# BEFORE THE OKLAHOMA WATER RESOURCES BOARD STATE OF OKLAHOMA

IN THE MATTER of Misty Lake	)	
Dam in the SE/4 NE/4 NW/4 NW/4 of	)	
Section 34, Township 9 North, Range 2	)	NID ID: OK12578
West of the Indian Meridian, Cleveland	)	
County, Oklahoma.	)	

# SECOND CONSENT ORDER

This Second Consent Order is entered into between the Oklahoma Water Resources Board ("Board") and Summit Lake Property Owners Association and Summit Lake Villas Homeowners Association ("Respondents") pursuant to the Oklahoma Administrative Procedures Act, Section 309(E) of Title 75 of the Oklahoma Statutes. The parties waive statutory requirements of formal notice of the preparation and service of proposed Findings of Fact, Conclusions of Law and Board Order, and the entry of final Findings, Conclusions and Order.

#### I. MATTERS OF JURISDICTION AND AUTHORITY

- 1. Summit Lake Property Owners Association and Summit Lake Villa Homeowners Association, as joint owners of the dam and spillway, are responsible for the safety of the structure and for meeting the requirements placed on owners of dams by the State of Oklahoma. See 82 O.S. §§ 110.1 et seq., Chapter 25 of Title 785 of the Oklahoma Administrative Code (OAC) Chapter 785:25, specifically Section 785:25-3(a).
- 2. The Board is the state agency responsible for oversight and approval of the construction, repair, and alteration of certain dams in Oklahoma, including the Misty Lake Dam. See 82 O.S. §§110.5 and 110.10.
- 3. Summit Lake Property Owners Association previously entered into a Consent Order with the Board, effective July 8, 2015, addressing deficiencies with Misty Lake Dam and providing corrective action. Unless stated otherwise herein, the stipulations, findings, conclusions, and ordered actions in that Consent Order are hereby incorporated by reference and continue in effect.

#### II. PARTIES BOUND

4. This Order shall apply to and be binding upon the Board, Summit Lake Property Owners Association and Summit Lake Villa Homeowners Association, their agents, successors, and assigns. No change in the ownership or corporation status of any party shall alter its responsibilities under this Order.

#### III. FINDINGS OF FACT

- 5. Misty Lake Dam is an earthen dam approximately 21 feet in height and is capable of impounding a maximum of 200 acre-feet of water. Misty Lake Dam is classified as a high hazard dam as defined in OAC 785:25-3-3(2)(C), which defines high hazard dams as those where failure will probably cause loss of human life.
- 6. Pursuant to OAC 785:25-7-7, Summit Lake Property Owners Association and Summit Lake Villa Homeowners Association submitted an Emergency Action Plan (EAP) to the Board. The latest revision of that EAP was sent to the Board on May 10, 2013.
- 7. On March 13, 2015, Board dam safety staff members Yohanes, Sugeng, P.E., and Zach Hollandsworth, P.E., inspected Misty Lake Dam, accompanied by Joe Willingham, P.E., from the City of Norman. Board staff observed uncontrolled seepage from under the dam that had saturated the soil immediately north of the dam. The saturated soil extended from the foot of the dam and surrounded a nearby residence approximately 10 feet to the north. The seepage and saturated soil further extended as far as Alameda Street, the public street approximately 130 feet north of the aforementioned residence. The seepage also resulted in employees of the City of Norman closing a public sidewalk which was located 110 feet north of the foot of the dam due to safety concerns.
- 8. Following the March 13, 2015, inspection, the Board determined that the uncontrolled seepage from the dam, in violation of Sections 785:25-3-4, 785:25-3-10, 785:25-9-3, and 785:25-9-5, created an imminent peril that is so dangerous to the safety of life or property as not to permit time for the issuance and enforcement of an order after notice and hearing relative to maintenance or operation. Consequently, the Board issued an Emergency Order pursuant to OAC 785:25-9-5(a) and 82 O.S. § 110.10(B) on March 20, 2015. The Emergency Order was followed by a Consent Order on July 8, 2015 ("first Consent Order"), which directed the dam owners as follows:
  - 1. Immediately lower the lake level of Misty Lake Dam, under the direction and supervision of a registered professional engineer experienced in dam safety, to a minimum of three feet below the top of the emergency spillway, and to maintain that level until construction and/or repairs to the dam are complete;
  - 2. Submit engineering plans and specifications for the repair of the structure by no later than July 13, 2015. Construction pursuant to plans submitted on July 13, 2015, receipt of which is hereby acknowledged by Board staff is to begin no later than September 1, 2015.

