

ALIEUS ENGINEERING, LLC

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October 3, 2022

Mike Pariza
7102 Valhalla Trail
Madison, Wisconsin 53719

Dear Mike,

On September 7, 2022, I inspected the Virginia Lake Dam. Included are the following items: a copy of the Consultant Inspection Process Form, my Dam Inspection Report, photos of the dam, photo identification sheet and Dam Ownership Fact Sheet. I have also included a copy of the "Pocket Safety Guide for Dams and Impoundments" for when you do your periodic inspection of the dam. I did find some items that need to be addressed and estimated the time frame for completion of these items. The Wisconsin Department of Natural Resources will determine the actual completion date(s) for the items.

1. Dam Warning Sign viewable from the flowage and Downstream Hazard signage should be installed.
Action required by June 1, 2023
2. Rodent damage repaired and rodent extermination should be completed.
Action Required by June 1, 2023
3. Vegetation should be removed from around the toe drain outlets and around the water control outlet end section.
Action by June 1, 2023
4. Investigate the non-metallic pipe downstream of the water control structure outlet end section.
Action by June 1, 2023
5. Embankment and auxiliary spillway grass should be mowed to provide 4" to 6" cover.
Action should be completed as necessary during growing season.
6. Emergency Action Plan should be updated.
Action by January 1, 2023

You should continue to perform your routine inspections on at least a semi-annual basis (Spring and Fall) and after any severe storm event.

The included Dam Ownership Fact Sheet includes suggestions for tree, brush and related root systems removal. Contact the Wisconsin Department of Natural Resources Water Management Engineer for Sauk

County regarding approved methods for tree, brush and related root systems removal.

The preceding list of items should **not** be considered all inclusive. The Dam Inspection Report should be **read** in its **entirety**.

The WDNR will receive a copy of the report and related material via a copy of this letter.

The WDNR will follow-up with a letter after the report has been reviewed.

The letter will include items that need to be addressed and a time frame for completion.

If you have any questions or concerns, please contact me at 608-213-5167.

Sincerely,

Alieus Engineering, LLC represented by:
Dominick Mangardi, P.E
Principal
Alieus Engineering, LLC

cc: Michael Stone, P.E. - Water Management Engineer – Wisconsin Department of Natural Resources,
3911 Fish Hatchery Road, Fitchburg, WI. 53711-5367 - w/copy of Dam Inspection Report

Consultant Inspection Process Form – for dam inspected by outside consultant

Task	<input checked="" type="checkbox"/>	Date Completed	Responsible Party	
			Owner/ Consultant	DNR
Inspection Notification *Notify dam owner of DNR inspection date/time			X	
File Research *Review last inspection report, photos, database, aerial photos, ownership information, etc.		9/6/2022	X	
Field Inspection *Physically inspect dam, conduct survey if required		9/7/2022	X	
Inspection Checklist *Fill out form documenting observations during inspection		9/7/2022	X	
Photo Documentation *Print and label photos, back up digital copies		10/3/2022	X	
Review Sufficiency Rating *Complete Sufficiency Rating questionnaire based on current condition of the dam.				X
Review Hazard Rating *Review downstream development for changes, check if downstream zoning is adopted			X	
Review EAP *Review and update EAP, submit to DNR			X	
Review IOM *Review and update IOM, submit to DNR			X	
Inspection Report Submitted to DNR Regional Engineer		10/4/2022	X	
Inspection Report Submitted to DNR Central Office				X
Response Letter *DNR letter which outlines work needed to be completed on the dam based on consultant inspection				X
Update database *Update owner contact information, follow-up dates, inspection dates, etc. on DNR database				X
Notify DNR of planned work * Determine if plans and specs are needed for the proposed dam work, issue proper permits or plan approvals			X	
Complete Required Elements *Owner completes required items listed in inspection report			X	
Enforcement *Pursue enforcement action against the dam owner if the required elements are not completed by the appropriate deadlines				X

Dam Name: VIRGINIA LAKE	Field File #: 56.35
Engineer Completing Form: DOMINICK MANGARDI	Key Sequence #: 829

Certification for Dam Inspection

Local Dam Name (PRINT): VIRGINIA LAKE

DNR Field File #: 56.35

I certify that I have completed the checklist truthfully and factually:

