Jon Niermann, *Chairman* Emily Lindley, *Commissioner* Catarina Gonzales, *Commissioner* Kelly Keel, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY Protecting Texas by Reducing and Preventing Pollution

June 10, 2024

William Stubbs 1385 Camp Branch Road Trinity, Texas 75862

Subject: Camp Branch Acres Dam – TX07192 Trinity County Dam Safety Inspection Follow-up

Dear Mr. Stubbs,

We wanted to extend our appreciation for allowing the Texas Commission on Environmental Quality (TCEQ) Dam Safety staff to visit the above-mentioned dam on June 4, 2024. The inspection found that the spillway (located at the left end of the dam) measured about 8-feet (ft) deep below the crest and 5-ft wide at the spillway's control section such that the control section eroded about 2.4-ft deeper and 3-ft wider than what has been observed in previous inspections. The erosion in the spillway discharge channel expanded to about 19-ft wide and 7-ft deep at the downstream toe approximately 50-ft downstream of the spillway's control section where the dam embankment (downstream toe) and the earthen discharge channel of the spillway interface. Future significant engagements would likely continue to erode the dam's spillway channel if not addressed.

The main goal is to prevent a catastrophic failure of the dam and to protect the individuals that live downstream of the dam. Therefore, during the inspection, TCEQ recommended a couple of initial steps that should be taken, which include:

- 1. Lower the lake level (using siphons, pumps, etc.) to limit excess flow though the spillway as much as possible.
- 2. Develop an Emergency Action Plan (EAP) and submit the document to TCEQ Dam Safety for review as well as to the Trinity County Emergency Management Coordinator (EMC). This document will be used to evacuate downstream residents in the event of a dam failure.
- 3. Hire a Texas Licensed Professional Engineer (PE) to evaluate the dam, spillway, and erosion. The PE should develop a plan for you moving forward and help you ensure the structure is maintained in a safe condition.
- 4. The dam, spillway, and erosion should be evaluated/inspected after every rain event that engages the spillway to ensure the dam is not structurally compromised or the erosion does not increase substantially.

As discussed during the inspection, you have two options at this time, which will decide what your next steps will include. You will need to decide if you would like to keep the dam or remove the dam. Regardless, either option will require a PE to develop plans and specifications along with any supporting documentation that is needed.

If you wish to keep the dam, then you should understand that you, as the owner of this dam, may be liable for downstream damages in the event of a dam failure, and it is your

Mr. Stubbs 6/10/2024 Page 2

responsibility to maintain the dam in a safe condition in order to prevent loss of life and limit the potential for property loss. The following is a brief list of initial items that would need to be taken:

- 1. Hire a PE to evaluate the dam and spillway. The engineer would need to develop plans and specifications to repair the erosion within the spillway channel and along the downstream toe of the dam. The repairs should be adequate to prevent future erosion and/or damage to the dam. Any plans and specifications developed for the repairs will need to be reviewed and approved by TCEQ Dam Safety before the start of construction.
- 2. Develop/finalize the EAP and have it recorded with the county EMC.
- 3. Maintain the lake at a lower level to limit flows through the spillway.
- 4. The spillway channel and inlet should be cleared of all trees and brush such that there are no obstructions within the spillway, and it can be adequately accessed as needed.
- 5. The inspection report will detail additional recommendations that would need to be taken once the initial items have been addressed.

If you wish to remove the dam, then this would release you of your liability from a dam failure and the regulatory requirements established by the 30 Texas Administrative Code (TAC) Chapter 299 would no longer be required. However, adequate erosion controls and sediment controls would need to be implemented to prevent undue sedimentation to downstream properties. There are two primary options for a dam to be removed from the regulation of TCEQ Dam Safety, which include:

- 1. Remove the entire dam to its natural channel; or
- 2. Remove enough of the dam so that it no longer provides detention (no significant differential between the upstream and downstream depth of water) during normal conditions and during the design flood of the dam. The differential is typically less than 1-ft deep but higher differentials can be approved on a case-by-case basis.

Either option of dam removal will require plans and specifications to be developed by a PE. However, the second option (remove a portion of the dam) will require additional analyses to show the dam no longer provides any detention. Nonetheless, the developed plans, specifications, and any associated analyses are required to be submitted to TCEQ Dam Safety for review and approval prior to the start of construction. The Removal Guidelines for Dams in Texas were provided to you during the inspection, which includes additional information as it relates to dam removals.

Thank you for your time and if you would like to discuss any of this in further detail, please feel free to contact me by email at levi.best@tceq.texas.gov or by phone at (512)-239-6238.

Sincerely,

Lecei Best

Levi Best, PE Dam Safety Section Critical Infrastructure Division MC-177