

STATE OF MICHIGAN
DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENT

City of Ann Arbor

Argo Dam, Section 20, T02S, R06E, Ann Arbor Township, Washtenaw County

CONSENT AGREEMENT

The City of Ann Arbor (Ann Arbor) and the Land and Water Management Division (LWMD), Michigan Department of Natural Resources and Environment (DNRE), in consideration of their mutual interest in increasing the safety of the Argo Dam, located in the City of Ann Arbor, Washtenaw County, Michigan (hereinafter “the dam”), have agreed to this Consent Agreement. This Consent Agreement identifies the necessary actions to be taken by Ann Arbor, and supersedes the Dam Safety Order issued to Ann Arbor on August 6, 2009. This agreement also serves to resolve the pending contested case initiated by Ann Arbor regarding the August 6, 2009 Order.

IT IS HEREBY AGREED AS FOLLOWS:

Background

- 1) The Argo Dam is currently rated by DNRE as a “high hazard potential dam” per the provisions of Part 315 (Dam Safety) of the Natural Resources and Environmental Protection Act, MCL 324.31501 *et seq.* Section 31503 (11) defines a high hazard potential dam as follows: “High hazard potential dam” means a dam located in an area where a failure may cause serious damage to inhabited homes, agricultural buildings, campgrounds, recreational facilities, industrial or commercial buildings, public utilities, main highways, or class I carrier railroads, or where environmental degradation would be significant, or where danger to individuals exists with the potential for loss of life.
- 2) Section 31518(7) states, “If, based on the findings and recommendations of the inspection report and an inspection by the department, the department finds that a condition exists which endangers a dam, it shall order the owner to take actions that the department considers necessary to alleviate the danger.”
- 3) On August 6, 2009, the LWMD of the Department of Environmental Quality (DEQ) issued a Dam Safety Order to Ann Arbor requiring the City to correct certain deficiencies of the toe drains of the headrace embankment and to remove the extensive growth of trees and brush from the headrace embankment. The LWMD takes the position there are certain deficiencies of the toe drains of the headrace embankment, and the City takes the position that the deficiencies are not all deficiencies or that they are not as severe as characterized by the MDNRE, but the parties resolve their concerns and differences by this agreement.

- 4) The City filed a petition for a contested case hearing regarding the Order. That matter has been held in abeyance while the LWMD and the City engaged in settlement negotiations regarding the Order.
- 5) On November 2, 2009, the City installed a stop log blocking flow to the Argo Dam headrace.
- 6) The City has provided additional information to the LWMD, including, but not limited to, a report entitled *Geotechnical Evaluation Report for the Argo Dam Headrace Embankment*, dated December 16, 2009 prepared by Soil and Materials Engineers, Inc; a *Vegetation Management Plan-Headrace Embankment Argo Dam*, dated April 30, 2010; and *Triggers for response actions for the Argo Headrace Embankment*, dated April 30, 2010.
- 7) Pursuant to Executive Order 2009-45, all of the functions and authorities of the DEQ LWMD were transferred to the DNRE, Effective January 17, 2010.
- 8) The City and the LWMD have now agreed upon a series of measures and a schedule regarding the dam, that are specified below.

Vegetation Management

- 9) Ann Arbor shall remove the trees and brush from the headrace embankment in accordance with the schedule contained in *Vegetation Management Plan – Headrace Embankment Argo Dam*, dated April 30, 2010.

Reconstruction or Repair

- 10) Ann Arbor shall select and execute one of two options or a combination thereof: (i) repair the toe drain system and/or (ii) reconstruct the embankment, according to the following terms and schedule:
 - a) Ann Arbor shall issue a Request for Proposal no later than October 1, 2010 for the repair of the toe drains and/or for the reconstruction of the embankment.
 - b) Ann Arbor shall apply for the necessary permits for the selected option no later than February 1, 2011.
 - c) Construction of the selected option shall commence on or before June 1, 2011, contingent upon receipt of the required DNRE permits by May 15, 2011.
 - d) Construction of the selected option shall be completed by November 15, 2011.

