Referral of a Proposal to the Environmental Protection Authority under Section 38 of the *Environmental Protection Act 1986*.

PURPOSE OF THIS FORM

Section 38 of the *Environmental Protection Act 1986* (EP Act) makes provision for the referral to the Environmental Protection Authority (EPA) of a proposal (significant proposals, strategic proposals and proposals under an assessed scheme) by a proponent, a decision making authority (DMA), or any other person.

The purpose of this form is to ensure that EPA has sufficient information about a proposal to make a decision about the nature of the proposal and whether or not the proposal should be assessed under Part IV of the EP Act. Information provided in the referral form must be brief (no more than 30 pages), sharp and succinct to achieve the purposes of this form.

This form does not prevent the referrer from providing a supplementary referral report. Should a referrer choose to submit a supplementary referral report please ensure the following.

- i. Information is short, sharp and succinct.
- ii. Attachments are below eight megabytes (8 MB) as they will be published on the EPA's website (exemptions apply) for public comment. To minimise file size, "flatten" maps and optimise pdf files.
- iii. Cross-references are provided in the referral form to the appropriate section/s in the supplementary referral report.

This form is to be used for all proposals¹ which can be referred to the EPA under section 38 of the EP Act; i.e. referrals from: **proponents** of proposals (significant proposals, strategic proposals, derived proposals, proposals under an assessed scheme); **DMAs** (significant proposals); and **third parties** (significant proposals).

This form is divided into several sections, including; Referral requirements and Declaration; Part A - Information of the proposal and proponent; and Part B Environmental Factors. Guidance on successfully completing this form is provided throughout the form and is also available in the EPA's Environmental Assessment Guideline for Referral of a Proposal under s38 of the EP Act (EAG 16).

Send completed forms to

Office of the Environmental Protection Authority Locked Bag 10, East Perth WA 6892

or

Email: Registrar@epa.wa.gov.au

Enquiries

Office of the Environmental Protection Authority Locked Bag 10, East Perth WA 6892

Telephone: 6145 0800

Fax: 6145 0895

Email: info@epa.wa.gov.au
Website: www.epa.wa.gov.au

¹ Please note that this form consolidates and replaces the following forms: Referral of a Proposal by the Proponent to the EPA under section 38(1) of the EP Act; Referral of a Proposal by a third party to the EPA under section 38(1) of the EP Act; and Referral of a development proposal to the EPA by the decision making authority.

Referral requirements and Declaration

The following section outlines the referral information required from a proponent, decision making authority and third party.

(a) Proponents

Proponents are expected to complete all sections of the form and provide GIS spatial data to enable the EPA to consider the referral. Spatial GIS data is necessary to inform the EPA's decision.

The EPA expects that a proponent will address Part B of the form as thoroughly as possible to demonstrate whether or not the EPA's objectives for environmental factors can be met.

If insufficient information is provided the EPA will request more information and processing of the referral will commence once the information is provided or the EPA decides to make a precautionary determination on the available information.

| Proponent to complete before submitting form | |
|--|---|
| Completed all the questions in Part A (essential) | ⊠ Yes □ No |
| Completed all the questions in Part B | ⊠ Yes □ No |
| Completed all other applicable questions | ⊠ Yes □ No |
| Included Attachment 1 – any additional document(s) the proponent wishes to provide | ⊠ Yes □ No |
| Included Attachment 2 – confidential information (if applicable) | ☐ Yes ☐ No |
| Enclosed an electronic copy of all referral information, including spatial data and contextual mapping but clearly separating any confidential information | ⊠ Yes □ No |
| Completed the Declaration | ⊠ Yes □ No |
| What is the type of proposal being referred? * a referred proposal seeking to be declared a derived proposal | |
| Do you consider the proposal requires formal environmental impact assessment? | ⊠ Yes □ No |
| If yes, what level of assessment? API = Assessment of Proponent Information PER = Public Environmental Review | ☐ API Category A ☐ API Category B ☑ PER |

NB: The EPA may apply an Assessment on Proponent Information (API) level of assessment when the proponent has provided sufficient information about:

- the proposal;
- the proposed environmental impacts;
- the proposed management of the environmental impacts; and
- when the proposal is consistent with API criteria outlined in the <u>Environmental Impact</u> Assessment (Part IV Division 1 and 2) Administrative Procedures 2012.

If an API A formal level of assessment is considered appropriate, please refer to Environmental Assessment Guideline No. 14 *Preparation for an Assessment on Proponent Information (Category A) Environmental Review Document EAG 14* (EAG14).

Declaration

I, Tony Petersen, (full name) declare that I am authorised on behalf of FQM Australia Nickel Pty Ltd (being the person responsible for the proposal) to submit this form and further declare that the information contained in this form is true and not misleading.

| Signature | 10 | Name (print) To | ny Petersen | |
|-----------|--|------------------|-------------|----------------------|
| Position | Manager, Health, Safety & Environment | Organisation | FQM Austr | ralia Nickel Pty Ltd |
| Email | Tony.Petersen@fqml.com | | | |
| Address | Lot 1269 | South Coast High | ghway | |
| | Ravensthorpe | | WA | 6346 |
| Date | 12/8/2 | 2016 | | - |

(b) Decision-making authority

The EPA expects decision-making authorities to complete applicable sections of Part A of the form and provide the proponent an opportunity to provide additional information in Part B of the form where appropriate.

