

Mining Proposal Reform

Discussion paper for public consultation

September 2014

Preface

The Department of Mines and Petroleum (DMP) carries prime responsibility for regulating mineral and petroleum exploration and development activities in Western Australia. In addition to administering titles systems and regulating for worker safety and management of dangerous goods, the role of DMP also includes regulating the environmental impacts and responsible closure of mining, petroleum and geothermal activities.

The resources sector in Western Australia has demonstrated its capacity to evolve and develop. At the same time, DMP has maintained a focus on ensuring that its regulatory framework, and the administrative practices it employs, are contemporary and in keeping with the principles of best practice regulations.

DMP has a targeted strategy to implement best practice for each regulatory activity. The Department has dedicated resources to research and work with stakeholders to identify the procedures, systems and legislative changes that may be required to deliver on this strategy.

The proposed reforms to Mining Proposals discussed within this paper are one aspect of this strategy – assisting DMP to implement an objective and risk-based regulatory framework, improve regulatory effectiveness and remove unnecessary duplication from the approval processes. The proposed changes will provide certainty to the mining industry and reassure the broader community that the environment is being appropriately managed by the resource sector of Western Australia.

This consultation paper is open for public comment until 5:00pm, 31 October 2014.

I encourage you to read this paper and to submit your comments on the proposed reforms to Mining Proposals.

Phil Gorey

Executive Director Environment

Submissions

The Department of Mines and Petroleum (DMP) invites submissions on the proposed Mining Proposal reform as outlined in this discussion paper. It is preferred that submissions are made using the form located on DMP's website at www.dmp.wa.gov.au/20808.aspx. All submissions can be emailed to mpreformenguiry@dmp.wa.gov.au.

This consultation paper is open for public comment until 5:00pm, 31 October 2014.

All submissions made to DMP will be made publicly available on its website at www.dmp.wa.gov.au. Any person wishing to make a submission can choose to provide feedback 'in confidence'; this will result in the respondent's name being withheld from the website (all comments will still be made publicly available).

DMP strongly encourages all interested stakeholders to provide feedback on the proposed Mining Proposal reform. All submissions will be considered in the future development of Mining Proposals.

Engagement strategy

DMP is undertaking Mining Proposal reform in consultation with stakeholders (see Figure 1). This discussion paper represents Phase 1, and is designed to outline the overall direction of the changes and the guiding principles. Following feedback on this discussion paper, DMP will prepare a draft Guideline outlining the revised structure and process for the preparation of a Mining Proposal. This document will form the basis of Phase 2 consultation and will provide much of the technical detail associated with the reform.

An industry reference group will be established for the life of the project to assist with both the development and implementation of the reforms and associated IT systems. Membership, terms of reference, agendas and meeting minutes of the reference group will be published on the DMP website www.dmp.wa.gov.au/20808.aspx .

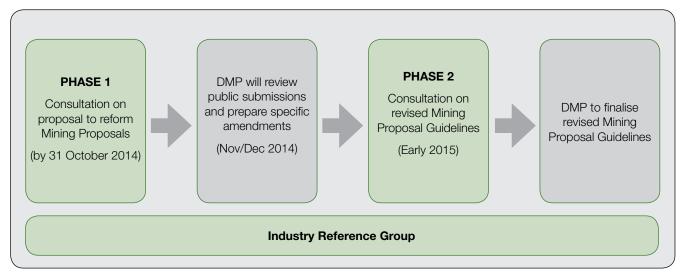


Figure 1 – MP Reform consultation strategy

Table of Contents

| Intro | ntroduction | | |
|-------|-------------|--------------------------------------|----|
| 1. | Minir | 5 | |
| | 1.1. | Risk based assessment | 5 |
| | 1.2. | Outcomes based regulation | 5 |
| | 1.3. | Regulatory expectations | 5 |
| | 1.4. | Management system | 6 |
| | 1.5. | Spatial capture | 6 |
| | 1.6. | Shift to a revision based submission | 6 |
| 2. | Minir | ng Proposal structure | 6 |
| | 2.1. | Mine site details | 7 |
| | 2.2. | Activity details | 7 |
| | 2.3. | Environmental legislative framework | 7 |
| | 2.4. | Stakeholder engagement | 7 |
| | 2.5. | Baseline environmental data | 7 |
| | 2.6. | Environmental risk assessment | 8 |
| | 2.7. | Environmental outcomes | 9 |
| | | Environmental performance criteria | 9 |
| | | Environmental monitoring | 9 |
| | 2.8. | Environmental reporting | 9 |
| | 2.9. | Management system | 9 |
| Арр | endices | | 10 |
| | A. | Mine site details | 10 |
| | В. | Mine activity information | 11 |
| | С | Baseline environmental data | 13 |