- 3. Immediately Implement Level 1 of the Emergency Action Plan (EAP) for the Misty Lake Dam and to continue to implement Level 1 until construction and/or repairs to the dam are complete.
- 9. Following issuance of the Board's Emergency Order and Consent Order, the lake level at Misty Lake Dam was lowered and has been maintained at a minimum of three feet below the top of the emergency spillway, engineering plans were submitted, and an EAP Level 1 was implemented as set out in the aforementioned orders. The submitted engineering plans, which were accepted and approved by the Board, included a subsurface drain system designed to address seepage from the dam.
- 10. Maintaining the lake level at a minimum of three feet below the top of the emergency spillway until dam construction or repairs are complete will reduce the amount of seepage; the probability of the dam's failure; and therefore, potential damage caused by dam failure.
- 11. Uncontrolled seepage from Misty Lake Dam continues to present a danger to the structural integrity of the dam. Failure to take measures to control the seepage will eventually create an imminent peril to life and/or property. In order to reduce further internal erosion to the dam structure, a subsurface drain system, such as one currently proposed by the consulting engineer, must be constructed.
- 12. Dam owners failed to begin construction and/or repairs to Misty Lake Dam by September 1, 2015, as required by the first Consent Order, the good faith efforts of the Respondents to achieve compliance with the assistance of third parties notwithstanding.
- 13. Misty Lake Dam is classified as "high hazard" and is required to be inspected annually. Two inspections, completed 1/26/2021 and 8/23/22, have been received by the Board since 2016.
- 14. The "application to construct" was reapproved by the Board in May 2019, and again in May 2021. According to OAC 785:25-5-8(e) the application expired May 2023, because construction has not commenced within two (2) years after the date of Board approval of the plans and specifications.
- 15. Significant re-growth of trees and other prohibited vegetation is present on the slopes and crest and emergency spillway of the dam.

# IV. CONCLUSIONS OF LAW

- 16. Summit Lake Property Owners Association and Summit Lake Villa Homeowners Association are in violation of OAC Sections 785:25-3-10, 785:25-9-3, and 785:25-9-5, which prohibit uncontrolled seepage and internal erosion which endangers the dam. In addition to Board Rules, the Design Criteria found in DESIGN OF SMALL DAMS (1977), published by the U.S. Department Interior Bureau of Reclamation (BOR), and made part of the Board's rules pursuant to 785:25-3-4, states as follows:
  - (a) An earthfill dam must be safe and stable during all phases of the construction and the operation of the reservoir. To accomplish this, the following criteria must be met:

 $[\ldots]$ 

(b) Seepage flow through the embankment, foundation, abutments, and reservoir rim must be controlled to prevent excessive uplift pressures; piping; instability; sloughing; removal of material by solutioning; or erosion of material into cracks, joints, or cavities. The amount of water lost through seepage must be controlled so that it does not interfere with planned project functions.

DESIGN OF SMALL DAMS (1977), in relevant portion, at pp.192-93.

- 17. Misty Lake Dam is classified as high hazard because if the dam were to fail, the failure would probably cause loss of human life. See OAC Sections 785:25-3-3(b)(3) and 785:25-3-3(a)(2)(C). The minimum spillway performance standards for small, high hazard dams require that the spillway be designed to pass a 50% probable maximum flood (PMF) with one foot of freeboard. OAC 785:25-3-6(b). Previous studies have indicated that the Misty Lake Dam spillway is inadequate.
- 18. Emergency Action Plans (EAP) are required for all high hazard dams pursuant to OAC 785:25-7-7. Summit Lake Property Owners Association and Summit Lake Villa Homeowners Association are responsible for implementing the EAP in the event of an applicable emergency.
  - 19. The Board is authorized to issue an Order under the following circumstances:

When an owner fails, neglects or refuses to comply with [the Oklahoma Dam Safety] Act, rules promulgated pursuant to this act, or orders of the Oklahoma Water Resources Board, and there is no imminent peril to the public health or welfare shown, the Board may, after notice and opportunity for hearing, issue an order requiring such owner to take whatever action

the Board deems necessary to place the dam in a safe condition, meet the requirements of the act, rules of the Board, or the previous orders of the Board. Such action may include but is not limited to lowering the level of or removing all water in the reservoir, providing an adequate warning to the public downstream, repair or modification of the existing dam after having the appropriate application for approval of plans and specifications granted, cease all construction work on a dam, and implementation of an appropriate operation and maintenance plan.