Wherever possible the DMA should obtain relevant spatial information from the proponent and provide this to the EPA with the referral.

| DMA to comp | lete before submitting f | form | | | |
|---|--|---------------|-------------|---|------------|
| Completed all the questions in Part A (essential) | | | | ☐ Yes | □No |
| Provided Part B to the proponent for completion | | | | ☐ Yes | □No |
| Completed all | other applicable question | ıs | | ☐ Yes | □No |
| Included Attac | hment 1 – any supporting | g information | | ☐ Yes | □No |
| | Enclosed an electronic copy of all referral information, including spatial data and contextual mapping | | | ☐ Yes | □No |
| Completed the | e below Declaration | | | ☐ Yes | □ No |
| Do you consider the proposal requires formal environmental impact assessment? | | | | ☐ Yes | □No |
| What is the type of proposal being referred? | | | ☐ sig | gnificant pr | oposal |
| | | | | significant proposal under an assessed scheme | |
| · | f the environmental signif | | mit this re | ferral to th | ne EPA for |
| Signature | | Name (print) | | | |
| Position | | Organisation | | | |
| Email | | | | | |
| Address | Street No. | Street Name | | | |
| | Suburb | | State | Р | ostcode |
| Date | | | _ | _ | |

(c) Third Party

Third parties are asked to have consideration for the Significance Test outlined in Part A Section 1.5 of this form before referring a significant proposal to the EPA. The EPA will only consider proposals that are likely, if implemented, to have a significant effect on the environment.

Third parties are to provide sufficient information to clearly identify the significant proposal, the proponent, and their reasons for referring the proposal. This can be done by completing as much of Part A of the form as possible, taking into consideration the information available. Third parties may wish to fill in Part B of the form to advance their own views of the significance of the environmental impacts and the need for EPA assessment.

In most cases the EPA will seek additional information from the proponent. This will be to confirm or amend the identity of the proponent, the proposal, and to allow the proponent opportunity to provide its views on the significance of the environmental impacts and the need for EPA assessment.

| Third Party t | o complete before su | | | | |
|---|-------------------------|--|-----------------|------------|---------|
| Complete all applicable questions in Part A and B | | | ☐ Yes [| ☐ No | |
| Completed the Declaration | | ☐ Yes [| ☐ No | | |
| Do you consider the proposal requires formal environmental impact assessment? | | | ☐ No | | |
| Declaration | | , <i>(full name</i>) sul | hmit this refer | ral to the | EDA for |
| consideration o | | ignificance of its impacts | | | LFA IOI |
| | | | | | LFA IOI |
| consideration o | | ignificance of its impacts | | | LFA IOI |
| consideration of Signature | | ignificance of its impacts | | | LFA IOI |
| Signature Email | | ignificance of its impacts Name (print) | | | LFA IOI |
| Signature Email Position | of the environmental si | Name (print) Organisation | | Posto | |

PART A: Information on the proposal and the proponent

All fields of Part A must be completed by the proponent and/or decision-making authority for this document to be processed as a referral. Third party referrers are only expected to fill in the fields they have information for.

1 PROPONENT AND PROPOSAL DESCRIPTION

1.1 The proponent of the proposal

| Proponent and/or DMA to complete | |
|---|---|
| Name of the proponent | FQM Australia Nickel Pty Ltd |
| Joint Venture parties (if applicable) | N/A |
| Australian Company Number(s) | 135 761 465 (FQMAN) |
| Postal Address (Where the proponent is a corporation or an association of persons, whether incorporated or not, the postal address is that of the principal place of business or of the principal office in the State) | Locked Bag 100 Ravensthorpe WA 6346 Australia |
| Key proponent contact for the proposal Please include: name; physical address; phone; and email. | Tony Petersen Lot 1269 South Coast Highway, Ravensthorpe, WA, 6346, Australia Phone: +61898382601 Email: Tony.Petersen@fqml.com |
| Consultant for the proposal (if applicable) Please include: name; physical address; phone; and email. | |

1.2 Proposal

Proposal is defined under the EP Act to mean a "project, plan, programme policy, operation, undertaking or development or change of land use, or amendment of any of the foregoing, but does not include scheme". Before completing this section please refer to Environmental Protection
Bulletin 17 – Strategic and derived proposals (EPB 17) and Environmental Assessment Guideline
for Defining the Key Characteristics of a proposal (EAG 1).

| Proponent and/or DMA to complete | |
|---|--|
| Title of the proposal | Changes to the Ravensthorpe Nickel Operations Proposal |
| What project phase is the proposal at? | ☐ Scoping☐ Feasibility☑ Detailed design☐ Other |
| Proposal type More than one proposal type can be identified, however for filtering purposes it is recommended that only the primary proposal type is identified. | ☐ Power/Energy Generation ☐ Hydrocarbon Based – coal ☐ Hydrocarbon Based – gas ☐ Waste to energy ☐ Renewable – wind ☐ Renewable – wave ☐ Renewable – solar |

| Proponent and/or DMA to complete | |
|----------------------------------|--|
| | Renewable – geothermal |
| | ☐ Mineral / Resource Extraction ☐ Exploration – seismic ☐ Exploration – geotechnical ☐ Development |
| | ☐ Oil and Gas Development ☐ Exploration ☐ Onshore – seismic ☐ Onshore – geotechnical ☐ Onshore – development ☐ Offshore – seismic ☐ Offshore – geotechnical ☐ Offshore – development |
| | ☐ Industrial Development☐ Processing☐ Manufacturing☐ Beneficiation |
| | □ Land Use and Development □ Residential – subdivision □ Residential – development □ Commercial – subdivision □ Commercial – development □ Industrial – subdivision □ Industrial – development □ Agricultural – subdivision □ Agricultural – development □ Tourism |
| | ☐ Linear Infrastructure ☐ Rail ☐ Road ☐ Power Transmission ☐ Water Distribution ☐ Gas Distribution ☐ Pipelines |
| | Water Resource Development □ Desalination □ Surface or Groundwater □ Drainage □ Pipelines □ Managed Aquifer Recharge |
| | |