Introduction

In 2012, the Department of Mines and Petroleum (DMP) announced the implementation of a Reforming Environmental Regulation (RER) program that aims to establish a risk and outcome based regulatory framework. This framework will ensure that regulatory effort by DMP is targeted and proportionate to protect environmental values in an effective, efficient and timely manner; and to support the community expectation for responsible development. Further information about the RER program and other reform success can be found on the DMP website: http://www.dmp.wa.gov.au/15811.aspx.

Reform to the structure and content of Mining Proposals in Western Australia (MP reform) is an essential component of the RER program. The aim of MP reform is to ensure environmental regulation of mining is focused around the identification and mitigation of key environmental risks to ensure an agreed environmental outcome is achieved. It is envisaged that the reform will also result in Mining Proposals being lodged in an on-line format.

This paper outlines the scope of changes to Mining Proposals that will enable the principles of best practice environmental regulation¹ to be implemented within the department's environmental regulatory function. This discussion paper is being released as part of the first phase of the engagement strategy and provides an opportunity for stakeholder feedback.



Figure 2 - RER Program

1. Mining Proposal reforms

The proposed MP reform will result in a change to the way in which the mining industry prepares, submits and obtains approval to conduct mining activities under the *Mining Act 1978*.

Key changes to Mining Proposals

1.1 Risk-based assessment

The proposed MP reforms will place the responsibility on the tenement holder to demonstrate that the environmental risks arising from a proposal are identified and managed to an acceptable level. The application of risk-based assessment will enable flexibility for mining operators to assess risk on a case-by-case basis, allowing resources to be targeted and allocated proportionate to the level of risk. It also encourages the adoption of continuous improvement as the tenement holder will be responsible for continually evaluating the level of risk and reviewing mitigation strategies to ensure risk is minimised.

This approach is consistent with the risk and outcomes-based environmental regulatory method already applied in the regulation of petroleum activities at both the State and Commonwealth Government levels.

Further details regarding the requirements associated with risk assessments are provided within section 2.6.

1.2 Outcomes-based regulation

The implementation of an outcomes-based regulatory regime will result in a shift away from the current prescriptive nature of compliance against management commitments or an approved document, to the approval of an activity that will achieve agreed environmental outcomes. It is envisioned that environmental outcomes will be derived for each individual mine site as part of the site specific environmental risk assessment. Environmental outcomes are to be proposed by the applicant and must address all key environmental factors applicable to the site. Proposed outcomes will be subject to approval by DMP to ensure the activities are environmentally acceptable and achieve DMP's environmental objectives (further detail provided below).

This shift is in keeping with the aims of encouraging continuous improvement by providing a regulatory framework that is flexible in accommodating changes to mitigation strategies without necessarily requiring a new approval (further discussed in section 1.6). The application of environmental outcomes will improve transparency and provide clarity regarding all environment obligations under the *Mining Act 1978*.

1.3 Regulatory expectations

DMP will set broad environmental objectives as a means of ensuring proposals are acceptable to the State (or consider utilising existing objectives set by Government, e.g. Office of the EPA Environmental Objectives). The environmental objectives will also assist industry in establishing appropriate environmental outcomes as part of a Mining Proposal.

Preliminary regulatory expectations developed as part of the RER program are provided in Table 1:

Table 1 - Preliminary regulatory expectations

Ensure that premises are operated, closed, decommissioned and rehabilitated to minimise environmental impact, consistent with agreed outcomes and land-uses, and without unacceptable liability to the State.

Ensure that environmental outcomes and post-mining land-uses are agreed with all relevant stakeholders.

