The Delegate of the Administration Authority  
Department of Environmental and Heritage Protection  
PO Box 731  
Toowoomba T QLD 4350

Attention: Sarah Horton,

Dear Sarah

RE: RESPONSE TO INFORMATION REQUEST RE_APPLICATION FOR ENVIRONMENTAL AUTHORITY AMENDMENT ON ML55017, Ref.172605

We provide the following information in response to the information request dated 13/06/2014. Although the original information request has lapsed we intend to resubmit the EA amendment and provide the following responses to expedite the application process.

Please note that we have addressed the issues raised in order of items from the original information request:

- Provide location details (zone 55 / easting / northing) of an alternate “upstream of operations” water monitoring point to WS1 - this is because with the addition of ML55017 the water monitoring point identified as “WS1 - Juandahe Creek - upstream of operations” in Schedule C - Table 1 (Receiving water / stream monitoring locations and frequency) is no longer upstream of operations. Monitoring point WS1 in its current location could be retained for downstream monitoring for ML55017

A new upstream (WS5) monitoring location has been established on Juandahe Creek at 796,922 E and 7,077,282 N (zone 55 GDA94). As part of this change WS1 is to be re-named as the monitoring point downstream of the new ML55017 operations. The monitoring frequency will be every 3 months if flowing and in the event of release/overflow to waters. (Refer updated Stormwater Management Plan attached).

- For the proposed mining activities on ML55017 provide details of:
  - erosion and sediment control measures (including any sediment dams)
  - measures to separate clean storm water from undisturbed areas
  - location of downstream monitoring point (for amendment of Schedule C - Table 1)
  - proposed area of disturbance (for amendment of Schedule F - Table 1 (Final land use and rehabilitation approval schedule) and Schedule F - Table 2 (Landform design))

For proposed activities on ML55017, operations will be limited to extractive/mining activities and no processing activities. The materials will be transport to the current processing and stockpiling area once they are extracted. The disturbed area within ML55017 will be designed as a self-draining excavated pit with gently sloping sides, similar to the north pit. All contaminated stormwater from ML55017 will be captured within the in-pit basin and allowed to settle before being reused for dust suppression or treated (if required) prior to release.

Adequate measures and controls will be implemented to ensure all uncontaminated stormwater from the undisturbed areas are diverted around the extraction area and to the creek by using appropriate diversion bunds.
The current WS1 will be retained as down slope monitoring point for contaminated stormwater within ML55017 (Refer Monitoring Location Plan in Stormwater Management Plan).

It anticipated that the disturbed area will be rehabilitated via re-contouring, topsoiling and seeding with native grass. The pit area will be battered back to a safe level for animal egress and expected final land use is for water storage as specified by the landowner.

- For the contaminant release limits in Schedule C - Table 2, provide details from the representative water sampling (as required in the Site water management and monitoring plan) to:
  - confirm the contaminant release limit values; or
  - support an amendment of the contaminant release limits

The operation is confident that the existing contaminant release limit values are appropriate for the proposed operations within ML55017.

Please do not hesitate to contact this office if clarification of any point is required.

Yours Sincerely

Adebayo Bayooke
Principal Mining Engineer.
Application form
Environmental authority

Application to amend an environmental authority

This approved form is to be used when applying to amend an environmental authority under sections 222 to 227 of the Environmental Protection Act 1994 (EP Act) for an environmentally relevant activity (ERA).

An application to amend an environmental authority is not appropriate in all circumstances. If you answer YES to any of the questions in the checklist below, you cannot use this application form. If you answer NO to all of the questions in the checklist, you may continue to use this application form.

This form also contains a question relating to the Regional Planning Interests Act 2014. If you are proposing to undertake resource activities in an area of regional interests, a regional interest development approval (RIDA) may be needed. Further information, including applications forms, can be found on the Department of Infrastructure, Local Government and Planning (DILGP) website, www.dilgp.qld.gov.au.

You are encouraged to have a pre-lodgement meeting before applying to amend your environmental authority. If you would like to have a pre-lodgement meeting:

- for prescribed ERAs 2, 3 and 4—contact the Department of Agriculture and Fisheries by email at livestockregulator@daf.qld.gov.au.

- for any other ERA—please fill out and lodge the form “Application for a pre-design/pre-lodgement meeting” (EM1125’), prior to lodging this application form.

Checklist for making an amendment application

You must complete this checklist before you continue with the application form.

If your application is for:

☐ a prescribed ERA → fill in Section 1 and Section 2 of the checklist below
☒ a resource activity → fill in Section 1 and Section 3 of the checklist below
☐ both a prescribed ERA and a resource activity → fill in sections 1, 2 and 3 of the checklist below

If you have answered yes to any of the below questions, you cannot use this application form. If you have answered no to all of the below questions, you may continue to use this application form.

