

**Table 1. Requirements Under IFC PS6 and notes on compliance (blue font)**

### Introduction

1. Performance Standard 6 recognizes that protecting and conserving biodiversity, maintaining ecosystem services, and sustainably managing living natural resources are fundamental to sustainable development. The requirements set out in this Performance Standard have been guided by the Convention on Biological Diversity, which defines biodiversity as “the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species, and of ecosystems.” *General statement - no auditable requirement.*

2. Ecosystem services are the benefits that people, including businesses, derive from ecosystems. Ecosystem services are organized into four types: (i) provisioning services, which are the products people obtain from ecosystems; (ii) regulating services, which are the benefits people obtain from the regulation of ecosystem processes; (iii) cultural services, which are the nonmaterial benefits people obtain from ecosystems; and (iv) supporting services, which are the natural processes that maintain the other services.<sup>1</sup> *General statement - no auditable requirement.*

3. Ecosystem services valued by humans are often underpinned by biodiversity. Impacts on biodiversity can therefore often adversely affect the delivery of ecosystem services. This Performance Standard addresses how clients can sustainably manage and mitigate impacts on biodiversity and ecosystem services throughout the project’s lifecycle. *General statement - no auditable requirement.*

### Scope of Application

4. The applicability of this Performance Standard is established during the environmental and social risks and impacts identification process. *Only applies to IFC funded projects (the controls described in the standard may be applicable to other projects).*

The implementation of the actions necessary to meet the requirements of this Performance Standard is managed through the client’s Environmental and Social Management System (ESMS), the elements of which are outlined in Performance Standard 1. *In the case of PTAR, biodiversity controls are mostly managed through the HSE Management System, an equivalent outcome.*

5. Based on the risks and impacts identification process, the requirements of this Performance Standard are applied to projects (i) located in modified, natural, and critical habitats; (ii) that potentially impact on or are dependent on ecosystem services over which the client has direct management control or significant influence; or (iii) that include the production of living natural resources (e.g., agriculture, animal husbandry, fisheries, forestry). *General statement, in compliance.*

### Requirements

#### General

6. The risks and impacts identification process as set out in Performance Standard 1 should consider direct and indirect project-related impacts on biodiversity and ecosystem services and identify any significant residual impacts. This process will consider relevant threats to biodiversity and ecosystem services, especially focusing on habitat loss, degradation and fragmentation, invasive alien species, overexploitation, hydrological changes, nutrient loading, and pollution. It will also take into account the differing values attached to biodiversity and ecosystem services by Affected Communities and, where appropriate, other stakeholders. Where paragraphs 13–19 are applicable, the client should consider project-related impacts across the potentially affected landscape or seascape. *Assessed generally under the Amdal process and in more detail by the 2021 Biodiversity Risk Assessment (PTAR) and the 2023 Residual Impact Assessment (TBC).*

7. As a matter of priority, the client should seek to avoid impacts on biodiversity and ecosystem services. When avoidance of impacts is not possible, measures to minimize impacts and restore biodiversity and ecosystem services should be implemented. *In compliance (see Table 2).*

Given the complexity in predicting project impacts on biodiversity and ecosystem services over the long term, the client should adopt a practice of adaptive management in which the implementation of mitigation and management measures are responsive to changing conditions and the results of monitoring throughout the project’s lifecycle. *In compliance (Biodiversity Management Steering Committee, bi-annual biodiversity workshops, annual Biodiversity Action Plans etc.).*

8. Where paragraphs 13–15 are applicable, the client will retain competent professionals to assist in conducting the risks and impacts identification process. *In compliance (consultants engaged for technical studies, key staff).*

Where paragraphs 16–19 are applicable, the client should retain external experts with appropriate regional experience to assist in the development of a mitigation hierarchy that complies with this Performance Standard and to verify the implementation of those measures. *In compliance (consultants engaged for technical studies, the Biodiversity Advisory Panel).*

## Protection and Conservation of Biodiversity

9. Habitat is defined as a terrestrial, freshwater, or marine geographical unit or airway that supports assemblages of living organisms and their interactions with the non-living environment. For the purposes of implementation of this Performance Standard, habitats are divided into modified, natural, and critical. Critical habitats are a subset of modified or natural habitats. *In compliance (habitat mapping studies 2013 and 2022).*