Use a risk based approach to identify risks to local ecosystems, land scapes and the achievement of the agreed outcomes and post-mining land use.

Land clearing is undertaken in accordance with the native vegetation clearing principles.²

The concept of how the proposed regulatory expectations may be addressed as part of a Mining Proposal assessment is explained within Table 2.

¹ The principles of best practice environmental regulation – accountable, transparent, predictable, proportional and targeted.

² Required to allow for the proposed Native Vegetation Clearing Permit exemption – see 'Proposal For Environmental Reform – Discussion paper for public consultation (January 2014)'

Table 2 - Application of regulatory expectations within a Mining Proposal assessment

| Regulatory expectation | Environmental factor | Activity threat pathway | Risk assessment and mitigation strategies | Environmental outcome (site specific) | Performance criteria and monitoring |
|--|-------------------------|--------------------------------------|---|---|---|
| Ensure that premises are operated, closed, decommissioned and | Flora & fauna | Clearing of specific vegetation type | Risk assessment undertaken. | To minimise disturbance to species x,y,z. | < 5% impact to known population of x,y,z. |
| rehabilitated to minimise environmental impact, consistent with agreed outcomes and landuses, and without unacceptable liability to the State. | Groundwater | Contamination of local groundwater | Risk assessment undertaken. Mitigation and monitoring strategies set. | Maintenance of groundwater quality | pH 6-7 TDS <1,000 mg/L |

1.4 Management system

A key underpinning of DMP's shift to a risk and outcomes-based regulatory framework will be the requirement for tenement holders to have and maintain a system for identifying and managing environmental risks. As discussed in DMP's 'Proposal For Environmental Reform – Discussion paper for public consultation (January 2014)', this will become a mandatory requirement for mine sites.

The management system will not be required to be a certified Environmental Management System under the relevant Australian/New Zealand Standard (AS/NZS ISO 14001:2004 Environmental Management Systems – requirements with guidance for use). Instead, DMP will develop guidance for tenement holders, in consultation with stakeholders, on the expectations for the development and use of the management system, while recognising many organisations already have systems in place that will meet these requirements.

1.5 Spatial capture

DMP proposes the reforms to Mining Proposals will result in the development of a new online Mining Proposal format. This will include a requirement for the inclusion of activity-based spatial data in the application. This will replace the current requirement for a map showing the activities or features of the proposed project. Proponents will be able to either upload spatial files or draw features or activities, using a simple tool provided by DMP. This mechanism will allow proponents to calculate areas of disturbance automatically.

The addition of spatial data will improve regulatory transparency through capturing and displaying the approved location and scale of all mining activities associated with a mine site. Spatial data will also assist both DMP and industry in data collation, early identification of environmentally sensitive areas, decreasing duplication of data provision, and enhancing the strategic understanding of mining operations throughout Western Australia. See map in Appendix A for an example of spatial capture in the lodgement process.

Question – Should the spatial approval associated with a Mining Proposal be based on an activity footprint, or within an approved envelope?

1.6 Shift to a revision-based submission

The current process for the assessment of Mining Proposals is based on an addendum system, whereby any variation to previous approvals must be subsequently approved via a new Mining Proposal. Over time a single project may have numerous Mining Proposals approved, each with its own set of commitments, some of which may be duplicated, contradictory, outdated or conflicting with environmental best practice.

The proposed reforms to Mining Proposals will result in a shift to a version-based submission process to capture changes to a mining operation, instead of issuing a separate approval for each alteration and expansion to the operation. This will work on the principle of each mine site having a suite of approved mining activities under only one approved Mining Proposal that is revised as required by the tenement holder.

Furthermore, minor changes that do not change the project's risk profile past an acceptable risk threshold, may be dealt via a notification process rather than an approval. This aspect may be subject to legislative amendments that are currently being considered under RER. For updates regarding the status of the legislative amendments please consult DMP's website: http://www.dmp.wa.gov.au/19436.aspx.

2. Mining Proposal structure

In consideration of the above key changes, a draft structure for Mining Proposals has been developed to further articulate the scope and nature of the reform. The proposed structure is detailed within Figure 3 and illustrates the main components considered necessary for a Mining Proposal. It is important to note that DMP will only approve activities that can demonstrate compliance with the established environmental outcomes. DMP will need to be satisfied with the level of information provided.