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1 This is the publication number. The publication number can be used as a search term to find the latest version of a publication at www.qld.gov.au.
### Application form

**Application to amend an environmental authority**

<table>
<thead>
<tr>
<th>Checklist questions</th>
<th>Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Section 1 – all applications</strong></td>
<td></td>
</tr>
<tr>
<td>Is the amendment to correct a clerical or formal error?</td>
<td>☐ YES</td>
</tr>
<tr>
<td>☒ NO</td>
<td>If yes, you cannot use this form. This request should be made in writing directly to the administering authority (no fees apply).</td>
</tr>
<tr>
<td>Is the amendment to amalgamate two or more environmental authorities?</td>
<td>☐ YES</td>
</tr>
<tr>
<td>☒ NO</td>
<td>If yes, you cannot use this form. Please use either the form Application to Amalgamate two or more Environmental Authorities into an Amalgamated Corporate Authority (EM789), or Application to Amalgamate two or More Environmental Authorities Into an Amalgamated Project or Local Government Authority (EM879).</td>
</tr>
<tr>
<td>Is the amendment to add an ERA to an amalgamated local government authority and there is not an appropriate degree of integration between the proposed activity and the existing activities on the authority?</td>
<td>☐ YES</td>
</tr>
<tr>
<td>☒ NO</td>
<td>If yes, you cannot use this form. You will need to apply for a new environmental authority. For a standard application use the form Standard Environmental Authority Application (Prescribed Activity) (EM1283) or Standard Environmental Authority Application (Resource Activity) (EM1280). For a variation application, use the form Variation Environmental Authority (Prescribed Activity) (EM1284) or Variation Environmental Authority (Resource Activity) (EM1281). For a site-specific application use the form Site Specific Environmental Authority Application (Prescribed ERA) (EM1285) or Site Specific Environmental Authority Application (Resource Activity) (EM1282).</td>
</tr>
<tr>
<td>Is the amendment to add an ERA to an amalgamated project authority and the proposed activity does not form part of the single integrated operation conducted under the authority?</td>
<td>☐ YES</td>
</tr>
<tr>
<td>☒ NO</td>
<td>If yes, you cannot use this form. You will need to apply for a new environmental authority. See form details above.</td>
</tr>
<tr>
<td>Is the amendment to amend financial assurance only?</td>
<td>☐ YES</td>
</tr>
<tr>
<td>☒ NO</td>
<td>If yes, you cannot use this form. Please use the form Application to Amend or Discharge Financial Assurance (EM875).</td>
</tr>
<tr>
<td>Is the amendment to remove or amend a condition requiring compliance with the eligibility criteria, and is a result of changes to the activity?</td>
<td>☐ YES</td>
</tr>
<tr>
<td>☒ NO</td>
<td>If yes, you cannot use this form. Please make a site-specific application for a new environmental authority using the form Site Specific Environmental Authority Application (Prescribed ERA) (EM1285) or Site Specific Environmental Authority Application (Resource Activity) (EM1282).</td>
</tr>
</tbody>
</table>
Note: If the required amendment to the eligibility criteria condition is a result of factors beyond your control such as residential encroachment, rather than a change to the activity, you can use this form. The amendment will be a major amendment.

### Section 2 – prescribed ERAs

<table>
<thead>
<tr>
<th>Question</th>
<th>☐ YES</th>
<th>☐ NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the amendment for the holder of the environmental authority to transfer all or part of the environmental authority to a person?</td>
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</tr>
<tr>
<td>If yes, you cannot use this form. Please use the form Request to Transfer All or Part of an Environmental Authority for a Prescribed Environmentally Relevant Activity (EM794).</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>☐ YES</th>
<th>☐ NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the proposed amendment involve changes to the relevant activity that require a new development application to be lodged under the Sustainable Planning Act 2009 and the application for the amendment has not been lodged.</td>
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<td></td>
</tr>
<tr>
<td>If yes, the development application must be lodged before an environmental authority amendment application can be made. Under SPA, a development application for a material change of use of premises for an environmentally relevant activity is deemed to be also an application for an environmental authority. In this case, an environmental authority amendment application should not be lodged.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>☐ YES</th>
<th>☐ NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the proposed amendment solely to add or remove vehicles for ERA 57 (Regulated Waste Transport)?</td>
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</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>☐ YES</th>
<th>☐ NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the proposed amendment to add a prescribed ERA, other than an ancillary activity, to an environmental authority for a resource project?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If yes, you cannot use this form to add the prescribed ERA to the environmental authority. You will need to apply for a new environmental authority. Refer Section 1 above for appropriate form.</td>
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</tr>
</tbody>
</table>

