ALIEUS ENGINEERING, LLC

6300 South Avenue Middleton, WI. 53562 Phone (608) 213-5167 Fax (608) 836-3576 alieusengineering@chorus.net

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

| | | | Responsib | le Party |
|--|---|-----------|------------|----------|
| Task | 1 | Date | Owner/ | DND |
| 1 2 3 K | Y | Completed | Consultant | DNR |
| Inspection Notification | | | х | |
| *Notify dam owner of DNR inspection date/time | | | л | |
| File Research | | | | |
| *Review last inspection report, photos, database, aerial photos, ownership information, etc. | | 9/6/2022 | х | |
| Field Inspection | | | T | |
| *Physically inspect dam, conduct survey if required | | 9/7/2022 | Х | |
| Inspection Checklist | | | T | |
| *Fill out form documenting observations during inspection | | 9/7/2022 | Х | |
| Photo Documentation | | / | | |
| *Print and label photos, back up digital copies | | 10/3/2022 | Х | |
| Review Sufficiency Rating | | | | |
| *Complete Sufficiency Rating questionnaire based on current condition of the dam. | | | | х |
| Review Hazard Rating | | | | |
| *Review downstream development for changes, check if downstream zoning is adopted | | | х | |
| Review EAP | | | | |
| *Review and update EAP, submit to DNR | | | Х | |
| Review IOM | | | | |
| *Review and update IOM, submit to DNR | | | Х | |
| Inspection Report Submitted to DNR Regional Engineer | | 10/4/2022 | Х | |
| 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 | | | | х |
| Update database | | | | |
| *Update owner contact information, follow-up dates, inspection dates, etc. on DNR database | | | | х |
| Notify DNR of planned work | | | | |
| * Determine if plans and specs are needed for the proposed dam | | | x | |
| work, issue proper permits or plan approvals | | | | |
| Complete Required Elements | | | 77 | |
| *Owner completes required items listed in inspection report | | | Х | |
| Enforcement | | | | |
| *Pursue enforcement action against the dam owner if the required elements are not completed by the appropriate deadlines | | | | х |

| Dam Name: VIRGINIA LAKE | Field File #: 56,35 |
|--|----------------------------|
| Engineer Completing Form: DOMINICK MANGARD | Key Sequence #: 829 |

Version 5/13/2010

Certification for Dam Inspection

Local Dam Name (PRINT): <u>VIRGINIA</u> LAKE DNR Field File #: <u>56.35</u>

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/ | 7857 |
|--|------------------------|--|-----------------------------------|---------|-------------------|
| Inspectors: DOMINICK MANG | ARDI | 00) 17.9 1700 | | 56. | |
| Owner's Name: LAKE VIRGINIA | MANAGEME | NT DISTRICT | Key Seq #: | | |
| Street: 7102 VALHALLA TR | AIL | and a second | | 02 | |
| City, State, Zip Code: MADISON, | | | | | |
| County: SAUK | | | Phone: (608)271 | -51 | 69. |
| Weather and Site conditions: SUNNY | WARM | | Email: muparizo | | |
| | P | GENERAL | | A | ction |
| Item N P | sa bu faiste zite aidt | Notes/ Observatio | ns | M | I R |
| 1 Monuments/Benchmarks | | | IT PLAN SHOWS | 171 | |
| Location: | BRASS MON | UMENT, UNAB | LE TO LOCATE. | | |
| Elevation: 900 | .58' SHOWN | ON STRUCTURE | E REPLACEMEN | TPL | AN. |
| Datum: NO7 | LISTED | · · · · · · · · · · · · · · · · · · · | | | |
| | | | 2" (7 - 2° 0.91 | | |
| 2 Pool Level | NO RECO | RD. | | | |
| Normal/Operating: | | | | | |
| Maximum: | | | | | 10.00 |
| Minimum: | ٦ | | | | |
| 3 Access Road | DAVED DO | | 2 × Du | - | |
| J Attess Road | OFF S.T. H | AD ALONG TO | POF DAM, | - N | |
| | OFF 3.1. H | , 33. | | | |
| 1 Signagal Scomits | | | & preferradore de la | 2001.01 | |
| 4 Signage/ Security Portage/route: | 1-1-15 | | and which the strain of the state | | 2 |
| Dam Warning: | NONE | IN MATER SIC | NS ON 1/5 510 | DE | |
| Downstream Hazard: | NONE | V WHILE JIG | NS ON YS SLO | PE, | |
| Fencing/Railings/Catwalks: | N/A . | | | | |
| | I WAENING | SIGNS NEED T | D BE INSTALL | LED. | 5 5 mil |
| Additional Comments: | | | | | |
| DIRECTIONS RIGHT (RT |) AND LEFT (| LT) is STAND | ING AN TOP | DE | 8.23 C. |
| DAM AT CONTROL ST | RUCTURE I | DEATION 100 | KING DAMALST | PEAN | ~ |
| | | | TING POUNCET | n Grif | 10.0 |
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| | | | | | |
| N= Noted; P= Photo; M= Monitor | Action Suggestion | 1. Requires immediate a | action | | |
| I= Investigate; R= Repair | sector ouggestion | 2. Plan to do soon | ic (10)] | | |
| F.F.= Field File; $RT = Right$; $LT = Left$ | | 3. Do when convenient | | | |
| U/S = Upstream; D/S = Downstream | | er bo mien convenient | | | |
| | | | | | 1.1 |
| | | ection Checklist | | | |
| Dam Name: VIRGINIA LAKE | F.F.#: 56.35 | a reporter ten esta da la | Date: 9/7/2022 1 | Page Z | of 10 |
| | | | t-f | 0 | international and |

