**DAM SAFETY INSPECTION REPORT**

**NAME OF DAM:**

**DATE:**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Dam Inspected By: | |  | | |  | | |
| Owner Representative: | |  | | |
| Weather: | |  | | |
|  | | | | |
| Inventory No: |  | | | Owner: | |  | |
| Hazard Category: |  | | | Operator: | |  | |
| Type of Dam: |  | | | Stream(s): | |  | |
| Year Built: |  | | | Drainage Area: | |  | |
| Year Rehabilitated: |  | | |  | | | |
| **RESERVOIR STORAGE STATUS** | | | | | | | | |
|  | | | Water Surface Elevation  (Feet) | | | | Storage  (Acre-Feet) | |
| At Time of Inspection: | | |  | | | |  | |
| At Spillway Crest: | | |  | | | |  | |
| At Min Dam Crest Elevation: | | |  | | | |  | |
|  | | | | | | | | |

1. **Embankment**
2. **Crest**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Height: | |  | | Width: | |  |
| Length: | |  | | Surface: | |  |
| # | ITEM | | YES | NO | REMARKS | |
| 1 | Settlement | |  |  |  | |
| 2 | Misalignment | |  |  |  | |
| 3 | Transverse Cracking | |  |  |  | |
| 4 | Longitudinal Cracking | |  |  |  | |
| 5 | Traffic or Roadway Damage | |  |  |  | |
| 6 | Animal Damage | |  |  |  | |
| 7 | Erosion | |  |  |  | |
| 8 | Nuisance Vegetation | |  |  |  | |
| 9 | Other | |  |  |  | |

1. **Upstream Face**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Upper Slope Ratio: | |  | | | Lower Slope Ratio: |  |
| # | ITEM | | YES | NO | REMARKS | |
| 1 | Erosion | |  |  |  | |
| 2 | Longitudinal Cracks | |  |  |  | |
| 3 | Transverse Cracks | |  |  |  | |
| 4 | Adequate Riprap Protection | |  |  |  | |
| 5 | Riprap Deterioration | |  |  |  | |
| 6 | Settlement/Depressions | |  |  |  | |
| 7 | Slumps/Sloughs | |  |  |  | |
| 8 | Nuisance Vegetation | |  |  |  | |
| 9 | Animal Damage | |  |  |  | |
| 10 | Debris | |  |  |  | |
| 11 | Other | |  |  |  | |

1. **Downstream Face**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Slope Ratio: | |  | | | |
| # | ITEM | | YES | NO | REMARKS |
| 1 | Erosion | |  |  |  |
| 2 | Longitudinal Cracks | |  |  |  |
| 3 | Transverse Cracks | |  |  |  |
| 4 | Settlement/Depressions | |  |  |  |
| 5 | Slumps/Sloughs | |  |  |  |
| 6 | Seepage | |  |  |  |
| 7 | Adequate Vegetation Cover | |  |  |  |
| 8 | Nuisance Vegetation | |  |  |  |
| 9 | Animal Damage | |  |  |  |
| 10 | Debris | |  |  |  |
| 11 | Other | |  |  |  |

1. **Abutment and Toe**
2. **Downstream Toe**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| # | ITEM | YES | NO | REMARKS |
| 1 | Seepage |  |  |  |
| 2 | Depressions/Bulges |  |  |  |
| 3 | Boils |  |  |  |
| 4 | Toe Drain in Good Condition |  |  |  |
| 5 | Toe Drain Flowing |  |  |  |
| 6 | Relief Wells Flowing |  |  |  |
| 7 | Erosion |  |  |  |
| 8 | Animal Damage |  |  |  |
| 9 | Nuisance Vegetation |  |  |  |
| 10 | Other |  |  |  |

1. **Upstream Abutment**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| # | ITEM | YES | NO | REMARKS |
| 1 | Erosion |  |  |  |
| 2 | Cracking |  |  |  |
| 3 | Slides/Depressions |  |  |  |
| 4 | Sinkholes |  |  |  |
| 5 | Nuisance Vegetation |  |  |  |
| 6 | Animal Damage |  |  |  |
| 7 | Debris |  |  |  |
| 8 | Other |  |  |  |

