

# 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



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



**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)**



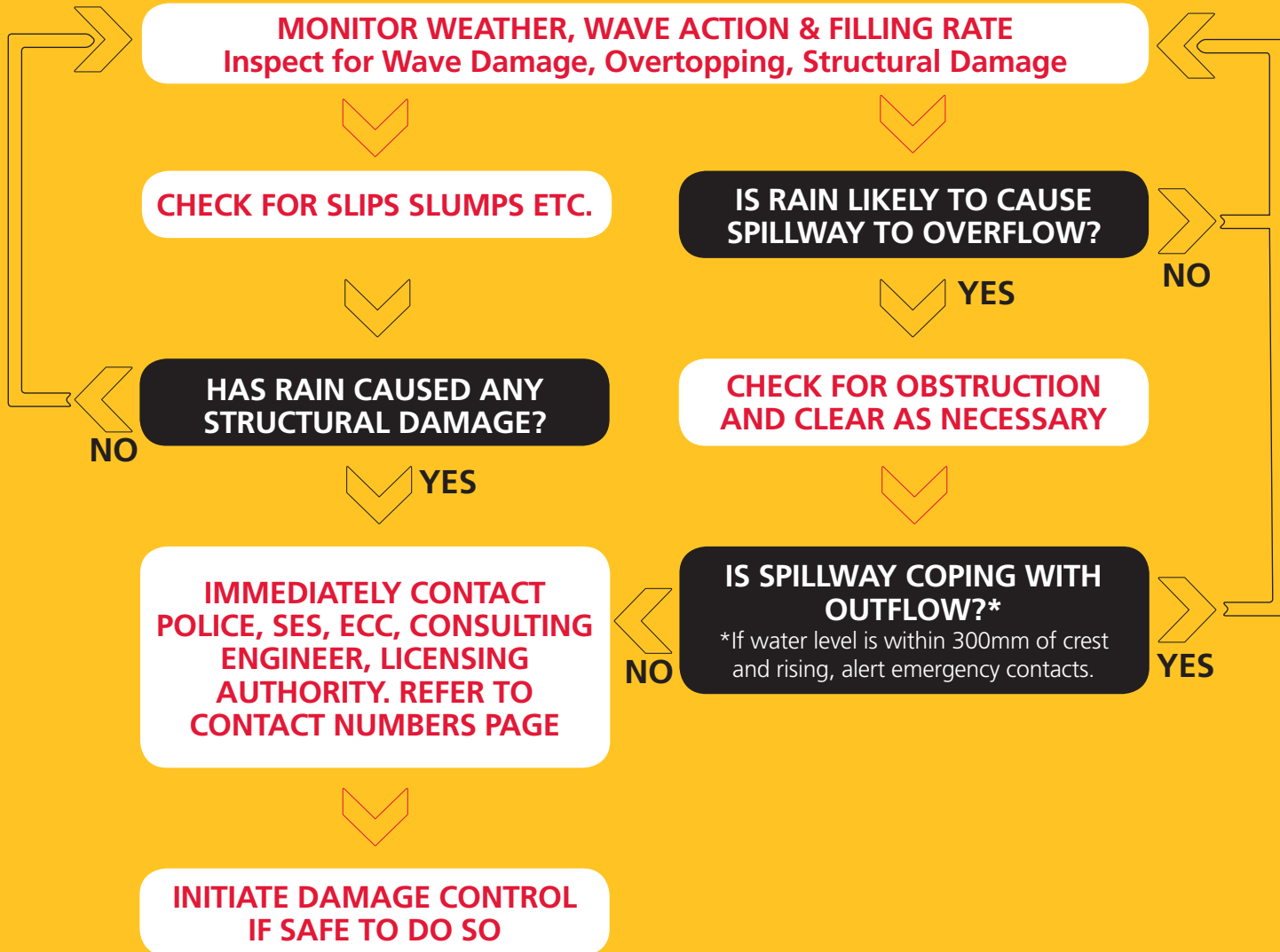
**INITIATE DAMAGE CONTROL IF SAFE TO DO SO**

# MAJOR STRUCTURAL FAILURE

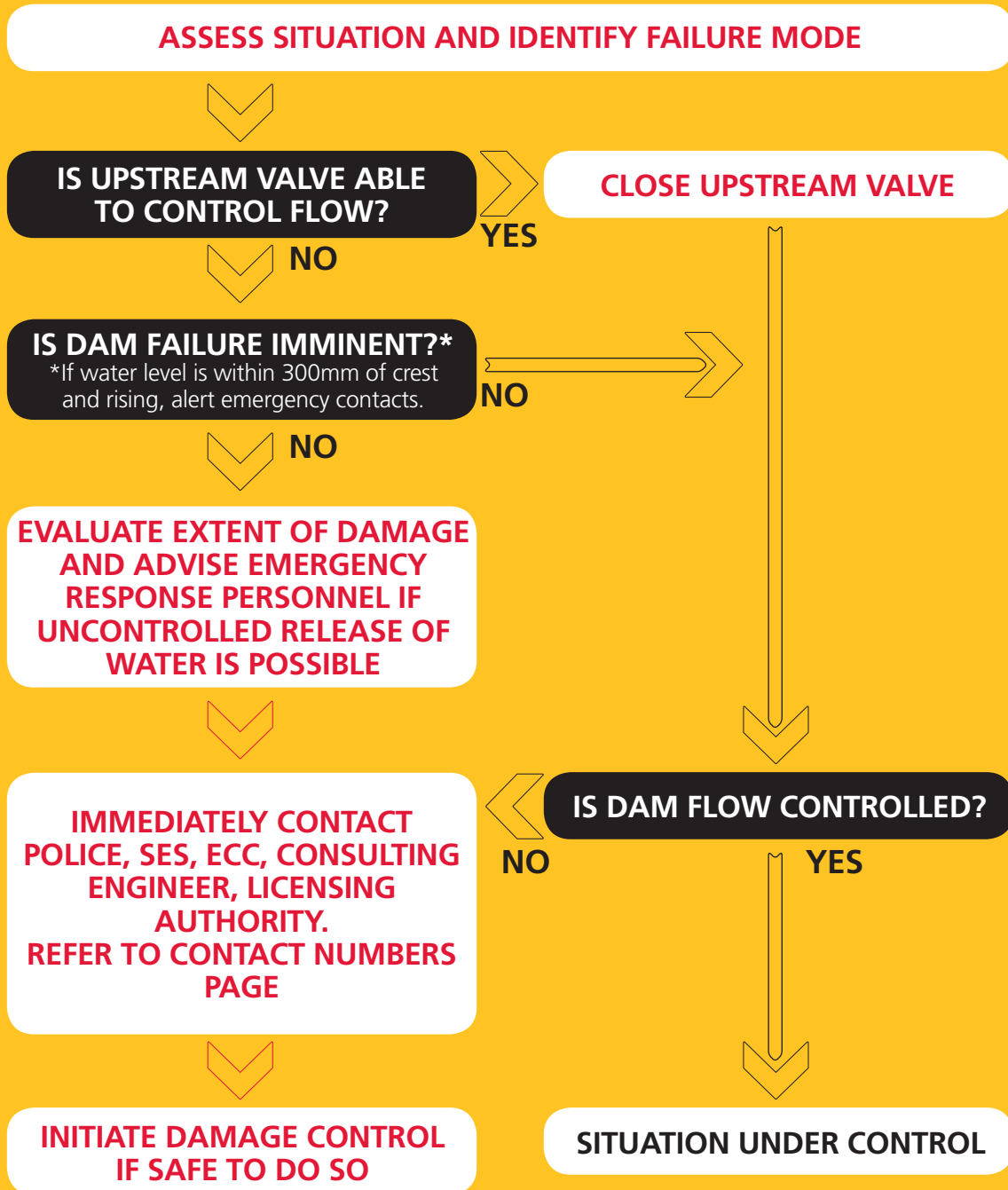