| Proponent and/or DMA to complete | |
|--|---|
| | ☐ Dredging |
| | If other, please state below: Other |
| Proponent and/or DMA to complete | |
| Description of the proposal – describe the key characteristics of the proposal in accordance with EAG 1. | FQM Australia Nickel Pty Ltd (FQM) proposes changes at the Ravensthorpe Nickel Operations (RNO) for an expansion of mining operations on the Hale-Bopp ore body and a revised infrastructure corridor between Shoemaker-Levy and the existing processing operations. |
| | Mining operations in the proposed Hale-Bopp pit will utilise the same processes as the existing operations of drill and blast for open pit mining. Ore from this pit will be transported via existing access roads to the same processing facility. The revised corridor will be used to transport ore from Shoemaker-Levy initially via road, then later by conveyor, to the existing ore processing site. |
| | The proposal will involve the clearing of up to 113 ha within a 252 ha Development Envelope. |
| Timeframe in which the proposal is to occur (including start and finish dates where applicable). | FQM is seeking to commence construction of the corridor and orebody in January 2018. |
| Details of any staging of the proposal. | Mining of Shoemaker-Levy (already approved) would commence in early 2019 once access via the corridor is provided. |
| What is the current land use on the property, and the extent (area in hectares) of the property? | The current land use is FQM exploration and mining activities provided under Ministerial Statement 633. The proposal is located on mineral leases M74/108, M74/115, M74/144, M74/168, M74/171, M74/235, L74/21 and L74/32. |
| | The proposed corridor will cross the South Coast Highway and intersect the road reserve. Consultation with Main Roads WA (MRWA) has commenced to inform the design of the crossing of the road at this point. Consent will be obtained from MRWA prior to construction for traffic management to ensure safe traffic flow. |
| Have pre-referral discussions taken place with the OEPA? | Yes (Ref. CA03-2013-0033). November 2015 (Floyd Browne and Tom |
| If yes, please provide the case number. If a case number was not provided, please state the date of | Hatton) 18 May 2016 (Floyd Browne and Tom Hatton) |

| Proponent and/or DMA to complete | |
|--|-----------------------------------|
| the meeting and names of attendees. | 10 June 2016 (Richard Sutherland) |
| DMA (Responsible Authority) to complete | |
| For a proposal under an assessed scheme (as defined in section 3 of the EP Act, applicable only to the proponent and DMA) provide details (in an attachment) as to whether: • The environmental issues raised by the proposal were assessed in any assessment of the assessed scheme. | N/A |
| The proposal complies with the assessed scheme and any environmental conditions in the assessed scheme. | |

1.3 Strategic / derived proposals

Complete this section if the proposal being referred is a strategic proposal or you are seeking the proposal to be declared a derived proposal. Note: Only a proponent may refer a strategic proposal and seek a proposal to be declared a derived proposal.

| Proponent to complete | |
|---|-----------------|
| Is this referred proposal a strategic proposal? | ☐ Yes No |
| Are you seeking that this proposal be declared a derived proposal? | ☐ Yes ⊠ No |
| If you are seeking that this proposal be declared a derived proposal, what is the Ministerial Statement number (MS #) of the associated strategic proposal? | MS #: |

1.4 Location

Proponents and DMAs must provide spatial data. Please refer to <u>EAG 1</u> for more detail.

| Proponent, DMA and Third Party to complete | |
|--|---|
| Name of the Local Government Authority in which the proposal is located. | Shire of Ravensthorpe |
| Location: a) street address; lot number; suburb; and nearest road intersection; or b) if remote the nearest town; and distance and direction from that town to the proposal site. | Located on mineral leases M74/108, M74/115, M74/144, M74/168, M74/171, M74/235, L74/21 and L74/32. Located approximately 35 km east of Ravensthorpe. |
| Have maps and figures been included with the referral (consistent with <u>EAG 1</u> where appropriate)? The types of maps and figures which need to be provided (depending on the nature of the proposal) include: • maps showing the regional location and context of the proposal; and • figures illustrating the proposal elements. | ⊠ Yes □ No |
| Proponent and DMA to complete | |
| Have electronic copies of spatial data been included with the referral? | ⊠ Yes □ No |
| NB: Electronic spatial (GIS or CAD) data, geo-referenced and conforming to the following parameters: GIS: polygons representing all activities and named; CAD: simple closed polygons representing all activities and named; datum: GDA94; projection: Geographic (latitude/longitude) or Map Grid of Australia (MGA); format: ESRI geodatabase or shapefile, MapInfo Interchange Format, Microstation or AutoCAD | |

1.5 Significance test and environmental factors

| Proponent, DMA and Third Party to complete | |
|--|-------------------------------------|
| What are the likely significant | ☐ Benthic Communities and Habitat |
| environmental factors for this proposal? | ☐ Coastal Processes |
| | ☐ Marine Environmental Quality |
| | ☐ Marine Fauna |
| | |
| | Landforms |
| | ☐ Subterranean Fauna |
| | ☐ Terrestrial Environmental Quality |
| | □ Terrestrial Fauna |
| | |
| | |

| Proponent, DMA and Third Party to comp | Nete | | |
|--|--|--|--|
| Having regard to the Significance Test (refer to Section 7 of the <i>EIA Administrative Procedures 2012</i>) in what ways do you consider the proposal may have a significant effect on the environment and warrant referral to the EPA? | Air Quality & Atmospheric Gases Amenity Heritage Human Health Offsets Rehabilitation and Decommissioning FQM has conducted the significance test according to the framework and is satisfied that the proposal meets the requirements of the significance test due to the potential residual impacts to the key factors. | | |
| 1.6 Confidential information | | | |
| All information will be made publically available unless authorised for exemption under the EP Act or subject to the Freedom of Information Act 1992. | | | |
| Proponent to complete | | | |
| Does the proponent request that the EPA treat any part of the referral information as confidential? | ☐ Yes ⊠ No | | |
| Ensure all confidential information is provided in a separate attachment in hard copy. | n | | |
| 2 REGULATORY CONSIDERATIONS This section applies to the Local, State and Commonwealth regulatory considerations for the referred proposal. 2.1 Government approvals 2.1.1 State or Local Government approvals | | | |
| DMA to complete | | | |
| What approval(s) is (are) required from you as decision-making authority? | а | | |
| Is rezoning of any land required before th proposal can be implemented? If yes, please provide details. | e ☐ Yes ☐ No | | |