| | | GENERAL | (Cont.) | | | | 246 2 4 247 2 14 |
|---|--|----------------------|---------------------------------------|----------------------|-------|-----------------------|---------------------|
| 5 Hazard Section | | | | | | namesoonika perintipa | |
| A. D/S Development | X | | | | | | |
| - | FEW | | | | | | |
| | | t = D/s | | | | | |
| Type (Residential, Commercial, | PECI | DENDE | · · · · · · · · · · · · · · · · · · · | | | | |
| Industrial): | | DENCE | | | | | |
| B. Channel Crossing | XIT | MEASUREM | ENTS FROM 10/2 | 20/11 INSPECTION | T | | |
| 0 | Bridge | | le, Other (Explain) (Circle | | | | |
| Dimensions: | 10.7 | 5'4 AVE 1.215 | TH X 9.1' AVE. | HEIGHT V/2 BR | inte | 0.04 | |
| D/S distance: | 2500 | 1 - | TH A TOLE HVE. | TEIGHT. IS ON | 060 | oper | NING |
| Traffic Level (Local, CTH, | | | | | | | |
| Rail Road, STH, Interstate, etc): | 1 | | | | | | |
| C. Distance to nearest D/S | | | | | | - | |
| community/impoundment: | A 48 | 300 2 N/3 TO | COPPER CREEK | R. 1200' ± D/S | ALOI | VG | |
| | ROPPE | R CREEK T | BARABOO RIV | ER. 4 MILES ± | P/s | ALD | NG |
| Iname. | DARF | 1000 KIVER | TO ROCK SPR. | INGS. | | | |
| D. Anticipated Hazard (based | XL | | | in the second second | | | |
| on landuse and zoning): | P L | UW | | | | | |
| E. Dam Failure Analysis | X | | | | | | |
| Date Completed/Approved | P ol | 1/2013 | | | | | |
| Is map available? | | | | | | | |
| Are map & profile adopted? | | | | | | | |
| List adoption date: | plantas annound | | | | | | |
| | And and a second | 1/2013 | | | | | |
| Verify validity of failure mode: | X | | | | | | |
| Varify validity of DEA | | | | | | | |
| Verify validity of DFA | percent of the second s | | | | | | |
| conclusions: | | 0 | | | 1 | | |
| F. Emergency Action Plan | YN | Comm | ients, Explanation, and D | lescription | M | 1 | R |
| 1. Current plan posted? | | | | | | | |
| 2. Understood by Operator? | | | ノノマウト | | | | |
| 3. Warning systems? | K | | | | | | |
| 4. Certification of last test? | | | | | | | |
| 5. Remote operation? | | | | | | | |
| 6. Revision Date? | | | | | | | |
| 7. Habitable structures? | | | | | | | |
| 8. Recreation areas? | | | | | | | |
| 9. Changed hazard potential? | $\square X$ | | | | | | |
| 10. New development? | | | | | | | |
| 11. Other comments? | X | | | | | | |
| Additional Comments: | | | | | | | |
| EAP SHOULD BE 1 | JP DA- | TED. | | | | | |
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| | 19930154 | dalleeding a dulpski | A choit Stagestina - F | 0.04 - 64001001 | | | |
| N= Noted; P= Photo; M= Monitor | A | action Suggestion | 1. Requires immediate act | tion | | | |
| = Investigate; R = Repair | | | 2. Plan to do soon | | | | |
| F.F.= Field File; $RT = $ Right; $LT = 1$ | | | 3. Do when convenient | | | | |
| U/S = Upstream; D/S = Downstream | | | | | | | |
| | | | pection Checklist | | | | |
| Dam Name: VIRGINIA LA | KE I | .F.#: 56.35 | | Date: 9/7/2022 | Page. | 3of | 10 |

