**EPA R&R No: 1545** 

#### MINISTER FOR ENVIRONMENT

HEAVY MINERAL SANDS MINE, BEENUP, SHIRE OF AUGUSTA – MARGARET RIVER – INQUIRY UNDER S46 OF THE *ENVIRONMENTAL PROTECTION ACT* 1986 TO AMEND MINISTERIAL STATEMENT 434

The Minister for Environment has requested that the Environmental Protection Authority (EPA) inquire into and report on the matter of changing the implementation conditions for the Heavy Mineral Sands Mine, Beenup proposal.

The following is the EPA's Report and Recommendations (No. 1545) to the Minister pursuant to section 46(6) of the *Environmental Protection Act 1986 (EP Act)*.

# **Background**

In May 1991, the original proponent for the proposal, Mineral Deposits Limited (now BHP Titanium Minerals Pty Ltd) obtained authorisation under Ministerial Statement 140 to mine and concentrate heavy mineral sands at Beenup in the Shire of Augusta – Margaret River, within a total operations area of 1,000 hectares (ha). In November 1996, BHP Titanium Minerals (BHPTM) obtained authorisation under Ministerial Statement 434 to extend the existing Heavy Mineral Sands Mine operations at Beenup to 2,900 ha. Ministerial Statement 434 replaced all previous conditions in Ministerial Statement 140.

In November 2012, the Office of the Environmental Protection Authority (OEPA) approved the *Beenup Rehabilitation Project Environmental Management Programme 2012* (June 2012) based on advice provided by the Department of Water and the Department of Environment Regulation (DER, previously DEC) that the completion criteria and methods of assessment outlined in the Environmental Management Programme relating to groundwater and surface water resources were acceptable.

In July 2014, the DER further advised that the proponent's commitment to ongoing monitoring and management of the site under its current classification as 'remediated for restricted use' can be managed under the *Contaminated Sites Act 2003*. As this project ceased operation in 1999 and is currently in the rehabilitation phase, the OEPA considers the Environmental Management Programme appropriate to manage the rehabilitation of the site in an ecologically sustainable manner.

In August 2014, the EPA approved the BHPTM's request to remove the unmined parcels of land and reduce the original proposal area from 2,900 ha to 697 ha under section 45C of the *Environmental Protection Act 1986*. The reduction of the project envelope area to 697 ha was also consistent with the BHPTM Mining Lease Area approved by the Department of Mines and Petroleum.

# Requested changes to conditions

Due to the early closure of the heavy mineral sands mine in 1999, BHPTM has requested to contemporise and consolidate implementation conditions, and remove all proponent commitments of Ministerial Statement 434 as the commitments are considered to be:

- fully implemented;
- no longer applicable due to closure of the project; or
- managed under the Beenup Rehabilitation Project Environmental Management Programme 2012 (June 2012), and approved by the OEPA in November 2012.

# Assessment of the requested changes to conditions

The EPA has reviewed the BHPTM's request and a summary of the assessment of the proposed changes to conditions and commitments is provided in Tables 1 and 2 of this report.

#### **EPA conclusions and recommendations**

Having inquired into this matter, the EPA submits the following recommendations to the Minister for Environment:

- That while retaining the environmental requirements of the original conditions, it is appropriate to delete implementation conditions 1 to 16 of Ministerial Statement 434 and replace them with consolidated, contemporary conditions 1 to 5;
- 2. That it is appropriate to delete proponent commitments 1 to 93 of Ministerial Statement 434 as they have been implemented, are no longer applicable due to the early closure of the project, or are managed under the approved Environmental Management Programme (dated June 2012); and
- 3. That after complying with section 46(8) of the *Environmental Protection Act* 1986, the Minister issues a statement of decision to delete implementation conditions 1 to 16 and proponent commitments 1 to 93 of Statement 434 in the manner provided for in the attached recommended statement.