10. For the protection and conservation of biodiversity, the mitigation hierarchy includes biodiversity offsets, which may be considered only after appropriate avoidance, minimization, and restoration measures have been applied.<sup>1</sup> A biodiversity offset should be designed and implemented to achieve measurable conservation outcomes<sup>2</sup> that can reasonably be expected to result in no net loss and preferably a net gain of biodiversity; however, a net gain is required in critical habitats. *In compliance (previous and current offset feasibility studies).*

The design of a biodiversity offset must adhere to the “like-for-like or better” principle<sup>3</sup> and must be carried out in alignment with best available information and current practices. When a client is considering the development of an offset as part of the mitigation strategy, external experts with knowledge in offset design and implementation must be involved. *In compliance (previous and current offset feasibility studies).*

### Modified Habitat

11. Modified habitats are areas that may contain a large proportion of plant and/or animal species of non-native origin, and/or where human activity has substantially modified an area’s primary ecological functions and species composition.<sup>4</sup> Modified habitats may include areas managed for agriculture, forest plantations, reclaimed coastal zones, and reclaimed wetlands. *General statement - no auditable requirement.*

12. This Performance Standard applies to those areas of modified habitat that include significant biodiversity value, as determined by the risks and impacts identification process required in Performance Standard 1. *In compliance (2013 and 2022 habitat mapping studies).*

The client should minimize impacts on such biodiversity and implement mitigation measures as appropriate. *In compliance (see Table 2).*

### Natural Habitat

13. Natural habitats are areas composed of viable assemblages of plant and/or animal species of largely native origin, and/or where human activity has not essentially modified an area’s primary ecological functions and species composition. *General statement - no auditable requirement.*

14. The client will not significantly convert or degrade<sup>5</sup> natural habitats, unless all of the following are demonstrated:

- No other viable alternatives within the region exist for development of the project on modified habitat; consultation has established the views of stakeholders, including Affected Communities, with respect to the extent of conversion and degradation.<sup>6</sup> *In compliance (public consultation process applied in the Amdal study, review and approval of the Amdal).*
- Any conversion or degradation is mitigated according to the mitigation hierarchy. *In compliance (see Table 2).*

15. In areas of natural habitat, mitigation measures will be designed to achieve no net loss<sup>7</sup> of biodiversity where feasible. Appropriate actions include:

- Avoiding impacts on biodiversity through the identification and protection of set-asides<sup>8</sup>;
- Implementing measures to minimize habitat fragmentation, such as biological corridors;

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<sup>1</sup> Biodiversity offsets are measurable conservation outcomes resulting from actions designed to compensate for significant residual adverse biodiversity impacts arising from project development and persisting after appropriate avoidance, minimization and restoration measures have been taken.

<sup>2</sup> Measurable conservation outcomes for biodiversity must be demonstrated in situ (on-the-ground) and on an appropriate geographic scale (e.g., local, landscape-level, national, regional).

<sup>3</sup> The principle of “like-for-like or better” indicates that biodiversity offsets must be designed to conserve the same biodiversity values that are being impacted by the project (an “in-kind” offset). offset that involves “trading up” (i.e., where the offset targets biodiversity of higher priority than that affected by the project) that will, for critical habitats, meet the requirements of paragraph 17 of this Performance Standard.

<sup>4</sup> This excludes habitat that has been converted in anticipation of the project.

<sup>5</sup> Significant conversion or degradation is (i) the elimination or severe diminution of the integrity of a habitat caused by a major and/or long-term change in land or water use; or (ii) a modification that substantially minimizes the habitat’s ability to maintain viable populations of its native species.

<sup>6</sup> Conducted as part of the stakeholder engagement and consultation process, as described in Performance Standard 1.

<sup>7</sup> No net loss is defined as the point at which project-related impacts on biodiversity are balanced by measures taken to avoid and minimize the project’s impacts, to undertake on-site restoration and finally to offset significant residual impacts, if any, on an appropriate geographic scale (e.g., local, landscape-level, national, regional).

<sup>8</sup> Set-asides are land areas within the project site, or areas over which the client has management control, that are excluded from development and are targeted for the implementation of conservation enhancement measures. Set-asides will likely contain significant biodiversity values and/or provide ecosystem services of significance at the local, national and/or regional level. Set-asides should be defined using internationally recognized approaches or methodologies (e.g., High Conservation Value, systematic conservation planning).

- Restoring habitats during operations and/or after operations; and
- Implementing biodiversity offsets.