1. **Downstream Abutment**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| # | ITEM | YES | NO | REMARKS |
| 1 | Erosion |  |  |  |
| 2 | Cracking |  |  |  |
| 3 | Slides/Depressions |  |  |  |
| 4 | Seepage |  |  |  |
| 5 | Drains Flowing |  |  |  |
| 6 | Nuisance Vegetation |  |  |  |
| 7 | Animal Damage |  |  |  |
| 8 | Debris |  |  |  |
| 9 | Other |  |  |  |

1. **Outlet Works**

|  |  |  |  |
| --- | --- | --- | --- |
| Location: |  | Maximum Discharge: |  |

1. **Intake Structure**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Visible: | |  | Date Last Inspected: | | |  | | Type: |  |
| # | ITEM | | | YES | NO | | REMARKS | | |
| 1 | Settlement | | |  |  | |  | | |
| 2 | Concrete Cracking | | |  |  | |  | | |
| 3 | Concrete Spalling | | |  |  | |  | | |
| 4 | Concrete Erosion | | |  |  | |  | | |
| 5 | Exposed Reinforcement | | |  |  | |  | | |
| 6 | Joint Displacement | | |  |  | |  | | |
| 7 | Problems with Trash Rack | | |  |  | |  | | |
| 8 | Corrosion of Trash Rack | | |  |  | |  | | |
| 9 | Erosion Around Intake | | |  |  | |  | | |
| 10 | Deposition Around Intake | | |  |  | |  | | |
| 11 | Other | | |  |  | |  | | |

1. **Upstream Conduit**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Accessible: | |  | Type: |  | | | | Size: |  |
| # | ITEM | | | | YES | NO | REMARKS | | |
| 1 | Concrete Cracking | | | |  |  |  | | |
| 2 | Concrete Spalling | | | |  |  |  | | |
| 3 | Concrete Erosion | | | |  |  |  | | |
| 4 | Exposed Reinforcement | | | |  |  |  | | |
| 5 | Joint Displacement | | | |  |  |  | | |
| 6 | Loss of Joint Material | | | |  |  |  | | |
| 7 | Open Joints or Holes in the Wall | | | |  |  |  | | |
| 8 | Leakage | | | |  |  |  | | |
| 9 | Calcium Deposits | | | |  |  |  | | |
| 10 | Corrosion of Metal | | | |  |  |  | | |
| 11 | Wear of Protective Coatings | | | |  |  |  | | |
| 12 | Misalignment of Conduit | | | |  |  |  | | |
| 13 | Material Deposition | | | |  |  |  | | |
| 14 | Other | | | |  |  |  | | |

1. **Downstream Conduit**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Accessible: | |  | Type: |  | | | | Size: |  |
| # | ITEM | | | | YES | NO | REMARKS | | |
| 1 | Concrete Cracking | | | |  |  |  | | |
| 2 | Concrete Spalling | | | |  |  |  | | |
| 3 | Concrete Erosion | | | |  |  |  | | |
| 4 | Exposed Reinforcement | | | |  |  |  | | |
| 5 | Joint Displacement | | | |  |  |  | | |
| 6 | Loss of Joint Material | | | |  |  |  | | |
| 7 | Open Joints or Holes in the Wall | | | |  |  |  | | |
| 8 | Leakage | | | |  |  |  | | |
| 9 | Calcium Deposits | | | |  |  |  | | |
| 10 | Corrosion of Metal | | | |  |  |  | | |
| 11 | Wear of Protective Coatings | | | |  |  |  | | |
| 12 | Misalignment of Conduit | | | |  |  |  | | |
| 13 | Material Deposition | | | |  |  |  | | |
| 14 | Other | | | |  |  |  | | |

1. **Gatehouse and Tower**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| # | ITEM | YES | NO | REMARKS |
| 1 | Vandalism |  |  |  |
| 2 | Ladder in Good Condition |  |  |  |
| 3 | Grating in Good Condition |  |  |  |
| 4 | Fall Protection in Good Condition |  |  |  |
| 5 | Seepage from Tower Walls |  |  |  |
| 6 | Debris in Bottom of the Tower |  |  |  |
| 7 | Pooling Water in Bottom of Tower |  |  |  |
| 8 | O&M and EAP Available |  |  |  |
| 9 | Other |  |  |  |