Table 1 Beenup Heavy Mineral Sands Project – assessment of proposed changes to implementation conditions

Condition	Proposed Change to Condition	Assessment and Evaluation of Proposed Changes
1 Proponent Commitments	Delete condition.	The EPA has reviewed each proponent commitment and considers that they fall into three categories: (1) have been fully implemented; (2) no longer apply due to the early closure of the project; or (3) are managed under the "Beenup Rehabilitation Project Environmental Management Programme 2012" dated June 2012, and approved by the OEPA in November 2012. For the full details of this assessment See Table 2 of this report. The proponent commitments can be deleted.
2 Implementation	Delete condition and replace with a consolidated contemporary style condition.	The requirements of condition 2-1 are still relevant and will be retained but expressed in contemporary wording and format without changing the intent. This condition is deleted and replaced by the following:  1 Proposal Implementation  1-1 When implementing the proposal, the proponent shall not exceed the authorised extent of the proposal as defined in Table 2 in Schedule 1, unless amendments to the proposal and the
		authorised extent of the proposal have been approved under the EP Act.  Condition 2-2 relating to changes to the proposal is deleted as it is addressed in the EP Act.
Public Availability of	Add condition.	This condition is added to reflect contemporary Ministerial Statements.
Data	Add condition.	4 Public Availability of Data
		4-1 Subject to condition 4-2, within a reasonable time period approved by the CEO of the issue of this Statement and for the remainder of the life of the proposal, the proponent shall make publicly available, in a manner approved by the CEO, all validated environmental data (including sampling design, sampling methodologies, empirical data and derived information products (e.g. maps)) relevant to the assessment of this proposal and implementation of this Statement.
		4-2 If any data referred to in condition 4-1 contains particulars of:
		<ul><li>(1) a secret formula or process; or</li><li>(2) confidential commercially sensitive information;</li></ul>
		the proponent may submit a request for approval from the CEO to not make this data publicly available. In making such a request, the proponent shall provide the CEO with an explanation and reasons why the data should not be made publicly available.
3 Environmental Management Programme	Delete condition and replace with a consolidated contemporary style condition.	Condition 3-1 was a pre-operational condition satisfied by the submission of the <i>Beenup Titanium Minerals Project Environmental Management Programme 1994</i> . The correspondence from the Minister for Environment (November 1994) advised that this condition was satisfactorily met.  Conditions 3-2 and 3-3 are deleted and replaced with contemporary condition 5-2.  Ministerial condition 3 is deleted and replaced with proposed condition 5 below:
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	Condition	Proposed Change to Condition	Assessment and Evaluation of Proposed Changes
			<ul> <li>5 Rehabilitation and Decommissioning</li> <li>5-1 The proponent shall ensure that the mine is decommissioned and rehabilitated in an ecologically sustainable manner.</li> </ul>
			5-2 The proponent shall implement the proposal in accordance with the "Beenup Rehabilitation Project Environmental Management Programme 2012", dated June 2012, or subsequent revisions approved by the CEO.
			5-3 Revisions to the rehabilitation goals and completion criteria in the Environmental Management Programme may be approved by the CEO on the advice of the Department of Mines and Petroleum.
			5-4 The proponent shall implement the revised rehabilitation goals; completion criteria and end land uses approved by the CEO.
			5-5 The proponent shall make the Environmental Management Programme required by condition 5.2 publicly available, in a manner approved by the CEO.
4	Groundwater	Delete condition	Condition 4-1 was a pre-operational condition which was satisfied by the submission of the <i>Beenup Titanium Minerals Project Environmental Management Programme1994</i> .
			Condition 4-2 refers to implementation of the Groundwater Management Programme which no longer applies due to the early closure of the project in 1999.
			Condition 4-3 can be managed under the Environmental Management Programme (June 2012) and its subsequent revisions. This condition can be deleted.
5	Surface Water Management	Delete condition	The requirements of this condition are managed under the Environmental Management Programme (June 2012) and its subsequent revisions. This condition can be deleted.
6	Pyrite Management	Delete condition.	This condition was satisfied by the submission of the <i>Beenup Titanium Minerals Project Revised Environmental Management Programme 1998</i> (approved March 1999). This condition can be deleted.
7	Slime Handling Operations	Delete condition.	This condition relates to the operational phase of the proposal and is no longer relevant due to the early closure of the plant in 1999. This condition can be deleted.
8	Dieback	Delete condition.	The pre-operational phase of this condition no longer applies. The part of the operational phase has been partially satisfied with completion of earthworks in 2003 and establishment of native vegetation. The part of this condition that relates to the post-mining period will be addressed by on-going application of commitments 13 and 14 of Appendix C of the approved Environmental Management Programme (June 2012) required by condition 5-2. This condition can be deleted.
9	Community Liaison	Delete condition.	This pre-operational condition has been satisfied by the development of the Beenup Consultative Group in 1989. Section 4 of the approved Environmental Management Programme (June 2012) addresses ongoing community consultation processes. This condition can be deleted.