| | EMBANKMENTS | | |
|--|--|-------------------|-------------|
| escription: | CONTRACT STREET, IS (CARL) | | Action |
| | | | M 1 |
| Item | N P Location on Embankment and De | ficiency | |
| Vegetation: | No problem | | 4.4.4 |
| A. Trees | XINONE | | |
| Quantity (<5,sparse,dense): | | | |
| Diameter: | | | |
| Location: | and the second secon | | |
| | | | |
| B. Brush | XNONE | | |
| Quantity (sparse, dense): | | | L |
| Location: | | | |
| | | | |
| C. Ground cover | | | TTT |
| Type (grass, crown vetch,other): | GRASS | | Land |
| Quantity (bare, sparse, adequate, | | | |
| dense): | 110-4-11 | | |
| Appearance (too tall, too short, | | | |
| good): | GOOD | | |
| Erosion | No problem Not applicable Could not | inspect | COLUMN TO A |
| A. Wave erosion (Beaching): | X MINOR | mspeet | I T |
| Scarp: Length/ Width: | | | |
| Location: | | | |
| Docution | | | |
| B. Runoff Erosion (Gullies) | X NONE VIEWED. | | |
| Quantity: | AL NORCE VIEWED. | | |
| Length/ Width/ Depth: | | | |
| Location: | | | |
| Location. | | | |
| Instabilities | No problem Not applicable Could not | to company of the | 10.000.000 |
| A. Slides | No problem Not applicable Could not | Inspect | 1 1 1 |
| Transverse: | | | |
| Longitudinal: | mini no vi se se segura en la sectore de la se | | |
| Scarp: Length/ Width: | | | |
| Crack Length/ Width: | | | |
| Crack Length/ Within. | | | |
| B. Cracks: | NONE | 0.0010.00 | |
| Transverse: | X NOWE | | |
| Longitudinal: | | | |
| Length/ Width/ Depth: | | | |
| Location: | | | |
| Other: | | | |
| other. | | | |
| C. Bulges/ Depressions | X NONE | | T T T |
| C. Durges/ Depressions Size: | | | |
| Height/ Depth: | | | |
| rieigni/ Deptil. | | | |
| D. Slope (Too Steep) | X DIS-TOO STEEP | | 1 1 1 |
| U/S, D/S | // V/3 - 100 5120F | | |
| 010, 010 | Action Suggestion 1. Requires immediate action | | |
| Noted: D- Dhoter M- Marit | ACTIVITY SHUMPSTION I KACING Immodiate action | | |
| Noted; P= Photo; M= Monitor | | | |
| Investigate; R= Repair | 2. Plan to do soon | | |
| Investigate; R = Repair F.= Field File; R T = Right; L T = 1 | 2. Plan to do soon3. Do when convenient | | |
| Investigate; R = Repair F.= Field File; R T = Right; L T = 1 S = Upstream; D /S = Downstream | 2. Plan to do soon3. Do when convenient | | |
| Investigate; R = Repair F.= Field File; R T = Right; L T = 1 S = Upstream; D /S = Downstream | 2. Plan to do soon3. Do when convenient | | |
| Investigate; \mathbf{R} = Repair F.= Field File; \mathbf{RT} = Right; \mathbf{LT} = 1 S = Upstream; $\mathbf{D/S}$ = Downstream Additional Comments: \mathbf{GRA} | 2. Plan to do soon 3. Do when convenient SS MOWED, LAYING ON SLOPE | | |
| Investigate; R = Repair F.= Field File; R T = Right; L T = 1 S = Upstream; D /S = Downstream | 2. Plan to do soon 3. Do when convenient SS MOWED, LAYING ON SLOPE | | |
| Investigate; \mathbf{R} = Repair F.= Field File; \mathbf{RT} = Right; \mathbf{LT} = 1 S = Upstream; $\mathbf{D/S}$ = Downstream Additional Comments: \mathbf{GRA} | 2. Plan to do soon 3. Do when convenient SS MOWED, LAYING ON SLOPE | | |
| Investigate; \mathbf{R} = Repair F.= Field File; \mathbf{RT} = Right; \mathbf{LT} = 1 S = Upstream; $\mathbf{D/S}$ = Downstream Additional Comments: \mathbf{GRA} | 2. Plan to do soon 3. Do when convenient SS MOWED, LAYING ON SLOPE | | |