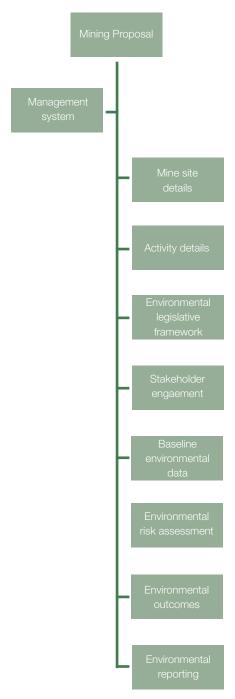


Figure 3 - Draft Mining Proposal structure

2.1 Mine site details

The 'mine site details' section of a Mining Proposal is intended to capture and display information specific to the mine site for which a Mining Proposal is being lodged. This information is to be generic in nature and applicable across a variety of divisions within DMP. Such information may include but is not limited to:

- the mine site name
- the status of the mine (operational, decommissioning etc.)
- commodity mined and/or remaining years of operation.

Providing this information enables the department to maintain a single 'approval profile' for individual mine

sites, thus simplifying the obligations and outcomes expected of the proponent.

An example of the types of information captured within this section is provided within Appendix A.

2.2. Activity details

The intent of the 'activity details' section is to accurately and concisely record the activities for which the operator is seeking approval. This would include any variations to an existing proposal, as well as any new activities for the mine site. This section forms the basis of a Mining Proposal and will document the activities for which approval is being sought. The requirement to include activity based **spatial data** will be addressed within the activity details section of a Mining Proposal.

A draft structure and information requirements specific for each mine activity area is provided within Appendix B.

2.3. Environmental legislative framework

The new format of Mining Proposals will include a section where proponents identify all Commonwealth and State environmental legislation that are relevant to the proposal. The proponent must demonstrate that they have considered and will meet the provisions of all relevant environmental legislation. The addition of an environmental legislative framework section is intended to streamline assessment by reducing regulatory duplication. Issues which have already been assessed and determined under other legislation (where appropriate) will not require re-assessment by DMP.

2.4. Stakeholder engagement

The revised structure for Mining Proposals is proposed to include details regarding consultation undertaken between the tenement holder and relevant stakeholders in regards to the proposed activities. Early engagement with stakeholders will enable operators to better understand and manage stakeholder expectations and the potential risks associated with the proposed activities.

In this section the operator must clearly identify all relevant stakeholders. It must include a description of the nature of all consultation, including the level of information provided to stakeholders, the date of the consultations, the issues and concerns raised by those stakeholders and how they were resolved. It would be expected that the consultation will include discussion on the main environmental risks, how these will be managed and the agreed post mining land use for the project area.

2.5. Baseline environmental data

As with current Mining Proposals, environmental baseline data must be captured for the mine site to ensure that the operator has an appropriate level of understanding of the environmental values and sensitivities that may be affected by the proposed activities. The baseline data must address all key environment factors applicable to the proposed activities and include the methodology used to gather the data. Such information may include but is not limited to:

| Climate | Details regarding the climatic conditions specific to the area of interest. |
|----------------------------------|---|
| Geology | Brief description of geology specific to the area of interest, including a basic description of the mineralisation |
| Waste characterisation | Summary of the characterisation of the mining wastes and tailings including chemical and physical characteristics such as potential for acidic/metalliferous drainage, asbestiform minerals, sodicity, salinity and dispersive potential. |
| Soils and soil profiles | Identify possible adverse parameters such as low or high pH, high salinity, nutrient / trace element deficiencies, poorly structured soils, dispersive or sodic soils and any potentially hazardous compounds. |
| Hydrology | Brief description of groundwater flows and aquifers. Description of surface water and water flows with assessment for flood potential if applicable. Description of surface and groundwater quality. |
| Flora, fauna and ecosystems | Provide a description of vegetation types and biological communities in the mining proposal locality using previously published flora / fauna surveys or studies |
| Heritage, land use and community | Detail the impact on other land occupiers in the vicinity of the mining proposal, such as pastoralists, Shires, owners of reserves, private land owners, local community members, recreational groups and Aboriginal communities |
| | Question – To what extent should a Mining Proposal consider land-use, community and heritage? |

Demonstrating an acceptable level of understanding of the environmental baseline conditions pre-mining is required to provide confidence to DMP that the tenement holder has sufficient information to assess all relevant risks of their proposal. The information provided within this section will be retained at the mine site level in DMP's online database. This will prevent information from having to be re-entered for every change to a proposal.

