

DAM SAFETY EMERGENCY PLAN

Location of Dam _____

Vic Roads Map Reference _____

This document sets out the procedures the Dam Owner is obliged to take in the case of a Major Event or incident occurring at the dam.

Priority of Action:

- > Saving Life
- > Saving Property
- > Dam Structure Damage Control



The dam owner is responsible for keeping this document up-to-date

UPDATED _____

SELECT APPROPRIATE SUBJECT BELOW AND FLIP CHART PAGE FOR QUICK REFERENCE ON PROCEDURE

Black text for
Information

White text
for Decision

Red text
for action



CONTACT LIST FOR EMERGENCY RESPONSE



DAM SAFETY EMERGENCY PLAN



POLICE	Ph (03) _____ _____	Office After Hours
STATE EMERGENCY SERVICE (SES)	Ph (03) _____ _____	Office After Hours
ENGINEER	Ph (03) _____ _____	Office After Hours
LICENSING AUTHORITY	Ph (03) _____ _____	Office After Hours
MUNICIPAL COUNCIL	Ph (03) _____ _____	Office After Hours
DEPT. OF SUSTAINABILITY & ENVIRONMENT - EMERGENCY CO-ORDINATION CENTRE (ECC)	Ph 1300 13 4444	All Hours
MET. BUREAU WEATHER REPORTS	Ph (03) _____ _____	Office After Hours
DOWN STREAM NEIGHBOURS	Name _____ Name _____ Name _____ Name _____	Ph _____ Ph _____ Ph _____ Ph _____

Having made initial contact, dam owner shall make arrangements to maintain continuous contact and provide timely advice on changes of conditions



EVENTS

High Rainfall/Floods – Storms – Earthquake – Other

EMERGENCY INCIDENTS

(Overtopping, Wave Damage, Cracking, Slips, Structural Failure)
(Slides, Slumping, Increased or New Seepage, Piping, Sandboils)
(Other abnormal signs or behaviour)



Be alert to potential developments and maintain close vigilance during extreme events or perceived abnormal behaviour of the dam



Maintain safety requirements at all times during response actions



Take actions as outlined in this emergency response flip chart

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HAS ROUTINE CHECK DETECTED ANY EMBANKMENT MOVEMENT, SLIPS, INTERNAL OR EXTERNAL EROSION?

ARE THERE ANY SIGNS THAT THE DAM MAY FAIL?*

*If unsure, notify emergency contacts to place them on alert.
Remember that once started, progress to failure may be rapid.

YES

NO

EVALUATE EXTENT OF DAMAGE AND ADVISE EMERGENCY RESPONSE PERSONNEL IF UNCONTROLLED RELEASE OF WATER IS POSSIBLE

RECORD ALL INCIDENT CONTAINMENT ACTIONS



IMMEDIATELY CONTACT POLICE, SES, ECC, CONSULTING ENGINEER, LICENSING AUTHORITY. REFER TO CONTACT NUMBERS PAGE



RECORD EVENT (TIMES, PHOTOGRAPHS, NOTES, VIDEO, COMMUNICATIONS LOG AND MAINTAIN COMMUNICATIONS)