*In compliance, noting that the process of evaluating and implementing an offset is still underway.*

### **Critical Habitat**

16. Critical habitats are areas with high biodiversity value, including (i) habitat of significant importance to Critically Endangered and/or Endangered<sup>1</sup> species; (ii) habitat of significant importance to endemic and/or restricted-range species; (iii) habitat supporting globally significant concentrations of migratory species and/or congregatory species; (iv) highly threatened and/or unique ecosystems; and/or (v) areas associated with key evolutionary processes.

17. In areas of critical habitat, the client will not implement any project activities unless all of the following are demonstrated:

- No other viable alternatives within the region exist for development of the project on modified or natural habitats that are not critical; *In compliance.*
- The project does not lead to measurable adverse impacts on those biodiversity values for which the critical habitat was designated, and on the ecological processes supporting those biodiversity values;<sup>2</sup> *It seems that the requirement for no measurable adverse impacts applies after application of the mitigation hierarchy. In the case of Martabe, this would mean following site rehabilitation involving, habitat restoration and implementation of an offset. On this basis, the site should fully comply with this requirement.*
- The project does not lead to a net reduction in the global and/or national/regional population<sup>3</sup> of any Critically Endangered or Endangered species over a reasonable period of time;<sup>4</sup> *Given the relatively small scale and short duration of activities at Martabe, there is no credible basis for concluding that the project will lead to a net reduction in the population of any Critically Endangered or Endangered species over a reasonable period of time. A “reasonable period of time” would include site rehabilitation and implementation of an offset.*
- A robust, appropriately designed, and long-term biodiversity monitoring and evaluation program is integrated into the client’s management program. *Already being addressed (River Health Program, rehabilitation monitoring, monitoring in forest areas). Will be expanded as required e.g. as rehabilitated areas develop and with implementation of an offset. This will be a long-term program, extending into mine closure.*

18. In such cases where a client is able to meet the requirements defined in paragraph 17, the project’s mitigation strategy will be described in a Biodiversity Action Plan and will be designed to achieve net gains<sup>5</sup> of those biodiversity values for which the critical habitat was designated. *Addressed by the PTAR Biodiversity Strategy and Action plan.*

In instances where biodiversity offsets are proposed as part of the mitigation strategy, the client must demonstrate through an assessment that the project’s significant residual impacts on biodiversity will be adequately mitigated to meet the requirements of paragraph 17. *This is a key outcome under the current offset study being conducted by TBC.*

### **Legally Protected and Internationally Recognized Areas**

20. In circumstances where a proposed project is located within a legally protected area or an internationally recognized area<sup>6</sup> the client will meet the requirements of paragraphs 13 through 19 of this Performance Standard, as applicable. In addition, the client will:

- Demonstrate that the proposed development in such areas is legally permitted;
- Act in a manner consistent with any government recognized management plans for such areas;
- Consult protected area sponsors and managers, Affected Communities, Indigenous Peoples and other stakeholders on the proposed project, as appropriate; and

<sup>1</sup> As listed on the International Union for the Conservation of Nature (IUCN) Red List of Threatened Species. The determination of critical habitat based on other listings is as follows: (i) If the species is listed nationally / regionally as critically endangered or endangered, in countries that have adhered to IUCN guidance, the critical habitat determination will be made on a project by project basis in consultation with competent professionals; and (ii) in instances where nationally or regionally listed species’ categorizations do not correspond well to those of the IUCN (e.g., some countries more generally list species as “protected” or “restricted”), an assessment will be conducted to determine the rationale and purpose of the listing. In this case, the critical habitat determination will be based on such an assessment.

<sup>2</sup> Biodiversity values and their supporting ecological processes will be determined on an ecologically relevant scale.

<sup>3</sup> Net reduction is a singular or cumulative loss of individuals that impacts on the species’ ability to persist at the global and/or regional/national scales for many generations or over a long period of time. The scale (i.e., global and/or regional/national) of the potential net reduction is determined based on the species’ listing on either the (global) IUCN Red List and/or on regional/national lists. For species listed on both the (global) IUCN Red List and the national/regional lists, the net reduction will be based on the national/regional population.

<sup>4</sup> The timeframe in which clients must demonstrate “no net reduction” of Critically Endangered and Endangered species will be determined on a case-by-case basis in consultation with external experts.

