



MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

Mike Kehoe
Governor

Kurt U. Schaefer
Director

September 19, 2025

Augusta Shores Homeowner Association
C/O Mr. Lowell Pfenning
P.O. Box 53
Defiance, Missouri 63341

lowellpfenning@gmail.com

RE: Hickory Lake Dam (MO32042) St. Charles County

Dear Mr. Pfenning:

As a result of an inspection of the Hickory Lake Dam on September 10, 2025, I am pleased to inform you that Safety Permit S-139 has been renewed and is enclosed for your use. The permit will be valid for a period of five years from the expiration date of the last safety permit issued for the dam and will expire on October 2, 2030. At that time the dam will be reinspected by the Dam and Reservoir Safety Program at no cost to you. The permit is being issued for five years based on the downstream environmental zone classification.

Please refer to the enclosed inspection report for additional information on the inspection. If you have any questions or need further assistance, please feel free to contact Sam Hardy at (573) 368-2175. Thanks for your cooperation.

Sincerely,

MISSOURI GEOLOGICAL SURVEY

Ryan P. Stack, P.E.
Chief Engineer
Dam and Reservoir Safety Program

RPS/cjc
Enclosures

CC: guymiddleton1961@gmail.com

**STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
DAM AND RESERVOIR SAFETY COUNCIL
SAFETY PERMIT**

Pursuant to Chapters 236.400 through 236.500 of the Revised Statutes of Missouri and the rules established by the Dam and Reservoir Safety Council, and on the basis of an inspection by the Department of Natural Resources for the Hickory Lake Dam, St. Charles County, all of which are made a part hereof by reference, **PERMISSION IS HEREBY GRANTED** to Augusta Shore HOA, hereafter known as the permittee, whose address for the purpose of notices and other communications pertaining to this permit is P.O. Box 53; Defiance, Missouri 63341, which address is subject to change by written notice from the permittee, **TO OPERATE** said dam and reservoir located in U.S. Survey 1246, Township 44 North, Range 2 East, having identification number of MO32042, a dam height of 37 feet, a principal spillway elevation of 94.9 feet (site datum), an auxiliary spillway elevation of 94.6 feet (site datum), a minimum crest elevation of 97.4 feet (site datum), a reservoir area of 43 acres at the water storage elevation and approximate UTM Coordinates of 4,273,450 meters North and 690,061 meters East, Zone 15, subject to the following provisions:

GENERAL PROVISIONS:

1. No liability shall be imposed upon or incurred by the State of Missouri and/or the Dam and Reservoir Safety Council, or any of their officers, agents, employees, and members, officially or personally, on account of the granting hereof or on account of any damage to any person or property resulting from any act or omission of the permittee or any of its agents, employees, or contractors, or closed corporations or successors relating to any matter hereunder. This permit shall not be construed as estopping or limiting any legal claim or right of action of the state against the permittee, its agents, employees or contractors for any damages or injury resulting from any such act or omission by them or for violation of or failure to comply with the provisions of the permit or applicable provisions of law.
2. The permittee shall comply with all Federal, State and local laws and regulations, and shall obtain such other permits as may be required.

3. In cases where the doing by the permittee of anything authorized by this permit shall involve the taking, using or damaging of any property rights or interest of any other person or persons, or of any publicly owned lands or improvements thereon or interests therein, it is the sole responsibility of the permittee, before proceeding therewith, to obtain the written consent of all persons, agencies, or authorities concerned, and to acquire all property, rights and interests necessary therefore, including flood easements or permissions for all properties which may be inundated by the dam on a temporary or permanent basis in the upstream impoundment area below the top of dam elevation.
4. The permittee shall notify the Dam and Reservoir Safety Council in writing upon the sale or other transfer of interest in the dam or reservoir.
5. Based on conditions existing at the time of issuing this permit, the Downstream Environment Zone is Class III. Future development in the vicinity of the dam and flood plain below the dam may result in a change in classification. This change will necessitate hydraulic and structural upgrading of the dam so the dam is in compliance with the rules and regulations of the Missouri Dam and Reservoir Safety Council. Permittee or its representatives, successors or assigns shall perform any such upgrading upon a change in classification and upon notification from the Missouri Dam and Reservoir Safety Council.
6. The permittee shall not alter, enlarge, reduce, repair or remove the dam, reservoir or appurtenances without first obtaining a construction permit from the Dam and Reservoir Safety Council.
7. The permittee shall immediately notify in writing, the Chief Engineer of any conditions relating to the structural stability of, hydraulic capacity of, or seepage through the dam discovered during the term of this permit which may differ from those conditions identified in the renewal inspection summary.
8. The terms and provisions of this permit shall extend to and bind the successors in authority of the Dam and Reservoir Safety Council and the legally assigned successors in interest of the permittee.
9. Maintenance of the dam and reservoir herein permitted shall be the responsibility of the permittee.
10. The term of this permit shall be five (5) years from the date of issue expiring on October 2, 2030. The permittee shall apply for renewal not less than sixty (60) days prior to this expiration date.