INITIATE DAMAGE CONTROL IF SAFE TO DO SO

MAJOR STRUCTURAL FAILURE

CONTACT LIST FOR EMERGENCY RESPONSE



**DAM SAFETY
EMERGENCY PLAN**

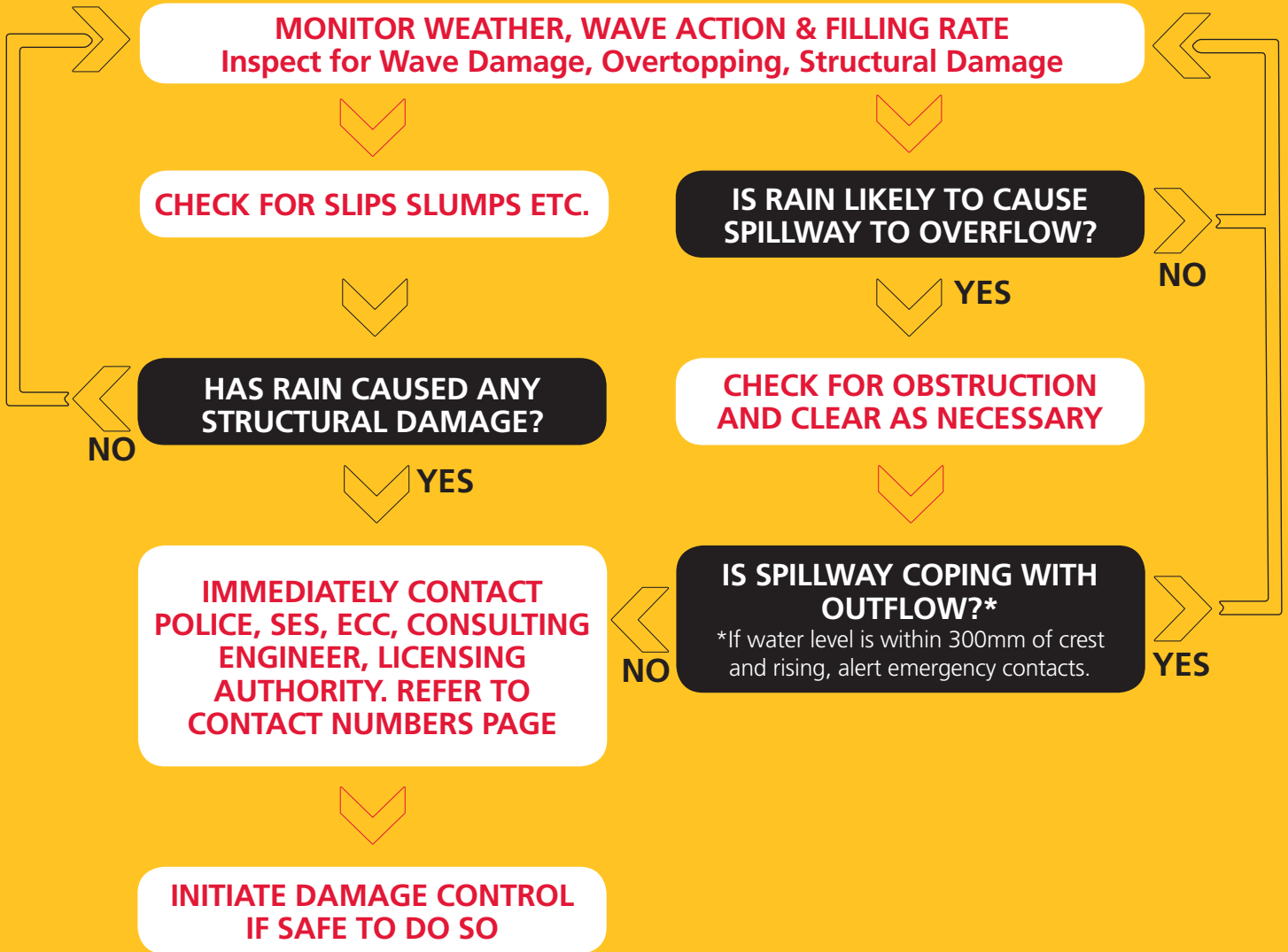
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HIGH RAINFALL OR STORM EVENT