Condition	Proposed Change to Condition	Assessment and Evaluation of Proposed Changes
10 Noise (Haulage)	Delete condition.	This condition relates to product haulage which ceased with closure of the project in 1999, and is therefore no longer relevant, and can be deleted.
11 Rehabilitation	Delete condition.	Condition 11-1 was required to be completed within one year of commencing operations and was satisfied by submission of the BHP Beenup Rehabilitation Strategy, 1998. This condition can be deleted.
		Condition 11-2 required a rolling rehabilitation plan. The early closure of the project in 1999 lead to development of the Decommissioning and Final Rehabilitation Plan required by condition 12-2 of Statement 434 (condition 8-2 in the new Ministerial Statement).
12 Decommissioning	Delete condition and replace with a consolidated contemporary style condition.	The requirements of this condition are addressed by the new condition 5. This condition can be deleted.
13 Proponent	Delete condition and replace with a consolidated	This condition is still relevant and shall be retained; however, it has been updated to reflect contemporary wording and format without changing the intent. Conditions 13-1 is deleted and replaced with condition 2-1.
	contemporary style condition.	<ul> <li>2 Contact Details</li> <li>2-1 The proponent shall notify the Chief Executive Officer (CEO) of any change of its name, physical address or postal address for the serving of notices or other correspondence within twenty eight (28) days of such change. Where the proponent is a corporation or an association of persons, whether incorporated or not, the postal address is that of the principal place of business or of the principal office in the State.</li> </ul>
14 Time Limit on Approval	Delete condition.	This condition was satisfied with project commencement in 1997. This condition can be deleted.
15 Performance Review	Delete condition.	Components of this condition are relevant to the operational stage of the project and are no longer relevant due to the early closure of the project in 1999. This condition can be deleted.
16 Compliance Auditing	Delete condition and replace with a consolidated contemporary style condition.	Condition 16 is deleted and replaced with contemporary Compliance Auditing conditions 3-1 to 3-6 without changing the intent:  3 Compliance Reporting
	otylo ooridition.	3-1 The proponent shall prepare, submit and maintain a Compliance Assessment Plan to the CEO at
		least three (3) months prior to the Compliance Assessment Report required by condition 3-6.
		3-2 The Compliance Assessment Plan shall indicate:  (1) the frequency of compliance reporting;