<sup>5</sup> Net gains are additional conservation outcomes that can be achieved for the biodiversity values for which the critical habitat was designated. Net gains may be achieved through the development of a biodiversity offset and/or, in instances where the client could meet the requirements of paragraph 17 of this Performance Standard without a biodiversity offset, the client should achieve net gains through the implementation of programs that could be implemented in situ (on-the-ground) to enhance habitat, and protect and conserve biodiversity.

<sup>6</sup> Exclusively defined as UNESCO Natural World Heritage Sites, UNESCO Man and the Biosphere Reserves, Key Biodiversity Areas, and wetlands designated under the Convention on Wetlands of International Importance (the Ramsar Convention).

- Implement additional programs, as appropriate, to promote and enhance the conservation aims and effective management of the area.<sup>1</sup>

*Not currently applicable, however outcomes already addressed.*

### **Invasive Alien Species**

21. Intentional or accidental introduction of alien, or non-native, species of flora and fauna into areas where they are not normally found can be a significant threat to biodiversity, since some alien species can become invasive, spreading rapidly and out-competing native species. *General statement - no auditable requirement.*

22. The client will not intentionally introduce any new alien species (not currently established in the country or region of the project) unless this is carried out in accordance with the existing regulatory framework for such introduction. *Compliant. We use commonplace legume species in the rehabilitation program.*

Notwithstanding the above, the client will not deliberately introduce any alien species with a high risk of invasive behaviour regardless of whether such introductions are permitted under the existing regulatory framework. *At least one of the legumes in use at site is rated as invasive however this is in the context of pastures and agricultural crops where conditions are most suitable for growth. Not regarded as invasive in conditions of low light and nutrient availability as typical of tropical forest floors.*

All introductions of alien species will be subject to a risk assessment (as part of the client's environmental and social risks and impacts identification process) to determine the potential for invasive behaviour. The client will implement measures to avoid the potential for accidental or unintended introductions including the transportation of substrates and vectors (such as soil, ballast, and plant materials) that may harbor alien species. *We should document a formal risk assessment.*

23. Where alien species are already established in the country or region of the proposed project, the client will exercise diligence in not spreading them into areas in which they have not already been established. As practicable, the client should take measures to eradicate such species from the natural habitats over which they have management control. *Not practicable or needed.*

### **Management of Ecosystem Services**

24. Where a project is likely to adversely impact ecosystem services, as determined by the risks and impacts identification process, the client will conduct a systematic review to identify priority ecosystem services. *Not likely to adversely impact ecosystem services going forward.*

Priority ecosystem services are two-fold: (i) those services on which project operations are most likely to have an impact and, therefore, which result in adverse impacts to Affected Communities; and/or (ii) those services on which the project is directly dependent for its operations (e.g., water). When Affected Communities are likely to be impacted, they should participate in the determination of priority ecosystem services in accordance with the stakeholder engagement process as defined in Performance Standard 1. *Not clear if this was addressed in the Amdal public meetings.*

25. With respect to impacts on priority ecosystem services of relevance to Affected Communities and where the client has direct management control or significant influence over such ecosystem services, adverse impacts should be avoided. If these impacts are unavoidable, the client will minimize them and implement mitigation measures that aim to maintain the value and functionality of priority services. *Compliant.*

With respect to impacts on priority ecosystem services on which the project depends, clients should minimize impacts on ecosystem services and implement measures that increase resource efficiency of their operations, as described in Performance Standard 3. Additional provisions for ecosystem services are included in Performance Standards 4, 5, 7, and 8.2. *Generally compliant*

### **Sustainable Management of Living Natural Resources**

26. Clients who are engaged in the primary production of living natural resources, including natural and plantation forestry, agriculture, animal husbandry, aquaculture, and fisheries, will be subject to the requirements of paragraphs 26 through 30, in addition to the rest of this Performance Standard. Where feasible, the client will locate land-based agribusiness and forestry projects on unforested land or land already converted. Clients who are engaged in such industries will manage living natural resources in a sustainable manner, through the application of industry-specific good management practices and available technologies. Where such primary production practices are codified in globally, regionally, or nationally recognized standards, the client will implement sustainable management practices to one or more relevant and credible standards as demonstrated by independent verification or certification. *Not applicable.*

27. Credible globally, regionally, or nationally recognized standards for sustainable management of living natural resources are those which (i) are objective and achievable; (ii) are founded on a multi-stakeholder consultative process;

<sup>1</sup> Implementing additional programs may not be necessary for projects that do not create a new footprint.

