EPA R&R No: 1421

MINISTER FOR ENVIRONMENT

MT GIBSON IRON ORE MINE AND INFRASTRUCTURE PROJECT, SHIRE OF YALGOO – PROPOSAL UNDER S46 OF THE EP ACT TO AMEND CONDITION 13 FAUNA MANAGEMENT ALONG THE SERVICES CORRIDOR, AND CONDITION 15 PERFORMANCE BOND (MINISTERIAL STATEMENT 753)

I refer to the Hon John Day’s letter of 6 December 2010, and your letter of 23 June 2011, requesting the Environmental Protection Authority (EPA) to report to you on Mount Gibson Mining Limited and Extension Hill Pty Ltd’s requested changes to the environmental conditions for the Mount Gibson Iron Ore Mine and Infrastructure Project (Ministerial Statement 753).

The following is the EPA’s Report and Recommendations (No. 1421) to you pursuant to section 46(6) of the Environmental Protection Act 1986.

Introduction
Ministerial Statement 753 (October 2007) gives approval for the Mt Gibson Iron Ore and Infrastructure Project; a proposal to mine and process iron ore from Extension Hill and Extension Hill North within the Mt Gibson Ranges, construct a pipeline to transport the magnetite slurry to Geraldton Port, and construct infrastructure at the port to strip the ore from the slurry for export.

The proposal was referred to the EPA and assessed at the level of Public Environmental Review (PER). EPA Bulletin 1242 (November 2006) is the EPA’s report and recommendations on the proposal to the Minister for the Environment.
Extension Hill and Extension Hill North are part of a ridge of banded ironstone formations (BIF) in the Mt Gibson Ranges, approximately 350 kilometres northeast of Perth. The BIF ranges support floristically different vegetation communities and unique biological species, and are considered by the EPA to have outstanding conservation significance. The EPA considered flora and vegetation key environmental factors in the assessment of the proposal, and were particularly concerned with potential impacts to Declared Rare Flora and the proposed removal of floristic vegetation communities restricted to Extension Hill and Extension Hill North.

The other key environmental factors considered by the EPA were fauna, and mine closure and rehabilitation. The EPA recommended to the then Minister for the Environment that should the proposal be approved for implementation, it should be subject to a set of conditions that addressed matters such as rare flora research and recovery plans, conservation of significant flora species and communities, weed management, fire management, fauna management and mine closure and rehabilitation.

The joint proponents of the proposal are Extension Hill Pty Ltd and Mt Gibson Mining Limited. Mt Gibson Mining Limited will carry out the first (direct shipping grade hematite) stage of mining, which will involve the transport of the ore by road to Perenjori then train to Geraldton Port (this transport route was approved separately under Ministerial Statement 786). The second (magnetite) stage of mining will be carried out solely by Extension Hill Pty Ltd, and will involve the construction and operation of the magnetite processing plant and facilities, including a 280 kilometre underground pipeline to transport magnetite slurry to Geraldton Port. The slurry pipeline will be constructed within a services corridor that will also contain return water pipes, water pumping stations and a gas pipeline.

**Condition 13 Fauna Management along the Services Corridor**

Construction within the services corridor will include excavation of trenches, which remain open until the lengths of pipe can be installed and the trench backfilled. Experience from similar proposals is that native fauna are at significant risk of injury and death as a result of falling into and becoming trapped in the open trenches. The PER document for the proposal recognised the potential risk to fauna, and committed to managing construction activities to minimise fauna mortality. The EPA recommended Condition 13 to ensure construction was managed to minimise the risk to fauna as proposed, and based many of the requirements of Condition 13 on the management actions described in the PER document.
The proponents consider Condition 13 overly restrictive, and believe it will negatively impact on construction efficiency and safety management. The requested changes to Condition 13 would remove restrictions on:

- Time of year trench works can take place (currently restricted to April-September inclusive);
- Length of trench open at any one time (currently restricted to 10 kilometres in the pastoral section and 20 kilometres in the agricultural section);
- Length of time a section of trench can remain open (currently restricted to seven days);
- Distance between fauna egress ramps (currently set at 500 metre intervals); and
- The minimum number of "fauna clearing persons" required (currently at least two per ten kilometres of open trench).

Discussion

Many of the requirements of Condition 13 are based on the management commitments detailed in the PER document, and are not necessarily requirements of conditions placed on similar proposals.

The EPA's objective in recommending Condition 13 was to ensure that the trench construction activities are managed to minimise the risk to fauna. The EPA considers that the requested changes are unlikely to significantly increase the risks to fauna along the services corridor. The requested changes are consistent with recent fauna management conditions imposed on similar proposals, and will result in a less prescriptive, more outcomes based condition.

Conclusions

The EPA recommends that Condition 13 be amended so that it reads as follows:

13-1 Prior to ground-disturbing activities of the Services Corridor, the proponent shall clearly delineate on the ground the boundaries of the services corridor, being up to 20 metres wide from Geraldton Port to Monger's Lake (agricultural section) and up to 15 metres wide from Monger's Lake to the mine site (pastoral section).

13-2 The proponent shall not cause or allow disturbance of vegetation outside the delineated services corridor referred to in Condition 13-1, unless authorised by the CEO.
13-3 Prior to vegetation clearing, the proponent shall mark significant habitat trees of sufficient age to form nesting hollows for hollow-nesting birds and mammals, and Malleefowl mounds, in consultation with the Department of Environment and Conservation.