1. **Operating Gate (Slide Gate)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inspected current year: | |  | | | Type: |  |
| Not inspected current year: | |  | | | Size: |  |
| Stem, pre-inspected, in: | |  | | | Stem, during inspection, in: |  |
| Stem, during guard gate operation, in: | |  | | | Stem, post-inspection, in: |  |
| # | ITEM | | YES | NO | REMARKS | | |
| 1 | Operated During Inspection | |  |  |  | | |
| 2 | Operator Operational | |  |  |  | | |
| 3 | Operator Lubricated | |  |  |  | | |
| 4 | Stem in Good Condition | |  |  |  | | |
| 5 | Leakage from Gate | |  |  |  | | |
| 6 | Gate Leaf in Good Condition | |  |  |  | | |
| 7 | Gate Frame in Good Condition | |  |  |  | | |
| 8 | Air Vent in Good Condition | |  |  |  | | |
| 9 | Cavitation Damage | |  |  |  | | |
| 10 | Other | |  |  |  | | |

1. **Guard Gate**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Stem, pre-operation, in: | |  | | | Type: |  |
| Stem, closed/during inspection, in: | |  | | | Size: |  |
| Stem, post-operation, in: | |  | | | | |
| # | ITEM | | YES | NO | REMARKS | |
| 1 | Operated During Inspection | |  |  |  | |
| 2 | Operator Operational | |  |  |  | |
| 3 | Operator Lubricated | |  |  |  | |
| 4 | Stem in Good Condition | |  |  |  | |
| 5 | Gate Housing in Good Condition | |  |  |  | |
| 6 | Leakage from Flanges | |  |  |  | |
| 7 | Leakage from Stem Packing | |  |  |  | |
| 8 | Leakage from Gate | |  |  |  | |
| 9 | Gate Leaf in Good Condition | |  |  |  | |
| 10 | Other | |  |  |  | |

1. **Operating Gate**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inspected current year: | |  | | | Type: |  |
| Not inspected current year: | |  | | | Size: |  |
| Stem, pre-inspected, in: | |  | | | Stem, during inspection, in: |  |
| Stem, during guard gate operation, in: | |  | | | Stem, post-inspection, in: |  |
| # | ITEM | | YES | NO | REMARKS | | |
| 1 | Operator Operational | |  |  |  | | |
| 2 | Operator Lubricated | |  |  |  | | |
| 3 | Stem in Good Condition | |  |  |  | | |
| 4 | Gate Housing in Good Condition | |  |  |  | | |
| 5 | Leakage from Flanges | |  |  |  | | |
| 6 | Leakage from Cylinder | |  |  |  | | |
| 7 | Leakage from Gate | |  |  |  | | |
| 8 | Gate Leaf in Good Condition | |  |  |  | | |
| 9 | Air Vent in Good Condition | |  |  |  | | |
| 10 | Cavitation Damage | |  |  |  | | |
| 11 | Other | |  |  |  | | |

1. **Outlet and Stilling Basin**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Type: | |  | | Dewatered for inspection: | |  |
| # | ITEM | | YES | NO | REMARKS | |
| 1 | Concrete Cracking | |  |  |  | |
| 2 | Concrete Spalling | |  |  |  | |
| 3 | Concrete Erosion | |  |  |  | |
| 4 | Exposed Reinforcement | |  |  |  | |
| 5 | Exposed Water Stops | |  |  |  | |
| 6 | Displacement or Offset of Joints | |  |  |  | |
| 7 | Seepage | |  |  |  | |
| 8 | Debris | |  |  |  | |
| 9 | Riprap Protection Stable | |  |  |  | |
| 10 | Other | |  |  |  | |