<sup>2</sup> Ecosystem service references are located in Performance Standard 4, paragraph 8; Performance Standard 5, paragraphs 5 and 25–29; Performance Standard 7, paragraphs 13–17 and 20; and Performance Standard 8, paragraph 11.

(iii) encourage step-wise and continual improvements; and (iv) provide for independent verification or certification through appropriate accredited bodies for such standards.<sup>1</sup> *Not applicable.*

28. Where relevant and credible standard(s) exist, but the client has not yet obtained independent verification or certification to such standard(s), the client will conduct a pre-assessment of its conformity to the applicable standard(s) and take actions to achieve such verification or certification over an appropriate period of time. *Not applicable.*

29. In the absence of a relevant and credible global, regional, or national standard for the particular living natural resource in the country concerned, the client will:

- Commit to applying good international industry operating principles, management practices, and technologies; and
- Actively engage and support the development of a national standard, where relevant, including studies that contribute to the definition and demonstration of sustainable practices.

*Not applicable.*

### **Supply Chain**

30. Where a client is purchasing primary production (especially but not exclusively food and fiber commodities) that is known to be produced in regions where there is a risk of significant conversion of natural and/or critical habitats, systems and verification practices will be adopted as part of the client's ESMS to evaluate its primary suppliers.<sup>2</sup> The systems and verification practices will (i) identify where the supply is coming from and the habitat type of this area; (ii) provide for an ongoing review of the client's primary supply chains; (iii) limit procurement to those suppliers that can demonstrate that they are not contributing to significant conversion of natural and/or critical habitats (this may be demonstrated by delivery of certified product, or progress towards verification or certification under a credible scheme in certain commodities and/or locations); and (iv) where possible, require actions to shift the client's primary supply chain over time to suppliers that can demonstrate that they are not significantly adversely impacting these areas. The ability of the client to fully address these risks will depend upon the client's level of management control or influence over its primary suppliers. *Not applicable.*

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<sup>1</sup> A credible certification system would be one which is independent, cost-effective, based on objective and measurable performance standards and developed through consultation with relevant stakeholders, such as local people and communities, Indigenous Peoples, and civil society organizations representing consumer, producer and conservation interests. Such a system has fair, transparent and independent decision-making procedures that avoid conflicts of interest.

<sup>2</sup> Primary suppliers are those suppliers who, on an ongoing basis, provide the majority of living natural resources, goods, and materials essential for the core business processes of the project.



Table 2. Biodiversity controls management at the Martabe Gold Mine - Alignment With The Mitigation Hierarchy