| 3 1 12 8 | | | | | | A | ctio |
|--|----------|------------------------|--|------------|---|------------------|-------------|
| Item | N | P monthada | Notes/ Ol | servations | /// | | 1 |
| Slope Protection | | No problem | Not applicable | | not inspect | 1.11 | 1 |
| A. Type (none, riprap, wave berm, concrete slabs, loose formed | X | MINOR | | | | | |
| concrete/asphalt): | | | | | alateratele | | |
| B. Condition: | X | OK . | | | | | |
| Other A. Rodent burrows (few, many) | | No problem | Not applicable | Could r | not inspect | | 0 |
| Location: | | U/5 = D/5 . | SLOPES | BE MOL | ,ES | | 2 |
| B. Ruts Length/ Width/ Depth: Location: | \times | NONE V | ILEWED | | 1993 Source and States | | |
| C. Other | | | | | t (n où 10 stenit (tr) a d ^y ≋ 25 | | |
| Alignment | X | No problem | Not applicable | Could r | 10t inspect | in the second | |
| A. Vertical | X | GOOP | 2.27 | 2 - 7 - 1 | store Giovension - 1 | ars size / | 1 |
| Low area: Elevation Difference: Location: | | | | | | 22 | |
| B. Horizontal | \times | GOOD | | | and a starter of the second | | 1. |
| | | | | | | kingan mar basis | |
| C. Width | | GOOD | | | 2 10 CV 10 202-2 | | (there is a |
| Too narrow: | - | | | | | L | |
| Location: | | | | | | | |
| Тое | | No problem | Not applicable | Could r | not inspect | | 1 |
| Cracks/Slumps: Embankment drains: | | | PHOTOS | C 4 1 | | | - |
| Type/Flow: | 65A | CMP, HAR | REMOVED. | ow w/w | EGETATION. 1 OUTLET END | SECT / | 171 |
| Hummocky: | - | | | | | | |
| Seepage | | No problem | Not applicable | Could n | not inspect | | |
| Wet area: Boil: | X | D/S-RT | | | | 2 | 2 |
| Sinkhole: Aquatic vegetation: | X | - D/S - RT | έ LT. | | | | |
| Rust colored deposits: Other: | X | D/5-RT | | | | | |
| Sediment in Flow: | | HARD TO V | NEW W/VEGE | ETATION | / http://www. | | |
| Flowrate: Location: | - | | | | | al) equi | |
| Noted; P= Photo; M= Monitor | | Action Sugges | tion 1. Requires imm | | anti-oni si Coola | | 10.1 |
| nvestigate; R = Repair .= Field File; R T = Right; LT = I | | | Plan to do so Do when con | | | | |
| = Upstream; D/S = Downstream | | | | | munitive and the 201 | niestan' | |
| Additional Comments: PRIVA AY BE SOURCE OF | ATE W | E LAND D, ATER D/S. | K-RT OF DA -RT OF OUTL | ET EN | AQUATIC VEG D SECTION. | SETATI | OA |
| | | | | | | | |
| | | | | | | | |