1. **Downstream Channel**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| # | ITEM | YES | NO | REMARKS |
| 1 | Seepage |  |  |  |
| 2 | Erosion |  |  |  |
| 3 | Riprap Protection Stable |  |  |  |
| 4 | Deterioration of Riprap |  |  |  |
| 5 | Nuisance Vegetation |  |  |  |
| 6 | Debris |  |  |  |
| 7 | Overtopping |  |  |  |
| 8 | Grade Problems |  |  |  |
| 9 | Other |  |  |  |

1. **Primary Spillway**

|  |  |  |  |
| --- | --- | --- | --- |
| Location: |  | Type: |  |
| Operating: |  | Maximum Discharge: |  |
| At Res. El.: | | |  |

1. **Approach Area**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Visible During Inspection: | |  | | | | |
| # | ITEM | | YES | | NO | REMARKS |
| 1 | Deposition/Debris | |  | |  |  |
| 2 | Nuisance Vegetation | |  | |  |  |
| 3 | Obstructions | |  |  | |  |
| 4 | Other | |  |  | |  |

1. **Weir**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Location: | |  | Type of Weir: | | | |  |
| Operating: | |  | Length: | | | |  |
| # | ITEM | | YES | | NO | REMARKS | |
| 1 | Concrete Cracking | |  | |  |  | |
| 2 | Concrete Spalling | |  | |  |  | |
| 3 | Exposed Reinforcement | |  |  | |  | |
| 4 | Exposed Water Stops | |  |  | |  | |
| 5 | Blockage of Drains | |  |  | |  | |
| 6 | Nuisance Vegetation | |  |  | |  | |
| 7 | Debris | |  |  | |  | |
| 8 | Other | |  |  | |  | |

1. **Chute**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Accessible: | |  | Width: | |  | | | Length: |  |
| # | ITEM | | | YES | | NO | REMARKS | | |
| 1 | Concrete Cracking | | |  | |  |  | | |
| 2 | Concrete Spalling | | |  | |  |  | | |
| 3 | Concrete Erosion | | |  | |  |  | | |
| 4 | Exposed Reinforcement | | |  | |  |  | | |
| 5 | Exposed Water Stops | | |  | |  |  | | |
| 6 | Displacement or Offset of Joints | | |  | |  |  | | |
| 7 | Joint Sealant in Good Condition | | |  | |  |  | | |
| 8 | Deterioration of Dissipaters | | |  | |  |  | | |
| 9 | Drains in Good Condition | | |  | |  |  | | |
| 10 | Seepage from Drains | | |  | |  |  | | |
| 11 | Seepage (not from drains) | | |  | |  |  | | |
| 12 | Deposition of Material | | |  | |  |  | | |
| 13 | Energy Dissipaters | | |  | |  |  | | |
| 14 | Erosion of Stilling Basin | | |  | |  |  | | |
| 15 | Debris in Stilling Basin | | |  | |  |  | | |
| 16 | Other | | |  | |  |  | | |

1. **Downstream Channel**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Accessible: | |  | Width: | |  | | | Length: |  |
| # | ITEM | | | YES | | NO | REMARKS | | |
| 1 | Erosion | | |  | |  |  | | |
| 2 | Nuisance Vegetation | | |  | |  |  | | |
| 3 | Debris | | |  | |  |  | | |
| 4 | Seepage | | |  | |  |  | | |
| 5 | Other | | |  | |  |  | | |

1. **Auxiliary Spillway**

|  |  |  |  |
| --- | --- | --- | --- |
| Location: |  | Maximum Discharge: |  |
| Type: |  | At Res. El.: |  |

1. **Chute**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| # | ITEM | YES | | NO | REMARKS |
| 1 | Description |  | |  |  |
| 2 | Settlement |  | |  |  |
| 3 | Excessive Crest Grade |  |  | |  |
| 4 | Nuisance Vegetation |  |  | |  |
| 5 | Obstructions |  |  | |  |
| 6 | Debris |  |  | |  |
| 7 | Other |  |  | |  |

