approval No. 151716-00-00 apply to this Order, whether the Approval has expired or not.
2. The Parties shall
 - a. immediately; and
 - b. continue to until further written notice from the Directorcomply with each of the terms and conditions of this Order
3. The Parties shall
 - a. immediately; and
 - b. continue to until further written notice from the Director

at all times provide water through the Waterworks System that meets all of the following limits:

PARAMETERS	<i>DESIGNATED SAMPLING LOCATION</i>	LIMIT
pH of Treated Water	Entering the water distribution system	6.5 - 8.5
Free Chlorine Residual of Treated Water	In the water distribution system	≥ 0.1 mg/L in 95% of samples per month
Fluoride Concentration of treated water	Entering the water distribution system	≥ 0.6 mg/L or ≤ 1.0 mg/L
Turbidity, Total Dissolved Solids, Calcium, magnesium, hardness, sodium, NO ₂ -NO ₃ , NH ₃ -N, T-Alkalinity, Nitrite-N, Dissolved Organic Carbons, Aluminium, Arsenic, Copper, Iron, Manganese, Lead and Electrical Conductivity	Entering the water distribution system	Maximum Acceptable Concentrations as listed in the Guidelines for Canadian Drinking Water Quality (Health Canada, 2012)

4. The Parties shall, beginning on **June 2, 2013**, and continue every month thereafter,
- collect samples; and
 - analyze for the parameters;

for the water in the Waterworks System in accordance with the entirety of the following table:

PARAMETERS	FREQUENCY	SAMPLE TYPE	SAMPLING LOCATION	REPORTING FREQUENCY
WATERWORKS SYSTEM				
Volume of Treated Water	5 Days per week	Metered	Entering the water distribution system	Monthly
pH of Treated Water	5 Days per week	Grab sample	Entering the water distribution system	
Free Chlorine Residual of Treated Water	5 Days per week	Grab sample	Random location in the water distribution system	
Fluoride Concentration of treated water	5 Days per week	Grab sample	Water entering the water distribution system	
Name, concentration and dosage of the chemicals added	Once per week	N/A	To the water treatment process	
Bacteria in Treated Water (Bacteriological examination)	Twice per week with a minimum of 3 days between	Grab sample	Random location in the water distribution system	
WASTE STREAMS				
Reject water (Stage 1 R.O.) volume -monthly total (Litres)	Once per month	Metered	Prior to discharge to irrigation pond or prior to Stage 2 R.O. filtration	Monthly
Reject water (Stage 2 R.O.) volume - monthly total (Litres) (when operating)	Once per month	Metered	Prior to brackish water evaporation pond	

5. The Parties shall,
- beginning on July 12, 2013; and
 - continuing on the 12th of every month thereafter
- submit all of the following electronically in writing to leslie.miller@gov.ab.ca
- the analytical results for the monitoring required by Clause 4 of this Order
 - the name of the certified operator as required by Clause 13 of this Order;
 - a summary of all incidents that required reporting as per Clauses 9 and 10 of this Order; and
 - a summary of any operational problems
6. In addition to the requirements of Clause 5 above, the Parties shall, prior to August 1, 2013, obtain a grab sample of water entering the water distribution system.

7. The Parties shall conduct an analysis of the grab sample obtained under Clause 6 of this Order for all of the following parameters:

(a) Turbidity	(g) NO ₂ -NO ₃	(m) Arsenic
(b) Total dissolved solids	(h) NH ₃ -N	(n) Copper
(c) Calcium	(i) T-Alkalinity	(o) Iron
(d) Magnesium	(j) Nitrite-N	(p) Manganese
(e) Hardness	(k) Dissolved Organic Carbons	(q) Lead
(f) Sodium	(l) Aluminum	(r) Electrical Conductivity

