Dear Mr McGunnigle

PROJECT NAME: North Star Magnetite Project
ASSESSMENT NO: 1946
LEVEL OF ASSESSMENT: Public Environmental Review (6 weeks)

The Environmental Scoping Document (ESD) (March 2013) specifying the scope and content of the Public Environmental Review (PER) document for the above proposal was considered by the Environmental Protection Authority (EPA) at meeting number 1049 on 21 February 2013. The ESD has been approved as providing an acceptable basis for the preparation of the PER document.

Please find enclosed the final version of the ESD. A copy of this document will also be available on the EPA website (www.epa.wa.gov.au). Guidelines for preparing a PER document are also available on the EPA website.

As noted by the EPA at the its meeting, the information provided with the section 38 referral was not comprehensive. This has created some uncertainty for the EPA in determining the preliminary key environmental factors for the proposal. The EPA expects that you will provide sufficient detail in the PER document to enable the EPA to determine the key environmental factors that they will assess in the EPA Report and Recommendations for the North Star Magnetite proposal.

The EPA also expects that you will undertake parallel processing for other approvals required for the project. This is particularly important in regard to obtaining water licences from the Department of Water. The EPA will need confidence that there is sufficient water available to implement the project by the time the EPA releases its Report and Recommendations.
During the preparation of the PER, the EPA encourages you to liaise regularly with the Office of the Environmental Protection Authority (OEPA) and discuss any issues or uncertainties early with the OEPA. The assessment officer for the project, Matt Spence can be contacted on telephone number 6467 5536.

Yours sincerely

Dr Paul Vogel
CHAIRMAN

27 February 2013

Encl.
ENVIROMENTAL PROTECTION AUTHORITY

ENVIRONMENTAL SCOPING DOCUMENT

PROPOSAL: North Star Magnetite Project (Assessment No. 1946)
LOCATION: Approximately 110 kilometres (km) south-east of Port Hedland
LOCALITY: Shire of East Pilbara and Town of Port Hedland
PROPOINENT: FMG Iron Bridge (Aust) Pty Ltd
LEVEL OF ASSESSMENT: Public Environmental Review with a 6 week public review period

This Environmental Scoping Document (ESD) is provided to define the requirements of the Public Environmental Review (PER) document to be prepared in accordance with the Western Australian Environmental Protection Act 1986 (EP Act) and the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).

The preliminary key environmental factors to be addressed are identified in Section 2. The generic guidelines for the format of an environmental review document are provided in Attachment 1.

The Public Environmental Review document must adequately address all elements of this scoping document prior to approval being given to commence the public review.

1. Introduction

The EP Act sets out that where a proposal is considered to have a significant environmental impact it will be subject to an assessment by the Environmental Protection Authority (EPA) under section 38 of the EP Act. This proposal is being assessed by way of a PER because it raises significant environmental factors. The EPA will, at the conclusion of its assessment, prepare a report on the outcome of its assessment of the proposal and give the assessment report to the Minister for Environment. The Minister for Environment will then decide whether or not the proposal may be implemented, and, if the proposal may be implemented, the conditions and procedures that implementation of the proposal should be subject.

The level of assessment for this proposal was set on 5 November 2012. The procedure for this PER assessment is described in the Western Australian EP Act Environmental Impact Assessment – Administrative Procedures 2010. The proponent should have regard to the Administrative Procedures when preparing the PER.

Under the EPBC Act, a proposed action that has been determined to have a significant impact on one or more matters of national environmental significance (MNES) protected under the EPBC Act will need to be assessed and approved by
the Commonwealth before it can proceed. This proposal was determined as likely to have a significant impact on listed threatened species and communities (EBPC2012/6689), in particular three EPBC listed species; the Northern Quoll (*Dasyurus hallucatus*), the Pilbara Leaf-nosed Bat (*Rhinonoceris aurantius*) and the Pilbara Olive Python (*Liiasis olivaceus barroni*).

This proposal is being assessed by way of an accredited process with the EPA under a bilateral agreement made under section 47 of the EPBC Act. The bilateral agreement allows the Australian Government Minister for Sustainability, Environment, Water, Population and Communities to rely on the PER process of the State Government of Western Australia in assessing this action under the EPBC Act.

The PER document should contain a separate section identifying MNES, discussing how these matters have been addressed within the document and discussing any offsets proposed to address MNES. The assessment report on the proposed action prepared by the EPA and provided to the Western Australian Minister for Environment is forwarded to the Commonwealth Environment Minister who will then make a decision as to whether or not the proposal should be approved under the EPBC Act. This is separate from any Western Australian approval that may be required.

As this proposal is subject to a PER, the proponent is required to produce a PER document in accordance with an approved ESD. The purpose of the ESD is to:

- develop proposal-specific guidelines to direct the proponent on the preliminary key environmental factors for the proposal, including MNES that should be addressed in preparing the PER document; and

- identify the necessary impact predictions required for an assessment of the proposal, and the information on the environmental setting required to carry out the assessment.

The EPA has determined that it will prepare and issue the ESD outlining the scope and content of the PER in relation to this proposal.

The EPA, in its formulation of the ESD, undertakes consultation with the proponent regarding the details of the proposal, its environmental setting and the environmental surveys and investigations required and expected outcomes. In addition the EPA will consult with the relevant government agencies, including Decision Making Authorities. The Office of the EPA (OEPA) provides services and facilities for the EPA. In many cases the OEPA will facilitate the gathering of information for the EPA.

ESDs prepared by the EPA are not subject to a public review period. The ESD will be available on the EPA website (www.epa.wa.gov.au) upon finalisation and will be included as an appendix in the PER document.

The proponent will then be required to prepare a PER document in accordance with the ESD. When the EPA is satisfied that the PER document has adequately addressed all of the environmental factors and studies identified in the ESD, the proponent will be required to release the document for a public review period of 6 weeks.
An important aspect of the environmental impact assessment process is the review by the public. The EPA requires the opportunity for public input into the possible environmental impacts of this proposal and its implementation. The EPA expects the proponent to fully consult with interested members of the public and relevant stakeholders, and to take due care in ensuring any other relevant environmental factors which may be of interest to the public and stakeholders are succinctly addressed. The PER should document the matters raised in consultation, ideally in a table including any changes made to the proposal as a result of consultation and/or the proponent’s response to each matter raised.

The EPA considers that adequate consultation can be demonstrated when stakeholders:

- are included in the consultation process and are able to make their concerns known;
- are kept informed about the potential and actual environmental impacts; and
- receive responses to the concerns raised, including identifying how the proposal has been modified and/or identifying management measures that will be implemented to address the concerns raised.

To facilitate adequate public input, the PER should be made available as widely as possible and at a reasonable cost.

2. Specific Guidelines for the Preparation of the Public Environmental Review Document

2.1 The proposal

The EPA has prepared Environmental Assessment Guideline for Defining the Key Characteristics of a Proposal (May 2012) (EAG 1). EAG 1 describes how to define the Key Proposal Characteristics for the purposes of assessing the proposal and subsequent incorporation in the Ministerial approval statement. It is expected that the Key Proposal Characteristics will be informed by the outcome of the work required for the environmental factors that are relevant to the proposal specified below (section 2.2).

The proposal that is the subject of this assessment is FMG Iron Bridge (Aust) Pty Ltd’s (FMG) proposed development of the North Star Magnetite Project. The main part of the proposal (the mine site) is located approximately 110 km south-east of the town of Port Hedland with water supply and slurry pipelines extending the proposal to the West Canning Basin and Port Hedland surrounds. The proposal description is provided in Section 2 of this guideline and a map showing the approximate location of the proposal is shown in Figure 1.