1. **Reservoir Control**
2. **Development and Changes**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| # | ITEM | YES | NO | REMARKS |
| 1 | Recent Upstream Development |  |  |  |
| 2 | Recent Downstream Development |  |  |  |
| 3 | Slides in Reservoir Area |  |  |  |
| 4 | Changes in Basin Hydrology |  |  |  |
| 5 | Change in Reservoir Operation |  |  |  |
| 6 | Large Impoundment Upstream |  |  |  |
| 7 | Significant Debris in Reservoir |  |  |  |
| 8 | Other |  |  |  |

1. **Instrumentation**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Reservoir and Piezometers Monitored Manually: | | | | |  | |
| Reservoir and Piezometers Monitored Automatically: | | | | |  | |
| # | ITEM | YES | NO | REMARKS | | |
| 1 | Description |  |  |  | | |
| 2 | Damage to Piezometers |  |  |  | | |
| 3 | Atypical Piezometer Data |  |  |  | | |
| 4 | Problems with Flumes/Weirs |  |  |  | | |
| 5 | Data Reviewed |  |  |  | | |
| 6 | Data Attached |  |  |  | | |
| 7 | Other |  |  | | |  |

1. **Downstream Condition**
2. **Downstream Land Use**

|  |
| --- |
|  |

1. **Spillway (Earthen Chute)**

|  |  |  |  |
| --- | --- | --- | --- |
| Location: |  | Type: |  |
| Operating: |  | Maximum Discharge: |  |
| At Res. El.: | | |  |

1. **Approach Area**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Visible During Inspection: | |  | | | |
| # | ITEM | | YES | NO | REMARKS |
| 1 | Erosion | |  |  |  |
| 2 | Obstructions | |  |  |  |
| 3 | Debris | |  |  |  |
| 4 | Deposition of Material | |  |  |  |
| 5 | Nuisance Vegetation | |  |  |  |
| 6 | Animal Damage | |  |  |  |
| 7 | Other | |  |  |  |

1. **Crest/Weir**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Accessible: | |  | Type: |  | | | Length: |  |
| # | ITEM | | | YES | NO | REMARKS | | |
| 1 | Erosion | | |  |  |  | | |
| 2 | Obstructions | | |  |  |  | | |
| 3 | Debris | | |  |  |  | | |
| 4 | Deposition of Material | | |  |  |  | | |
| 5 | Nuisance Vegetation | | |  |  |  | | |
| 6 | Animal Damage | | |  |  |  | | |
| 7 | Other | | |  |  |  | | |

1. **Earthen Chute/Downstream channel**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Accessible: | |  | Channel Width: | | |  | | Side Slopes: |  |
| # | ITEM | | | YES | NO | | REMARKS | | |
| 1 | Erosion | | |  |  | |  | | |
| 2 | Obstructions | | |  |  | |  | | |
| 3 | Debris | | |  |  | |  | | |
| 4 | Deposition of Material | | |  |  | |  | | |
| 5 | Nuisance Vegetation | | |  |  | |  | | |
| 6 | Animal Damage | | |  |  | |  | | |
| 7 | Other | | |  |  | |  | | |

Report completed by:

|  |  |
| --- | --- |
| **COMMENTS** | **PHOTOS** |
| 1. **EMBANKMENT** | |
|  |  |
|  |  |
|  |  |
| 1. **ABUTMENT & TOE** | |
|  |  |
|  |  |
|  |  |
| 1. **OUTLET WORKS** | |
|  |  |
|  |  |
|  |  |
| 1. **PRIMARY SPILLWAY** | |
|  |  |
|  |  |
|  |  |
| 1. **AUXILIARY SPILLWAY** | |
|  |  |
|  |  |
|  |  |
| 1. **RESERVOIR CONTROL** | |
|  |  |
|  |  |
|  |  |
| 1. **INSTRUMENTATION** | |
|  |  |
|  |  |
|  |  |
| 1. **DOWNSTREAM** | |
|  |  |
|  |  |
|  |  |
| 1. **SPILLWAY** | |
|  |  |
|  |  |
|  |  |

|  |  |  |
| --- | --- | --- |
| **RECOMMENDATIONS** | | |
| **Maintenance/Repair** | | |
| **ID** | **Description** | **Status** |
|  |  |  |
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|  |  |  |
| **Annual Maintenance** | | |
| **ID** | **Description** | **Status** |
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