ALASKA DAM SAFETY PROGRAM
VISUAL INSPECTION CHECKLIST

GENERAL INFORMATION

NAME OF DAM:	POOL ELEVATION:
NATIONAL INVENTORY OF DAMS ID#:	TAILWATER ELEVATION:
OWNER:	CURRENT WEATHER:
HAZARD POTENTIAL CLASSIFICATION:	PREVIOUS WEATHER:
SIZE CLASSIFICATION:	INSPECTED BY:
PURPOSE OF DAM:	INSPECTION FIRM:
O & M MANUAL REVIEWED:	DATE OF INSPECTION:
EMERGENCY ACTION PLAN REVIEWED:	

ITEM	YES	NO	REMARKS
RESERVOIR			
1. Any upstream development?			
2. Any upstream impoundments?			
3. Shoreline slide potential?			
4. Significant sedimentation?			
5. Any trash boom?			
6. Any ice boom?			
7. Operating procedure changes?			

ITEM	YES	NO	REMARKS
DOWNSTREAM CHANNEL			
1. Channel			
a. Eroding or Backcutting			
b. Sloughing?			
c. Obstructions?			
2. Downstream Floodplain			
a. Occupied housing?			
b. Roads or bridges?			
c. Businesses, mining, utilities?			
d. Recreation Area?			
e. Rural land?			
f. New development?			

ITEM	YES	NO	REMARKS
EMERGENCY ACTION PLAN			
1. Class I or Class II Dam?			
2. Emergency Action Plan Available?			
3. Emergency Action Plan current?			
4. Recent emergency action plan exercise?		**DATE:**	

ITEM	YES	NO	REMARKS
INSTRUMENTATION			
1. Are there			
a. Piezometers?			
b. Weirs?			
c. Observation wells?			
d. Settlement Monuments?			
e. Horizontal Alignment Monuments?			
f. Thermistors?			
2. Are readings			
a. Available?			
b. Plotted?			
c. Taken periodically?			

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SAFETY

ITEM	YES	NO	REMARKS
SAFETY			
1. ACCESS			**TYPE:**
a. Road access?			
b. Trail access?			
c. Boat access?			
d. Air access?			
e. Access safe?			
f. Security gates and fences?			
g. Restricted access signs?			
2. PERSONNEL SAFETY			
a. Safe access to maintenance and operation areas?			
b. Necessary handrails and ladders available?			
c. All ladders and handrails in safe condition?			
d. Life rings or poles available?			
e. Limited access and warning signs in place?			
f. Safe walking surfaces?			
3. DAM EMERGENCY WARNING DEVICES			
a. Emergency Action Plan required?			
b. Emergency warning devices required by EAP?			**TYPE(S):**
c. Emergency warning devices available?			
d. Emergency warning devices operable?			
e. Emergency warning devices tested?			
f. Emergency warning devices tested by owner?			**WHEN:**
g. Emergency procedures available at dam?			
h. Dam operating staff familiar with EAP?			
4. OPERATION AND MAINTENANCE MANUAL			
a. O & M Manual reviewed?			
b. O & M Manual current?			**DATE:**
c. Contains routine inspection schedule?			
c. Contains routine inspection checklist?			

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EMBANKMENT DAMS

ITEM	YES	NO	REMARKS
EMBANKMENT DAMS			**TYPE:**
1. CREST			
a. Any settlement?			
b. Any misalignment?			
c. Any cracking?			
d. Adequate freeboard?			
2. UPSTREAM SLOPE			
a. Adequate slope protection?			
b. Any erosion or beaching?			
c. Trees or brush growing on slope?			
d. Deteriorating slope protection?			
e. Visual settlement?			
f. Any sinkholes?			
3. DOWNSTREAM SLOPE			**TYPE:**
a. Adequate slope protection?			
b. Any erosion?			
c. Trees or brush growing on slope?			
d. Animal burrows?			
e. Sinkholes?			
f. Visual settlement?			
g. Surface seepage?			
h. Toe drains dry?			
i. Relief wells flowing?			
j. Slides or slumps?			
4. ABUTMENT CONTACTS			
a. Any erosion?			
b. Seepage present?			
c. Boils or springs downstream?			
5. FOUNDATION			**TYPE:**
a. If dam is founded on permafrost			
(1) Is fill frozen?			
(2) Are internal temperatures monitored?			
b. If dam is founded on bedrock			**TYPE:**
(1) Is bedrock adversely bedded?			
(2) Does rock contain gypsum?			
(3) Weak strength beds?			
c. If dam founded on overburden			**TYPE:**
(1) Pipeable?			
(2) Compressive?			
(3) Low shear strength?			