Hierarchy Level	Description	General Comments	Controls	Source
Avoidance	Avoidance of biodiversity loss by means of decisions made early in the project planning stage. The most likely opportunities involve site selection, project design and project scheduling.	As for many mines, opportunities for avoidance of biodiversity impacts at the project planning stage were limited. There were no alternative deposits to consider and the footprint of the Tailings Facility was determined by topography and geotechnical constraints. Extensive support facilities were located in the lowlands outside of areas of critical habitat. The decision not to develop TMF East is a clear example of avoidance of biodiversity loss. Efforts are now being directed towards the scheduling of pits LOM to maximise opportunities for in-pit placement of tailings and waste rock (avoidance of pit voids).	Project Pre-Feasibility Studies (PFS) shall include a preliminary assessment of biodiversity impacts and risks associated with the project. A desktop study may be sufficient at PFS level (if existing studies for similar ecosystems are available for reference). The PFS shall take into account preliminary costing of required biodiversity controls, including closure costs. Key findings shall be included in the PFS report executive summary.	CoP Biodiversity Management - Requirement 1.1
			If the preliminary assessment (above) indicates the potential for significant project-related biodiversity impacts, the PFS shall evaluate opportunities for avoidance and minimisation of these impacts in accordance with the mitigation hierarchy. Key findings shall be included in the PFS report executive summary.	CoP Biodiversity Management - Requirement 1.2
			In the case where several project alternatives are being evaluated, the PFS shall include a preliminary assessment of the biodiversity impacts and risks associated with each alternative. This information shall be taken into account in the evaluation and ranking of alternatives. Key findings shall be referenced in the PFS report executive summary.	CoP Biodiversity Management - Requirement 1.3
Minimisation	Minimizing biodiversity loss due to impacts that are unavoidable if a project is implemented. There are three main classes of minimisation controls: <i>physical controls</i> related to the design of infrastructure, <i>operational controls</i> such as rules and procedures, and <i>abatement controls</i> on pollution.	COP Requirement 1.4 requires that controls for minimising operational biodiversity impacts be identified and costed as part of the Feasibility Study for any new project.  COP Requirements 2.1. and 2.2 require that Amdal impact assessment studies for new projects properly address biodiversity risk. The Amdal Addendum shall document mitigation measures for minimisation of biodiversity impacts reflective of industry leading practices.  Operational controls on clearing are key for minimising operational impacts on biodiversity at the site and in exploration areas.	If a Pre Feasibility Assessment indicates the potential for significant project-related biodiversity impacts and risks, a following Feasibility Study (FS) shall include a more detailed impact assessment including required controls to mitigate biodiversity impacts. This assessment shall include a biodiversity survey of areas to be disturbed by the project conducted by ecologists familiar with local ecosystems. The FS financial analysis shall take into account the costs of required biodiversity controls including closure costs. Key findings of this impact assessment shall be included in the FS report executive summary.	CoP Biodiversity Management - Requirement 1.4
			During the planning stage for any project or development at the Martabe Gold Mine, biodiversity risk shall be assessed as part of the impact assessment studies required under the Amdal process. This assessment shall be carried out by specialist environmental consultants with expertise in the biodiversity of forest areas surround the mine. An input into this assessment shall be a fauna and flora survey in the planned area of disturbance that specifically addresses the requirements of IFC PS6. These surveys shall specifically include assessment of orangutan habitat and the presence of <i>Pongo tapanuliensis</i> or evidence of previous use of the area by <i>Pongo tapanuliensis</i> .	CoP Biodiversity Management - Requirement 2.1
			Based on this impact assessment, mitigation measures reflective of industry leading practice shall be documented in the associated Amdal or Amdal Addendum. These measures shall be aligned with the mitigation hierarchy for protection and conservation of biodiversity as presented in IFC Performance Standard 6 .	CoP Biodiversity Management - Requirement 2.2
			All clearing of vegetation at the site shall be strictly controlled by application of the Land Access Disturbance Request (LADR) procedure. When completing the Environment clearance section of a LADR, Manager Environment shall (1) verify that the area of clearing shown in the LADR falls with area approved for clearing under the Amdal / Amdal Addendums, (2) verify that the area of clearing is no larger than that required for the activity covered by the LADR, (3) ensure that pre-clearing inspections are specified as a required control, (4) ensure that surface water controls for minimising Impacts on downstream waterways are specified as a required controls.  All areas of clearing shall be approved by Director Operations by means of an authorized LADR. Unapproved clearing shall be subject to disciplinary sanction.	CoP Biodiversity Management - Requirement 3.1