A preliminary structure of the key environmental factors for which information must be provided is detailed within Appendix C.

The revised Mining proposal guidelines (Phase 2) will provide more detail on the level of baseline data required for the key environmental factors.

2.6. Environmental Risk Assessment

The proposed MP reforms will require the tenement holder to identify the environmental risks arising from the proposal and demonstrate how they will manage to avoid, reduce or mitigate environmental harm. The proponent must detail their risk assessment within this section.

DMP intends to allow industry flexibility in how their risk assessments are conducted. This is to enable proponents to utilise an existing internal standard, develop their own standards, or follow international standards. This flexibility is tempered by Mining Proposals needing to be high quality documents. Documents that fail to identify and address foreseeable risks will not be approved and proponents will need to conduct further risk analysis prior to resubmitting proposals.

The risk assessment must clearly identify the following:

- Defined risk criteria: Identification of risk assessment methodologies used to define and measure consequences and likelihoods in relation to the proposal. In order to provide clarity, the environmental risk assessment matrix used must also be included.
- Risk analysis: Identification of risk pathway and the
 potential environmental impacts associated with the
 proposal. A clear description of consequence and
 likelihood levels must also be provided to quantify
 each risk both pre and post treatment (mitigation).
- Risk treatment (mitigation): The risk analysis must also include the mitigation strategies proposed to treat the level of risk. Appropriate reference to industry standards may be used as long as sufficient detail is provided to DMP to justify the post treatment level of risk and the relevance of the standard. Where recognised standards do not exist, the level of detail required regarding risk treatment (mitigation strategies) must be proportionate to pre-treated risk (raw risk). High risk factors will require the implementation of significantly more detailed risk treatment strategies to justify the activities can be managed to ensure responsible mineral development.

This section would also require the applicant to present a case that the proposed activities meet the following two key environmental requirements:

- That risks have been reduced to as low as reasonably practicable (or other accepted environmental outcomes), and;
- That the environmental impacts are acceptable

2.7. Environmental outcomes

Environmental outcomes

In facilitating outcomes based regulation, the proposed structure of Mining Proposals intends to capture mine site specific environment outcomes derived as part of the environmental risk assessment. The applicant will propose environmental outcomes for the mine site as part of their proposal, which must address all key environmental factors. The outcomes must be within the bounds of the broad environmental objectives set by DMP (see section 1.3). They will also need to consider spatial and temporal variations in the operation.

Environmental performance criteria

To ensure that performance can be measured against the proposed environmental outcomes, appropriate performance criteria will need to be set. All performance criteria will need to be specific, measureable, achievable, realistic, time-bound (SMART), and acceptable to DMP. Performance criteria may relate to baseline conditions specific to the site or in the absence of these, to relevant accepted standards e.g. ANZECC Water Quality Guidelines. The relevance of generic standards will need to be justified where site specific information is not available.

Environmental monitoring

The proposed new structure of Mining Proposals will require appropriate detail on the monitoring and maintenance framework to be implemented for each of the environmental performance criteria. The measurement techniques provided must be capable of demonstrating that environmental outcomes have been met, thus evaluating the effectiveness of the risk treatment strategies employed. Monitoring

results and interpretation against the performance criteria and environmental outcomes will be included in the Annual Environmental Report (AER).

2.8. Environmental reporting

Improving the quality of performance reporting to DMP is an important aspect in the shift to a risk and outcome based regulatory framework. It allows DMP to collect information on the environmental performance of mine sites to identify systemic and ongoing failures. This will ensure that resources can be allocated to areas of environmental concern in a timely fashion.