DAM SAFETY EMERGENCY PLAN



HIGH RAINFALL OR STORM EVENT

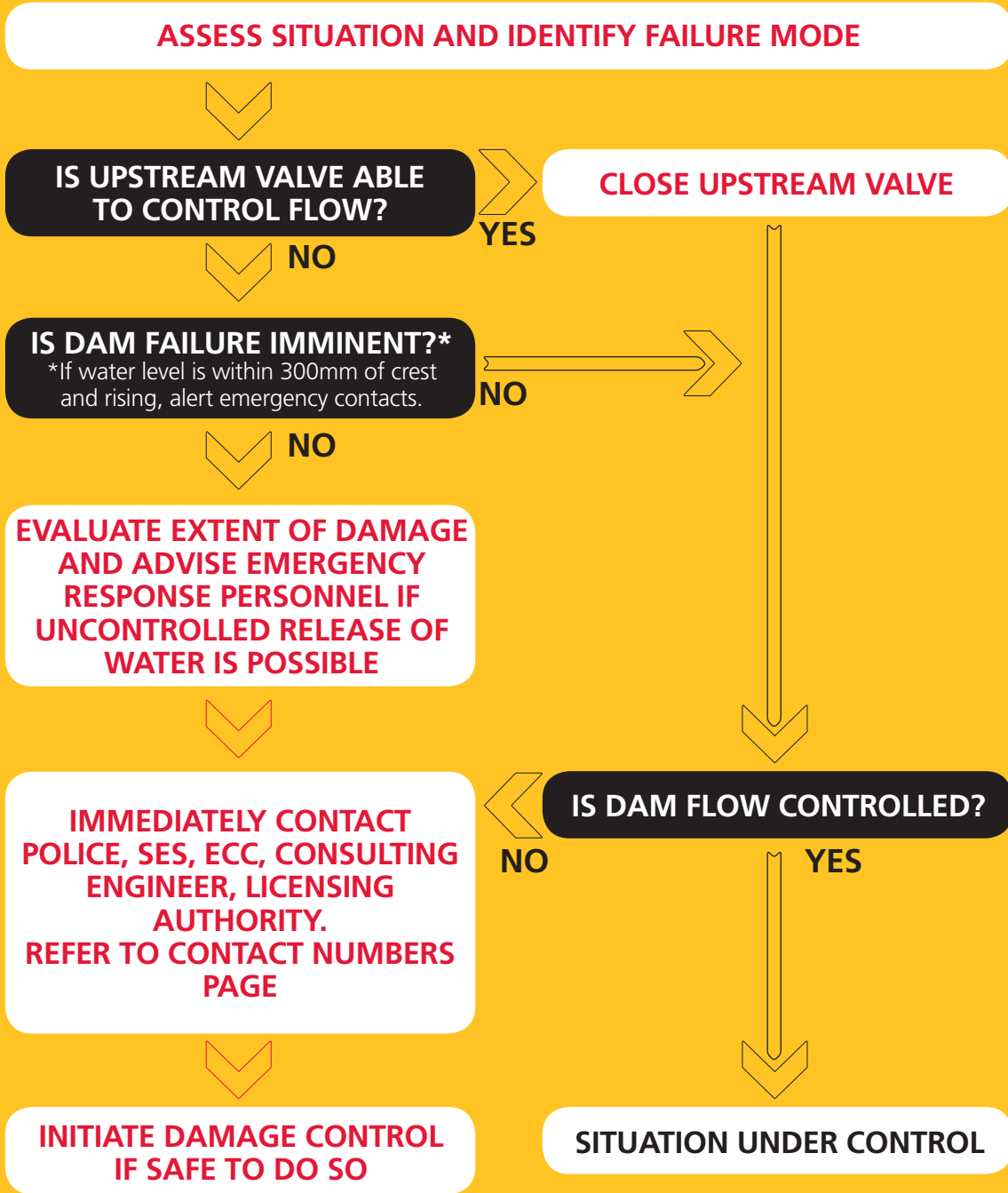
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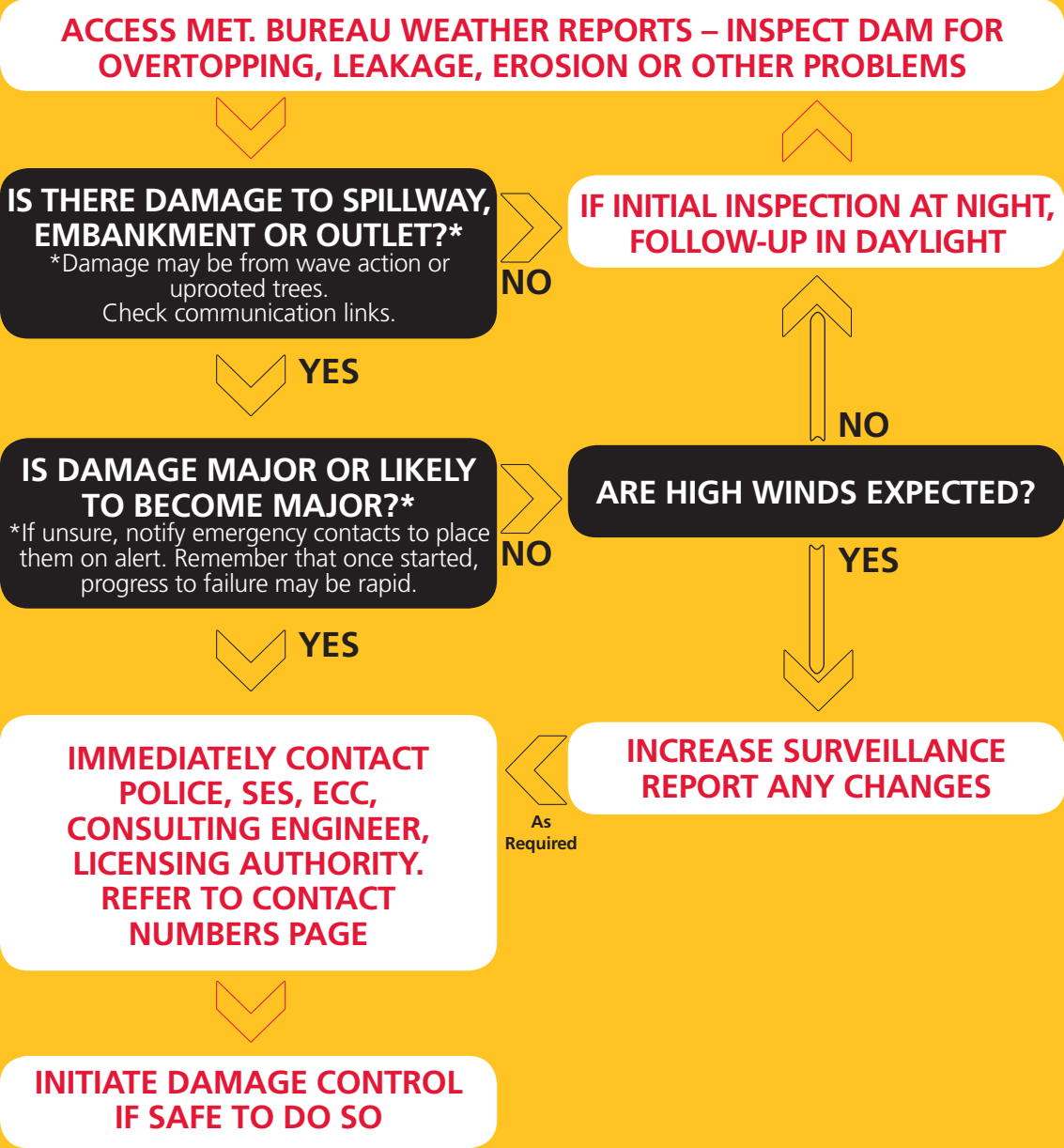
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**INSPECT DAM IMMEDIATELY EARTHQUAKE EVENT IS FELT/NOTIFIED
AND MAINTAIN VISUAL MONITORING FOR 24hrs**