Mine

The proposal is for the development of an open-cut iron ore mine, using traditional drill and blast methods. Mine life is estimated at 45 years. Waste from the mine will be sent to a dedicated waste rock dump. The ore will be crushed and further processed onsite to produce a magnetite product, dry process rejects and wet tailings.
The magnetite product will be mixed with water to produce a slurry which will be transported via pipeline to Port Hedland. The dry process rejects will be sent to a landform whilst the tailings will be disposed of in a tailings storage facility.

Associated site infrastructure

To support the mine the following infrastructure is proposed to be developed:

- 120 megawatt gas fired power station;
- Roads and borrow pits;
- Water processing, ponds and reticulation;
- Bulk fuel storage;
- Workshops and maintenance facilities;
- Laydown and storage facilities;
- Explosives and chemical storage; and
- Camp and administration buildings.

Water supply infrastructure

Hydrogeological investigations indicate that groundwater seepage into the pits will be minimal. Consequently FMG proposes to develop a separate water supply to meet the project's water requirements. The North Star proposal includes the development of a borefield at the Canning Basin and 190 km water supply pipeline to deliver the water to the mine. The annual water requirement for the project is estimated at 14 gigalitres per annum (GL/a).

Under the proposal the pipeline will cross several rivers, including the De Grey and Shaw rivers, and river crossings will need to be constructed. The crossing is proposed to be within the De Grey River Water Reserve, which is a proclaimed Public Drinking Water Source Area (PDWSA).

The West Canning Basin is a possible future water source for supply to Port Hedland, with 10 GL of water from basin currently reserved for public water supply. Should this source be developed the proposed borefield for the North Star Magnetite Project may be within any PDWSA proclaimed to protect the West Canning Basin water source.

Infrastructure corridor

The proposal includes an infrastructure corridor between the mine site and the surrounds of Port Hedland. The corridor will include a buried slurry pipeline to transport the magnetite to the port and a buried gas pipeline to service the on-site power station.

FMG is considering if there is any potential third party power supply options. If a commercially viable option can be secured prior to commencement of project construction the gas pipeline may be replaced by power transmission lines.

Relationship to other FMG proposals

FMG is seeking separate approval for the Port Hedland port operations associated with the North Star Magnetite proposal, known as the FMG Greater Pilbara Port project. The North Star Magnetite proposal (EPA Assessment No. 1946) covers the North Star mine and associated infrastructure up to the boundary of the Port Hedland Port Authority precinct. The FMG Greater Pilbara Port proposal has yet to
be referred to the EPA, but the proponent has indicated its intention is to refer the proposal. If the EPA considers that the Greater Pilbara Port requires formal assessment then most of the slurry pipeline will be assessed as part of the North Star Magnetite assessment (No. 1946), with a small section in the north being assessed separately.

The North Star Hematite Project is a small scale stand-alone iron ore project that sits within the boundaries of the North Star Magnetite Project. The hematite project was considered separately by the EPA as it is a project in its own right. The EPA was of the view that the impacts of the North Star Hematite Project were not significant enough to require formal environmental assessment and set a level of assessment of Not Assessed – Public Advice Given on 6 August 2012. The North Star Hematite Project is managed under the Mining Act 1978. Any interaction between the two projects, including infrastructure sharing, should be described in the PER document.

Table 1 – Key Characteristics Table
Summary of the proposal

<table>
<thead>
<tr>
<th>Proposal Title</th>
<th>North Star Magnetite Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proponent Name</td>
<td>FMG Iron Bridge (Aust) Pty Ltd</td>
</tr>
</tbody>
</table>
| Short Description    | The proposal is for the development of the North Star Magnetite Deposit and includes:  
  • open cut mine pits;  
  • waste rock dump (WRD);  
  • tailings storage facility;  
  • ore stockpiles;  
  • processing plant;  
  • slurry and gas pipeline;  
  • 120 megawatt (MW) gas fired power station;  
  • roads and borrow pits;  
  • water processing, ponds and reticulation;  
  • bulk fuel storage;  
  • workshops and maintenance facilities; and  
  • explosives and chemical storage.  
|                      | It is also proposed to develop a borefield within the Canning Basin and a 190 km water supply pipeline for the project’s operational water supply requirements. |

Physical Elements – See Attachment 1

<table>
<thead>
<tr>
<th>Element</th>
<th>Location</th>
<th>Proposed Extent Authorised</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pit Zone</td>
<td>Figure 2</td>
<td>Clearing of up to 510 ha within a development zone of 635 ha.</td>
</tr>
<tr>
<td>Tailings Storage Facility (TSF) Zone</td>
<td>Figure 2</td>
<td>Clearing of up to 1,316 ha within a development zone of 1,334 ha.</td>
</tr>
<tr>
<td>Low Grade Ore Stockpile Zone</td>
<td>Figure 2</td>
<td>Clearing of up to 342 ha within a development zone of 359 ha.</td>
</tr>
<tr>
<td>Process Zone</td>
<td>Figure 2</td>
<td>Clearing of up to 124 ha within a development zone of 137 ha.</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>----------</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>Process Reject Zone</td>
<td>Figure 2</td>
<td>Clearing of up to 300 ha within a development zone of 427 ha.</td>
</tr>
<tr>
<td>Camp Zone</td>
<td>Figure 2</td>
<td>Clearing of up to 31 ha within a development zone of 159 ha.</td>
</tr>
<tr>
<td>Waste Rock Dump (WRD) Zone</td>
<td>Figure 2</td>
<td>Clearing of up to 840 ha within a development zone of 854 ha.</td>
</tr>
<tr>
<td>Infrastructure Zone</td>
<td>Figures 1 and 2</td>
<td>Clearing of up to 447 ha within a development zone of 4,171 ha.</td>
</tr>
<tr>
<td>Power Station Zone</td>
<td>Figure 2</td>
<td>Clearing of up to 30 ha within a development zone of 43 ha.</td>
</tr>
<tr>
<td>Slurry pipeline and infrastructure corridor (Slurry Corridor Zone)</td>
<td>Figures 1 and 2</td>
<td>Clearing of up to 315 ha within a development zone of 1,973 ha.</td>
</tr>
<tr>
<td>Canning Basin borefield and water supply pipeline (Water Corridor Zone)</td>
<td>Figures 1 and 2</td>
<td>Clearing of up to 886 ha within a development zone of 94,524 ha. Extraction of up to 14 GL/a from the Canning Basin.</td>
</tr>
</tbody>
</table>

**Operational Elements**

<table>
<thead>
<tr>
<th>Element</th>
<th>Location</th>
<th>Proposed Extent Authorised</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dewatering</td>
<td>Figures 1 and 2</td>
<td>Extraction of up to 0.5 GL/a.</td>
</tr>
<tr>
<td>Power</td>
<td>Figure 2</td>
<td>Mine area: 120 MW to be supplied by on site gas fired power station</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Borefield and pumping stations: 8 MW supplied by gas fired power station.</td>
</tr>
<tr>
<td>Gas supply</td>
<td>Figures 1 and 2</td>
<td>Gas will be supplied to the 120 MW power station via a buried pipeline at a rate of 20 terajoules per day. Gas will be supplied to the borefield power station via a buried pipeline connected to the existing Shay Gap pipeline.</td>
</tr>
<tr>
<td>Overburden/Waste Rock</td>
<td>Figure 2</td>
<td>Disposal of up to 77 million tonnes per annum (Mtpa) to the WRD to a life of project maximum of 913 million tonnes.</td>
</tr>
<tr>
<td>Ore Processing (waste)</td>
<td>Figure 2</td>
<td>Disposal of up to 12 Mtpa of wet tailings to the TSF to a maximum of 540 Mt. Disposal of up to 2 Mtpa of dry rejects to the Waste Landform to a maximum of 180 Mt.</td>
</tr>
</tbody>
</table>
2.2 Environmental factors and policy documents relevant to this proposal

The PER should give a detailed assessment of each of the preliminary key environmental factors identified for this proposal. The EPA has identified the relevant preliminary key environmental factors, objectives and work required is as detailed in Table 2.