Condition	Proposed Change to Condition	Assessment and Evaluation of Proposed Changes
		<ul> <li>(2) the approach and timing of compliance assessments;</li> <li>(3) the retention of compliance assessments;</li> <li>(4) the method of reporting of potential non-compliances and corrective actions taken;</li> <li>(5) the table of contents of Compliance Assessment Reports; and</li> <li>(6) public availability of Compliance Assessment Reports.</li> </ul>
		3-3 After receiving notice in writing from the CEO that the Compliance Assessment Plan satisfies requirements of condition 3-2 the proponent shall assess compliance with conditions in accordance with the Compliance Assessment Plan required by condition 3-1.
		3-4 The proponent shall retain reports of all compliance assessments described in the Compliance Assessment Plan required by condition 3-1 and shall make those reports available when requested by the CEO.
		3-5 The proponent shall advise the CEO of any potential non-compliance within seven (7) days of that non-compliance being known.
		3-6 The proponent shall submit to the CEO Compliance Assessment Reports addressing compliance in the previous calendar year. The first Compliance Assessment Report shall be submitted six (6) months from the date of issue of this Statement and then annually from the date of submission of the first Compliance Assessment Report, or as agreed in writing by the CEO.
		The Compliance Assessment Report shall:
		(1) be endorsed by the proponent's Chief Executive Officer or a person delegated to sign on the Chief Executive Officer's behalf;
		(2) include a statement as to whether the proponent has complied with the conditions;
		(3) identify all potential non-compliances and describe corrective and preventative actions taken;
		(4) be made publicly available in accordance with the approved Compliance Assessment Plan; and
		(5) indicate any proposed changes to the Compliance Assessment Plan required by condition 3-1.
Notes	Delete Notes 1 and 2.	Notes 1 and 2 are deleted to reflect contemporary Ministerial Statements.

Table 2 Beenup Heavy Mineral Sands Project – section 46 assessment of proposed changes to proponent commitments

Commitment	No.	Assessment and Evaluation
Accommodation for Temporary Workforce	1-2	Commitments 1 and 2 are not relevant to environmental management and can be deleted.
Environmental Awareness	3	This commitment has been completed as its requirement has been satisfied by Workforce Induction Programme.
Groundwater	4	Commitment 4 refers to the design stage of the project which has been completed.
	5	The intent of the 100m buffer from the National Park boundary was met during the operational phase of the project. Dredging ceased in 1999 with project closure, therefore, this commitment no longer applies.
	6	The requirements of this commitment are met by the Environmental Management Programme required by condition 5-2 of the new Ministerial Statement.
	7	Aspects of this commitment relevant to the post-closure and rehabilitation phase of the project will be addressed by ongoing application of an approved Environmental Management Programme (which includes a requirement to monitor groundwater bores for as long as deemed necessary) and is addressed by proposed new condition 5-2.
Surface Water	8-9	Parts of commitments 8 and 9 that are relevant to the operational phase of the proposal, do not apply due to the early closure of the mine.
	10	This commitment is relevant to the operational phase of the project and no longer applies.
	11	Aspects and intent of this commitment that are relevant to the post-closure and rehabilitation phase of the project are addressed by commitments made in the Environmental Management Programme 2012.
		BHP obtained approval to cease monitoring of the Blackwood River from the Department of Water (DoW) in 2006.
	12	The part of this commitment that refers to the pre-operational phase of the project has been completed by submission of the <i>Beenup Titanium Minerals Project Environmental Management Programme 1994</i> . Correspondence from the Minister for Environment (dated 30 Nov 1994) indicates that this commitment is completed.
	13	The requirement for ongoing management of surface water quality and its drainage is addressed by the Environmental Management Programme 2012 required by new condition 5-2.
	14	BHP obtained approval from DoW in 2002, to release surface water post-remediation. The DoW established surface water release criteria and installed a gauging station downstream of the release point to monitor water quality being released from the site.
	15	The requirement for ongoing management and monitoring of surface water quality is addressed by the Environmental Management Programme 2012 required by condition 5-2 of the new Statement.