2.1.2 Regulation of aspects of the proposal

Complete the following to the extent possible.

| Proponent to complete | |
|--|---|
| Do you have legal access required for the implementation of all aspects of the proposal? | ⊠ Yes □ No |
| If yes, provide details of legal access authorisations / agreements / tenure. If no, what authorisations / agreements / tenure is required and from whom? | The proposal is located on mineral leases M74/108, M74/115, M74/144, M74/168, M74/171, M74/235, L74/21 and L74/32. |
| | Consultation has commenced and will continue to be undertaken with Main Roads WA where the proposed corridor crosses the South Coast Highway. |

Outline both the existing approvals and approvals that will be / are being sought as a part of this proposal.

| Proponent to complete | | | |
|--|---------------------------------|--------------------------------------|--|
| Aspects* of the proposal | Type of approval | Legislation regulating this activity | Which State agency /entity regulate this activity? |
| Mining and associated infrastructure | Ministerial Statement 633 | EP Act 1986 – Part IV | EPA |
| Processing or ore, tailings, chemical manufacturing, Electric power generation and sewage. | Licence to operate L8008/2004/3 | EP Act 1986 – Part V | DER |
| | | _ | |

^{*}e.g. mining, processing, dredging

2.1.3 Commonwealth Government *Environment Protection and Biodiversity Conservation Act 1999* approvals

Refer to the <u>assessment bilateral agreement</u> between the Commonwealth of Australia and the State of Western Australia for assistance on this section.

| Pr | Proponent to complete | | |
|--|--|--------------------------------------|--|
| Does the proposal involve an action that may be or is a controlled action under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act)? | ⊠ Yes □ No | | |
| | If no continue to Part A section 2.1.4. | | |
| 2. | What is the status of the decision on whether or not the | ☐ Proposal not yet referred | |
| | action is a controlled action? | Proposal referred, awaiting decision | |
| | | ☐ Assessed – controlled action | |
| | | ☐ Assessed – not a controlled | |

| Pro | Proponent to complete | | |
|-----|--|------------------|--|
| | | action | |
| 3. | If the action has been referred, when was it referred and what is the reference number (Ref #)? | Date: 1/8/16 | |
| | | Ref #: 2016/7756 | |
| 4. | If the action has been assessed, provide the decision in an attachment. Has an attachment been provided? | ☐ Yes ☐ No N/A | |
| 5. | Do you request this proposal to be assessed under the bilateral agreement? | ⊠ Yes □ No | |

Complete the following to the extent possible for the Public Comment of EPBC Act referral documentation.

| Proponent to complete | |
|--|-------------------|
| Have you invited the public to comment on your referral documentation? | ☐ Yes ⊠ No |
| 7. How was the invitation published? | newspaper website |
| 8. Did the invitation include all of the following? | |
| (a) brief description of the action | ☐ Yes ☐ No |
| (b) the name of the action | ☐ Yes ☐ No |
| (c) the name of the proponent | ☐ Yes ☐ No |
| (d) the location of the action | ☐ Yes ☐ No |
| (e) the matters of national environmental significance that will be or are likely to be significantly impacted | ☐ Yes ☐ No |
| (f) how the relevant documents may be obtained | ☐ Yes ☐ No |
| (g) the deadline for public comments | ☐ Yes ☐ No |
| (h) available for public comment for 14 calendar days | ☐ Yes ☐ No |
| (i) the likely impacts on matters of national environmental significance | ☐ Yes ☐ No |
| (j) any feasible alternatives to the proposed action | ☐ Yes ☐ No |
| (k) possible mitigation measures | ☐ Yes ☐ No |
| Were any submissions received during the public comment period? | ☐ Yes ☐ No |
| Have public submissions been addressed? If yes provide attachment. | ☐ Yes ☐ No |

2.1.4 Other Commonwealth Government Approvals

| Proponent, DMA and Third Party to complete | | | | |
|---|-------------------|----------------|------------------------|--|
| Is approval required from other Commonwealth Government/s for any part of the proposal? | | lf. | [:] yes, plea | ☐ Yes ☐ No se complete the table below. |
| Agency / Authority | Approval required | Applic lodg | | Agency / Local Authority contact(s) for proposal |
| | | ☐ Yes | ☐ No | |
| | | ☐ Yes | ☐ No | |

3. SUPPORTING INFORMATION

Please attach copies of any relevant information on the proposal, supporting evidence and / or existing environmental surveys, studies or monitoring information undertaken and list the documents below.

| Proponent, DMA and Third Party to complete | | | |
|--|--|-----|---|
| (1) | Referral application supporting information document – Changes to Ravensthorpe Nickel Operations | FQM | The referral documentation meets the requirements of the EPA's Environmental Assessment Guideline No. 16 Referral of a proposal under s38 of the Environmental Protection Act (EPA 2015). |

PART B: ENVIRONMENTAL FACTORS

The purpose of Part B is to assist the EPA to determine the significance of the likely environmental impacts of the proposal in accordance with the EPA's *Environmental Assessment Guideline for Environmental factors and objectives* (EAG 8) and *Environmental Assessment Guideline for Application of a significant framework in the EIA process* (EAG 9). Referrers completing Part B should refer closely to EAG 8 and EAG 9.

The EPA has prepared <u>Referral of a Proposal under s38 of the EP Act EAG No.16 - Appendix A</u> (Appendix A) to assist in identifying factors and completing the below table. Further guidance can be found in the guidance and policy documents cited in Appendix A under each factor.

How to complete Part B

For each environmental factor, that is likely to be significantly impacted by the implementation of the proposal, make a copy of the table below and insert a summary of the relevant information relating to the proposal. The table can be broken down into more than one table per factor, if the need arises. For example the hydrological processes factor can be presented in two separate tables, one for surface water and one for groundwater, or similarly one for construction and one for operations.