13-4 The proponent shall not fell marked trees or disturb mounds referred to in Condition 13-3 except in the case where habitat trees or mounds occur in the direct line of the proposed pipeline and cannot reasonably be avoided.

13-5 Open trench lengths shall not exceed a length capable of being inspected and cleared by fauna clearing persons employed on the pipeline construction project within the times required by Condition 13-8. The “fauna clearing persons” shall be able to demonstrate suitable experience to obtain a fauna handling licence issued by the Department of Environment and Conservation.

Note: “Fauna clearing persons” means employees whose responsibility is to daily walk the open trench to recover and record fauna found within the trench.

13-6 The proponent shall install ramps at intervals of not more than 500 metres along the entire route of the open trench to allow trapped animals to escape, except in remnant vegetation patches in the agricultural section, where each remnant vegetation patch shall have at least one ramp.

13-7 The proponent shall employ sufficient “fauna clearing persons” to ensure compliance with Condition 13-8. The “fauna clearing persons” shall be able to demonstrate suitable experience to obtain a fauna handling licence issued by the Department of Environment and Conservation.

13-8 The open trenches shall be inspected by the “fauna clearing persons” for trapped fauna each day by no later than three hours after sunrise and half an hour prior to backfilling of the trench.

13-9 In the event of significant rainfall, the proponent shall, following the clearing of fauna from the trench, pump out any pooled water in the open trench (with the exception of groundwater) and discharge it via a mesh (to dissipate energy) to adjacent areas.

13-10 The proponent shall produce monthly performance monitoring reports on fauna management. These reports shall include a Fauna Register on the fauna found in the trench, and fatalities. These reports are to be provided to the Department of Environment and Conservation each month, and made publicly available.
Condition 15 Performance Bond

Construction of the services corridor will require clearing of 90 hectares of native vegetation; 23 hectares within the agricultural section and 67 hectares within the pastoral section. Condition 14 (Closure) of Ministerial Statement 753 requires the rehabilitation of all disturbed areas, including the services corridor.

At the time of the EPA's assessment of the proposal the proponents held several Mining Act 1978 leases or licences over sections of the services corridor, and it was expected that these areas would be subject to a rehabilitation performance bond set by the Department of Industry and Resources (now Department of Mines and Petroleum). In view of the ecological significance of the area the EPA considered that the entire services corridor, regardless of tenure, should be subject to a rehabilitation performance bond. The EPA recommended the proposal should be subject to Condition 15, which requires a rehabilitation performance bond for the parts of the services corridor that are not subject to the requirements of the Mining Act 1978.

The proponents have requested changes to:
- the time of lodgement of the bond (from 'prior to commencement of mining activities' to 'prior to commencement of operations of construction activities within the services corridor'); and
- the calculation of the bond (from $5,000 per hectare of disturbance in the agricultural section and $7,000 per hectare of disturbance in the pastoral section, and a specified total of $576,000, to 'according to the Department of Mines and Petroleum Setting Policy').

Discussion

Condition 14-1 of Ministerial Statement 753 requires the proponents to prepare a Preliminary Closure Plan, which must describe the framework to ensure the services corridor is left in an environmentally acceptable condition, and provide a rehabilitation program which aims to restore the original vegetation communities to areas disturbed by construction within the services corridor. The Preliminary Closure Plan is to be prepared prior to ground-disturbing activities, in consultation with relevant stakeholders such as the Department of Environment and Conservation, and to include completion criteria to be met.

Condition 14-3 of Ministerial Statement 753 requires the proponents to prepare a Final Closure Plan that shall set out details and measures for rehabilitation of the services corridor, to ensure establishment of sustainable vegetation communities consistent with the reconstructed landscape and surrounding vegetation, and in accordance with the completion criteria.
Condition 15 of Ministerial Statement 753 imposes a performance bond 'as security for the due and punctual observance and performance by the proponent of the requirement to rehabilitate that part of the services corridor that lies outside mining tenure, as required by conditions 14-1(5) and 14-3(5)'. The proponents do not intend to remove the pipes within the services corridor following closure, but intend to flush the slurry pipeline with clean water, drain and then cap the pipe, leaving a negligible amount of slurry in the pipeline. The performance bond was recommended in part to cover the likelihood that this approach would not be acceptable, and some or all of the pipelines will need to be removed post-closure.

In determining whether to impose a financial assurance requirement as an implementation condition, the Minister is to have regard to the matters set out in section 86C(2) of the Environmental Protection Act 1986, which include:

- the degree of risk of pollution or environmental harm associated with implementation of the proposal; and
- the likelihood of action being required to deal with waste or prevent, control or abate pollution or environmental harm arising from acts associated with the implementation of the proposal.

Even if the pipes remain in the ground following closure, the degree of risk of pollution or environmental harm is considered to be low. Similarly, the likelihood of action being required to deal with waste or prevent pollution or environmental harm is also considered to be low. Condition 14 of Ministerial Statement 753 requires the proponents to prepare and implement Preliminary and Final Closure Plans, which should be sufficient to ensure the satisfactory rehabilitation of the services corridor.

**Conclusion**

Having regard to the matters set out in section 86C(2) of the Environmental Protection Act 1986, it is considered that the imposition of a performance bond for rehabilitation in the services corridor is not necessary, and that Condition 15 of Ministerial Statement 753 should be deleted.

Dr Paul Vogel  
CHAIRMAN  

1 December 2011