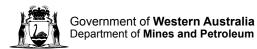
DMP is proposing mandatory environmental incident reporting requirements in future legislative amendments (e.g. spills, threatened fauna deaths, unauthorised clearing – see *Proposal For Environmental Reform – Discussion paper for public consultation (January 2014)).* The existing requirements for AERs will be streamlined so that monitoring and reporting is targeted to the agreed environmental outcomes and associated performance criteria. Mining Proposals will outline how environmental performance reporting requirements will be met.

2.9. Management system

The proposed legislative changes under the RER program will require operators to have and maintain a management system to ensure that environmental risks are identified and managed. The complexity of the system will reflect the complexity of the operation and the local environment. This requirement will be separate to a Mining Proposal in terms of structure; however the requirement to explain how the system will be developed and implemented will need to be addressed within a Mining Proposal submission.

Appendicies

A. Mine Site Details



Mining Proposal Submission Mine Site Details

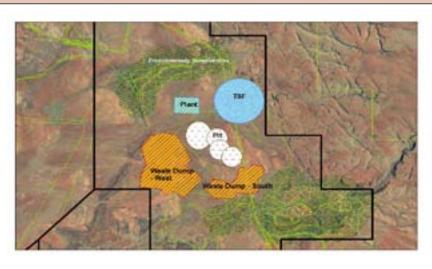
| Site Details | | | | |
|-------------------------------------|--|---|--|--|
| Mine Site | Mine Site Name | Mine Site Name | | |
| Mine Code | JXXXXX / EGS Code SXXXXXXXX / Oti | JXXXXX / EGS Code SXXXXXXXX / Other grouping (to be determined) | | |
| Type of Operation | Small Operation / Large Mining Operat | Small Operation / Large Mining Operation / State Agreement Act | | |
| Mine Status | | Greenfield / Construction / Operation / Care and Maintenance / Decommissioning / Rehab / Relinquishment | | |
| Commodity mined | e.g. Iron Ore, gold, etc | e.g. Iron Ore, gold, etc | | |
| Geographical Region | Kimberley / Pilbara / Mid-West / South | Kimberley / Pilbara / Mid-West / South-West / Goldfields | | |
| Project commencement Date | DAY MONTH YEAR | DAY MONTH YEAR | | |
| Estimated completion of the project | DAY MONTH YEAR | DAY MONTH YEAR | | |
| Tanamanta | MXX/XXXX – Tenement Holder | MXX/XXXX – Tenement Holder | | |
| Tenements | MXX/XXXX – Tenement Holder | MXX/XXXX – Tenement Holder | | |
| Operator Details | | | | |
| Company or Individual Name | | | | |
| ACN / ABN: | | | | |
| Address | | | | |

Mining Proposal Approval

Existing Areas Approved

| Mine Activity | Mine Activity Reference | Tenement | Current Area of Activity (Ha) | Total Approved Area (Ha) |
|-------------------------------------|-------------------------|----------|-------------------------------|--------------------------|
| Tailings / residue storage facility | TSF | MXX/XXXX | 10.00 | 20.00 |
| Waste Dump / Overburden Storage | Waste Dump – West | MXX/XXXX | 50.00 | 50.00 |
| Plant site | Plant | MXX/XXXX | 5.00 | 5.00 |
| Roads | All roads | MXX/XXXX | 9.60 | 9.60 |
| Mining Void (>5m in depth) | Pit | MXX/XXXX | 8.00 | 8.00 |
| TO | TAL AREA FOR MINE SITE | | 82.60 | 92.60 |

Existing Spatial Approval



B. Mine Activity information

Mining Proposal Submission Activity Details

| Proposal Information | | | | |
|--------------------------------|--|--|--|--|
| Specific proposal reference ID | MP-XXX-XXXX | | | |
| Proposal Summary | Brief summary of the activities which constitute this proposal (i.e. new activities, amendment to existing operations etc.). | | | |