Certifier's Name (print): DOMINICK MANGARDI

Company Name: ALIEUS ENGINEERING, LLC

Signature: Dominick Mangardi

Date: 9/7/2022

Multidisciplinary: I am experienced in the technical disciplines or I am working with other professionals experienced in the technical disciplines to properly inspect this dam and appurtenant works. Technical disciplines, in addition to general civil engineering, may include geotechnical, geological, hydrologic, structural, and mechanical:

Yes No

Engineer's Wisconsin Registration Number: 13019-6

Expiration Date: 07-31-2024

Engineer's Seal (optional):

Name of Dam: VIRGINIA LAKE Date: 9/7/2022
 Inspectors: DOMINICK MANGARDI F.F.#: 56.35
 Owner's Name: LAKE VIRGINIA MANAGEMENT DISTRICT Key Seq #: 829
 Street: 7102 VALHALLA TRAIL
 City, State, Zip Code: MADISON, WI. 53719
 County: SAUK Phone: (608)271-5169
 Weather and Site conditions: SUNNY, WARM Email: mwpariza@gmail.com

GENERAL

Item	N	P	Notes/ Observations	Action		
				M	I	R
1 Monuments/Benchmarks	<input checked="" type="checkbox"/>	<input type="checkbox"/>	STRUCTURE REPLACEMENT PLAN SHOWS BRASS MONUMENT. UNABLE TO LOCATE. Location: 900.58'; SHOWN ON STRUCTURE REPLACEMENT PLAN. Elevation: NOT LISTED Datum:			
2 Pool Level	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NO RECORD.			
3 Access Road	<input checked="" type="checkbox"/>	<input type="checkbox"/>	PAVED ROAD ALONG TOP OF DAM, OFF S.T.H, 33.			
4 Signage/ Security	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Portage/route: NONE Dam Warning: "DANGER-OPEN WATER" SIGNS ON U/S SLOPE. Downstream Hazard: NONE Fencing/Railings/Catwalks: N/A DAM WARNING SIGNS NEED TO BE INSTALLED.			2

Additional Comments:
 DIRECTIONS RIGHT (RT) AND LEFT (LT) IS STANDING ON TOP OF DAM AT CONTROL STRUCTURE LOCATION LOOKING DOWNSTREAM.

N= Noted; P= Photo; M= Monitor
 I= Investigate; R= Repair
 F.F.= Field File; RT = Right; LT = Left
 U/S = Upstream; D/S = Downstream

Action Suggestion 1. Requires immediate action
 2. Plan to do soon
 3. Do when convenient

SPILLWAY--PRINCIPAL - WHISTLE TUBES					Action			
Item	N	P	Notes/ Observations			M	I	R
1 Whistle Tubes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Full circle/Whistle tube	Half circle riser	Glory hole (Drop Inlet)			
A. Inlet Riser Diameter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	60" INSIDE DIA. - RCP					
B. Outlet pipe * Dia: 30" Type: RCP	<input checked="" type="checkbox"/>	<input type="checkbox"/>						
C. Low level draw /Inlet Pipe What kind & Size:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	PLAN SHOWS 36" DIA - RCP, SUBMERGED, UNABLE TO VIEW.					
D. Debris/Trash Rack	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NONE VIEWED - SUBMERGED INLET.					
E. Antivortex	<input checked="" type="checkbox"/>	<input type="checkbox"/>	PLAN SHOWS HOOD INLET. SUBMERGED, UNABLE TO VIEW.					
F. Material	<input checked="" type="checkbox"/>	<input type="checkbox"/>	REINFORCED CONCRETE PIPE.					
G. Alignment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ALONG OLD STREAM CHANNEL.					

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Action Suggestion 1. Requires immediate action
 2. Plan to do soon
 3. Do when convenient

Controlled = Gated Uncontrolled = Overflow

Additional Comments and/or Sketch:

CREST WALL BELOW STOPLOGS. ACCORDING TO PLANS,
 VIEWED PREVIOUSLY.

* Type of Concrete Problems: Spalling, cracks, exposed rebar, misalignment, joints, bug holes, efflorescence, popouts,
 honeycombing, scaling, craze/map cracks, isolated crack, disintegration, other

Dam Inspection Checklist

Dam Name: VIRGINIA LAKE F.F.#: 56.35

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