The EPA has also identified a list of relevant policy documents (see Table 2) which set out how the EPA expects the proponent to consider the preliminary key environmental factors. The EPA expects that the treatment of preliminary key environmental factors will be consistent with the approaches set out in these policy documents. The EPA also considers that the proponent should assess the proposal in a local and regional context and ensure that all cumulative impacts are addressed.

The EPA considers that the following are the preliminary key environmental factors relevant to the proposal:

- Flora and vegetation;
- Terrestrial fauna;
- Subterranean fauna;
- Hydrological processes; and
- Offsets.

Table 2: Preliminary key environmental factors relevant to the proposal

<table>
<thead>
<tr>
<th>EPA objective</th>
<th>Flora and Vegetation</th>
</tr>
</thead>
<tbody>
<tr>
<td>To maintain representation, diversity, viability and ecological function at the species, population and community level.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Potential Impacts</th>
<th>Flora and Vegetation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The proposal involves the clearing of up to 5300 ha of native vegetation.</td>
<td></td>
</tr>
<tr>
<td>Indirect impacts on flora and vegetation may result from dust deposition, altered fire patterns, spread of weeds and altered water regimes.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Work required</th>
<th>Flora and Vegetation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detailed description of the clearing associated with the proposal, including from direct impacts, and the indirect impacts of groundwater drawdown and operations.</td>
<td></td>
</tr>
<tr>
<td>Figures showing the extent of clearing or loss of vegetation and conservation significant flora species, including but not limited to threatened and/or priority ecological communities, declared rare flora, priority flora and new flora species, from direct and indirect impacts.</td>
<td></td>
</tr>
<tr>
<td>Level 2 flora and vegetation surveys conducted in areas that are likely to be directly or indirectly disturbed as a result of the proposal. Surveys are to be undertaken in accordance with Guidance Statement 51. Follow up targeted or additional Level 2 surveys may be required based on the results of the baseline survey.</td>
<td></td>
</tr>
<tr>
<td>Analysis of the extent of clearing and conservation status of vegetation and/or flora species to be cleared, including quantifying impacts to vegetation types and/or conservation significant species, including threatened and/or priority ecological communities, declared rare flora, priority flora and new flora species, to be cleared to assist in the determination of the significance of impacts.</td>
<td></td>
</tr>
<tr>
<td>Baseline mapping of weed affected areas in any area likely to be directly or indirectly impacted by the proposal.</td>
<td></td>
</tr>
<tr>
<td>Discussion of potential for indirect impacts to flora and vegetation, including impacts to groundwater dependent vegetation as a result of dewatering activities.</td>
<td></td>
</tr>
</tbody>
</table>
| **Relevant policy/guidance documents** | Position Statement 2 Environmental Protection of Native Vegetation in Western Australia.  
| | Position Statement 3 Terrestrial Biological Surveys as an Element of Biodiversity Protection.  
| | *Environment Protection and Biodiversity Conservation Act 1999.*  
| | Checklist for documents submitted for EIA on marine and terrestrial biodiversity.  |

### Terrestrial Fauna

| **EPA objective** | To maintain representation, diversity, viability and ecological function at the species, population and assemblage level.  |
| **Potential impacts** | Clearing of vegetation would result in loss or fragmentation of fauna habitat and consequential displacement of fauna.  
| | Death or injury of fauna may occur during clearing and construction and from ongoing operations.  
| | Indirect impacts through altered fire regimes, feral animal introduction, noise and light spill.  |

| **Work required** | Desktop study of information available to provide a comprehensive listing of fauna known or likely to occur in the habitat present, and identification of conservation significant fauna species likely to occur in the area.  
| | Where previous surveys are not available, or are not of acceptable quality in accordance with Guidance Statement 56, Level 1 survey and mapping of habitats within areas to be cleared should be conducted in accordance with Guidance Statement 56.  
| | Identification and mapping of important, rare or unusual habitat types.  
| | Analysis of the extent of clearing, including percentages of habitat types to be cleared, to assist in determination of significance of impacts.  
| | Where the desktop study and habitat analysis indicates that it is appropriate, conduct targeted Level 2 surveys for conservation significant vertebrate species that are known to or likely to occupy habitats in the project area.  
| | Conduct targeted Short Range Endemic survey and habitat mapping.  
| | Discussion of potential impacts to Fauna as a result of the proposal, with particular regard to Matters of National Environmental Significance (MNES), and provision of quantitative data on impacts of the proposal to species of conservation significance.  
| | Where vegetation to be cleared provides habitat for EPBC listed species, the PER should also provide an assessment of habitat quality in terms of site condition and context and species stocking rate, as described in the EPBC Act Offsets Assessment Guide.  
| | Discussion using current predictions of potential for climate change to increase the direct and indirect impacts to Fauna and Habitat identified above.  
| | Discussion of proposed management, monitoring and mitigation methods to be implemented.  |

| | Position Statement 3 Terrestrial Biological Surveys as an Element of Biodiversity  |
**Subterranean Fauna**

**EPA objective**
To maintain representation, diversity, viability and ecological function at the species, population and assemblage level.

**Potential impacts**
Direct mortality and loss of habitat through sub-surface disturbance and abstraction of groundwater.

**Work required**
Where previous surveys are not available, or are not of acceptable quality in accordance with Guidance Statement 54, survey within areas to be impacted and in surrounding areas should be conducted in accordance with Guidance Statement 54 and Guidance Statement 54a. The EPA is currently reviewing the guidance on subterranean

The results of the subterranean fauna surveys should be presented and a discussion of potential for impacts to subterranean fauna provided.

Discussion of proposed management, monitoring and mitigation methods to be implemented.

**Relevant policy/guidance documents**
Guidance Statement No. 54 Consideration of Subterranean Fauna in Groundwater and Caves During Environmental Impact Assessment in Western Australia December 2003.

Guidance Statement No. 54a Sampling methods and survey considerations for subterranean fauna in Western Australia July 2007.

The EPA is currently reviewing its guidance on subterranean fauna. The EPA encourages FMG to discuss with the OEPa how this could assist FMG to address this factor.

Checklist for documents submitted for EIA on marine and terrestrial biodiversity.

---

**Hydrological processes**

**EPA objective**
To maintain the hydrological regimes of groundwater and surface water so that existing and potential uses, including ecosystem maintenance are protected.

**Potential impacts**
Contamination of groundwater and surface water as a result of the project, including potential impacts to public drinking water supplies during construction and operation of the water supply pipeline.

Impacts to surface water flows as a result of placement and design of new infrastructure, including alterations of existing drainage patterns of rivers, including the De Grey, Shaw and Turner rivers from proposed pipeline routes.

Impacts to any groundwater dependent ecosystems, as a result of groundwater drawdown and groundwater abstraction at the mine.