| DAPTNB | SPILLWAYPRINCIPA | L - WHISTLE TUBES | Action |
|---|--|--|-----------|
| adital. Item | N P Note | es/ Observations | MI |
| 1 Whistle Tubes | Full circle/Whistle tube | alf circle riser Glory hole (Drop Inl | |
| A. Inlet Riser Diameter | XX 60" INSIDE PI | | |
| | | | |
| B. Outlet pipe * Dia: 30" Type: RCP | | | |
| | | | |
| C. Low level draw /Inlet Pip What kind & Siz | UNABLE TO VIEW. | A-RCP, SUBMERE | ĒD, |
| D. Debris/Trash Rack | X NONE VIEWED- | SUBMERGED INLET. | a Isb si |
| E. Antivortex | V PLAN SHOWS HO UNABLE TO VIEW. | OD INLET. SUBMERG | ŧD, |
| F. Material | X REINFORCED | CONCRETE PIPE | |
| | | | LL |
| G. Alignment | X ALONG OLD ST | REAM CHANNEL. | |
| | | Contra Cignorree. | |
| C = Field File; RT = Right; LT S = Upstream; D/S = Downstre ditional Comments and/or SI | am Controlled = Gated U | en convenient ncontrolled = Overflow | lanas? d |
| | BELOW STOPLOGS | = 1000000000000000000000000000000000000 | 1- |
| VIEWED PREVIE | | S. ALLOKVING TO FLAI | vS. |
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| | Spalling, cracks, exposed rebar, misaligr | unent, joints, bug holes, efflorescence, j cks, isolated crack, disintegration. other | Compouts. |
| | Spalling, cracks, exposed rebar, misalign honeycombing, scaling, craze/map crac Dam Inspection Che | cks, isolated crack, disintegration, other | popouts, |

| o Frida) | | unitarrant O Sector | [3] X-1 | irem | Action |
|--|-------------|--|---|----------------------------------|--------------|
| Item | IN | Р | Notes/ Observations | and a second | MIII |
| 1 Outlet Erosion Control | | No problem | Not applicable Could not | inspect | |
| A. Type (none, endwall, plunge pool, energy dissipation structure rock lined channel, apron) | R | CP END SECT. | | adia | 8. 9x1c |
| B. Scour | | UNABLE TO | VIEW, | - 19 (J | |
| C. Material | | 1 | | 1999 200 199 | 1 2 |
| a. Riprap: Avg Diameter Condition (adequate, sparse displaced, weathered) Bedding fabric- (Yes/ No) | U | S-RT LT BESIG NABLE TO VIEW | E OUTLET PIPE END BECAUSE OF VEGE | SECTION TATION. | • |
| b. Concrete * Dimensions/Location | | | | | |
| Dimensions/Location | | N/A | | | 1 1 1 |
| Misalignment Location Description | : | | | | |
| E. Separated Joint / Loss of Joint Material: | | N/A | | 1651 | |
| Location: Description: | 1 | | | | |
| F. Natural | | N/A | L) = Leit. creanControlled = Cat. d | не и т = 1 9 ми. 1979 – Сома | |
| | | | | ommenis on Voi | ⊃ (umpl)if b |
| 2 Undermining Location: Description: N= Noted; P= Photo; M= Monitor | | | Not applicable Could not | | 2 |
| = Investigate; R= Repair 7.F.= Field File; RT = Right; LT = J/S = Upstream; D/S = Downstream | | | Plan to do soon Do when convenient Uncontrolled = Overflow | | |
| Additional Comments: | 1 | controlled Gated | Cheditroned - Overnow | | |
| | | | TO VIEW/INSPE | | |
| RIPRAP BESIDE O TRAVERSING IT PRI | DTO | ET END SECTI | ON WAS SLIPPERY | AND MA | ÐE |
| | | | NON-METALLIC PIPE | F IS EPO | 4 |
| VEGETATION AROUN THE WATERWAY SHO | VD | OUTLET END S | ECTION AND IMMERIC | TLELY D/S | TN IN |
| | | | | | |
| * Type of Concrete Problems: | Spal hor | ing, cracks, exposed rebar neycombing, scaling, craze | , misalignment, joints, bug holes, effl /map cracks, isolated crack, disintegr | orescence, popol ation, other | its, |
| | | Dam Inspect | on Checklist | | |
| Dam Name: VIRGINIA LA | THE | F.F.#: 56.35 | Date: 9 | 17/2022 Page | 7 of 10 |