# 82 O.S. § 110.10(A).

- 20. The Board is further authorized to impose daily administrative penalties against owners of dams who fail, refuse or neglect to comply with the provisions of the Oklahoma Dam Safety Act, Board rules, or orders of the Board. 82 O.S. § 110.10(C); OAC 785:25-11-1.
- 21. As stated in Paragraphs 10-12 of the Facts Asserted by Board above, the Board has determined the following conditions existing at Misty Lake Dam are violations of the July 2015, Consent Order and/or violations of Sections 785:25-3-4, 785:25-3-10, 785:25-9-3, and 785:25-9-5; of the Board's dam safety rules:
  - A. The continued existence of uncontrolled seepage from the dam;
  - B. The failure to begin construction on approved dam repairs on or before September 1, 2015, as required by the first Consent Order, the good faith efforts of the Respondents to achieve compliance with the assistance of third parties notwithstanding.
  - C. The failure to remove prohibited trees and heavy vegetation from the slopes and crest of the earthen embankment and emergency spillway area of the dam.
- 22. Therefore, the Board has authority to issue an Order pursuant to OAC 785:25-9-3 and 82 O.S. § 110.10(A) requiring Summit Lake Property Owners Association and Summit Lake Villa Homeowners Association to take corrective actions which the Board deems necessary to place Misty Lake Dam in a safe condition and to bring Misty Lake Dam into compliance with Oklahoma's Dam Safety Act and Board Dam Safety Rules, including minimum design standards for minimum spillway performance standards.

#### V. ACTIONS ORDERED

23. Summit Lake Property Owners Association and Summit Lake Villa Homeowners Association are hereby Ordered to take the following actions, if not already in compliance:

- A. Submit an "application to construct" in accordance with Subchapter 5 of Chapter 25 of Board rules.
- B. Continue to maintain the lake level of Misty Lake Dam to a minimum of three feet below the top of the emergency spillway as required in the July 2015, Consent Order, until construction and/or repairs to the dam are complete.
- C. Have the dam inspected annually by a qualified Professional Engineer registered in Oklahoma who is experienced with dams. The next inspection report must be received by no later than December 31, 2023.
- D. Clear all prohibited vegetation from the dam during construction of the subsurface drainage system but no later than March 1, 2024.
- E. Address seepage located near the right abutment of the dam with a subsurface drainage system, as proposed by the consulting engineer and previously approved by the Board. Construction of the subsurface drainage system shall begin by December 1, 2024.
- F. Continue implementation Level 1 of the Emergency Action Plan (EAP) for the Misty Lake Dam until construction and/or repairs to the dam are complete.
- G. The Board will consider alternative plans submitted by Respondents if construction pursuant to such alternative plans begin by December 1, 2024.

#### VI. PENALTIES FOR NON-COMPLIANCE

24. Failure of the Respondents to comply with the directions listed in Section VI above, titled "ACTIONS ORDERED," will result in the assessment of administrative fines allowable by law for each day the violation continues after the date set forth therein. The administrative fines assessed pursuant to this Order may be waived by the Board upon written application from the Respondents.

### VII. EFFECTIVE DATE, AMENDMENTS, AND RELEASE CONDITIONS

- 25. The effective date of this Order shall be the date on which it is approved by the Board.
- 26. This Order may be amended by mutual agreement of the Board and the Respondents. Amendments shall be in writing and shall be in effect when approved by the Board.
- 27. Certificate of Completion issued by the Board in accordance with 785:25-7-8 shall be considered Satisfaction and Release of this Second Consent Order, including the Consent Order of July 8, 2015, and the Emergency Order and Notice of Administrative Hearing of March 20, 2015. Certificate of Completion shall be conditioned upon the following:

- A. Respondent's compliance with the Actions as ordered in paragraph 23 of this Second Consent Order;
- B. In accordance with OAC 785:25-7-4, construction, enlargement, repair, alteration, or removal completed in accordance with approved plans, drawings, and specifications are certified by an engineer as defined in 785:25-5-2; and
- C. Summit Lake Property Owners Association and Summit Lake Villa Homeowners Association, give the Board Notice of Completion in accordance with 785:25-7-6.
- D. Satisfaction and Release under this section does not absolve Summit Lake Property Owners Association and Summit Lake Villa Homeowners Association, their agents, successors, and assigns- of continuing compliance with Oklahoma Water Law, the Oklahoma Dam Safety Act, and Chapter 25 of Title 785 of the Oklahoma Administrative Code with respect to the Misty Lake Dam.

## **ORDER**

OKLAHOMA WATER RESOURCES BOARD

Jennifer Castillo, Chairman

ATTEST:

Suzanne Landess, Secretary

# APPROVED:

Summit Lake Property Owners Association, By:	
Lewis Cr Holdel Signature	
Lewis C. Goidell	President
Name (Printed)	Position
Summit Lake Villas Homeowners Association, By	
Lary Dunham Signature	
Signature	_
Name (Printed)	President
Name (Printed)	Position

# **CERTIFICATE OF MAILING**

I certify that on the 27<sup>th</sup> day of September, 2023, a true and correct copy of the above and foregoing instrument was mailed via US Postal Service, Certified Mail, Return Receipt Requested to those persons named herein.

William R. Dill 401 West Main St., Ste 444 Norman, OK 73069

Chrystal Krittenbrink

Legal Assistant

Oklahoma Water Resources Board