Impacts to existing and potential users as a result of abstraction of water from West Canning Basin.

**Work required**
Provide a detailed description of the design and location of the proposal with the potential to impact surface water or groundwater.

Characterise baseline hydrological and hydrogeological regimes and water quality.

Assess groundwater drawdown associated with the proposal and analyse and discuss any impacts to groundwater expected as a result of the proposal.

Assess impacts to existing and potential users of the proposed abstraction of water from the West Canning Basin.
Assess surface water impacts associated with the proposal and analyse and discuss any impacts to surface water expected as a result of the proposal.

Predictive assessments of the hydrodynamics and hydrochemistry of any pit water over time showing potential interactions of pit water with local and regional groundwater and surface water during mining and following mine closure. This should include predictions, based on waste characterisation investigations, of the water quality of any water accumulating in the pits following large rainfall events.

Discussion using current predictions of potential for climate change to increase the direct and indirect impacts to groundwater and surface water identified above.

Discussion of proposed management, monitoring and mitigation to prevent any further contamination as a result of implementing the proposal.

### Relevant policy/guidance documents

- Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC and ARMCANZ, 2000).
- Rights in Water and Irrigation Act (1914).
- Department of Water 2012 Western Australian Water in Mining Guideline: Draft for Public Comment.

### Offsets

#### EPA objective

To counterbalance any significant residual environmental impacts or uncertainty through the application of offsets.

#### Potential impacts

Potential impacts on vegetation, flora, habitat and fauna species of State and National significance.

#### Work required

Examination of residual impacts and, if required, development of draft program of environmental offsets.

Identification of residual impacts with regard to MNES and an assessment of the significance of the impacts.

Inclusion in the PER of the completed Environmental Offsets Reporting Form and any offsets required and proposed.

### Relevant policy/guidance documents

- Govt of WA (2011) WA Environmental Offsets Policy.
- EPA Offsets Reporting Form.
- EPA Draft Environmental Assessment Guidelines -- Environmental Offsets (may be finalised by time North Star assessment is finished)
These preliminary key factors must be addressed within the environmental review document for the public to consider the impacts of the proposal and make comment to the EPA. The EPA anticipates that it will address these factors in its report to the Minister for Environment. All technical reports, modelling and referenced documents (not currently in the public domain) used in the preparation of the PER should be included as appendices to the document.

2.3 Other Environmental Issues

The EPA has considered other environmental issues to determine if the impacts are significant enough to require assessment by the EPA. The issues that have been considered not to meet the significance test and/or can be readily managed under other regulatory processes to meet the EPA’s objectives are listed below:

- **Air quality** – Significant air quality impacts from dust and other emissions are not anticipated to occur due to a lack of sensitive receptors near the project. Air quality impacts from the project can be managed through Works Approvals and Licences required under Part V of the EP Act.

The project will also generate greenhouse gas emissions. FMG proposes to develop a Greenhouse Gas Management Plan to minimise and mitigate greenhouse gas emissions from the project. The majority of greenhouse gas emissions associated with the project will be generated by the power station. Should an alternative energy source be identified greenhouse gas emissions associated with the project are not likely to be significant.

Dust impacts on vegetation and flora should be addressed in the environment review document through an assessment of the indirect impacts of the proposal on Flora and Vegetation.

- **Heritage** – Any potential impacts to heritage areas can be managed through existing land access agreements and the *Aboriginal Heritage Act 1972*.

- **Amenity** – There are no noise sensitive premises in proximity to the mine area that are likely to be significantly impacted by the proposal. Noise impacts that may affect human amenity can be adequately managed under Part V of the EP Act. The environmental review document should assess any noise impacts from the proposal on fauna as part of the assessment of the impacts on terrestrial fauna.

- **Human Health** – There are no receptors in proximity to the project that are likely to experience human health impacts from dust, aside from employees working at the mine. The prevention of impacts to employees can be effectively managed by the Department of Mines and Petroleum Resources Safety Division through the *Mines Safety and Inspection Act 1994*.

- **Rehabilitation and closure** – With the introduction of the DMP/EPA *Guidelines for Preparing Mine Closure Plans*, the EPA will generally not assess mine closure as part of its EIA of mining proposals under the EP Act, where they are subject to the *Mining Act 1978*. The EPA will only assess mine closure in circumstances where it considers there are particular issues which pose a high environmental risk, particularly those projects that may have a long term impact on the State’s conservation estate.
The North Star Magnetite Project will not impact on any existing conservation reserves or any area identified for exclusion from the pastoral leases in 2015 that are proposed to be included in the conservation estate. It is considered that mine closure can be managed to meet the EPA’s objectives through the *Mining Act 1978.*

If during the course of the preparation of the document other potential issues are identified, these issues should be discussed with the OEPA to determine whether they are to be addressed in the PER.

As noted above, other approvals will be required for the proposal. Where possible, the EPA advises that these approvals should be progressed in parallel with the Public Environmental Review, with particular regard to:

- Water Licensing and other approvals required by the Department of Water;
- Works Approvals and Licenses required from the Department of Environment and Conservation; and
- Mining Proposal and Mine Closure Plans required by the Department of Mines and Petroleum.

### 2.4 Agreed Assessment Milestones

EPA Environmental Assessment Guideline No. 6 "Timelines for EIA of Proposals" addresses the responsibilities of proponents and the EPA for achieving timely and effective assessment of proposals.

This timeline (Table 3) is agreed between the EPA and proponent. Proponents are expected to meet the agreed proposal assessment timeline, and in doing so, provide adequate, quality information to inform the assessment. Proponents will need to allocate sufficient time to undertake the necessary studies to the appropriate standard and incorporate the outcomes of the studies into the PER.

Where an agreed timeline is not being met by the proponent, or if adequate information is not submitted by the proponent, the timeline for subsequent steps will be re-established. Where the OEPA is unable to meet a date in the agreed timelines the proponent will be advised and the timeline adjusted.

The EPA will report to the Minister for Environment on whether the agreed proposal assessment timeline has been met. Where the timeline has not been met, the reasons for this will be identified.
Table 3: Agreed Milestones for the proposal

<table>
<thead>
<tr>
<th>Key Stage of Proposal</th>
<th>Agreed Milestone</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPA approval of ESD Document</td>
<td>This Document</td>
</tr>
<tr>
<td>Proponent submits first adequate draft of PER Document</td>
<td>Late March 2013</td>
</tr>
<tr>
<td>OEPA provides comment on first draft PER Document</td>
<td>6 weeks</td>
</tr>
<tr>
<td></td>
<td>6 May 2013</td>
</tr>
<tr>
<td>Proponent submits adequate revised draft PER Document</td>
<td>4 weeks</td>
</tr>
<tr>
<td></td>
<td>3 June 2013</td>
</tr>
<tr>
<td>EPA authorises release of PER Document</td>
<td>2 weeks</td>
</tr>
<tr>
<td></td>
<td>17 June 2013</td>
</tr>
<tr>
<td>Proponent releases approved PER Document</td>
<td>1 Week</td>
</tr>
<tr>
<td></td>
<td>24 June 2013</td>
</tr>
<tr>
<td>Public Review of PER Document</td>
<td>6 weeks</td>
</tr>
<tr>
<td></td>
<td>Ends: 5 August 2013</td>
</tr>
<tr>
<td>EPA provides Summary of Submissions</td>
<td>3 Weeks</td>
</tr>
<tr>
<td></td>
<td>26 August 2013</td>
</tr>
<tr>
<td>Proponent provides Response to Public Submissions</td>
<td>4 Weeks</td>
</tr>
<tr>
<td></td>
<td>23 September 2013</td>
</tr>
<tr>
<td>OEPA assesses proposal for consideration by EPA</td>
<td>7 weeks</td>
</tr>
<tr>
<td></td>
<td>11 November 2013</td>
</tr>
<tr>
<td>Preparation and finalisation of EPA Report (including 2 weeks consultation on draft conditions with proponent and key Government agencies)</td>
<td>5 weeks</td>
</tr>
<tr>
<td></td>
<td>16 December 2013</td>
</tr>
</tbody>
</table>
2.5 Decision Making Authorities

At this preliminary stage, the EPA has identified the following decision making authorities (DMAs) (see Table 4). These DMAs are constrained from making any decision that could have the effect of causing or allowing the revised proposal to be implemented. Throughout the assessment process further DMAs may be identified.