Executed at Rolla, Missouri on this 19th day of
September 2025

DAM & RESERVOIR SAFETY COUNCIL

By _____
Chief Engineer
Dam and Reservoir Safety Program



ID #: MO32042	HICKORY LAKE DAM	INSPECTION DATE: September 10, 2025
ST. CHARLES COUNTY	PERMIT NUMBER: S-139	HAZARD CLASS: III
EARTHFILL	INSPECTION TEAM: Scheible/Skinner/Hardy	PLSS: T44NR02ES05

DAM & RESERVOIR SAFETY PROGRAM DAM INSPECTION REPORT

OWNER:	AUGUSTA SHORES HOMEOWNERS ASSOCIATION
ADDRESS:	C/O LOWELL PFENNING
	P.O. BOX 53
CITY/STATE/ZIP:	DEFIANCE, MISSOURI 63341
TELEPHONE:	636-236-5826
EMAIL:	lowellpfenning@gmail.com cc guymiddleton1961@gmail.com

SPILLWAY TYPE(S):	PRINCIPAL	5 ft x 5 ft concrete riser with a 36 inch RCP discharge pipe
	AUXILIARY	10-foot wide concrete lined trapezoidal channel inside a 100 foot wide open channel

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ENGINEER CERTIFICATION

- ☒ I hereby certify that HICKORY LAKE DAM was inspected in accordance with RSMO 236.400 through RSMO 236.500.
- ☒ I hereby certify that HICKORY LAKE DAM did not have any observed defects that required correction at the time of the inspection.
- ☒ Judgement of Slope Stability – The embankment and appurtenant structures appeared to be in good overall condition at the time of the inspection, with no indications of slope instability or excessive seepage.
- ☐ Defects were found that will have to be corrected prior to the permit being renewed.



INSPECTING ENGINEER
Sam Hardy



INSPECTING ENGINEER
Jerry Scheible, PE
Missouri Engineer, PE-2001018805



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INSPECTION CHECKLIST

Item	Condition	Issue	Comments
1. Upstream face/riprap	NP		
2. Crest	NP		
3. Downstream face	NP		
4. Left groin	OR	Seepage	Continue to monitor the seepage and wet areas on the downstream slope. If the flow rate or color of the water changes, contact the Dam and Reservoir Safety Program (DRSP).
5. Right groin	OR	Seepage	Continue to monitor the seepage and wet areas on the downstream slope. If the flow rate or color of the water changes, contact the Dam and Reservoir Safety Program (DRSP).
6. Toe of dam	OR	Seepage	Continue to monitor the seepage and wet areas on the downstream slope. If the flow rate or color of the water changes, contact the Dam and Reservoir Safety Program (DRSP).
	MR	Vegetation	Remove encroaching vegetation in the toe area.
7. Principal spillway	NP		
8. Principal spillway outlet	NP		
9. Auxiliary spillway	OR	Vegetation	Monitor the joints and any cracks that have formed in the concrete spillway. They should be kept clear of vegetation growth and sealed with an appropriate sealant to prevent freeze/thaw damage and water from eroding the subgrade.
10. Auxiliary spillway outlet channel	NP		
11. Embankment drains	NA		
12. Lake drain gates/valves	MR	Vegetation	Clear the excess vegetation from around the outlet pipe to allow proper access and regular visual inspection. The operability of the drawdown valve is unknown. If the valve is operable, it is recommended to be exercised annually to ensure future operability.
13. Other	NP		

NP = No observable problem
EC = Emergency Condition

MR = Maintenance Required
OR = Observation Required

DO = Defect Observed
NA = Not Applicable



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SURVEY and FREEBOARD DATA

STATION	ELEVATION (ft.) ¹	COMMENTS
TBM	100.0	Temporary benchmark – Nail in power pole, left side of AS, at edge of parking lot
PS	94.9	Principal spillway inlet – 5 ft x 5 ft concrete riser with a 36 inch RCP discharge pipe
AS	94.6	Auxiliary spillway sill – 10 foot wide concrete lined trapezoidal channel inside a 100 foot wide open channel
Dam	97.4	Low point on crest of dam
WL	94.2	Water level on day of inspection
Other	NA	NA
Freeboard (ft.)	Available	Required
	2.5	1.7 (class II)

¹Elevations are based on an assumed, local site datum of 100.0 feet at the temporary benchmark

Equipment used ☒ GPS system ☐ Auto level and rod

INSPECTION PHOTOS



Upstream face



Downstream face



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Principal spillway inlet



Principal spillway outlet



Principal spillway channel – looking downstream



Auxiliary spillway – looking right



Auxiliary spillway – looking upstream (note vegetation in joints)



Auxiliary spillway – looking downstream (note vegetation in joints)



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Toe – looking left (note vegetation and seepage)



Right groin (note seepage)