**IS THERE DAMAGE TO
SPILLWAY, EMBANKMENT
OR OUTLET?***

*Damage may be from embankment subsidence, dam breach or overtopping.



NO

**IF INITIAL INSPECTION AT NIGHT,
FOLLOW-UP IN DAYLIGHT**



YES

**IS DAMAGE MAJOR OR LIKELY
TO BECOME MAJOR?***

*If unsure, notify emergency contacts to place them on alert. Remember that once started, progress to failure may be rapid.



NO



YES

**IMMEDIATELY CONTACT
POLICE, SES, ECC, CONSULTING
ENGINEER, LICENSING
AUTHORITY.
REFER TO CONTACT NUMBERS
PAGE**



**INITIATE DAMAGE CONTROL
IF SAFE TO DO SO**

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RESPONSIBILITIES

The Dam Owner is responsible for regular monitoring and visual inspection of conditions at the dam.

The Dam Owner is responsible for providing the initial timely and accurate notifications to the Police and/or State Emergency Service and the Emergency Co-ordination Centre.

The Dam Owner is responsible for providing subsequent notification and preventative action recommendations, accompanied by appropriate emergency public information to the Police and/or State Emergency Service to assist them in making timely and accurate decisions regarding their warning and evacuation responsibilities.



DAM SAFETY STATUS

The Dam Owner is required to conduct a safety evaluation of the dam and to have identified any deficiency in the dam's safety.

The Dam Owner is required to take adequate steps to reduce the potential risk of dam failure based upon the results of the safety evaluation, and to maintain an appropriate dam safety monitoring procedure.



DETECTION OF EVENT

The existing monitoring installations located at the dam and observations by the Dam Owner will be used as the primary method for incident detection.

Emergency events affecting the dam will be detected primarily through visual observations made on-site.



DECISION MAKING

The Dam Owner is responsible for making appropriate dam safety related decisions based on advice from a Consulting Engineer where appropriate. The Dam Owner is also responsible for authorising immediate expenditure so that urgent repair work will not be delayed.

To assist the Dam Owner in making effective decisions regarding repair work on the dam, the Emergency Action Plan includes sources of plant, equipment, materials, and labour; and engineering expertise for use during an emergency. The materials portion includes sources for clay, sand, gravel, stone, riprap, sandbags, cement, plastic sheeting, etc.



NOTIFICATION

Initial notification of a problem affecting dam safety shall be made by the Dam Owner to the Police, Emergency Services, Consulting Engineers and DSE if dam failure is possible or imminent.

In the event of a dam safety emergency arising, the Dam Owner shall be responsible for continuous reporting of dam status in accordance with the Emergency Action Plan.



COMMUNICATION SYSTEM

The Dam Owner's landline telephone and mobile telephone numbers: _____

The nearest public telephone is found at: _____

Radio: The Dam Owner has two-way radio communication facilities: Yes / No

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PLAN FOR DAMAGE CONTROL



**DAM SAFETY
EMERGENCY PLAN**

ASSESS THE SEVERITY OF THE DAM DEFECT REQUIRING DAMAGE CONTROL RESULTING FROM STORM, FLOOD, EARTHQUAKE OR ANY OTHER FACTOR.



IS NOTIFICATION REQUIRED?*

*If unable to secure repair services, notify emergency contacts. Remember that once started, progress to failure may be rapid.



YES

ENACT EMERGENCY ACTION PLAN



NO

SELECT THE PERSONNEL, PLANT, EQUIPMENT AND MATERIALS TO ASSIST IN DAMAGE MITIGATION/REPAIR FROM THE LISTING BELOW.



**PERSONNEL
SOURCES**



**PLANT & EQUIPMENT
SOURCES**



**MATERIALS SOURCES
EQUIPMENT**

Consulting Engineer

Name _____
Ph _____
Address _____

Labour

Name _____
Ph _____
Address _____

Equipment

Name _____
Ph _____
Address _____

Plant

Name _____
Ph _____
Address _____

Other

Name _____
Ph _____
Address _____

Clay

Name _____
Ph _____
Address _____

Sand, Gravel or Rock

Name _____
Ph _____
Address _____

Geofabric Sheet Plastic Sandbags

Name _____
Ph _____
Address _____

Other

Name _____
Ph _____
Address _____





