Biodiversity TARP

Key Element	Predictions / Commitments (EIS)	Consent Criteria	Triggers / Responses	Condition Green (Operations within Predictions & Approved Impacts)	Condition Amber (Operations within Approved Impacts but potentially exceeding predictions)	Condition Red (Operations Exceed Approved Impacts)
				Continue Operations & Monitoring as Normal	*Review Processes & Adaptive Management as Required*	*Adaptive Management Process Fully Engaged*
Sensitive biodiversity features: **TEC / GDE** **Threatened Species, populations and their habitats** **Aquatic Biodiversity**	No Adverse Impact	Generally in accordance with the EIS & SEE (for MOD 9). Negligible environmental consequence as per Table 6 in Condition 1, Schedule 4 of SSD-5144. *(refer adjacent column)*	**Trigger**	• **Mining induced impacts to creeks and alluvial groundwater <u>not</u> identified** by environmental monitoring (including surface flow gauging, water quality, related groundwater levels) and/or routine monitoring (as per Extraction Plan). • Monitoring indicates all parameters are within design criteria / Level Green trigger levels.	• Subsidence monitoring program **identifies *potential* for impact** at surface in the vicinity of sensitive vegetation / habitat areas; ***<u>however</u>*** • **Mining induced impacts to creeks and alluvial groundwater is <u>not</u> identified/not confirmed** by routine environmental monitoring (including surface flow gauging, water quality, related groundwater levels) and/or routine monitoring (as per Extraction Plan); ***And/or*** • Amber Level triggers for surface water/groundwater (including alluvium) are triggered (potential for riparian vegetation impact requiring further investigation/assessment);	• **<u>Mining induced impacts</u>** <u>(beyond negligible approved levels compared to baseline)</u> identified by: o environmental monitoring (including flow gauging, water quality and biodiversity) and/or o monitoring (as per Extraction Plan); and/or o by investigations and actions arising from Condition Amber; • Red Level triggers for surface water/groundwater (incl. alluvium and biodiversity) are triggered;
			Action	• **No Action required**	• Review and confirm monitoring data, cross check Biodiversity monitoring data against other related environmental data (e.g. control sites and benchmark data) and subsidence monitoring upon identification of the potential trigger. • Notify DPIE and relevant stakeholders of current findings and proposed approach for investigation upon identification of the potential trigger.	• **Implement Adaptive Management** process as detailed within the Extraction Plan and in accordance with Condition 8 of Schedule 6 of SSD-5144 immediately. • Take all necessary steps to ensure that the exceedance ceases and does not recur. • Targeted field inspection by a qualified ecologist and the Mandalong Environment & Community Coordinator with invitation to relevant stakeholders as soon as practicable after the trigger is confirmed to be mining induced. • Monitor impact for affected species/ ecological communities using relevant methods outlined in baseline dataset. • Investigate exceedance of subsidence prediction model. • Notify DPIE as per Condition 2 of Schedule 4 and Condition 10 of Schedule 6 of SSD-5144 and consult with relevant stakeholders as per Consent/ related approvals. • **Explore all remediation options** and submit a report to DPIE outlining them.
			Response	• No response required. • Continue Subsidence monitoring program. • Continue Biodiversity Monitoring Program.	• Implement responses as per relevant Amber Level trigger/responses above (where triggered) for surface water/groundwater elements. • Where review of subsidence monitoring data indicates *potential for mining-induced impact*, or there is insufficient data to quantify the above, undertake targeted monitoring inspection over the relevant surface area to confirm and quantify the scale/extent/nature of potential surface impacts. • Undertake further investigations as appropriate to confirm the potential issue and analyse data with the aim of determining whether the exceedance is likely to be mining related. • Assess need for any increase to monitoring frequency or additional monitoring where relevant. • Continue monitoring programs.	• Implement remediation measures to the satisfaction of the secretary. • Review of mining design / predictions against mine design criteria. • Written reporting as per Consent / relevant approvals. • Implement agreed ponding remediation in consultation with the landowner, using the most applicable options and best practice at the time (such as installing drains, sub-surface drains etc). • If in the case that: (a) it is not reasonable or feasible to remediate the impact or environmental consequences; or (b) remediation measures implemented by the Applicant have failed to satisfactorily remediate the impact or environmental consequence,

						then a suitable biodiversity offset to compensate for the impact or environmental consequence would be determined to the satisfaction of the Secretary. • If a biodiversity offset is required, it would be proportionate with the significance of the impact or environmental consequence. Any offset requirements would be quantified using BAM (2020) and be commensurate with monitoring results. The offset calculation would have regard for the baseline condition state, as determined through the monitoring program and Section 8.5 of BAM (2020; i.e. Adaptive management for uncertain biodiversity impacts). • If offsets are required, the credit obligation would be met by: o Retiring credits owned by Centennial (if suitable credits available); o Identifying and purchasing the required 'like for like' credits in the market and then retire those credits; or o Using the offsets payment calculator to determine the cost of the credit obligation and transfer this amount to the Biodiversity Conservation Fund (BCF).