For complex proposals a supplementary referral report can be provided in addition to the referral form. If this option is chosen the table must still be completed (summaries are acceptable) to assist the Office of the EPA with statistical reporting and filtering proposals for processing.

Proponents expecting an API level of assessment must provide information in accordance with the EPA's *Environmental Assessment Guideline for Preparation of an API-A environmental review document* (EAG 14).

For each of the significant environmental factors, complete the following table (Questions 1-10).

| | POTENTIAL KEY FACTOR – TERRESTRIAL ENVIRONMENTAL QUALITY | | |
|---|---|---|--|
| 1 | Factor, as defined in <u>EAG 8</u> | Terrestrial Environmental Quality | |
| 2 | EPA Objective, as defined in <u>EAG 8</u> | To maintain the quality of land and soils so that the environmental values, both ecological and social, are protected. | |
| 3 | Guidance - what established policies, guidelines, and standards apply to this factor in relation to the proposal? | GS 6 – Rehabilitation of Terrestrial Ecosystems | |
| 4 | Consultation - outline the need for consultation and the outcomes of any consultation in relation to the potential environmental impacts, including: • anticipated level of public interest in the impact; | Pre-referral discussions have been held with OEPA and DPAW regarding the project scope and preliminary key factors. | |
| | consultation with regulatory agencies; and consultation with community. | Consultation with the Jerdacuttup RNO Working Group has occurred. FQM will conduct further consultation with OEPA, DPaW and with DoW regarding the impacts to terrestrial environmental quality. | |

| POTEN | TIAL KEY FACTOR – TERRESTRIAL ENVIRONMENTAL QUALITY | 1 |
|-------|---|--|
| 5 | Baseline information - describe the relevant characteristics of the receiving environment. | Details are provided in Table 5 of the supporting Referral Document. |
| | This may include: regional context; known environmental values, current quality, sensitivity to impact, and current level of cumulative impacts. | |
| 6 | Impact assessment - describe the potential impact/s that may occur to the environmental factor as a result of implementing the proposal. | Details are provided in Table 6 of the supporting Referral Document. |
| 7 | Mitigation measures - what measures are proposed to mitigate the potential environmental impacts? The following should be addressed: | Details are provided in Table 7 of the supporting Referral Document. |
| | Avoidance - avoiding the adverse environmental impact altogether; | |
| | Minimisation - limiting the degree or magnitude of the adverse impact; | |
| | Rehabilitate – restoring the maximum environmental value that is reasonably practicable; and | |
| | Offsets – actions that provide environmental benefits to counterbalance significant residual environmental impacts or risks of a project or activity. | |
| 8 | Residual impacts – review the residual impacts against the EPA objectives. | Details are provided in Table 7 of the supporting Referral Document. |
| | It is understood that the extent of any significant residual impacts may be hard to quantify at the referral stage. Referrers are asked to provide, as far as practicable, a discussion on the likely residual impacts and form a conclusion on whether the EPA's objective for this factor would be met if residual impacts remain. This will require: | |
| | quantifying the predicted impacts (extent, duration, etc.) acknowledging any uncertainty in predictions; | |
| | putting the impacts into a regional or local context, incorporating knowable cumulative impacts; and | |
| | comparison against any established environmental policies, guidelines, and standards. | |
| 9 | EPA's Objective – from your perspective and based on your review, which option applies to the proposal in relation to this factor? <i>Refer to EAG 9</i> | ∑ meets the EPA's objective ☐ may meet the EPA's objective is unlikely to meet the EPA's objective |
| 10 | Describe any assumptions critical to your conclusion (in Question 9). e.g. particular mitigation measures or regulatory conditions. | |

| POTEN | POTENTIAL KEY FACTOR – FLORA AND VEGETATION | | |
|-------|---|---|--|
| 1 | Factor, as defined in <u>EAG 8</u> | Flora and Vegetation | |
| 2 | EPA Objective, as defined in <u>EAG 8</u> | To maintain representation, diversity, viability and ecological function at the species, population and community level. | |
| 3 | | EAG 2 and EAG 51 | |
| | Guidance - what established policies, guidelines, and standards apply to this factor in relation to the proposal? | Environmental Protection Authority and Department of Parks and Wildlife (2015). Technical Guide – Terrestrial Flora and Vegetation Surveys for Environmental Impact Assessment (eds. K Freeman, G Stack, S Thomas and N Woolfrey). Perth, Western Australia. | |
| 4 | Consultation - outline the need for consultation and the outcomes of any consultation in relation to the potential environmental impacts, including: • anticipated level of public interest in the impact; | FQM has consulted with the OEPA and the DPaW regarding the proposed clearing of vegetation and the impacts to significant flora within | |
| | consultation with regulatory agencies; and | the proposed Development Envelope. | |
| | consultation with community. | Following consultation with DPAW and OEPA, and application of the mitigation hierarchy with regard to impact of the pit to <i>Kunzea similis</i> ssp. <i>mediterranea</i> , FQM modified the pit boundary to reduce the clearing of the number of <i>Kunzea</i> individuals to such that remaining numbers ensure maintenance of the conservation status. | |
| | | As few populations of <i>Conostylis lepidospermoides</i> are known and initial studies recorded a new population in the corridor, further studies of the taxon will be conducted to provide a more accurate impact assessment to this taxon. | |
| | | It is anticipated that there will be a high level of community interest and stakeholder engagement will be conducted to provide adequate consultation. | |
| 5 | Baseline information - describe the relevant characteristics of the receiving environment. | Details are provided in Table 5 of the supporting Referral Document. | |
| | This may include: regional context; known environmental values, current quality, sensitivity to impact, and current level of cumulative impacts. | | |

