

WORSLEY ALUMINA

TSF EMERGENCY PLANNING

Emergency Preparedness and Response Planning (GISTM Requirement 15.1 B8)

Worsley Alumina has provided local authorities and emergency services with relevant information and included them in presentations and emergency simulations drills as part of our emergency preparedness and response planning for the operation.

The Emergency Preparedness and Response Plan (EPRP) covers all Bauxite Residual Disposal Area (BRDAs) / tailings storage facilities (TSFs) and dams at Worsley Alumina for the credible failure modes as determined from dam break analysis. A list of dam break analyses documents is provided in the EPRP document.

Trigger Action Response Plans (TARPs) exist for all facilities. All TARPs are detailed in relevant Operation, Maintenance and Surveillance Manuals (OMS) for the relevant facilities.

Emergency management follows the five-step process described below.

1. Emergency - Event Detection

An unusual event or emergency event may be detected by:

- Observations at or near the BRDAs / TSFs by the Worsley Alumina dam safety inspection team or contract personnel;
- Evaluation and monitoring instrumentation data associated with the structure;
- Earthquakes felt or reported in the vicinity of the site; and
- Forewarning of conditions that may cause an unusual or emergency event like severe weather or flash flood forecast.

2. Emergency - Level Determination

After an unusual or emergency event is detected or reported, the Supervisor Production, or alternative, will be responsible for classifying the event, with advice from subject matter experts, into one of the following three emergency levels:

Level 1 – Alert Status

Non-emergency, unusual event, slowly developing and under review from engineering team as per TARP detailed in the OMS with potential dam safety measures: This situation is not normal but has not yet threatened the operation or structural integrity of the TSF, but possibly could if it continues to develop.

Level 2 – Limited Damage Status

Potential failure situation or operation disruption, rapidly developing and under review from engineering team as per TARP detailed in the OMS with potential advanced dam safety measures. This situation may eventually lead to a failure and flash flooding downstream, but there is not an immediate threat of dam failure.

Level 3 – Major Damage or Failure Status

Urgent, dam failure or operation disruption appears imminent or is in progress. This is an extremely urgent situation when a failure is occurring or obviously is about to occur and cannot be prevented. Flash flooding will occur downstream of the dam. This situation is applicable when flow through the earth spillway is causing downstream flooding of people and roads.

3. Notification and Communication

After an emergency level has been determined, personnel are to be notified based on the level of the emergency, which will range from the Area Superintendent, Vice President Operations and the Chief Operating Officer.

External stakeholder and community engagement regarding a failure will be conducted based on the level and nature of the emergency. External stakeholders that may be notified in a Level 2 and Level 3 emergency are: the Shire of Collie, Department of Water and Environmental Regulation (DWER), Department of Energy, Mines, Industry, Regulation and Safety (DEMIRS), Department of Fire and Emergency Services (DFES), Department of Biodiversity, Conservation and Attractions (DBCA), Local Government Bodies (Shire of Collie and Shire of Harvey), Water Corporation WA, local government Community Emergency Services Managers and any persons that may be affected downstream of our facilities.

During an emergency an Incident Management Team (IMT) will be formed as per Worsley Alumina's crisis and emergency management procedures.

Notification charts have been developed for each level of the emergency to allow for the correct personnel to be notified in a timely manner.

4. Expected Actions

Expected actions will be based on the alert level and example lists are included in the EPRP to assist.

Level 1 – Alert Status

- Notification of Supervisor Production who conducts inspection and notification of relevant other senior shift personnel or contractors; and
- The Responsible Tailings Facility Engineer (RTFE) and Superintendent Execution will be notified and the condition of the TSF or dam will be closely monitored with regular reporting until the event has been rectified or repaired.

Level 2 – Limited Damage Status

- The RTFE and Superintendent Execution will be notified immediately, and corrective actions will be identified;
- Subject matter experts (SMEs) will be contacted to assist in recommending corrective actions;
- Manager Production will be informed, an investigation initiated, and if conditions warrant an emergency an IMT will be formed; and
- Ongoing monitoring and complete visual inspections and surveys will occur.

Level 3 – Major Damage or Failure Status

- Manager Production, Vice President Operations and Chief Operating Officer will be notified;
- IMT will be formed; and
- Evacuation of downstream areas will be undertaken.

Ongoing monitoring and a complete visual inspection and survey will occur where it is safe to do so. Emergency remedial action plan will be developed and enacted. These actions range from changing the deposition location and installing temporary pumping to the evacuation and shutdown of operations.

5. Close Out

Once the emergency event is over, the emergency must be closed out and follow-up procedures completed.

Assessment of social, environmental, and local economic impacts will be conducted as soon as possible after people are safe and short-term needs have been met.

Worsley Alumina will also facilitate the monitoring and public reporting of post-failure outcomes and work with regulators and affected people towards the development of reconstruction, restoration and recovery plans that address the medium- and long-term social, environmental, and local economic impacts of the failure.