### STATE OF MAINE



### DEPARTMENT OF ENVIRONMENTAL PROTECTION



PATRICIA W. AUO
COMMISSIONER

PAUL R. LEPAGE GOVERNOR

January 30, 2014

Mr. Jeffery LaCasse, General Manager Kennebec Water District PO Box 356 6 Cool Street Waterville, Maine 04903-0356

RE: Water Level Order Application, East Vassalboro, DEP #L-7912-36-E-M

Dear Mr. LaCasse:

Please find enclosed a signed copy of your Department of Environmental Protection Water Level Order Minor Revision permit. You will note that the permit includes a description of your project, findings of fact that relate to the approval criteria the Department used in evaluating your project, and conditions that are based on those findings and the particulars of your project. Please take several moments to read your permit carefully, paying particular attention to the conditions of the approval. The Department reviews every application thoroughly and strives to formulate reasonable conditions of approval within the context of the Department's environmental laws. You will also find attached some materials that describe the Department's appeal procedures for your information.

If you have any questions about the permit or thoughts on how the Department processed this application please get in touch with me directly. I can be reached at (207) 446-2642 or at Kathy. Howatt@maine.gov.

Sincerely,

Kathy Davis Howatt, Hydropower Coordinator

Division of Land Resource Regulation Bureau of Land and Water Quality

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# STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION 17 STATE HOUSE STATION AUGUSTA, ME 04333

## IN THE MATTER OF

KENNEBEC WATER DISTRICT Vassalboro, Kennebec County CHINA LAKE WATER LEVEL L-7912-36-E-M (approval) ) REGULATION OF WATER LEVELS

) AND MINIMUM FLOWS

) MINOR REVISION

) FINDINGS OF FACT AND ORDER

Pursuant to the provisions of 38 M.R.S.A. §§ 341-A and 840, the Department of Environmental Protection has considered the application of the KENNEBEC WATER DISTRICT with the supporting data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

# 1. PROJECT DESCRIPTION:

- A. History: In Board Order #L-9177-26-B-X, dated June 13, 1984, the Board established water level and minimum flow requirements for China Lake, located in the Towns of Vassalboro and China. Water levels on China Lake are controlled by an outlet dam in East Vassalboro. In Board Order #L-9177-26-C-X, dated November 12, 1986, the Board approved a reduction in the minimum flow rate from 25 cfs to 10 cfs at the China Lake outlet dam. In Board Order #L-7912-36-B-N, dated November 12, 1997, the Board established a new water level and minimum flow regime for China Lake. In Board Order #L-7912-36-C-M, dated April 20, 2000, the Board approved a modification in the minimum flow regime. In addition to these approvals the Board has heard various petitions and appeals of Department actions related to China Lake which did not result in changes to the China Lake Water Level Order.
- B. Summary: The applicant proposes to change Condition #1 of Board Order #L-7912-36-B-N from beginning the annual lake drawdown process on November 1 each year to beginning the annual drawdown process upon fall destratification, which occurs on or about October 1 each year. The applicant proposes to further change Condition #1 of Board Order #L-7912-36-B-N from a drawdown target of 1½ feet below spillway level to a drawdown target of 2½ feet below spillway level.
  - 1. Condition #1 of Board Order #L-7912-36-B-N reads as follows: "Beginning November 15 each year, the lake shall be drawn down to a target level of 1½ feet below spillway level. The drawdown shall occur as gradually and consistently as possible to achieve the goal of reaching the target drawdown level by ice-in."

The applicant proposes to modify Condition #1 as follows: "Withdraw water from China Lake during fall destratification (on or prior to October 1 on an annual basis) until the lake is drawn down to a target level of 2½ feet below spillway level. Drawdown will occur at a rate not to

exceed 200 cubic feet per second (cfs) and will continue for a maximum of eight (8) weeks. Changes in stream flows will be coordinated with downstream stakeholders.

When the lake water level reaches the target of 2½ feet below spillway level, outlet flow will be reduced to a rate not less than the permitted minimum flow rate, to allow the water level to rebound to a winter target level of 1½ feet below spillway level."

C. Public Participation: Several interested parties indicated support for the proposed minor revision to the China Lake Water Level Order by letter and by electronic mail. One interested party had concerns about impacts to China Lake's wetlands. Those concerns were noted by the Department and material presented by that party was reviewed and considered, and was included in the project record. No new site specific information was presented of a nature to change the Department's findings.