| POTE | NTIAL KEY FACTOR – FLORA AND VEGETATION | |
|------|---|--|
| 6 | Impact assessment - describe the potential impact/s that may occur to the environmental factor as a result of implementing the proposal. | Details are provided in Table 6 of the supporting Referral Document. |
| 7 | Mitigation measures - what measures are proposed to mitigate the potential environmental impacts? The following should be addressed: | Details are provided in Table 8 of the supporting Referral Document. |
| | Avoidance - avoiding the adverse environmental impact altogether; | |
| | Minimisation - limiting the degree or magnitude of the adverse impact; | |
| | Rehabilitate – restoring the maximum environmental value that is reasonably practicable; and | |
| | Offsets – actions that provide environmental benefits to counterbalance significant residual environmental impacts or risks of a project or activity. | |
| 8 | Residual impacts – review the residual impacts against the EPA objectives. | Details are provided in Table 8 of the supporting Referral Document. |
| | It is understood that the extent of any significant residual impacts may be hard to quantify at the referral stage. Referrers are asked to provide, as far as practicable, a discussion on the likely residual impacts and form a conclusion on whether the EPA's objective for this factor would be met if residual impacts remain. This will require: | |
| | quantifying the predicted impacts (extent, duration, etc.) acknowledging any uncertainty in predictions; | |
| | putting the impacts into a regional or local context, incorporating knowable cumulative impacts; and | |
| | comparison against any established environmental policies, guidelines, and standards. | |
| 9 | EPA's Objective – from your perspective and based on your review, which option applies to the proposal in relation to this factor? <i>Refer to</i> <u>EAG 9</u> | ☐ meets the EPA's objective ☐ may meet the EPA's objective ☐ is unlikely to meet the EPA's objective |
| 10 | Describe any assumptions critical to your conclusion (in Question 9). e.g. particular mitigation measures or regulatory conditions. | Critical assumption/implementation condition? |

| POTENTIAL KEY FACTOR – TERRESTRIAL FAUNA | | |
|--|--|---|
| 1 | Factor, as defined in <u>EAG 8</u> | Terrestrial Fauna |
| 2 | EPA Objective, as defined in <u>EAG 8</u> | To maintain representation, diversity, viability and ecological function at the species, population and assemblage level. |
| 3 | | EAG 3 |
| | Guidance - what established policies, guidelines, and standards apply to this factor in relation to the | EAG 56 |
| | proposal? | Technical Guide for Terrestrial Fauna Surveys. |
| 4 | Consultation - outline the need for consultation and the outcomes of any consultation in relation to the potential environmental impacts, including: | FQM will conduct consultation with OEPA and DPaW regarding the impacts to vertebrate terrestrial |
| | anticipated level of public interest in the impact; | fauna. It is anticipated that there will |
| | consultation with regulatory agencies; and | be a high level of community interest and stakeholder engagement will be |
| | consultation with community. | conducted to provide adequate consultation. |
| | | Ongoing consultation will be undertaken regarding the potential impacts and proposed management of residual impacts to terrestrial fauna with state and federal agencies will be conducted. |
| 5 | Baseline information - describe the relevant characteristics of the receiving environment. | Details are provided in Table 5 of the supporting Referral Document. |
| | This may include: regional context; known environmental values, current quality, sensitivity to impact, and current level of cumulative impacts. | |
| 6 | Impact assessment - describe the potential impact/s that may occur to the environmental factor as a result of implementing the proposal. | Details are provided in Table 6 of the supporting Referral Document. |
| 7 | Mitigation measures - what measures are proposed to mitigate the potential environmental impacts? The following should be addressed: | Details are provided in Table 9 of the supporting Referral Document. |
| | Avoidance - avoiding the adverse environmental impact altogether; | |
| | Minimisation - limiting the degree or magnitude of the adverse impact; | |
| | Rehabilitate – restoring the maximum environmental value that is reasonably practicable; and | |
| | Offsets – actions that provide environmental benefits to counterbalance significant residual environmental impacts or risks of a project or activity. | |

| POTENTIAL KEY FACTOR – TERRESTRIAL FAUNA | | |
|--|---|--|
| 8 | Residual impacts – review the residual impacts against the EPA objectives. | Details are provided in Table 9 of the supporting Referral Document. |
| | It is understood that the extent of any significant residual impacts may be hard to quantify at the referral stage. Referrers are asked to provide, as far as practicable, a discussion on the likely residual impacts and form a conclusion on whether the EPA's objective for this factor would be met if residual impacts remain. This will require: | |
| | quantifying the predicted impacts (extent, duration, etc.) acknowledging any uncertainty in predictions; | |
| | putting the impacts into a regional or local context, incorporating knowable cumulative impacts; and | |
| | comparison against any established environmental policies, guidelines, and standards. | |
| 9 | EPA's Objective – from your perspective and based on your review, which option applies to the proposal in relation to this factor? <i>Refer to</i> <u>EAG 9</u> | ☐ meets the EPA's objective ☐ may meet the EPA's objective ☐ is unlikely to meet the EPA's objective |
| 10 | Describe any assumptions critical to your conclusion (in Question 9). e.g. particular mitigation measures or regulatory conditions. | |