Mine Activities approval is being sought for

| Tenement | Mine Activity | Mine Activity Reference | Current Area of Activity (Ha) | TOTAL Current Approved Area (Ha) | TOTAL Area approval is be- ing sought (Ha) | Proposed Change (Ha) |
|----------|-------------------------------------|----------------------------|----------------------------------|--|--|-------------------------|
| MXX/XXXX | Tailings / residue storage facility | TSF | 10.00 | 20.00 | 25.00 | +5.00 |
| | Waste Dump / Overburden Storage | Waste Dump – West | 50.00 | 50.00 | 60.00 | +10.00 |
| | Roads | All roads | 9.60 | 9.60 | 10.00 | +0.40 |
| | | TOTAL AREA | 69.00 | 79.60 | 95.00 | +15.40 |
| MXX/XXXX | Run-of-mine pad | ROM | 0.00 | 0.00 | 1.00 | +1.00 |
| | | TOTAL | 2.60 | 2.60 | 1.00 | 1.00 |
| | TOTAL | 7.60 | 82.20 | 96.00 | +16.40 | |

Table 2 - Contact information of the designated company representative

This information is intended to be provided publicly to facilitate stakeholder engagement.

| Designated company representative for consultation regarding proposal (intended to be provided publicly) | | |
|--|-----------------|--|
| Name | | |
| Position | | |
| Company | | |
| | Phone: | |
| Contact Details | Postal Address: | |
| | Email: | |

Table 3 – Specific mine activities for which approval is being sought.

| Tailings or residue Storage Facility | | | | |
|---|---|--|--|--|
| Mine Activity Reference | TSF East | | | |
| Area | 25 Ha (increase of 5 Ha proposed under this proposal) | | | |
| Area per tenement | MXX/XXXX – 25 Ha. | | | |
| Spatial Footprint | Shapefile | | | |
| | Туре | | | |
| | Height | | | |
| Design | Cells | | | |
| | Construction Method | | | |
| | Lining | | | |
| Tailings / Residue Material Characteristics | | | | |
| Category | Class 1, Class 2 (drop down) | | | |

| Waste dump or overburden stockpile | | | |
|------------------------------------|--|--|--|
| Mine Activity Reference | WD-2 | | |
| Area | 60 Ha (increase of 10 Ha proposed under this proposal) | | |
| Area per tenement | MXX/XXXX – 60 Ha. | | |
| Spatial Footprint | Shapefile | | |
| | Туре | | |
| | Height | | |
| Design | Construction Method | | |
| | | | |
| | | | |
| Waste Material Characteristics | | | |

| Workshop | | |
|-------------------------|---|--|
| Mine Activity Reference | Workshop | |
| Area | 10 Ha (increase of 5 Ha proposed under this proposal) | |
| Area per tenement | MXX/XXXX – 5 Ha. | |
| Spatial Footprint | Shapefile | |

| Roads | | |
|-------------------------|---|--|
| Mine Activity Reference | All roads | |
| Area | 10 Ha (increase of 1 Ha proposed under this proposal) | |
| Area per tenement | MXX/XXXX — 1 Ha. | |
| Spatial Footprint | Shapefile | |

| Run-of-mine pad | | |
|--------------------------|--|--|
| Mine Activity Reference | ROM | |
| Area | ea 1 Ha (increase of 0.40 Ha proposed under this proposal) | |
| Area per tenement | a per tenement MXX/XXXX – 1 Ha. | |
| Spatial Footprint | Shapefile | |
| Material Characteristics | | |

| Plant Site | | |
|---|----------------------------|--|
| Mine Activity Reference Processing Plant | | |
| Area 2.60 Ha (increase of 0.60 Ha proposed under this proposal) | | |
| Area per tenement | <i>MXX/XXXX</i> – 2.60 Ha. | |
| Spatial Footprint | Shapefile | |

C. Baseline Environmental Data

The project will capture environmental baseline data to ensure the operator has an acceptable level of understanding of the environmental sensitivities and values that may be affected by the project and the proposed activities (proposal). A preliminary list of the environmental aspects for which information must be provided is detailed below:

Geology

Brief description of geology specific to the area of interest, including a basic description of the mineralisation

Waste Characterisation (physical and chemical) Summary of the characterisation of the mining wastes and tailings including chemical and physical characteristics such as sodicity, salinity and dispersive potential. Supporting documents to be attached. Attached Documents WasteCharacterisationRepot.pdf ✓ TailingsCharacterisationResults.pdf

Soils and Soil Profiles

Identify possible adverse parameters such as low or high pH, high salinity, nutrient / trace element deficiencies, poorly structured soils, dispersive or sodic soils and any potentially hazardous compounds.