8. The Parties shall, within three weeks of obtaining the grab sample described in Clause 6 of this Order, provide an electronic written report to Leslie.Miller@gov.ab.ca containing all of the analytical results for all of the parameters described in Clause 7 of this Order;
9. The Parties shall immediately report by telephone any contravention of any of the clauses of this Order to the Director at 1-780-422-4505.
10. If any equipment used for disinfection fails or is shut down for any reason, the Parties shall immediately report this occurrence to the Director at 1-780-422-4505.
11. In addition to Clauses 9 and 10 of this Order, within 7 days of reporting to the Director, the Parties shall submit to the Director, a written report [the "7 Day Report"]
12. In each 7 Day Report, the Parties shall include, at minimum, all of the following:
- A detailed description of the contravention;
 - A detailed description of the circumstances leading to the contravention;
 - Corrective actions taken to remedy the contravention; and
 - Steps taken to prevent reoccurrence of the contravention.
13. The Parties shall not operate the Waterworks System unless the operation is under the direct supervision of a certified operator who holds a valid Level 1 Water Treatment Operators Certificate;
14. The Parties shall, beginning **June 14, 2013**, and continuing every two weeks thereafter until further written notice from the Director, submit to the Director a construction status report.
15. In the Construction Status Report, the Parties shall include, at minimum, the status of the construction activities related to the connection between the Waterworks System and Rocky View Water Co-op Ltd.'s system.
16. By August 1, 2013, the Parties shall complete the construction of a connection between the Rocky View Water Co-op Ltd (RVWC) water pipeline and the Waterworks System.

Registration Application

17. At least 30 days prior to distributing any water from the RVWC through the Waterworks System, the Parties shall submit in electronic format (unlocked PDF), to the Director at *AENV.SouthernEPEA@gov.ab.ca*, a complete application [the "Application"] for a Registration under the *Code Of Practice for a Waterworks System consisting solely of a Water Distribution System*, signed and stamped by an independent third party qualified professional currently registered with the Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGA) [the "Consultant"].
18. In the Application, the Parties shall include at minimum
 - a. A complete and signed application form for a COP Registration;
 - b. The signed recommendation of the Consultant as to where the connection between the RVWC line and the Waterworks System should be made;
 - c. Design plans signed and stamped by the Consultant, which show the connection details between RVWC and the Waterworks System;
 - d. The Consultant's recommendations for each of the following:
 - i. whether the existing Chlorine injection system will be retained to ensure the ability for re-chlorination; and
 - ii. The location of the Chlorine injection system;
 - e. A plan for flushing and water disposal that prevents a chemical reaction between the Water System's treated groundwater and the treated surface water supplied by RVWC;
 - f. The proposed timing for the implementation of the connection between RVWC and the Waterworks System;
 - g. An Operations Plan that complies with each of the requirements listed in the *Code of Practice for Waterworks System Consisting Solely of a Water Distribution System*, and
 - h. All the information listed in Section 3.1.3 (a)-(d), inclusive of the *Code of Practice for a Waterworks System Consisting Solely of a Water Distribution System*.
19. The Parties shall, by November 29, 2013 submit to the Director a detailed reclamation plan, signed and stamped by an independent third party qualified professional currently registered with the Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGA).
20. In the Reclamation Plan, the Parties shall include, at minimum, the plan for
 - a. decommissioning the components of the Waterworks System that will no longer be in use following the implementation of the water supply from RVWC; and
 - b. reclaiming the Lands associated with the Waterworks System in accordance with the requirements under EPEA.

DATED at the City of Calgary in the Province of Alberta, this 30th day of May, 2013.

Original signed by:

Craig Knaus
District Compliance Manager
Southern Region

Section 91 of the Environmental Protection and Enhancement Act may provide a right of appeal against this decision to the Alberta Environmental 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 #306 Peace Hills Trust Tower, 10011 – 109 Street, Edmonton, Alberta, T5J 3S8; telephone (780) 427-6207; fax (780) 427-4693.

Notwithstanding the above requirements, the Party(ies) shall obtain all necessary approvals in complying with this order.

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