Hierarchy Level	Description	General Comments	Controls	Source	
			Immediately prior to any clearing of native vegetation at the site (within 24 hours), Environment personnel shall conduct a walk-through inspection of the area to check for the presence of species classified as critically endangered ( <i>orangutan, tiger, pangolin, hornbill</i> ). If individuals of these species are recorded during a pre-clearing inspection, clearing activities in the vicinity must be immediately halted and a defined procedure followed to ensure the animal is protected. The procedure at Section 8 (see below) shall apply without exception. All pre-clearing inspections shall be recorded using the form approved for this purpose, signed by the team leader. These records shall be retained by the Environment Department.  A similar pre clearing fauna inspection procedure applies to exploration drill pads.	CoP Biodiversity Management - Requirements 3.2, 4.5	
			All field staff involved in clearing operations shall undergo basic species recognition training, and shall be instructed to report immediately any potential sighting of an endangered or critically endangered species in or near the area of operations. All such sightings are to be reported to PTAR Manager Environment on the day of the sighting.	CoP Biodiversity Management - Requirement 3.3	
			Mine planning shall place priority on minimising area of disturbance and wherever possible routing of roads and sighting of infrastructure to avoid high value forest habitat.	CoP Biodiversity Management - Requirement 3.4	
	Aside from controls on clearing, various other operational controls minimise biodiversity impacts associated with a wide range of activities at site and to regional exploration activity			Impacts on downstream waterways shall be managed in accordance with the requirements of Code of Practice Site Water Management and site discharge permits.	CoP Biodiversity Management - Requirement 3.5
				Hunting and collection of plants or animals for personal use is prohibited and shall be strictly controlled.	CoP Biodiversity Management - Requirements 3.6, 4.1
				Burning of vegetation in the Project Area is prohibited and shall be strictly controlled.	CoP Biodiversity Management - Requirements 3.7, 4.2
				Logging or timber getting by third-parties in the Project Area is prohibited and shall be strictly controlled.	CoP Biodiversity Management - Requirements 3.8, 4.3
				From time to time, illegal activities might be conducted by third parties within the Contract of Work. Examples could include clearing of vegetation and/or logging, or illegal mining and processing. If PTAR becomes aware of such an occurrence, the Chief Geologist shall report this to Director Government Relations and Senior Manager Government Relations and discuss response required. A monitoring program will be implemented as appropriate and agreed with senior management.	CoP Biodiversity Management - Requirement 4.8
				Hazardous waste shall be managed in compliance with B3 waste regulations.	CoP Biodiversity Management - Requirements 3.9, 4.4
				All sightings of endangered and critically endangered species shall be reported in the monthly operations report.	CoP Biodiversity Management - Requirement 3.10
				Feral animal occurrence around camp and office areas shall be monitored, and as needed feral animal control programs shall be implemented.	CoP Biodiversity Management - Requirement
Non-local species used in the site rehabilitation program (such as legumes and grasses) will be limited to those that have little potential for invasion of native ecosystems.	CoP Biodiversity Management - Requirement 3.12				

Hierarchy Level	Description	General Comments	Controls	Source
			The site HSE Induction shall describe basic requirements for the protection of fauna and flora applying to all employees. Information on biodiversity protection shall be included in the site's HSE awareness communications (alerts, posters and publications). A biodiversity management training course addressing the requirements of this COP shall be made available by PTAR Training. This shall be a "Required" competency for PTAR staff according to role as documented in Departmental LNAs.	CoP Biodiversity Management - Requirement 3.13
			Biodiversity monitoring as required by the Amdal shall be implemented using a standard site protocol developed for this purpose.	CoP Biodiversity Management - Requirement 3.14
<b>Restoration</b>	Measures taken to recover biodiversity losses that have not been addressed through avoidance and/or minimization. The common example in mining is site rehabilitation.	Site rehabilitation leading to the restoration of native forest ecosystem is a key element of the biodiversity management strategy established for the Martabe Gold Mine. Mine site rehabilitation techniques for the restoration of tropical forest are now well established.	All areas of the site will be rehabilitated to a safe and stable state following mining, including the removal of all major surface infrastructure (some required infrastructure shall be retained for a period, such as the WPP).	CoP Biodiversity Management - Requirement 5.1
			Drill sites shall be reclaimed in accordance with Exploration SOP 00073 Drill Site reclamation.	CoP Biodiversity Management - Requirement 4.7
			Wherever possible, site rehabilitation will be progressively implemented as areas become available.	CoP Biodiversity Management - Requirement 5.2
			The mine closure plan will provide for the restoration of most areas of the site to a native forest association similar to that originally disturbed. Tree species known to be important food sources or shelter for orangutan will be used across all these areas. Expert advice will be sought in the development of rehabilitation specifications.	CoP Biodiversity Management - Requirement 5.3
			Biodiversity monitoring will be periodically implemented on both rehabilitation areas and nearby natural vegetation in accordance with protocols established by expert consultants.	CoP Biodiversity Management - Requirement 5.4
			Rehabilitation areas will be maintained through ongoing measures such as weeding, replanting and fertilizer application until mine closure criteria as established by ESDM have been met.	CoP Biodiversity Management - Requirement 5.5
<b>Offset</b>	Measurable conservation outcomes designed to compensate for residual adverse impacts persisting after appropriate avoidance, minimization and restoration measures have been taken.	PTAR first implemented biodiversity offset feasibility studies in 2015 and 2016.	The PTAR Biodiversity Strategy and Action Plan commits the Company to implement studies to assess the feasibility of a biodiversity offset for the Martabe Gold Mine. This option is currently being addressed by a detailed offset study conducted by The Biodiversity Consultancy (TBC). Benefits from this offset project are expected to become available from mid-2024	PTAR Biodiversity Strategy and Action Plan (section 7.3).