

Appendix V

Safe Dams Inspection List

Embankment (Earth) Dam Inspection Form

Name of Dam: _____ Date: _____

Location of Dam (County): _____ Weather: _____

Inspected by (Print Name): _____

If an inspection item requires further action on your part, place a check mark to the left of the number of the item

A. Crest (refer to Glossary for description)

1. How would you describe the vegetation on the crest? (Check all that apply)
Recently Mowed _____ Overgrown _____ Good Cover _____ Sparse _____
Other/Corrective Action (describe): _____

2. Are there any trees or other inappropriate or excessive vegetation on the crest? Yes _____ No _____
If yes, describe (type of vegetation, size, location, etc.)/Corrective Action: _____

3. Is there a paved road or driveway on the crest? Yes _____ No _____
If yes, describe the condition (for example, good condition, numerous cracks, newly paved)/Corrective Action: _____

4. Are there any depressions, ruts or holes on the crest? Yes _____ No _____
If yes, describe (size, location, etc.)/Corrective Action: _____

5. Are there any cracks on the crest? Yes _____ No _____
If yes, describe (length and width, location, direction of cracking, etc.)/Corrective Action: _____

6. Other observations on the crest/Corrective Action: _____

B. Upstream Slope (refer to Glossary for description)

1. What is the reservoir level today? At Normal Pool _____ Above Normal Pool _____ Feet Below Normal Pool _____ Feet
2. How would you describe the vegetation on the upstream slope? (Check all that apply)
Recently Mowed _____ Overgrown _____ Good Cover _____ Sparse _____
Other/Corrective Action (describe): _____

3. Are there any trees or other inappropriate or excessive vegetation on the slope? Yes _____ No _____
If yes, describe (type of vegetation, size, location, etc.)/Corrective Action: _____

4. Are there any depressions, bulges, ruts or holes (such as animal burrows) on the slope? Yes _____ No _____
If yes, describe (size, location, etc.)/Corrective Action: _____

5. Are there any eroded areas on the slope (such as wave erosion along the shoreline)? Yes _____ No _____
If yes, describe (size of area, location, severity, etc.)/Corrective Action: _____

6. Are there any cracks, sloughs or slides (vertical cliffs) on the slope? Yes _____ No _____
If yes, describe (length, width, height, location, etc.)/Corrective Action: _____

Upstream Slope (continued)

7. Is there any type of slope protection along the shoreline (such as riprap)? Yes _____ No _____
If yes, describe what type and its condition (for example, riprap - adequate, inadequate, sparse)/Corrective Action: _____

8. Other observations on the upstream slope/Corrective Action: _____

C. Downstream Slope (refer to Glossary for description)

1. How would you describe the vegetation on the downstream slope? (Check all that apply)
Recently Mowed _____ Overgrown _____ Good Cover _____ Sparse _____
Other/Corrective Action (describe): _____

2. Are there any trees or other inappropriate or excessive vegetation on the slope? Yes _____ No _____
If yes, describe (type of vegetation, size, location, etc.)/Corrective Action: _____

3. Are there any depressions, bulges, ruts or holes (such as animal burrows) on the slope? Yes _____ No _____
If yes, describe (size, location, etc.)/Corrective Action: _____

4. Are there any eroded areas on the slope (such as along abutment contacts)? Yes _____ No _____
If yes, describe (size of area, location, severity, etc.)/Corrective Action: _____

5. Are there any cracks, sloughs or slides (vertical cliffs) on the slope? Yes _____ No _____
If yes, describe (length, width, height, location, etc.)/Corrective Action: _____

6. Are there any wet areas or areas of hydrophilic (lush, water-loving) vegetation? Yes _____ No _____
If yes, describe (size of area, location, etc.)/Corrective Action: _____

7. Do any wet areas indicate seepage through the dam (such as rust-colored, stained water)? Yes _____ No _____ N/A _____
If yes, describe (for example, new area of seepage, no change from past observations, size of area, location) /Corrective Action: _____

8. Are there any leaks (flowing water) from the slope or beyond the toe of the dam? Yes _____ No _____
If yes, describe (location, rate of flow, turbidity of flow)/Corrective Action: _____

9. Other observations on the downstream slope/Corrective Action: _____

D. Plunge Pool (refer to Glossary for description)

1. Is there any type of erosion protection around the plunge pool (such as riprap)? Yes _____ No _____
If yes, describe what type and its condition (for example, riprap - adequate, inadequate, obstructed by vegetation)
/Corrective Action: _____

2. Is there any erosion and or seeps around or going into the plunge pool? Yes _____ No _____
If yes, describe (size of area, location, severity, etc.) /Corrective Action: _____