# HIGH RAINFALL OR STORM EVENT

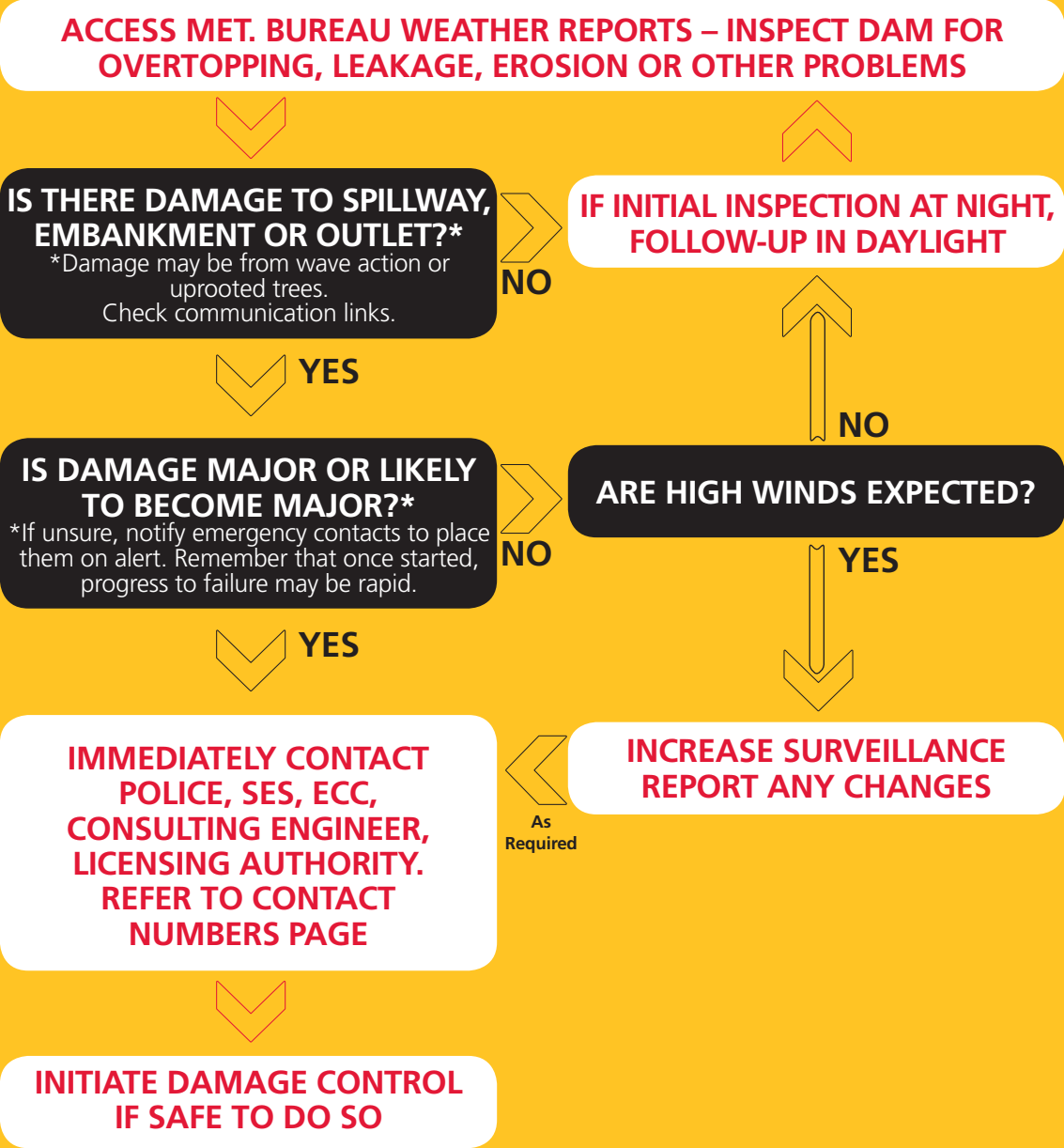


## DAM SAFETY EMERGENCY PLAN



# HIGH RAINFALL OR STORM EVENT







**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.



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



**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.



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



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





### 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

# 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.



**ENACT EMERGENCY ACTION PLAN**



**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 \_\_\_\_\_  
\_\_\_\_\_