Table 4: Nominated Decision Making Authorities

<table>
<thead>
<tr>
<th>Decision Making Authority</th>
<th>Relevant Legislation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Environment and Conservation</td>
<td>Part V of the Environmental Protection Act 1986</td>
</tr>
<tr>
<td>Minister for Water</td>
<td>Rights in Water and Irrigation Act 1914</td>
</tr>
<tr>
<td>Minister for Mines and Petroleum</td>
<td>Mining Act 1978</td>
</tr>
<tr>
<td>Minister for Lands</td>
<td>Land Administration Act 1997</td>
</tr>
<tr>
<td>Minister for Indigenous Affairs</td>
<td>Aboriginal Heritage Act 1972</td>
</tr>
</tbody>
</table>

DMAs are not prevented from parallel processing, up to the point of their decision, so that their views can inform the ministerial consultation process.

2.6 Preparation of the Environmental Review Document

The recommended format for the Environmental Review document is enclosed as Attachment 1.

When the EPA and SEWPaC is satisfied with the standard of the environmental review document (see EAG 6 Section 4.3) they will provide a written sign-off, giving approval to advertise the document for public review. The review document may not be advertised for release before written approval is received.

The proponent is responsible for advertising the release and availability of the PER in accordance with the guidelines which will be issued to the proponent by the OEPA. The EPA must be consulted on the timing and details for advertising the document.
Attachment 2
Generic Guidelines for Preparing a Public Environmental Review
(see www.epa.wa.gov.au)
Guidelines for Preparing a Public Environmental Review

Contents

1. Overview ................................................................. 2
2. Objectives of the environmental review ......................... 3
3. Preparation of the environmental review document .............. 3
4. Contents of the environmental review document ................ 4
5. Public consultation ...................................................... 11
6. Conclusion .................................................................. 11
7. Availability of the environmental review document .............. 11

Attachment 1 Example of the invitation to make a submission
Attachment 2 Advertising the environmental review
Attachment 3 Example of the newspaper advertisement
Attachment 4 Air quality and air pollution guide

These generic guidelines are provided to assist the preparation of the proponent’s environmental review document.

Project specific information related to the proposal, environmental factors, impacts, management, consultation and proposed investigations are required to be outlined in the environmental scoping document prepared by the proponent (refer to www.epa.wa.gov.au ). The environmental scoping document, along with these generic guidelines, comprise the EPA-agreed project guidelines.

The environmental review document must address all elements of the agreed environmental scoping document and these guidelines prior to approval being given to commence the public review. Where relevant, the environmental review document must also address any requirements of the Commonwealth under the Environment Protection and Biodiversity Conservation Act 1999 (refer to the Department of Sustainability, Environment, Population and Communities website at www.environment.gov.au). The Commonwealth may, through bilateral agreements, delegate to the State the responsibility for conducting assessments consistent with the provisions of the agreement. The Environmental Protection Authority (EPA) expects the proponent to fully consult with interested members of the public and relevant stakeholders, and to ensure that any other key environmental factors, which may be of interest to the public and stakeholders, are addressed. The environmental review should document the results of all consultation undertaken.
Guidelines for preparing a Public Environmental Review

1. Overview

All environmental reviews have the objective of protecting the environment. Environmental impact assessment is deliberately a public process in order to obtain broad ranging advice. The review requires the proponent to:

- describe the proposal;
- describe the receiving environment;
- outline the potential impacts of the proposal on factors of the environment;
- identify the proposed management strategies to ensure those environmental factors are appropriately protected;
- address the principles of environmental protection; and
- demonstrate that the proposal should be judged by the EPA to be environmentally acceptable.

Throughout the assessment process it is the objective of the EPA to help the proponent to design the proposal to improve the protection to the environment. The Office of the EPA administers the environmental impact assessment process on behalf of the EPA Board.

The primary purpose of the environmental review is to provide to the EPA information on the proposal within the local and regional framework, with the aim of emphasising how the proposal may impact the key environmental factors and how those impacts may be mitigated and managed so as to be environmentally acceptable.

How the proponent will outline the environmental setting of the proposal, address environmental principles and issues/factors and their management, and undertake consultation during the preparation of the environmental review are required to be described in the Environmental Scoping Document (ESD).

To assist proponents, the EPA has published a series of Environmental Assessment Guidelines, Environmental Protection Bulletins, Position Statements and associated Guidance for the Assessment of Environmental Factors which provides an indication of the EPA's views on matters of environmental importance and expectations about how to address specific factors. Proponents should ensure that they are aware of and utilise the information in these documents.

The language used in the body of the environmental review should be kept simple and concise, noting that the audience includes non-technical people, and any extensive, technical detail should either be referenced or appended to the environmental review. The environmental review will form the legal basis for the Minister for Environment's approval of the proposal and therefore the environmental review should include a description of all the main and ancillary components of the proposal.

Information used to reach conclusions should be properly referenced, including personal communications. Such information should not be misleading or presented in a way that could be construed to mislead readers. Assessments of the significance of an impact should be soundly based rather than unsubstantiated
opinion, and each assessment should lead to a discussion of the management of the environmental factor.

2. **Objectives of the environmental review**

The objectives of the environmental review are to:

- place this proposal in the context of the local and regional environment;
- adequately describe all components of the proposal, so that the Minister for Environment can consider approval of a well-defined project;
- provide the basis of the proponent's environmental management program, which shows that the environmental impacts resulting from the proposal, including cumulative impact, are minimised and can be acceptably managed;
- communicate clearly with stakeholders (including the public and government agencies), so that the EPA can obtain informed comment to assist in providing advice to government; and
- provide a document which clearly sets out the reasons why the proposal should be judged by the EPA and the Minister for Environment to be environmentally acceptable.

3. **Preparation of the environmental review document**

Proponents are encouraged to maintain close contact with the Office of the EPA project officer during the preparation of the environmental review. The environmental review should be provided to the Office of the EPA project officer as a draft for comment. At this stage the document should have all figures produced in the final format and colours.

The proponent and Office of the EPA project officer/manager should agree on the time to be taken to review the draft, taking into account the level of consultation during the environmental review preparation, Office of the EPA project officer's availability, the need for external review and any peer review arranged by the proponent. Revision of the document may be requested to ensure that it addresses all topics and issues in these guidelines, can be read by the educated layperson, contains no significant error of science and meets the required format.

Where the proposal is subject to the Commonwealth *Environment Protection and Biodiversity Conservation Act* 1999, the environmental review should also address requirements under that Act. These can be obtained from www.environment.gov.au.