Stop Log

- 11) The stop log currently blocking the flow to the Argo Dam headrace may be removed upon signing of this agreement by both parties. The refilling of the headrace shall not exceed six (6) inches of elevation in a 24-hour period.
- 12) The flow from the impoundment to the headrace shall be completely shut off again via the re-installation of the stop log on or before October 15, 2010.
- 13) The headrace stop log may be removed again after May 1, 2011.

- 14) Ann Arbor shall implement the measures detailed in the document *Triggers for Response Actions for the Argo Headrace Embankment* dated April 29, 2010. For the term of this agreement, Ann Arbor shall replace the stop-log within 2 hours if any of the triggers described occur.
- 15) If Ann Arbor does not commence or complete construction by the dates specified in items 10 c. and 10 d. above, the flow to the headrace from the impoundment shall be completely shut off via the re-installation of the stop log. The flow shall not be restored until Ann Arbor has completed a repair or construction program approved by the DNRE.

Inspections and Monitoring

- 16) Ann Arbor shall have the headrace embankment inspected at least quarterly by a Licensed Professional Engineer familiar with dam safety engineering.
- 17) At any time when the stop-log is not in place, Ann Arbor shall make a monthly visual inspection of the head race embankment and shall check and record all piezometer levels.
- 18) For the term of this Agreement, Ann Arbor shall monitor the water level in Argo Pond on at least a daily basis.

Quarterly Report

- 19) Ann Arbor shall make a quarterly report to the DNRE. The report, which may be submitted electronically, will be due on the 15th of the month following the end of the quarter. The first regular quarterly report shall be due July 15, 2010. Quarterly reports shall include the following items:
 - a) A report on the progress toward each of the milestones, and a statement that the conditions observed are in compliance with the terms of this agreement. If any conditions observed are not in compliance with the terms of this agreement, Ann Arbor shall give a detailed report as to any item not in compliance.
 - b) A summary of the data gathered during the required inspections.
- 20) Ann Arbor will maintain all data pertinent to the provision of this agreement for DNRE inspection upon request, including but not limited to piezometer readings, pond levels, inspection notes, and work records.
- 21) The terms of this agreement shall be deemed satisfied upon satisfactory completion of the construction activities described herein as permitted by the DNRE and completion of the work items detailed in *Vegetation Management Plan – Headrace Embankment Argo Dam* dated April 30, 2010.
- 22) This Consent Agreement shall be binding upon the parties and their successors and may be enforced as an order pursuant to MCL 324.31524(4).
- 23) This Consent Agreement shall not create any private rights or causes of action in any third party.

- 24) This Consent Agreement supersedes and replaces the Dam Safety Order issued August 6, 2009.
- 25) This Consent Agreement shall resolve the contested case proceeding filed by Ann Arbor regarding the Dam Safety Order issued August 6, 2009.
- 26) The undersigned certify that they are fully authorized by the party they represent to enter this Consent Agreement and legally bind that party to this Agreement.

_____ Dated: _____, 2010
Elizabeth M. Browne, Division Chief
Land and Water Management Division
Michigan Department of Natural Resources and Environment

Approved as to form:

_____ Date: _____, 2010
Robert P. Reichel
Assistant Attorney General
Environment, Natural Resources and
Agriculture Division
Department of Attorney General

City of Ann Arbor

_____ Date: _____, 2010
John Hieftje, Mayor

_____ Date: _____, 2010
Jacqueline Beaudry, City Clerk

Approved as to substance

_____ Date: _____, 2010
Roger W. Fraser, City Administrator
City of Ann Arbor

Sue F. McCormick, Public Service Area
Administrator, City of Ann Arbor

Date: _____, 2010

Approved as to form and content

Stephen K. Postema, City Attorney
City of Ann Arbor

Date: _____, 2010