| Item N P Notes/Observations M 1 Dimensions Image: State of the state o | A managero | |
|--|------------------------|-----------------|
| Item N P Notes/Observations M 1 Dimensions Image: Second | ctio | n |
| 1 Dimensions Length/Width: LENGTH @ CREST # 35' (PLAN SHOWS 50'); WIDTH # 3 Outfall Slope: # 2½:1 2 Type (turf, reinforced turf, riprap, block, concrete): TURF; CREST IS ASPHALT PAVED ROAD. 3 Signs of usage NONE (debris, bent grass, etc.): No problem A. Trees NONE Quantity (<5, sparse, dense): | I | F |
| Length/Width: $LENGTH @ CREST \approx 35' (PLAN SHOWS 50'); WIDTH \approx 3 Outfall Slope: \approx 2'_2:1 2 Type (turf, reinforced turf, riprap, block, concrete): \pi URF; CREST IS ASPHALT PAVED ROAD. inprap, block, concrete): \pi URF; CREST IS ASPHALT PAVED ROAD. inprap, block, concrete): \pi URF; CREST IS ASPHALT PAVED ROAD. inprap, block, concrete): \pi URF; CREST IS ASPHALT PAVED ROAD. inprap, block, concrete): \pi URF; CREST IS ASPHALT PAVED ROAD. inprap, block, concrete): \pi URF; CREST IS ASPHALT PAVED ROAD. inprap, block, concrete): \pi URF; CREST IS ASPHALT PAVED ROAD. inprap, block, concrete): \pi URF; CREST IS ASPHALT PAVED ROAD. inprap, block, concrete): \pi URF; CREST IS ASPHALT PAVED ROAD. inprap, block, concrete): \pi URF; CREST IS ASPHALT PAVED ROAD. inprap, block, concrete): \pi URF; CREST IS ASPHALT PAVED ROAD. Quantity (<5, sparse, dense):$ | 1 | |
| 2 Type (turf, reinforced turf, riprap, block, concrete): TURF; CREST IS ASPHALT PAVED ROAD. 3 Signs of usage NONE (debris, bent grass, etc.): NONE 4 Vegetation: No problem A. Trees NONE Quantity (<5, sparse, dense): | 0' | 1 |
| riprap, block, concrete): 3 Signs of usage (debris, bent grass, etc.): 4 Vegetation: A. Trees Quantity (<5, sparse, dense): | 1 | |
| 3 Signs of usage NONE (debris, bent grass, etc.): No problem 4 Vegetation: No problem A. Trees NONE Quantity (<5, sparse, dense): | | 1 |
| (debris, bent grass, etc.): No problem 4 Vegetation: No problem A. Trees $WONE$ | 171 . | T |
| 4 Vegetation: No problem A. Trees NONE Quantity (<5, sparse, dense): | - | 1 |
| A. Trees WONE Quantity (<5, sparse, dense): | - | |
| Quantity (<5, sparse, dense): | | 1 |
| Quantity (sparse, dense): Diameter: Location: C. Ground cover: Type (grass, crown vetch, other) Quantity (bare, sparse, adequate dense): ADEQUATE | | |
| C. Ground cover: Type (grass, crown vetch, other) GRASS Quantity (bare, sparse, adequate dense): ADEQUATE | | |
| Quantity (bare, sparse, adequate dense): | | Γ |
| | 17.7 | |
| Appearance (tall, short, good): GOOD | | |
| 5 Slope protection Not applicable | A characteristic state | |
| A. Type (none, riprap, wave $\square NONE$ | | T |
| berm, concrete slabs, other): Condition: | | |
| 6 Erosion No problem Not applicable Could not inspect | R second contents | Local Contracts |
| A. Wave erosion (beaching): Scarp: Length/ Width: Location: | | |
| B. Runoff erosion (Gullies) | | |
| Quantity: Length/ Width/ Depth: Location: | | |
| 7 Instabilities No problem Not applicable Could not inspect | | |
| A. Slides | | T |
| Transverse Length: Longitudinal Length: Scarp: Length/ Width: Location: Crack Length/ Width: | | |
| Location: | | |
| N= Noted; P= Photo; M= Monitor Action Suggestion 1. Requires immediate action I= Investigate; R= Repair 2. Plan to do soon F.F.= Field File; RT = Right; LT = Lefi 3. Do when convenient U/S = Upstream; D/S = Downstream Additional Comments: LENGTH OF SPILLWAY CREST 15 ALONG BOTTOM OF SECTION. | | |
| | | |
| * Type of Concrete Problems: Spalling, cracks, exposed rebar, misalignment, joints bug holes, efflorescence, popouts, honeycombing, scaling, craze/map cracks, isolated crack, disintegration, other | 5470 | |
| Dam Inspection Checklist | | |
| Dam Name: VIRGINIA LAKE F.F.#: 56.35 Date: 9/7/2022 Page: 8 | | 11 |

