

Mining Area C - Southern Flank Proposal									
Existing environment/ Impact	Mitigation			Significant Residual Impact	Offset Calculation Methodology				
	Avoid and minimise	Rehabilitation type			Type	Risk	Likely offset success	Time Lag	Offset Quantification
<b>19,671.2 hectares of clearing</b>									
Native vegetation to be cleared in 'Good' condition or above - for a pit area.	The 'worst-case' scenario is that the mine pits will not be back-filled. The Proponent is committed to prioritising back-fill of depleted mine pits where practicable. Further investigations in relation to closure of the mine voids are addressed through the Mine Closure Plan (current and future revisions).	Site specific rehabilitation approach based on ability to backfill.	<p><u>Can the environmental values be rehabilitated/Evidence?</u> No. Various closure scenarios are being investigated, however, worst case is that the depleted pit will not be backfilled.</p> <p>The Proponent would like the EPA to note that there are comparable sites whereby mine batters and 'in-pit OSAs' have been successfully rehabilitated. The Proponent proposes to compile case-studies and present to the EPA as part of discussions via working strategy groups and/or in relation to future developments.</p>	<p><u>Quality</u> A range of back-fill closure options are currently being modelled and are discussed further in the Mine Closure Plan. Based on the worst-case scenario, some mine voids may become a pit-lake.</p> <p><u>Conservation Significance</u> Nil.</p> <p><u>Land Tenure</u> Pastoral Lease or Unallocated Crown Land.</p> <p><u>Time Scale</u> As detailed and revised in the Mine Closure Plan.</p> <p><u>According to the agreed significance framework, residual impact is considered to be significant because:</u> Native vegetation in 'Good' condition or above within the Hamersley IBRA sub-region will be cleared and potentially (worst-case scenario) not rehabilitated.</p>	Monetary offsets contribution to the Pilbara Strategic Conservation Fund.	N/A	A offset Ministerial Condition is proposed in the Mining Area C - Southern Flank Proposal Referral Document.	Permanent.	In accordance with contemporary offset guidance applicable.
Native vegetation in 'Good' condition or above to be cleared - for Overburden Storage Areas (OSAs) and other mine infrastructure (including stockpiles and roads).	<p>Minimise clearing for OSAs through the progressive backfilling of depleted pits where practicable.</p> <p>Minimise clearing through the use of existing infrastructure such as workshops, offices, etc. at the existing Mining Area C operations.</p>	<p>Site specific rehabilitation approach based on ability to backfill.</p> <p>Progressive rehabilitation in accordance with the Mine Closure Plan.</p>	<p><u>Can the environmental values be rehabilitated/Evidence?</u> Yes. BHP Billiton Iron Ore has seen recent successes in the rehabilitation of OSAs at various Pilbara operations, albeit limited data. BHP Billiton Iron Ore has successes in rehabilitating a range of low-impact disturbances of a comparable nature and timeframe at various Pilbara operations.</p> <p>The Proponent would like the EPA to note that notwithstanding the currently limited data, the Proponent proposes to compile case-studies for presentation to the EPA via working strategy groups in relation to future developments as more data demonstrating rehabilitation success of OSAs becomes available.</p> <p><u>Operator experience in undertaking rehabilitation?</u> Refer to rehabilitation and monitoring data as reported within the Annual Environmental Report.</p> <p><u>What is the type of vegetation being rehabilitated?</u> Hummock and Tussock Grassland frequenting with Acacia.</p> <p><u>Time lag?</u> 12 years post closure.</p> <p><u>Credibility of the rehabilitation proposed (evidence of demonstrated success)</u> A brief overview of recent successes in the rehabilitation of comparable low impact clearing is outlined in the cover letter. The Proponent would like the EPA to note that extensive rehabilitation monitoring data is currently being compiled to demonstrate the credibility of its rehabilitation. The Proponent proposes to compile case studies for presentation to the EPA in future.</p>	<p><u>Quality</u> The Proponent acknowledges that there is currently limited data available to demonstrate the quality of the post-mining OSA to the pre-mining condition, however, there have been some successes. The Proponent has had successes in rehabilitating 'low impact' clearing disturbance back to a similar pre-mining condition.</p> <p><u>Conservation Significance</u> Due to the direct impacts on native vegetation from the Mining Area C - Southern Flank Revised Proposal, material from this species will be used during progressive rehabilitation activities undertaken on site as described in the Mine Closure Plan.</p> <p><u>Land Tenure</u> Unallocated crown land or pastoral.</p> <p><u>Time Scale</u> Progressively in accordance with the Mine Closure Plan up to completion in approximately 2054.</p> <p><u>According to the agreed significance framework, residual impact is considered to be significant because:</u> Native vegetation in 'Good' condition or above within the Hamersley IBRA sub-region will be cleared and potentially not rehabilitated back to its pre-mining condition.</p>	Monetary offsets contribution to the Pilbara Strategic Conservation Fund.	N/A	A offset Ministerial Condition is proposed in the Mining Area C - Southern Flank Proposal Referral Document.	12 years post closure.	In accordance with contemporary offset guidance applicable.
<b>Quantifying the potential impacts of individual or cumulative mining operations on the Ghost Bat species within the Hamersley region</b>									
BHP Billiton Iron Ore has commissioned a Ghost Bat Study which is currently underway.	The outcomes of this study will provide the business and the wider community with information which will assist in minimising impacts of future mining operations.	N/a	N/a	N/a	This offset type is considered 'research' (as defined in the offset values).	N/A	Data obtained from the surveys will advance the knowledge of the ecology of the Ghost Bat species and assist in quantifying the potential impacts of individual or cumulative mining operations on the Ghost Bat species within the Hamersley region. The majority of the information will be obtained prior to significant implementation of the Southern Flank satellite ore body and hence will help inform ongoing management measures, triggers, thresholds and contingency measures.	Studies currently underway and will span 12 months. Dependent on the outcomes of the current study, further studies may continue for an additional two years.	Financial cost of data collection and studies.