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TIMBER DAMS

ITEM	YES	NO	REMARKS
TIMBER DAMS			TYPE:
1. CREST			
a. Any settlement?			
b. Any misalignment?			
c. Adequate freeboard?			
d. Deck timbers sound?			
2. ABUTMENT AND FOUNDATION CONTACTS			
a. Any erosion?			
b. Seepage present?			
c. Boils or springs downstream?			
d. Exposed bedrock?			
e. Is bedrock deteriorating?			
f. Visible displacements?			
3. STRUCTURAL AND CRIB TIMBERS			TYPE:
a. Any deterioration?			
b. Are ends broomed or checked?			
c. Are timbers preservation treated?			
d. Are timbers pinned or bolted?			
4. CRIBS			
a. Are cribs filled with rock fill?			
b. Is rock fill sound rock?			

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SPILLWAYS

ITEM	YES	NO	REMARKS
SPILLWAYS			TYPE(S):
1. CREST			TYPE(S):
a. Any settlement?			
b. Any misalignment?			
c. Any cracking?			
d. Any deterioration?			
e: Exposed reinforcement?			
f. Erosion?			
g. Silt deposits upstream?			
2. CONTROL STRUCTURES			
a. Mechanical equipment operable?			
b. Are gates maintained?			
c. Will flashboards trip automatically?			
d. Are stanchions trippable?			
e. Are gates remotely controlled?			
3. CHUTE			
a. Any cracking?			
b. Any deterioration?			
c. Erosion?			
d. Seepage at lines or joints?			
4. ENERGY DISSIPATERS			
a. Any deterioration?			
b. Erosion?			
c. Exposed reinforcement?			
5. METAL APPURTENANCES			
a. Corrosion?			
b. Breakage?			
c. Secure anchorages?			
6. EMERGENCY SPILLWAY			
a. Adequate grass cover?			
b. Clear approach channel?			
c. Erodible downstream channel?			
d. Erodible fuse plug?			
e. Stable side slopes?			
f. Beaver dams present?			

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LOW LEVEL OUTLET

ITEM	YES	NO	REMARKS
LOW LEVEL OUTLET			TYPE
1. GATES			
a. Mechanical equipment operable?			
b. Are gates remotely operated?			
c. Are gates maintained?			
2. CONCRETE CONDUITS			
a. Any cracking?			
b. Any deterioration?			
c. Erosion?			
d. Exposed reinforcement?			
e. Are joints displayed?			
f. Are joints leaking?			
3. METAL CONDUITS			
a. Is metal corroded?			
b. Is conduit cracked?			
c. Are joints displaced?			
d. Are joints leaking?			
4. ENERGY DISSIPATERS			
a. Any deterioration?			
b. Exposed reinforcement?			
5. METAL APPURTENANCES			
a. Corrosion?			
b. Breakage?			
c. Secure anchorages?			

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INTAKES

ITEM	YES	NO	REMARKS
INTAKES			
1. EQUIPMENT			
a. Trash racks			
b. Trash rake?			
c. Mechanical equipment operable?			
d. Intake gates?			
e. Are racks and gates operable?			
f. Are gate operators operable?			
2. CONCRETE SURFACES			
a. Any cracking?			
b. Any deterioration?			
c. Erosion?			
d. Exposed reinforcement?			
e. Are joints displaced?			
f. Are joints leaking?			
3. CONCRETE CONDUITS			
a. Any cracking?			
b. Any deterioration?			
c. Erosion?			
d. Exposed reinforcement?			
e. Are joints displaced?			
f. Are joints leaking?			
4. METAL CONDUITS			
a. Is metal corroded?			
b. Is conduit damaged?			
c. Are joints displaced?			
d. Are joints leaking?			
5. METAL APPURTENANCES			
a. Corrosion?			
b. Breakage?			
c. Secure anchorages?			
6. PENSTOCKS			TYPE MATERIAL:
a. Material deterioration?			
b. Joints leaking?			
c. Supports adequate?			
d. Anchor blocks stable?			

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CONCRETE DAMS

ITEM	YES	NO	REMARKS
CONCRETE DAMS			TYPE OF DAM:
1. CREST			
a. Any settlement?			
b. Any misalignment?			
c. Any cracking?			
d. Any deterioration?			
e. Exposed reinforcement?			
d. Adequate freeboard?			
2. UPSTREAM FACE			
a. Spalling?			
b. Cracking?			
c. Erosion?			
d. Deterioration?			
e. Exposed reinforcement?			
f. Displacement?			
g. Loss of joint fillers?			
h. Damage to membranes?			
i. Silt deposits upstream?			
3. DOWNSTREAM FACE			TYPE:
a. Spalling?			
b. Cracking?			
c. Erosion?			
d. Deterioration?			
e. Exposed reinforcement?			
f. Inspection gallery?			
g. Foundation drains?			
h. Foundation drains clear and flowing?			
i. Seepage from joints?			
j. Seepage from lift lines?			
4. ABUTMENT & FOUNDATION CONTACTS			
a. Exposed bedrock?			
b. Erosion?			
c. Visible displacement?			
d. Seepage from contact?			
e. Boils or springs downstream?			