# 2. <u>FINDING</u>:

China Lake currently experiences nuisance algae blooms due to phosphorus concentrations. Lakeshore and watershed remedial projects designed to address and reduce external loading of total phosphorus are in place, however those actions cannot address phosphorus cycling from sediments. An increase in fall drawdown depth, timed to capture and remove phosphorus liberated from sediment during destratification, is expected to decrease the environmental impact of phosphorus on China Lake and is expected to have a positive effect on water quality over time. No additional detrimental effect is expected in the outlet stream or wetlands from the removal of phosphorus from the lake.

The proposed project is a minor change and will not significantly affect any issues identified during previous Department reviews of the project site. The project application with supporting materials was reviewed by the Department's Division of Environmental Assessment and was found to meet Department standards. Consultation was sought from the Maine Department of Inland Fisheries and Wildlife; no comments or conditions were received for inclusion into this approval.

Based on its review of the application, the Department finds the requested minor revision to be in accordance with all relevant Departmental standards. All other findings of fact, conclusions and conditions remain as approved in Board Order #L-7912-36-B-N, and subsequent Orders.

THEREFORE, the Department APPROVES the application of APPLICANT to modify Condition #1 of Board Order #L-7912-36-B-N for China Lake, SUBJECT TO THE FOLLOWING CONDITIONS and all applicable standards and regulations:

- 1. The Standard Conditions of Approval, a copy attached.
- 2. Limits of Order. This Order is limited to and includes the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. All variances from the plans and proposals contained in said documents are subject to the review and approval of the Department prior to implementation.
- 3. A sampling protocol for total phosphorus shall be developed and followed, and shall include collection and analysis of a minimum of one non-contaminated subsurface grab sample each week at the outlet dam during the phosphorus removal drawdown. Chemical analysis shall be performed by a laboratory certified to analyze for low concentrations of phosphorus (reporting limit of 1 part per billion) by acceptable methods. Sample results shall be reported (Total Phosphorus values in parts per million) annually (prior to January 1) to the Department's Division of Environmental Assessment for review.
- 4. All other Findings of Fact, Conclusions and Conditions remain as approved in Board Order #L-7912-36-B-N, and subsequent Orders, and are incorporated herein.

DONE AND DATED IN AUGUSTA, MAINE, THIS 3	DAY OF
January, 2014.	
DEPARTMENT OF ENVIRONMENTAL PROTECTIO	Filed
Mich on Ote lan	FEB 0 3 2014
For: Patricia W. Aho, Commissioner	State of Maine Board of Environmental Protection

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES...

KH/L7912EM/ATS#76840

### STANDARD CONDITIONS FOR WATER LEVEL ORDERS

THE FOLLOWING STANDARD CONDITIONS SHALL APPLY TO ALL WATER LEVEL ORDERS ISSUED UNDER THE ESTABLISHMENT OF WATER LEVELS STATUTE, TITLE 38 M.R.S.A SECTION 840, UNLESS OTHERWISE SPECIFICALLY STATED IN THE ORDER.

- 1. Noncompliance. Should the dam be found, at any time, not to be in compliance with any of the conditions of this Order, or should the owner or its designee operate this dam in any way other than specified by the conditions of this Order, then the terms of this Order shall be considered to have been violated.
- 2. Compliance with all Applicable Laws. The owner of the dam shall secure and appropriately comply with all applicable federal, state and local licenses, permits, authorizations, conditions, agreements, and orders prior to or during operation.
- 3. Inspection and Compliance. Authorized representatives of the Board, Department or the Attorney General shall be granted access to the premises by the owner of the dam at any reasonable time for the purpose of inspecting the operation of the project and assuring compliance by the owner of the dam with the conditions of this Order.
- 4. Severability. The invalidity or unenforceability of any provision, or part thereof, of this Order shall not affect the remainder of the provision or any other provisions. This Order shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.
- 5. Transfer. Unless otherwise provided in the Order, the owner of the dam may not sell, lease, assign, or otherwise transfer the dam or any portion thereof without submitting written notification to the Department for review and approval where the purpose or consequence of the transfer is to transfer any of the obligations of the owner of the dam as incorporated in this Water Level Order. Prior to any transfer of property subject to this Order, the Department shall be notified of the new owner of the dam and be provided with a signed letter from the new owner of the dam agreeing to comply with the terms of the Water Level Order. In addition to the requirements outlined in the Department's Chapter 2: Rules Concerning the Processing Applications and Other Administrative Matters, the owner of the dam shall provide the Department with evidence that public notice of the transfer of ownership has been sent to all littoral and riparian landowners (Section 21(C)), and provide sufficient evidence of title, right, or interest (Section 11(D)).