3. Other observations around the plunge pool/Corrective Action: _____

Embankment (Earth) Dam Inspection Form (continued)

Name of Dam: _____ Date: _____

E. Principal and Emergency Spillways (refer to Glossary for description)

- 1. What types of spillways does the dam have (such as corrugated metal, concrete or siphon pipe; concrete or earth channel)?
Principal Spillway _____ Emergency Spillway _____
Other/Corrective Action: _____
- 2. Has the emergency spillway activated (had flow) since the last inspection? Yes _____ No _____
If yes describe (date(s) of flow, reason for activation, depth of flow) /Corrective Action: _____

- 3. For pipe spillways, is the intake obstructed in any way (such as with excessive debris)? Yes _____ No _____
If yes, describe (type of debris, reason for obstruction, etc.) /Corrective Action: _____

- 4. For pipe spillways, what is the condition of any trash racks (for example, adequate, inadequate, damaged)? /Corrective Action: _____

- 5. For pipe spillways, are there any visible cracks, separations or holes in the pipe(s) (intake or outlet)? Yes _____ No _____
If yes, describe (location, width of crack or separation, etc.)/Corrective Action: _____

- 6. For pipe spillways, are there any apparent leaks in the pipe(s)? Yes _____ No _____
If yes, describe (location, rate of flow from leak, etc.)/Corrective Action: _____

- 7. For pipe spillways, how would you describe the overall condition of the pipe(s)? (Check all that apply)
Functioning Normally _____ Not Functional _____ Deteriorated _____ Damaged _____ Adequate _____ Inadequate _____
- 8. For concrete or earth channel spillways, is the entrance or channel obstructed in any way? Yes _____ No _____
If yes, describe (type of obstruction, location, etc.)/Corrective Action: _____

- 9. For earth channel spillways, how would you describe the vegetation in the spillway? (Check all that apply)
Recently Mowed _____ Overgrown _____ Good Cover _____ Sparse _____
Other (describe)/Corrective Action: _____

- 10. For earth channel spillways, are there any trees or other inappropriate vegetation in the spillway? Yes _____ No _____
If yes, describe (type of vegetation, size, location, etc.)/Corrective Action: _____

- 11. For earth channel spillways, are there any eroded areas in the spillway? Yes _____ No _____
If yes, describe (size of area, location, severity, etc.)/Corrective Action: _____

- 12. For concrete channel spillways, are there any cracks or holes in the spillway? Yes _____ No _____
If yes, describe (width of crack or hole, location, etc.)/Corrective Action: _____

- 13. For concrete channel spillways, are there any leaks or evidence of undermining (flow under the concrete)? Yes _____ No _____
If yes, describe (location, rate of flow from leak, indicators of undermining, etc.)/Corrective Action: _____

Principal and Emergency Spillways (continued)

14. For earth or concrete channel spillways, how would you describe the overall condition of the spillway? (Check all that apply)

Functioning Normally____ Not Functional____ Deteriorated____ Damaged____ Adequate____ Inadequate____

15. Other observations on the spillways/Corrective Action: _____

F. Instrumentation (refer to Glossary for description)

1. Are there any toe drains at the downstream toe or any other seepage drains on the dam? Yes____ No____
 If yes, describe the condition (for example, clogged, free flowing, deteriorated, good condition) /Corrective Action: _____

2. For drains, is an animal guard installed at the outlet of each drain? Yes____ No____
 If no, which drains lack animal guards? /Corrective Action: _____

3. For drains, measure the rate of flow from each drain and record below (use additional pages if necessary):

Designation/Location of Drain	Flow Rate	Flow Rate in GPM*	Turbidity of Flow (describe – clear, muddy, etc.)

4. Are there any piezometers on the dam? Yes____ No____
 If yes, describe the condition (for example, good condition, damaged, etc.)/Corrective Action: _____

5. For piezometers, does each piezometer have a cap with a lock? Yes____ No____
 If no, which piezometers need caps (to prevent rain water intrusion) and/or locks (to prevent tampering)? /Corrective Action: _____

6. For piezometers, are you able to take a measurement (depth to water) in each piezometer? Yes____ No____
 If yes, record depth to water (in feet) in each piezometer, record on a separate page, and attach to this form.

7. Are there any other monitoring devices on the dam? Yes____ No____
 If yes, describe what type and the condition (for example, monitoring wells - good condition, damaged) /Corrective Action: _____

8. Other observations on instrumentation/Corrective Action: _____

G. Photographs

At a minimum, photographs should be taken of the crest, upstream slope, downstream slope and any other notable features.

List of photographs (be sure to date stamp the photos): _____

*GPM (gallons per minute): to convert from oz/sec multiply by 0.4688; to convert from ml/sec multiply by 0.01585