When the EPA is satisfied with the standard of the environmental review document it will provide a written sign-off to the proponent, giving approval to advertise the document for public review. The review document should not be advertised for release before written approval is received.

Following approval to release the review for public comment, the final environmental review document should be provided to the Office of the EPA project officer in both hard copy and electronic form, including figures and spatial data in the required format.

Proponents are to prepare and publish the environment review and appendices in electronic format (CD and on the internet), although there remains the requirement
for printed copies of the document. This should be discussed with the Office of the EPA project officer early in the preparation of the environmental review document.

4. Contents of the environmental review document

The environmental review document should include an executive summary, introduction and at least the following:

4.1 The proposal

General requirements

The environmental review document should provide a comprehensive description of the proposal including its location (address and certificate of title details where relevant). Specific matters requiring attention are:

- the identification of the proponent and proposal location;
- justification and objectives for the proposed development;
- the legal framework, including existing zoning and environmental approvals, and decision making authorities and involved agencies; and
- alternatives considered, including location options. This section should provide analysis of alternatives in the following hierarchy that moves from broad/strategic to increasingly narrow/project specific in nature:
  - Need/meeting needs – is this development needed? Consider no-action alternative.
  - Mode/meeting general goals – is this development proposal the best way to meet the general goal? Consider alternative technologies or options.
  - Location/meeting project objectives spatially – what is the best location for the project. Consider alternative locations with a view to minimising environmental impacts.
  - Timing/meeting project objectives temporally – what is the best sequence of development for components of the project?
  - Implementation mechanisms/designing project – What is the best way to optimise the project so as to minimise environmental impacts? Consider detailed site design, layout, technologies and mitigation strategies.

Brief description of the proposal which is the subject of these guidelines

A description of the proposal and location, in sufficient detail to enable readers to clearly understand the nature and scale of the proposal, and to support later discussion of impacts. This should include an outline of the various components of the proposal (including how this proposal relates to other operations or proposals).

Spatial data on the proposal and its location should be provided in the form of both hard copy maps and in accordance with the electronic requirements set out in the Referral Form, available on www.epa.wa.gov.au.
Key characteristics of the proposal

The Minister's statement will bind the proponent to implementing the proposal in accordance with any technical specifications and key characteristics\(^1\) in the environmental review document. It is important therefore, that the level of technical detail in the environmental review, while sufficient for environmental assessment, does not bind the proponent in areas where the project is likely to change in ways that have no environmental significance.

Include a description of the key components of the proposal, including the nature and extent of works proposed. This information must be summarised in the form of a table, an example of which follows:

**Table 1: Key characteristics (example only)**

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life of project (mine production)</td>
<td>&lt; 5 yrs (continual operation)</td>
</tr>
<tr>
<td>Size of ore body</td>
<td>682 000 tonnes (upper limit)</td>
</tr>
<tr>
<td>Depth of mine pit</td>
<td>less than 30m</td>
</tr>
<tr>
<td>Water table depth</td>
<td>50m below ground surface</td>
</tr>
<tr>
<td>Area of disturbance (including access)</td>
<td>100 hectares</td>
</tr>
<tr>
<td>Mine operation</td>
<td>Daylight hours only, Monday to Friday</td>
</tr>
<tr>
<td>List of major components</td>
<td>refer 'Plans, specifications, charts' section immediately below for details of map requirements</td>
</tr>
<tr>
<td>• pit</td>
<td></td>
</tr>
<tr>
<td>• waste dump</td>
<td></td>
</tr>
<tr>
<td>• infrastructure (water supply, roads, etc)</td>
<td></td>
</tr>
<tr>
<td>Ore mining rate</td>
<td></td>
</tr>
<tr>
<td>• maximum</td>
<td>200 000 tonnes per year</td>
</tr>
<tr>
<td>Solid waste materials</td>
<td></td>
</tr>
<tr>
<td>• maximum</td>
<td>800 000 tonnes per year</td>
</tr>
<tr>
<td>Water supply</td>
<td></td>
</tr>
<tr>
<td>• source</td>
<td>XYZ borefield, ABC aquifer</td>
</tr>
<tr>
<td>• maximum hourly requirement</td>
<td>180 cubic metres</td>
</tr>
<tr>
<td>• maximum annual requirement</td>
<td>1 000 000 cubic metres</td>
</tr>
<tr>
<td>Fuel storage capacity and quantity used</td>
<td>50 000 litres; 300 000 litres per year</td>
</tr>
</tbody>
</table>

\(^1\) Changes to the key characteristics of the proposal following final approval would require assessment of the change. Depending on the significance of the change, it would be assessed under either s45C if the environmental impacts are not significant, or section 46 or section 38 if the change is significant. Changes to other aspects of the proposal are generally inconsequential and can be implemented without further assessment. It is prudent to consult with the Department of Environment and Conservation about changes to the proposal.
Plans, specifications, charts

Provide adequately dimensioned plans showing clearly the location and elements of the proposal which are significant from the point of view of environmental protection. Locate and show dimensions (for progressive stages of development, if relevant) of all relevant components of the proposal.

Only those elements of plans, specifications and charts that are significant from the point of view of environmental protection are of relevance here.

Always include:

- a map showing the proposal in the local context - an overlay of the proposal on a base map of the main environmental constraints;
- a map showing the proposal in the regional context; and, if appropriate,
- a process chart / mass balance diagram showing inputs, outputs and waste streams.

The plan/s should include contours, north arrow, scale bar, legend, grid coordinates, the source of the data, and a title. The dates of any aerial photos should be shown. Mapping should be provided in electronic form to meet the following specifications:

- Datum: GDA94
- Projection: Geographic (latitude/longitude) or Map Grid of Australia (MGA)
- Format: Arcview shapefile (...shp), Arcinfo coverages, Microstation or AutoCAD (.dgn, .dwg, .dxf)

Other logistics

- timing and staging of project; and
- ownership and liability for other aspects related to the proposal, such as waste during transport, disposal operations and long-term disposal (where appropriate to the proposal).

4.2 The environment

Provide a description of the existing environment in a local and regional context, with an emphasis on those aspects that may affect or be affected by the proposal, including:

- key ecosystem processes;
- biodiversity;
- existing site condition; and
- other environmental issues that may be constraints or fatal flaws to the proposal.

4.3 Environmental factors and principles

The environmental review should focus on the key or more significant environmental issues and the environmental factors associated with these issues. The EPA has often combined several factors which have clear relationships into environmental issues or broadly interpreted a single factor to encompass a range of related
impacts. These may be significant in a local, regional or cumulative context. Where this occurs, it is important that the factors are still identified.

The identification of key issues and key environmental factors for the proposal must be incorporated into the proponent’s environmental scoping document and agreed by the EPA.

The EPA has prepared a *Guide to Preparing an Environmental Scoping Document* and a *Guide to EIA Environmental Principles, Factors and Objectives* to assist proponents of proposals being formally assessed. These guides are available at [www.epa.wa.gov.au](http://www.epa.wa.gov.au).

The environmental factors should be addressed within the environmental review document for the public to consider and make comment to the EPA. The EPA is required to address key environmental factors in its report to the Minister for Environment.

Reference to relevant *Environmental Protection Bulletins* and *Position Statements* and demonstration of compliance with associated *Environmental Assessment Guidelines* and *Guidance for the Assessment of Environmental Factors* should be included in the discussion about environmental issues/factors.

The EPA expects the proponent to fully consult with interested members of the public and take due care in ensuring all other key environmental factors, which may be of interest to the public, are addressed.