| - | | | SPILL | WAYAUXILIARY | (Cont) | | ctio | |
|------------------------|--|----------|-----------------------|-------------------------|--|---------------------------|----------------|---------------------|
| | Item | N | T T | Notes/ Observ | | 1 | cuo | |
| - | B. Bulges: (Depressions, | X | | Tyotes/ Observ | ations | M | | R |
| | Hummocky): | 1 | 1,40000 | | | | | Ļ |
| | Size: | | | | | | | |
| | Height/ Depth: | | | | | | | 17 |
| 8 | Other | | No problem | Not applicable | Could not inspect | | - | |
| | A. Rodent burrows (few, many) | \times | FEW - U/S | | | | 2 | 7 |
| | Location: | | | 1 | | have been all | ~ | |
| | B. Ruts | X | | | | 3 | | |
| 1 | Location: | P | 5 | DACS CONTR | 1 million | | | |
| | C. Other (debris): | 7 | =x1=x7-,1 | GRASS COVER | e V | | | |
| | c. other (debits). | | I WOIVE | | | | | |
| - | | | | | | | | |
| 9 | Outlet erosion control | | No problem | Not applicable | Could not inspect thoroughly | | | Denie Lawrence Comm |
| | A. Type (none, endwall, plunge | | NONE | | Could not inspect theroughly | | | - |
| | pool, energy, dissipation structure | | decomposed. | | | | | |
| | rock-lined channel, apron): | | | | | | | |
| | Condition (Scour?): | | | | | | | |
| | B. Material | N | ONE | | | | | |
| | Riprap: Avg. diameter: Condition (adequate, sparse, | | | | | | | |
| | displaced, weathered): | | | | | and/ | | |
| | Bedding fabric (Yes/No): | | | | | | | 1.2 |
| | C. Concrete * | X | Not applicable | | | 17.0 | | |
| | a. Condition * | | | | | | T | |
| | b. Cracking * | | | | | | | 1 |
| | Dimensions/Location: | | | | | | | |
| | c. Sidewall/ Headwall* | | | | | | | |
| | Misalignment: Location: | | | | | | | |
| | Description: | | | | | | | |
| | d. Joints | | | | | | T | |
| | Separated: | | | | | | | |
| | Loss of material: | | | | | | | |
| | Location: | | | | | | | |
| | Description: | | r | | | 295 | 2.2 | |
| | D. Natural | \times | | | anglos | | | |
| | | | | | | | | |
| 10 | Undermining | ~ | Manushlau | 0-11-11 | | | | |
| 10 | Location: | - | No problem | Could not inspect | thoroughly | | | |
| | Description: | | NONE | | | | | |
| | 2000110111 | | | | | | | - 14 |
| N= | Noted; P= Photo; M= Monitor | | Action Suggestion | n 1. Requires immedia | te action | | | |
| I = I | nvestigate; R = Repair | | tabing respectively. | 2. Plan to do soon | $0 = 1 = 1 + 1 + 0^{+}, x^{+} = 1 + 1^{-}$ | | | |
| | = Field File; R T = Right; L T = | | 1 | 3. Do when convenie | | | | ≤ 2 |
| CONTRACTOR DESCRIPTION | = Upstream; D/S = Downstream | 1 | P. 1969 - 201 - 2014 | 20 - 2 6 70 C 6 8 6 7 | See Strate Annual | 0.12 | 101110 | |
| Add | litional Comments: | | | | | | | |
| | | | | | | * | | |
| * | Type of Concrete Problems | Sn | alling cracks exposed | rehar misalignment ini | nts bug holes, efflorescence, pop | oute | | |
| | Type of Concrete Floblellis, | h | onevcombing, scaling | craze/man cracks isolat | ted crack, disintegration, other | Juis, | | |
| | | | | pection Checklist | en orava, alonnegration, other | | | _ |
| Dai | n Name: VIRGINIA LAKE | F.F | .#: 56.35 | | te: 9/7/2022 Page: | 9 | of / | 0 |
| | | | | | | Statistics and statistics | ACCORDING TO A | PERSONAL PROPERTY. |