Commitment	No.	Assessment and Evaluation
Fines Management	16	This commitment relates to the operational phase of the project and is no longer relevant.
Minimisation of Disturbance	17	The requirement for clearing ceased with closure of the project in 1999. The Environmental Management Programme 2012, required by new condition 5-2, no longer requires clearing of native vegetation.
Timber Salvage	18	This commitment no longer applies as there is no clearing occurring in the project area.
Aboriginal Artefacts	19-20	These commitments refer to the operational phase of the project which ceased in 1999, and are no longer relevant.
<b>Dust Control</b>	21-22	These commitments relate to the operational phase of the project and are no longer relevant.
	23	As all cleared areas are now vegetated and no active earthworks and future clearing is proposed, a dust monitoring program is no longer required.
Lighting	24	This commitment is relevant to the operational phase of the project and is no longer relevant.
Noise Mitigation	25-31	These commitments relate to the operational phase of the project and are no longer relevant.
Flora, Vegetation and Fauna	32	Location 4264 was excluded from mining. After project closure, the area was subdivided (now Lot 101) and ownership transferred to the Department of Parks and Wildlife (DPaW).
	33	This commitment is relevant to the proposed mining extension which did not proceed due to closure of the project in 1999.
		Fauna monitoring ceased as approved and detailed in the 1999 Triennial Report. Flora monitoring continued for a period of 20 years, which has shown no adverse impacts.
	34	This commitment was relevant to the pre-operational phase of the project which was met with completion of various flora, fauna and dieback reports submitted at the time. It is no longer relevant.
	35-36	Commitments 35 and 36 relate to the operational stage of the project and are no longer relevant.
	37	All mined areas were surveyed ahead of mining. This commitment was specific to operations in the Extension Area which did not proceed due to closure of the project in 1999.
	38	This commitment is related to the operational stage of the project and is no longer relevant.
	39	This commitment was satisfied by completion of the Flora and Vegetation Survey of Scott National Park and Adjacent Camping Reserve, September 1996.
	40	All mined areas were surveyed ahead of mining. This commitment was specific to operations in the Extension Area which did not proceed due to closure of the project in 1999.
	41	Superseded by commitment 17 in Appendix C of the Environmental Management Programme 2012.  Ongoing application of this commitment via an approved Environmental Management Programme is addressed by proposed new Condition 5-1.

Commitment	No.	Assessment and Evaluation
Rehabilitation	42-43	The early closure of the project in 1999 required development of the Decommissioning and Final Rehabilitation Plan.
		In July 2014, under section 45C of the EP Act, a reduction to the original proposal area from 2900 to 697 ha was approved. The closure and rehabilitation of the remaining project area will be addressed by condition 5 of the new Statement.
	44-48	These commitments relate to the proposed mining extension which did not proceed due to closure of the project in 1999.
	49-50	Implementation of rehabilitation completed between 2000 and 2004, these commitments have therefore been met.
Dieback Management	51-52	Commitments 51 and 52 are relevant to pre-operational phase of the project and have been satisfied by completion of the Dieback Management Plan in 1992.
	53-55	Commitments 53 to 55, 57 and 58 relate to the proposed extension area that did not proceed due to project closure in 1999.
	56	The first part of commitment 56 relates to forest hygiene which has been satisfied with completion of earthworks in
	57-58	2003 and establishment of native vegetation. Commitments 13 and 14 of Appendix C in the Environmental Management Programme 2012 stipulate clearing and access restrictions which address ensure forest hygiene and ensure there will be no further clearing of remnant or restored native vegetation.
Environmental Management Programmes	59	This commitment relates to the pre-operational phase of the project and has been completed.
	60-61	These commitments relate to the proposed extension area that did not proceed due to project closure in 1999.
Monitoring	62	These commitments relate to the proposed extension area that did not proceed due to project closure in 1999.
Visual Amenity	63	This commitment was a pre-operational requirement completed during the construction phase in 1995 and 1996.
Water Supply	64-65	Commitments 64 to 93 relate to pre-operational or operational phases of the project and no longer apply due to the
Waste Disposal	66-67	closure of the project in 1999.
Transport of Mineral Product	68-74	
Audit of Greenhouse gases	75-76	
Employment	77-83	
Tourism	84	
Infrastructure	85-86	
Workforce	87-88	

Commitment No.
Accommodation 89
Accommodation
Social 90-93
Infrastructure

OEPAMIN2013-0348