Additional environmental factors may be identified during the preparation of the environmental review. These should be addressed in the PER. On-going consultation with the EPA and other relevant agencies is recommended. The Office of the EPA can advise on the recommended EPA objective for any new environmental factors raised. Minor matters which can be readily managed as part of normal operations for the existing operations or similar projects may be briefly described.

The EPA will expect to see a discussion of the extent to which best practice will be applied to the proposal and also an explanation of how the principles of environmental protection have been given attention, where appropriate.

Discussion under each environmental issue/factor should include:

- a description of where this factor fits into the broader environmental / ecological context (only if relevant - may not be applicable to all factors);
- a clear definition of the area of assessment for this factor;
- the EPA objective for this factor;
- a description of what is being affected - why this factor is relevant to the proposal and how is it significant;
- a description of how this factor is being affected by the proposal - the predicted extent of impact;
- a straightforward description or explanation of any relevant standards / regulations / policy;
- environmental evaluation - does the proposal apply best practice and does it meet the EPA’s objective as defined above;
• if not, what environmental management is proposed to ensure the EPA’s objective is met; and
• predicted outcome.

The proponent should provide a summary table of the above information for all environmental factors, under the three categories of biophysical, pollution management and social surroundings as shown in Table 2:

**Table 2: Environmental factors and management (example only)**

<table>
<thead>
<tr>
<th>Environmental Factor</th>
<th>EPA Objective</th>
<th>Existing environment</th>
<th>Potential impact</th>
<th>Environmental management</th>
<th>Predicted outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BIOPHYSICAL</strong></td>
<td></td>
<td>Reserve 34587 contains 45 ha of community type 20b and 34 ha of community type 3b</td>
<td>Proposal avoids all areas of community types 20b and 3b</td>
<td>Surrounding area will be fully rehabilitated following construction</td>
<td>Community types 20b and 3b will remain untouched. Area surrounding will be revegetated with seed stock of 20b and 3b community types</td>
</tr>
<tr>
<td>vegetation</td>
<td>To maintain the abundance, diversity, geographic distribution and productivity of flora at species and ecosystem levels through the avoidance or management of adverse impacts and improvement in knowledge</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>POLLUTION MANAGEMENT</strong></td>
<td></td>
<td>Light industrial area - three other dust producing industries in close vicinity</td>
<td>Proposal may generate dust on two days of each working week.</td>
<td>Dust Control Plan will be implemented</td>
<td>Dust can be managed to meet EPA’s objective</td>
</tr>
<tr>
<td>Dust</td>
<td>To ensure that emissions do not adversely affect the environment or health, welfare and amenity of people and nearby land uses by meeting statutory requirements and acceptable standards</td>
<td>Nearest residential area is 800 metres</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### SOCIAL SURROUNDINGS

<table>
<thead>
<tr>
<th>Visual amenity</th>
<th>Area already built-up</th>
<th>This proposal will contribute negligibly to the overall visual amenity of the area</th>
<th>Main building will be in 'forest colours' and screening trees will be planted on road</th>
<th>Proposal will blend well with existing visual amenity and the EPA's objective can be met</th>
</tr>
</thead>
</table>

#### 4.4 Principles

The proponent should provide a table showing how consideration has been given to the principles of environmental protection, as shown in Table 3:

**Table 3: Consideration given to principles (example only)**

<table>
<thead>
<tr>
<th>Principle</th>
<th>Relevant Yes/No</th>
<th>If yes, consideration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. The precautionary principle</strong></td>
<td>No</td>
<td>Investigations required to provide sufficient information to address potential environmental impacts.</td>
</tr>
<tr>
<td>Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. In application of this precautionary principle, decisions should be guided by —</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) careful evaluation to avoid, where practicable, serious or irreversible damage to the environment; and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) an assessment of the risk — weighted consequences of various options.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2. The principle of intergenerational equity</strong></td>
<td>Yes</td>
<td>See 3. Information on long-term emissions, greenhouse gas emissions, with respect to Guidance Statement No. 12.</td>
</tr>
<tr>
<td>The present generation should ensure that the health, diversity and productivity of the environment is maintained and enhanced for the benefit of future generations.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3. The principle of the conservation of biological diversity and ecological integrity</strong></td>
<td>Yes</td>
<td>Flora and fauna surveys to be undertaken. DRF, TECs etc. to be checked. Quantity of vegetation loss.</td>
</tr>
<tr>
<td>Conservation of biological diversity and ecological integrity should be a fundamental consideration.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4. Principles relating to improved valuation, pricing and incentive mechanisms</strong></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>(1) Environmental factors should be included</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
in the valuation of assets and services.

(2) The polluter pays principles – those who generate pollution and waste should bear the cost of containment, avoidance and abatement.

(3) The users of goods and services should pay prices based on the full life cycle costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste.

(4) Environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structure, including market mechanisms, which enable those best placed to maximise benefits and/or minimise costs to develop their own solution and responses to environmental problems.

5. The principle of waste minimisation
All reasonable and practicable measures should be taken to minimise the generation of waste and its discharge into the environment.

Yes

4.5. Environmental management

The EPA expects the proponent to have in place an environmental management system (EMS) appropriate to the scale and impacts of the proposal, including provisions for performance review and a commitment to continuous improvement.

The system may be integrated with quality and health and safety systems and should include the following elements:

- environmental policy and commitment;
- planning of environmental requirements;
- implementation of environmental requirements;
- measurement and evaluation of environmental performance; and
- review and improvement of environmental outcomes.

A description of the environmental management system should be included in the environmental review documentation. If appropriate, the documentation can be incorporated into a formal environmental management system (such as AS/NZS ISO 14001). Public accountability should be incorporated into the approach on environmental management.

The environmental management system should include plans to manage the key environmental factors, define the performance objectives, describe the resources to
be used, outline the operational procedures and outline the monitoring and reporting procedures which would demonstrate the achievement of the objectives.

5. Public consultation

A description of the public participation and consultation activities undertaken by the proponent in preparing the environmental review should be provided. It should describe the activities undertaken, the dates, the groups/individuals involved and the objectives of the activities. Cross-reference should be made with the description of environmental management of the factors which should clearly indicate how community concerns have been addressed. Those concerns which are dealt with outside the EPA process can be noted and referenced.

6. Conclusion

The environmental review document should indicate the proponent's view of the environmental costs and benefits of the proposal. This should be a synthesis of the preceding relevant information and aim to show how the proposal would achieve an overall net environmental benefit.

When presenting this synthesis, the proponent should note that the proponent's own commercial arrangements and aspects such as employment opportunities, including economic benefits that might accrue as a result of these, are not matters that the EPA can consider in its assessment.

Where relevant, the implications of the adoption in the proposal design and operation of best practicable measures to minimise environmental impacts should be mentioned. Proponents should also note how the proposal addresses the object and Principles set out in s4A of the EP Act.

Proponents are also requested to outline the basis upon which they believe the EPA should conclude that the proposal is environmentally acceptable.

7. Availability of the environmental review

The EPA expects the proponent to provide copies of the PER for distribution free of charge to the EPA, Office of the EPA and relevant government agencies, local governments, libraries and other organisations.