| | CONTRACTOR OF | 1000000000 | LAKI | DRAINS | | | | |
|---|---------------|------------|------------------------|--|---|-------|------|--------------------|
| | AMONTODES | (Lo | ow level outlet, not a | | x, spillway) | | | |
| | | | | <u> </u> | | A | ctio | 1 |
| Item | N | P | | Notes/ Obs | servations | M | 1 | R |
| 1 General | | Non | e found | Does not hav | e one | | - | |
| A. Type of lake drain | X | | | | | | | |
| (isolated control/intake tower | VA | UVE | LOCATED IN | RACEDE | STRUCTURE RISER | l | | |
| valve vault with outlet condui | | | | DAGE UP | STRUCTURE RISER | 2 | | |
| valve in riser/drop inlet siphon) | | | | | | | | |
| | 12 | 2 " | DIA. (PLAN E | EMENSION |) | | | |
| B. Operated (Yes/ No) | \times | | NO. HASN'T | BEEN OP | ERATED FOR A | | | |
| | | | LONG PERI | 00 of T7 | ME | | | |
| 2 Lake drain components | | | | | | | | |
| A.Concrete structure | X | | | | , | | | |
| | B | ASi | E OF STRU | ICTURE + | RISER. | | | |
| Description:* | | | | | | | | |
| Condition:* | | | | | | | | |
| B. Valve control (operating | X | | VALVE HA. | S PORTAB | LE OPERATING | | | |
| device): | 157 | EN | ASSEMBLY | , KEPT | IN RISER. | | | |
| No operating device; No stem Bent/Broken Stem; Access | | | | | | | | |
| Other: | | | | | | | | |
| Operability: | 1 | | | | | | | |
| C. Valve/Sluice gate | | | | | - | | 1 | Contraction (1996) |
| - | A | A | LFALFA/MUD | 1101.10 | | | | |
| a. Metal deterioration (surface | | | | | | | | |
| rust, minor, moderate, extensive, | UI | NA | BLE TO VIE | W, SUBI | MERGED. | | | |
| other): | | | | | | | | |
| Location: | | | | | | | | |
| Flow rate: | | | | | | | | |
| b. Misalignment | | | | | | | | |
| c. Leakage - Flow rate | | | | | | | | |
| D. Outlet conduit | X | | FLOWS INTO | CONTROL | STRUCTURE OUTLET | | | |
| Size: | |) " | PIPE. | | | | | |
| Material: | | P | | | | | | |
| Condition: | | | | | | | | |
| E. Energy dissipater | X | | | | | | | |
| Type (endwall, plunge pool | 00 | AT | ER CONTROL | STRUCT | URE OUTLET PIPE | | | |
| impact basin, stilling basin, | K | CP | END SECTI | Oav. | | | | |
| rock-lined channel, none): | | | | | | | | |
| Condition:* | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| N= Noted: D= Dhoto: M= Mark | <u> </u> | | A atton Engenti | 1 Dec.' | Alter and a | | | |
| N= Noted; P= Photo; M= Monitor I= Investigate; R= Repair | | 1 | Action Suggestion | | | | | |
| F.F.= Field File; RT = Right; LT = | - 1 0' | | | Plan to do soo Do when conv | | | | |
| U/S = Upstream; D/S = Downstream | | | | 5. DO WHEN CONV | ement | | | |
| | | 74, | I VAIVE INCE | ERECOLTIC | N 15 FROM CONSTRU | | , | |
| PLANS, VALVE WOR | S | | MALVE INT | CRIMATIO | N 13 FROM CONSTRU | CTI | on | |
| PLANS, VALVE WAS | 0 | 00 | MERGED VI | DRING INS | PECTION. | | | |
| | | | | | | | | |
| * Type of Concrete Problems: | Sp | alling | g, cracks, exposed rel | par, misalignment | , joints bug holes, efflorescence, pope | outs. | | |
| | | | | | solated crack, disintegration, other | , | | |
| | | | | tion Checklist | | | | |
| Dam Name: VIRGINIA LAKE | F.F | .#: . | 56.35 | | 9/7/2022 Page: | 10 | of | 10 |