Attached Documents

Supporting documents to be attached.

SoilAnalysisResults.pdf

Hydrology (surface and groundwater) Brief description of surface and subsurface water flows with assessment for flood potential if applicable. Supporting documents to be attached. Attached Documents ✓ Project Flood Assessment.pdf ✓ GroundwaterMonitoringResults.pdf

Flora, Fauna and Ecosystem Provide a description of vegetation types and biological communities in the mining proposal locality using previously published flora / fauna surveys or studies Supporting documents to be attached. Attached Documents FloraSurvey.pdf FaunaSurvey.pdf

Land Use and Community

Detail the impact on other land occupiers in the vicinity of the mining proposal, such as pastoralists, Shires, owners of reserves, private land owners, local community members, recreational groups and Aboriginal communities

Department of Mines and Petroleum Mineral House 100 Plain Street, East Perth Western Australia 6004 Tel: +61 8 9222 3333

www.dmp.wa.gov.au



MINING PROPOSAL REFORM

| SECTION 1 — STAKEHOLDER DETAILS | | | | | |
|---|--|-------------------------|--|--|--|
| | | | | | |
| Public or Confidential | | | | | |
| Do you wish to lodge your submission 'IN CONFIDENCE' | Yes | □No | | | |
| The DMP is intending to publish a summary of the submissions received. Feedback received from an 'IN CONFIDENCE' submission will be presented, but the respondents name will not be published on the DMP's website. | | | | | |
| | | | | | |
| Submission Details Note: The following information will be placed on DMP's website. | | | | | |
| This submission is written on behalf of: (please select one of the following categories) | | Individual Organisation | | | |
| Are you making this submission as: (please select one of the following categories) | Business Industry representative Academic Government representative Professional Other | | | | |
| Submission Details | | | | | |
| Note: The following information will not be published on DMP's website if you are lodging your submission 'IN CONFIDENCE'. | | | | | |
| Individual OR Organisation's name: | | | | | |
| | | | | | |
| Individual / Organisation Details Note: The following information will not be placed on DMP's website | | | | | |
| Principal contact name: Contact phone number: | | | | | |
| Email address: | | | | | |

PLEASE NOTE:

Typed electronic submissions are the preferred submission format.

If you wish to submit a hand written submission or for other submission related queries, please contact Department of Mines and Petroleum on 9222 3333 or via email mpreformenquiry@dmp.wa.gov.au

Confidential material – Where a submission includes confidential and non-confidential material, the confidential material should be provided separately and clearly marked 'IN CONFIDENCE' and will not be placed on the website.

Please note: Legal requirements such as those imposed by the Freedom of Information Act 1982 may affect the confidentiality of public submissions.



MINING PROPOSAL REFORM

SECTION 2 – STAKEHOLDER RESPONSE FORM

| Key Changes to Mining Proposal | 1. General Comments | |
|--------------------------------|---|--|
| | 1.1 Risk-based Assessment | |
| | 1.2 Outcomes based Regulation | |
| | | |
| | 1.3 Environmental Objectives | |
| | 1.4 Management System | |
| | 1.5 Spatial Capture | |
| | Question – Should the spatial approval associated with a Mining Proposal be based on activity footprint, or within an approved envelop? | |
| | 1.6 Shift to a revision based submission | |
| Mining Proposal Structure | 2. General comment | |
| | 2.1 Mine Site Details | |
| | 2.2 Activity Details | |
| | 2.3 Environmental Legislative Framework | |



MINING PROPOSAL REFORM

| Mining Proposal Structure | 2.4 Stakeholder Engagement | |
|---------------------------|--|--|
| | 2.5 Baseline Environmental Data | |
| | Question – To what extent should a Mining Proposal consider land-use and heritage? | |
| | 2.6 Environmental Risk Assessment | |
| | 2.7 Environmental Outcomes (including Environmental Performance Criteria and Environmental Monitoring) | |
| | 2.8 Environmental Reporting | |
| | 2.9 Management System | |
| | Tables and Appendices | |