

TAILINGS DAM HIF AUDIT - 17/06/2003 02:49:16 PM

1. HAZARD RATING

Point	Standard	Standard Met	Comments
1.1	A hazard rating has been assigned to the Tailings Storage Facility.		
1.2	The hazard rating has been derived by considering the potential environmental impact in the event of either a controlled or uncontrolled escape of material, seepage and/or abrupt failure of the storage embankment at any stage in its life.		
1.3	The hazard rating has been derived by considering the potential impact in terms of safety on any nearby community infrastructure and/or mining developments (including the tailings storage operator) in the event of either controlled or uncontrolled escape of material, seepage and/or abrupt failure of the storage embankment at any stage in its life.		
1.4	The hazard rating has been derived by considering the potential impact in terms of economics on any nearby community infrastructure and/or mining developments (including the tailings storage operator) in the event of either a controlled or uncontrolled escape of material, seepage and/or abrupt failure of the storage embankment at any stage in its life.		
1.5	Changes in the operation of the TSF or the surrounding infrastructure have resulted in a re-evaluation of the TSF hazard rating.		

2. DESIGN AND CONSTRUCTION

Point	Standard	Standard Met	Comments
2.1	The TSF has been designed in accordance with the applicable edition of the ' Guidelines on the Safe Design and Operating Standards for Tailings Storages' issued by the Department of Minerals and Energy, Western Australia.		
2.2	The TSF has been constructed in accordance with the design.		
2.3	Annual operating audits are submitted as required by the ' Guidelines on the safe design and operating standards for tailings storage' .		
2.4	Changes from the original design were documented during construction.		
2.5	Records of construction quality control checks are available.		
2.6	The specified monitoring equipment is installed.		

3. DAM BREAK ASSESSMENT

Point	Standard	Standard Met	Comments
3.1	Category 1 TSF have a documented ' Dam Break Risk Assessment' .		

4. OPERATION

Point	Standard	Standard Met	Comments
4.1	There is a TSF Operating Plan.		
4.2	The Operating Plan describes the deposition methodology.		
4.3	The Operating Plan describes the measures for pond control and water management.		
4.4	The Operating Plan specifies the method of seepage control.		
4.5	The Operating Plan specifies the pipeline management system.		
4.6	The Operating Plan describes the TSF geometry at all stages of its life.		
4.7	The Operating Plan includes provision for dust control.		
4.8	Modifications to the Operating Plan are documented when they occur.		
4.9	The actual operating characteristics of the TSF have been assessed against the original design assumptions.		
4.10	Annual geotechnical and engineering reports are submitted as outlined in the ' Guidelines on the safe design and operating standards for tailings storage' .		
4.11	The recommendations included in the annual geotechnical and engineering reports have been acted upon.		
4.12	The TSF site is secured against access by unauthorised personnel.		
4.13	Roads on and around the TSF are designed for the equipment using them.		
4.14	The TSF roads are demarcated by windrows, railings or other such indicators of safe travel limits.		
4.15	The TSF roads are controlled by suitable signage indicating speed limits, direction etc.		
4.16	Traffic control measures on the TSF are effective at night.		
4.17	Where there is deep water in a TSF, rescue equipment is provided.		

5. MANAGEMENT

Point	Standard	Standard Met	Comments
5.1	A responsible person has been appointed in writing to manage the TSF.		

5.2	Individual roles and responsibilities have been documented for operators working on the TSF.		
5.3	The TSF Operating Plan is available to the operators.		
5.4	There is a training program in place for TSF operators.		
5.5	There is an incident reporting procedure for the TSF.		

6. MONITORING AND AUDITING

Point	Standard	Standard Met	Comments
6.1	Routine inspections of the TSF are carried out on each shift.		
6.2	The findings of the routine inspections are recorded.		
6.3	Operating audits are conducted every year for Category 1 TSFs and every 2 years for Category 2 TSFs.		
6.4	Groundwater monitoring is carried out as per the DEP licence for the TSF.		
6.5	The monitoring equipment is kept in calibration.		
6.6	The monitoring frequency complies with licence conditions.		
6.7	The monitoring results are documented.		
6.8	The action to be taken when monitoring results fall outside the expected range is specified.		
6.9	A permanent survey monitoring grid is in place for the TSF.		
6.10	There is a dam stability monitoring program in place.		
6.11	The results of the dam stability monitoring program are documented.		
6.12	The action to be taken is specified should the dam stability monitoring results fall outside the expected range.		

7. EMERGENCY PLAN

Point	Standard	Standard Met	Comments
7.1	There is a specific Emergency Plan for incidents that may occur at the TSF.		
7.2	The TSF Emergency Plan contains details of any evacuation procedure that may be required in the event of failure, or impending failure of the TSF.		
7.3	The TSF Emergency Plan contains a diagram indicating the whereabouts of a muster point.		
7.4	The TSF Emergency Plan contains a list of names and residential addresses of all nominated emergency response personnel and their home/emergency contact telephone numbers.		
7.5	The TSF Emergency Plan contains a list of the telephone numbers of the local/regional emergency services (fire, ambulance, police etc.)		

7.6	The TSF Emergency Plan contains a list of all personnel that are associated with operation of the TSF and evidence that they have attended and understood all relevant induction/safety procedures.		
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8. DECOMMISSIONING

Point	Standard	Standard Met	Comments
8.1	A Decommissioning Plan has been drawn up for the TSF.		
8.2	Roles and responsibilities have been documented for key personnel involved in the decommissioning process.		
8.3	A hazard analysis has been conducted for the long term stability of the TSF structure post decommissioning.		
8.4	A risk assessment has been conducted for the long term stability of the TSF structure post decommissioning.		
8.5	A rehabilitation plan is in place for the decommissioned TSF structure.		
8.6	Where operational changes have occurred the Decommissioning Plan has been revised to take the changes into account.		