| POTENTIAL KEY FACTOR – HYDROLOGICAL PROCESSES | | |
|---|---|---|
| 1 | Factor, as defined in <u>EAG 8</u> | Hydrological processes |
| 2 | EPA Objective, as defined in <u>EAG 8</u> | To maintain the hydrological regimes of groundwater and surface water so that existing and potential uses, including ecosystem maintenance, are protected. |
| 3 | Guidance - what established policies, guidelines, and standards apply to this factor in relation to the proposal? | EAG 8 DoW Operational Policy No 1 and No 5 WA water in Mining Guideline |
| 4 | Consultation - outline the need for consultation and the outcomes of any consultation in relation to the potential environmental impacts, including: • anticipated level of public interest in the impact; • consultation with regulatory agencies; and | Pre-referral discussions have been held with OEPA and DPAW regarding the project scope and preliminary key factors. FQM will conduct further consultation with OEPA, DPaW and with DoW |
| | consultation with community. | regarding the impacts to hydrological processes. |
| 5 | Baseline information - describe the relevant characteristics of the receiving environment. This may include: regional context; known environmental values, current quality, sensitivity to impact, and current level of cumulative impacts. | Details are provided in Table 5 of the supporting Referral Document. |
| 6 | Impact assessment - describe the potential impact/s that may occur to the environmental factor as a result of implementing the proposal. | Details are provided in Table 6 of the supporting Referral Document. |
| 7 | Mitigation measures - what measures are proposed to mitigate the potential environmental impacts? The following should be addressed: • Avoidance - avoiding the adverse environmental | Details are provided in Table 10 of the supporting Referral Document. |
| | impact altogether; Minimisation - limiting the degree or magnitude of the adverse impact; | |
| | Rehabilitate – restoring the maximum environmental value that is reasonably practicable; and | |
| | Offsets – actions that provide environmental benefits to counterbalance significant residual environmental impacts or risks of a project or activity. | |

| POTENTIAL KEY FACTOR – HYDROLOGICAL PROCESSES | | |
|---|---|---|
| 8 | Residual impacts – review the residual impacts against the EPA objectives. | Details are provided in Table 10 of the supporting Referral Document. |
| | It is understood that the extent of any significant residual impacts may be hard to quantify at the referral stage. Referrers are asked to provide, as far as practicable, a discussion on the likely residual impacts and form a conclusion on whether the EPA's objective for this factor would be met if residual impacts remain. This will require: | |
| | quantifying the predicted impacts (extent, duration, etc.) acknowledging any uncertainty in predictions; | |
| | putting the impacts into a regional or local context, incorporating knowable cumulative impacts; and | |
| | comparison against any established environmental policies, guidelines, and standards. | |
| 9 | EPA's Objective – from your perspective and based on your review, which option applies to the proposal in relation to this factor? <i>Refer to</i> <u>EAG 9</u> | |
| 10 | Describe any assumptions critical to your conclusion (in Question 9). e.g. particular mitigation measures or regulatory conditions. | |

| 1 | Factor, as defined in <u>EAG 8</u> | Inland waters environmental quality |
|---|--|---|
| | Tactor, as defined in <u>LAG o</u> | |
| 2 | EPA Objective, as defined in <u>EAG 8</u> | To maintain the quality of groundwater and surface water, sediment and biota so that the environmental values, both ecological and social, are protected. |
| 3 | Guidance - what established policies, guidelines, and standards apply to this factor in relation to the proposal? | Department of Water Operational Policy (No 1 and No 5). WA water in Mining Guideline. |
| 4 | Consultation - outline the need for consultation and the outcomes of any consultation in relation to the potential environmental impacts, including: | FQM has consulted with OEPA and the Jerdacuttup RNO Working Group regarding the proposed project. |
| | anticipated level of public interest in the impact; | Pre-referral discussions have been |
| | consultation with regulatory agencies; and | undertaken with the OEPA, DPaW, and relevant community groups |
| | consultation with community. | regarding the project scope and the proposed preliminary key factors. Ongoing consultation will be undertaken regarding inland waters environmental quality, the potential impacts and proposed management of residual impacts. |
| 5 | Baseline information - describe the relevant characteristics of the receiving environment. | Details are provided in Table 5 of the supporting Referral Document. |
| | This may include: regional context; known environmental values, current quality, sensitivity to impact, and current level of cumulative impacts. | |
| 6 | Impact assessment - describe the potential impact/s that may occur to the environmental factor as a result of implementing the proposal. | Details are provided in Table 6 of the supporting Referral Document. |
| 7 | Mitigation measures - what measures are proposed to mitigate the potential environmental impacts? The following should be addressed: | Details are provided in Table 11 of the supporting Referral Document. |
| | Avoidance - avoiding the adverse environmental impact altogether; | |
| | Minimisation - limiting the degree or magnitude of the adverse impact; | |
| | Rehabilitate – restoring the maximum environmental value that is reasonably practicable; and | |
| | Offsets – actions that provide environmental benefits to counterbalance significant residual environmental impacts or risks of a project or activity. | |

| POTENTIAL KEY FACTOR – INLAND WATERS ENVIRONMENTAL QUALITY | | |
|--|---|---|
| 8 | Residual impacts – review the residual impacts against the EPA objectives. | Details are provided in Table 11 of the supporting Referral Document. |
| | It is understood that the extent of any significant residual impacts may be hard to quantify at the referral stage. Referrers are asked to provide, as far as practicable, a discussion on the likely residual impacts and form a conclusion on whether the EPA's objective for this factor would be met if residual impacts remain. This will require: | |
| | quantifying the predicted impacts (extent, duration, etc.) acknowledging any uncertainty in predictions; | |
| | putting the impacts into a regional or local context, incorporating knowable cumulative impacts; and | |
| | comparison against any established environmental policies, guidelines, and standards. | |
| 9 | EPA's Objective – from your perspective and based on your review, which option applies to the proposal in relation to this factor? <i>Refer to</i> <u>EAG 9</u> | |
| 10 | Describe any assumptions critical to your conclusion (in Question 9). e.g. particular mitigation measures or regulatory conditions. | |

