

Operations
Compliance Assurance
111 Twin Atria Building, 4999 – 98 Avenue
Edmonton, Alberta T6B 2X3
Telephone: 780-427-7617
Fax 780-644-5643
http://aep.alberta.ca/

Water Act

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

ENFORCEMENT ORDER NO. WA-EO-2017/04-RDNSR

Associated Aggregates Inc. 1700, 10235-101 Street Edmonton, AB T5J 3G1

WHEREAS on April 9, 1998, Associated Aggregates Inc. ("AAI") was issued Surface Mineral Lease No. SML910088 under the *Public Lands Act* to operate a sand and gravel pit on public lands legally described as E1/2-14-49-7-W5M (the "Lands");

WHEREAS on February 23, 2006, AAI was issued Surface Mineral Lease No. SML04084 under the *Public Lands Act* to excavate sand as part of a dry excavation on the Lands adjacent to and immediately south of the southern portion of the sand and gravel pit area (the sand and gravel pit authorized under SML910088 and the dry sand excavation authorized under SML04084 are collectively referred to as the "Drayton Valley Pit");

WHEREAS in August 2007, the Lands were made subject to the *Provincial Parks Act* pursuant to section 7 of that Act:

WHEREAS on July 31, 2007, Alberta Environment and Parks ("AEP") issued *Water Act* approval 00231435-00-00 (the "*Water Act* Approval") to AAI, in connection with the operation of the sand and gravel pit at the Drayton Valley Pit, including authorization to construct, operate, and maintain activities leading to a reclaimed waterbody design for wildlife habitat purposes;

WHEREAS section 2 of the Water Act Approval states:

"The approval holder shall undertake the activities in accordance with the following plans and reports filed in the following Departmental records:

Drawing No.

Title

2C

Existing and Reclaimed Cross Section Profiles, prepared by Tor Land



Resource Inc., dated April 2006

4A

Reclaimed Site – Water Body Design, prepared by Tor Land Resource Inc., dated April 2006"

WHEREAS Sketch Set 2C of the *Water Act* Approval includes a cross-section described as A-A', which illustrates the following:

- at the south end of the Drayton Valley Pit, a planned dry excavation and a reclaimed site profile for the dry sand excavation area at an elevation depth of approximately 733 meters above sea level (masl), just above the natural river level and water table,
- at the north end of the Drayton Valley Pit, a planned wet excavation for the sand and gravel pit and a reclaimed site profile with a constructed end pit lake excavated to an elevation depth of 728 masl;

WHEREAS Sketch 4A of the *Water Act* Approval permitted a single small end pit lake at the north end of the Drayton Valley Pit, as the end of life reclaimed state of the Drayton Valley Pit:

WHEREAS on March 7, 2016, AEP issued disposition PSM130002 (the "Parks Disposition") under the *Provincial Parks Act* to AAI which administratively replaced SML040084 and SML910088:

WHEREAS in May 2016, AAI submitted to AEP an application for an updated Conservation and Reclamation Business Plan for the Parks Disposition (the "CRBP Application"), which included an application to amend the *Water Act* Approval ("Amendment Application");

WHEREAS the Amendment Application shows the existence of two constructed end pit lakes on the Lands: one in the south area of the Drayton Valley Pit (the "South End Pit Lake"), with an elevation depth of 728 masl, approximately 5 meters below the estimated water table at 733 masl, and one in the north end of the Drayton Valley Pit with an elevation depth of 728 masl;

WHEREAS aerial photography and follow-up inspections by an AEP Environmental Protection Officer on April 20, 2017, and on July 19, 2017 also confirms the presence of the South End Pit Lake in the Drayton Valley Pit;

WHEREAS during a follow-up inspection on July 19, 2017, the AEP Environmental Protection Officer also observed a berm constructed with excavated materials from the South End Pit Lake which surrounds the South End Pit Lake ("Constructed Berm");

WHEREAS the Constructed Berm was observed to be approximately 4 meters high for the entirety of its length;

WHEREAS the Constructed Berm was observed to extend over 800 meters around the South End Pit Lake;



WHEREAS AAI submitted information that the gravel pit area is diked to prevent river water from flowing into the pit;

WHEREAS the area of the South End Pit Lake is estimated to be 11.55 acres in size, with the depth of excavation at approximately 728 masl;

WHEREAS the *Water Act* Approval only authorized excavation below the water table and construction of an end pit lake in the north end of the Drayton Valley Pit;

WHEREAS the Drayton Valley Pit is in the channel migration zone (CMZ) of the North Saskatchewan River:

WHEREAS AEP considers pits located within the CMZ with pit bottoms deeper than the adjacent river thalweg as a high risk of pit capture and rerouting of river flow direction;

WHEREAS the thalweg at the North Saskatchewan River adjacent to the Drayton Valley Pit is currently estimated at an elevation of 733.5 masl, which is above the excavated depth of the unauthorized South End Pit Lake, which is estimated at approximately 728 masl;

WHEREAS AAI has provided information to AEP which states that the risk of a flood overtopping the Constructed Berm around the south portion of the Drayton Valley Pit, where the South End Pit Lake is located is 23 percent over a projected 5-year lifespan;

WHEREAS the Town of Drayton Valley's municipal water intake is located 216 m from the Drayton Valley Pit boundary, directly across and slightly downstream from the South End Pit Lake:

WHEREAS AEP considers pits located within 800 meters of a town drinking water intake to be high risk for impacts to a public water supply;

WHEREAS pit capture may impact the Town of Drayton Valley's water supply;

WHEREAS section 36(1) of the *Water Act* states that no person may commence or continue an activity except pursuant to an approval unless it is otherwise authorized under the Act;

WHEREAS the excavation which resulted in the South End Pit Lake, including the Constructed Berm, is an activity pursuant to section 1(1)(b)(i) of the *Water Act*, being the removing or disturbing of ground on land that alters, may alter or may become capable of altering the flow of water; changes, may change or may become capable of changing the location of water or the direction of flow of water; causes, and may cause or may become capable of causing siltation of water or the erosion of any bed or shore of a water body (being the North Saskatchewan River);

WHEREAS the excavation which resulted in the South End Pit Lake, including the Constructed Berm, was not authorized under the *Water Act* Approval or otherwise authorized under the *Water Act*:

WHEREAS section 135(1) of the *Water* Act states that the Director may issue an enforcement order to any person if, in the Director's opinion, that person has contravened the *Water Act*, whether or not that person has been charged or convicted in respect of the contravention:

Albertan

WHEREAS Michael Aiton, Regional Compliance Manager, Red Deer North Saskatchewan Region (the "Director") has been designated as a Director for the purposes of issuing enforcement orders under section 135 of the *Water Act*:

AND WHEREAS the Director is of the opinion that AAI has contravened section 36(1) of the *Water Act*, by commencing the excavation which resulted in the South End Pit Lake, including the Constructed Berm, without an approval;

THEREFORE, I Michael Aiton, Director, pursuant to section 135(1) of the *Water Act*, DO HEREBY ORDER THAT:

- AAI shall by August 25, 2017, submit to the Director for the Director's approval in writing a Remedial Plan, to restore ground surface conditions of the South End Pit Lake, including the Constructed Berm, to those conditions as described in Drawing No.2C of the Water Act Approval;
- 2. AAI must include in the Remedial Plan, at minimum:
 - a) Confirmation of the depths of all excavations in the Drayton Valley Pit, including the South End Pit Lake:
 - b) Particulars of the characteristics and properties of the land in the area of the Drayton Valley Pit impacted by pit operations including topography, drainage, soils, vegetation and land capability;
 - c) a description of the remedial work that will replace the materials previously removed from the South End Pit Lake at similar densities, characteristics, and compaction as naturally occurring materials found in undisturbed areas directly adjacent to the Drayton Valley Pit:
 - d) a description of the remedial work for the Constructed Berm such that it will no longer alter the flow or direction of water;
 - e) a plan for the temporary dewatering of the areas where remedial work will occur;
 - f) a proposed schedule of implementation for the remedial work that shall;
 - i. provide two (2) working days notice to the Director, prior to the commencement of any active remedial work; and
 - ii. have November 30, 2017 as the completion date for interim remedial activities;
 - have November 30, 2018, as the completion date for final restoration of ground surface conditions;
- 3. Upon approval of the Remedial Plan by the Director in writing, AAI shall conduct the work described in the approved Remedial Plan, according to the approved schedule of implementation, unless otherwise authorized in writing by the Director;
- 4. On or before December 30, 2017, the Parties shall submit a Remedial Plan Report

Albertan

describing the interim remedial actions and conditions achieved by November 30, 2017, and submit a Final Report describing final remedial actions and conditions achieved by December 15, 2018.

DATED at the City of Edmonton in the Province of Alberta, this 29 th day of July, 2017.

Original Signed by:

Michael Aiton

Regional Compliance Manager Red Deer North Saskatchewan

Region

Designated Director under the

Water Act

Section 115 of the *Water 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 115 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 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.

Further, contravention of the Enforcement Order may lead to additional enforcement proceedings, up to and including prosecution.

Albertan