The EPA expects copies of the environmental review documentation to be distributed through electronic means (CD and internet), but a number of printed copies will also be required. The specific number of copies required, the type of copy, and the means of distribution, are invariably case-specific and should be agreed with the Office of the EPA project officer/manager during the early stages of preparation of the environmental review document.
<table>
<thead>
<tr>
<th>Example of distribution requirements:</th>
<th>Hard copy format</th>
<th>CD format</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supplied to EPA for:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Library/Reading Room</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>EPA Members</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>Office of the EPA</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Minister</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td><strong>Distributed by Proponent to:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government Departments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department of Environment and Conservation Regional Office</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Department of Water</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Department of Mines and Petroleum</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Department of Indigenous Affairs</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Shire</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Local Government Libraries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J S Battye Library</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Shire Library</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Local Libraries</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conservation Council of WA</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Interest Groups</td>
<td>1</td>
<td>-</td>
</tr>
</tbody>
</table>
Attachment 1

The first page of the proponent’s environmental review document must be the following invitation to make a submission, with the parts in square brackets amended to apply to each specific proposal. Its purpose is to explain what submissions are used for and to detail why and how to make a submission.

It is the EPA that is inviting submissions. Therefore the invitation should be distinguishable from the Proponent’s environmental review document. This is achieved by printing the invitation on different coloured paper (from the environmental review document) and ensuring that no Proponent identifiers, such as name or logos, appear on the invitation, including in headers and footers.

Invitation to make a submission

The Environmental Protection Authority (EPA) invites people to make a submission on this proposal. Both electronic and hard copy submissions are most welcome.

[The proponent] proposes [brief description of proposal]. In accordance with the Environmental Protection Act 1986 (EP Act), a Public Environmental Review (PER) has been prepared which describes this proposal and its likely effects on the environment. The PER is available for a public review period of [4] weeks from [date] closing on [date].

Comments from government agencies and from the public will help the EPA to prepare an assessment report in which it will make recommendations to government.

Why write a submission?

A submission is a way to provide information, express your opinion and put forward your suggested course of action - including any alternative approach. It is useful if you indicate any suggestions you have to improve the proposal.

All submissions received by the EPA will be acknowledged. Submissions will be treated as public documents unless provided and received in confidence, subject to the requirements of the Freedom of Information Act 1992 (FOI Act), and may be quoted in full or in part in the EPA’s report.

Why not join a group?

If you prefer not to write your own comments, it may be worthwhile joining a group interested in making a submission on similar issues. Joint submissions may help to reduce the workload for an individual or group, as well as increase the pool of ideas and information. If you form a small group (up to 10 people) please indicate all the names of the participants. If your group is larger, please indicate how many people your submission represents.

Developing a submission

You may agree or disagree with, or comment on, the general issues discussed in the PER or the specific proposal. It helps if you give reasons for your conclusions, supported by relevant data. You may make an important contribution by suggesting ways to make the proposal more environmentally acceptable.
When making comments on specific elements of the PER:
• clearly state your point of view;
• indicate the source of your information or argument if this is applicable;
• suggest recommendations, safeguards or alternatives.

Points to keep in mind
By keeping the following points in mind, you will make it easier for your submission to be analysed:
• attempt to list points so that issues raised are clear. A summary of your submission is helpful;
• refer each point to the appropriate section, chapter or recommendation in the PER;
• if you discuss different sections of the PER, keep them distinct and separate, so there is no confusion as to which section you are considering;
• attach any factual information you may wish to provide and give details of the source. Make sure your information is accurate.

Remember to include:
• your name;
• address;
• date; and
• whether and the reason why you want your submission to be confidential.

Information in submissions will be deemed public information unless a request for confidentiality of the submission is made in writing and accepted by the EPA. As a result, a copy of each submission will be provided to the proponent but the identity of private individuals will remain confidential to the EPA.

The closing date for submissions is: [date]

The EPA prefers submissions on PER documents to be made electronically on its consultation hub at https://consultation.epa.wa.gov.au.

Alternatively, submissions can be
• posted to: Chairman, Environmental Protection Authority, Locked Bag 33, CLOISTERS SQUARE WA 6850, Attention: (project officer); or
• delivered to the Environmental Protection Authority, Level 4, The Atrium, 168 St Georges Terrace, Perth, Attention: (project officer); or

If you have any questions on how to make a submission, please ring the EPA assessment officer, xxxxxx on 6467 xxxx.
Attachment 2

Advertising the environmental review

The proponent is responsible for advertising the release and arranging the availability of the environmental review document in accordance with the following guidelines:

Format and content of the advertisement

The Office of the EPA should approve the format and content of the advertisement before it appears in the media. For joint State-Commonwealth assessments, the Commonwealth also has to approve the advertisement. The advertisement should be consistent with the attached example (Attachment 3).

Note that the Office of the EPA project officer's name should appear in the advertisement.

Size

The size of the advertisement should be two newspaper columns (about 10 cm) wide by about 14 cm long. Dimensions less than these would be difficult to read.

Location

The approved advertisement should appear in the news section of the Saturday or Monday edition of the main daily paper (*The West Australian*), and in the news section of the main local paper.

Timing

Within the guidelines already given, it is the proponent's prerogative to set the time of release, although the Office of the EPA should be kept informed. The advertisement should appear at the commencement of the public review period. For PERs with a review period in excess of 4 weeks, the same advertisement should appear again two weeks prior to the closure of the public review period. The advertisement should not go out before the report is actually available to the public, or the review period may need to be extended.

Throughout the public review period, the document should be freely available for distribution in both CD and hard copy forms and as a download from the proponent's website. If the document is unavailable during the review period, the submissions period will need to be extended to reflect the delays.
Attachment 3  Example of the newspaper advertisement

Proponent Name
Public Environmental Review

TITLE OF PROPOSAL
(Public Review Period: [date] to [date])

[Proponent] is planning to [brief description of proposal].

A Public Environmental Review (PER) has been prepared by the company to examine the environmental effects associated with the proposed development, in accordance with Western Australian Government procedures. The PER describes the proposal, examines the likely environmental effects and the proposed environmental management procedures.

[Proponent] has prepared a project summary which is available free of charge from the company's office address. The PER is available for examination on the following web site – www.xxxxxxxx.com.au.

Copies of the PER may be purchased for [$10] from:
Company Name
Street
Suburb/Town  WA  Postcode
Telephone:  (08) 9xxx xxxx

A CD version of the PER can be obtained from the above address.

Copies of the PER will be available for examination at:
▪ Department of Environment and Conservation
  Library/Reading Room
  4th Floor, The Atrium
  168 St Georges Terrace
  PERTH  WA  6000
▪ Department of Environment and Conservation Regional/District Office - if appropriate
  [address]
▪ [Local Authority] public libraries
▪ J S Battye Library

Public submissions close on DATE

The EPA prefers submissions to be made electronically on its consultation hub at
https://consultation.epa.wa.gov.au

Alternatively submissions can be
▪ posted to: Chairman, Environmental Protection Authority, Locked Bag 33,
  CLOISTERS SQUARE  WA  6850, Attention:  (project officer); or
▪ delivered to the Environmental Protection Authority, Level 4, The Atrium, 168 St
  Georges Terrace, Perth, Attention:  (project officer).

If you have any questions on how to make a submission, please ring the EPA
assessment officer, xxxxx on 6467 xxxx.
Attachment 4  Air quality and air pollution guide:

The Department of Environment and Conservation (DEC) is frequently required to review assessments of the air quality impact of existing or proposed sources of air pollutants. This often occurs in the course of individuals or companies meeting their obligations under the Environmental Protection Act 1986 (the EP Act), notably environmental impact assessment under Part IV of the EP Act or in relation to Works Approvals and Licences under Part V of the EP Act. Guidance notes have been prepared to provide an understanding of the DEC’s expectations with respect to air quality modelling. These may be found at