| POTEN | POTENTIAL KEY FACTOR - OFFSETS | | |
|-------|--|--|--|
| 1 | Factor, as defined in <u>EAG 8</u> | Offsets (Integrating Factor) | |
| 2 | EPA Objective, as defined in <u>EAG 8</u> | To counterbalance any significant residual environmental impacts or uncertainty through the application of offsets. | |
| 3 | Guidance - what established policies, guidelines, and standards apply to this factor in relation to the proposal? | WA Environmental Offsets Policy (EPA 2011) WA Environmental Offsets Guidelines (WA Government 2014) Environmental Protection Bulletin No 1 – Environmental Offsets – Biodiversity (EPA 2010b). | |
| 4 | Consultation - outline the need for consultation and the outcomes of any consultation in relation to the potential environmental impacts, including: | FQM will review the WA Environmental offsets guidelines and undertake consultation with OEPA | |
| | anticipated level of public interest in the impact; | and DPaW. | |
| | consultation with regulatory agencies; and | | |
| | consultation with community. | | |
| 5 | Baseline information - describe the relevant characteristics of the receiving environment. | Details are provided in Table 5 of the supporting Referral Document. | |
| | This may include: regional context; known environmental values, current quality, sensitivity to impact, and current level of cumulative impacts. | | |
| 6 | Impact assessment - describe the potential impact/s that may occur to the environmental factor as a result of implementing the proposal. | Details are provided in Table 6 of the supporting Referral Document. | |
| 7 | Mitigation measures - what measures are proposed to mitigate the potential environmental impacts? The following should be addressed: | Details are provided in Table 12 of the supporting Referral Document. | |
| | Avoidance - avoiding the adverse environmental impact altogether; | | |
| | Minimisation - limiting the degree or magnitude of the adverse impact; | | |
| | Rehabilitate – restoring the maximum environmental value that is reasonably practicable; and | | |
| | Offsets – actions that provide environmental benefits to counterbalance significant residual environmental impacts or risks of a project or activity. | | |

| POTENTIAL KEY FACTOR - OFFSETS | | |
|--------------------------------|---|---|
| 8 | Residual impacts – review the residual impacts against the EPA objectives. | Details are provided in Table 12 of the supporting Referral Document. |
| | It is understood that the extent of any significant residual impacts may be hard to quantify at the referral stage. Referrers are asked to provide, as far as practicable, a discussion on the likely residual impacts and form a conclusion on whether the EPA's objective for this factor would be met if residual impacts remain. This will require: | |
| | quantifying the predicted impacts (extent, duration, etc.) acknowledging any uncertainty in predictions; | |
| | putting the impacts into a regional or local context, incorporating knowable cumulative impacts; and | |
| | comparison against any established environmental policies, guidelines, and standards. | |
| 9 | EPA's Objective – from your perspective and based on your review, which option applies to the proposal in relation to this factor? <i>Refer to</i> <u>EAG 9</u> | |
| 10 | Describe any assumptions critical to your conclusion (in Question 9). e.g. particular mitigation measures or regulatory conditions. | |

| POTENTIAL KEY FACTOR – REHABILITATION AND DECOMMISSIONING | | |
|---|---|--|
| 1 | Factor, as defined in <u>EAG 8</u> | Rehabilitation and Decommissioning (Integrating Factor) |
| 2 | EPA Objective, as defined in <u>EAG 8</u> | To ensure that premises are decommissioned and rehabilitated in an ecologically sustainable manner |
| 3 | Guidance - what established policies, guidelines, and | GS 6 – Rehabilitation of Terrestrial Ecosystems EAG - Guidelines for Preparing Mine Closure Plans (DMP and EPA 2015) |
| | standards apply to this factor in relation to the proposal? | Leading Practice Sustainable Development Program for the Mining Industry – Managing Acid and Metalliferous Drainage (DITR 2007) EPA Involvement in Mine Closure (EPA 2013) |
| 4 | Consultation - outline the need for consultation and the outcomes of any consultation in relation to the potential environmental impacts, including: | FQM will consult with DMP regarding the rehabilitation and closure. A Mine Closure Plan has been |
| | anticipated level of public interest in the impact; consultation with regulatory agencies; and consultation with community. | developed for the current RNO. This will be revised in consultation with relevant agencies. |
| 5 | Baseline information - describe the relevant characteristics of the receiving environment. | Details are provided in Table 5 of the supporting Referral Document. |
| | This may include: regional context; known environmental values, current quality, sensitivity to impact, and current level of cumulative impacts. | |
| 6 | Impact assessment - describe the potential impact/s that may occur to the environmental factor as a result of implementing the proposal. | Details are provided in Table 6 of the supporting Referral Document. |
| 7 | Mitigation measures - what measures are proposed to mitigate the potential environmental impacts? The following should be addressed: | Details are provided in Table 13 of the supporting Referral Document. |
| | Avoidance - avoiding the adverse environmental impact altogether; | |
| | Minimisation - limiting the degree or magnitude of the adverse impact; | |
| | Rehabilitate – restoring the maximum environmental value that is reasonably practicable; and | |
| | Offsets – actions that provide environmental benefits to counterbalance significant residual environmental impacts or risks of a project or activity. | |

| POTENTIAL KEY FACTOR – REHABILITATION AND DECOMMISSIONING | | |
|---|---|---|
| 8 | Residual impacts – review the residual impacts against the EPA objectives. | Details are provided in Table 13 of the supporting Referral Document. |
| | It is understood that the extent of any significant residual impacts may be hard to quantify at the referral stage. Referrers are asked to provide, as far as practicable, a discussion on the likely residual impacts and form a conclusion on whether the EPA's objective for this factor would be met if residual impacts remain. This will require: | |
| | quantifying the predicted impacts (extent, duration, etc.) acknowledging any uncertainty in predictions; | |
| | putting the impacts into a regional or local context, incorporating knowable cumulative impacts; and | |
| | comparison against any established environmental policies, guidelines, and standards. | |
| 9 | EPA's Objective – from your perspective and based on your review, which option applies to the proposal in relation to this factor? <i>Refer to</i> <u>EAG 9</u> | |
| 10 | Describe any assumptions critical to your conclusion (in Question 9). e.g. particular mitigation measures or regulatory conditions. | |

In circumstances where there was some uncertainty on the level of significance of a particular factor it is recommended that a brief summary (no longer than 1 - 2 paragraphs) is provided on the steps taken to determine why a factor was not considered to be significant.