### Section 3 – resource activities (mining, petroleum, geothermal or GHG storage activities)

<table>
<thead>
<tr>
<th>Question</th>
<th>☐ YES</th>
<th>☐ NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the amendment for a partial surrender of an environmental authority for a mining, geothermal or petroleum resource activity?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If yes, you cannot use this form. Please use the form Application for Surrender or Partial Surrender of an Environmental Authority (EM796).</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>☐ YES</th>
<th>☐ NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the proposed amendment to add a resource activity to an environmental authority for a prescribed ERA project?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If yes, you cannot add the resource activity to the environmental authority. You will need to apply for a new environmental authority. Refer Section 1 above for appropriate form.</td>
<td></td>
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</tr>
</tbody>
</table>
Definitions of terms used in this form

Where there is inconsistency between the definition of terms used here and the terms used in the EP Act, the terms in the EP Act apply.

Condition conversion
For an environmental authority, means a minor amendment replacing all the conditions of the authority with the standard conditions for the environmentally relevant activity which the authority relates. The relevant eligibility criteria and standard conditions must be able to be met.

Eligibility Criteria
For an environmentally relevant activity, means eligibility criteria that are in effect for the activity under –
(a) an ERA standard; or
(b) a code of environmental compliance; or
(c) a regulation in respect of a mining activity.

Environmentally relevant activity (ERA)
A resource activity or a prescribed ERA

ERA project
A prescribed ERA project or a resource project.

ERA standard
For an environmentally relevant activity, means the eligibility criteria and/or the standard conditions set by the administering authority.

Major amendment
For an environmental authority, means an amendment that is not a minor amendment.

Material change of use of premises for an environmentally relevant activity
A category of assessable development requiring a development permit under SPA. Refer Schedule 3, Table 2, Item 1 of the Sustainable Planning Regulation 2009.

Minor amendment
For an environmental authority, means an amendment that is—
(a) a condition conversion; or
(b) a minor amendment (threshold).

Minor amendment (threshold)
For an environmental authority, means an amendment that the administering authority is satisfied—
(a) is not a change to a condition identified in the authority as a standard
condition, other than—
(i) a change that is a condition conversion; or
(ii) a change that is not a condition conversion but that replaces a standard condition of the authority with a standard condition for the environmentally relevant activity to which the authority relates; and
(b) does not significantly increase the level of environmental harm caused by the relevant activity; and
(c) does not change any rehabilitation objectives stated in the authority in a way likely to result in significantly different impacts on environmental values than the impacts previously permitted under the authority; and
(d) does not significantly increase the scale or intensity of the relevant activity; and
(e) does not relate to a new relevant resource tenure for the authority that is—
(i) a new mining lease; or
(ii) a new petroleum lease; or
(iii) a new geothermal lease under the Geothermal Energy Act; or
(iv) a new GHG injection and storage lease under the GHG storage Act; and
(f) involves an addition to the surface area for the relevant activity of no more than 10% of the existing area; and
(g) for an environmental authority for a petroleum activity—
(i) if the amendment involves constructing a new pipeline—the new pipeline does not exceed 150km; and
(ii) if the amendment involves extending an existing pipeline—the extension does not exceed 10% of the existing length of the pipeline; and
(h) if the amendment relates to a new relevant resource tenure for the authority that is an exploration permit or GHG permit—the amendment application under section 224 seeks an amended environmental authority that is subject to the standard conditions for the relevant activity or authority, to the extent it relates to the permit.

Mobile and temporary ERA

A prescribed ERA, other than an activity that is dredging material, extracting rock or other material, or the incinerating of waste:

(a) carried out at various locations using transportable plant or equipment, including a vehicle

(b) that does not result in the building of any permanent structures or any physical change of the landform at the locations (other than minor alterations solely necessary for access and setup including, for example, access ways, footings and temporary storage areas)

(c) carried out at any 1 of the locations:
Application to amend an environmental authority

(i) for less than 28 days in a calendar year, or

(ii) for 28 or more days in a calendar year only if the activity is necessarily associated with, and is exclusively used in, the construction or demolition phase of a project.

Prescribed ERA
An environmentally relevant activity that is not a resource activity and is prescribed under section 19 of the EP Act.

Prescribed ERA project
All prescribed ERAs carried out, or proposed to be carried out, as a single integrated operation.

Registered suitable operator
A person who, or a corporation which, under section 318I of the EP Act has been assessed as being suitable to carry out an ERA and has been listed on the suitable operator register.

Resource activity
An activity that is any of the following:

(a) a geothermal activity
(b) a greenhouse gas (GHG) storage activity
(c) a mining activity
(d) a petroleum activity.

Resource project
Resource activities carried out, or proposed to be carried out, under 1 or more resource tenures, in any combination, as a single integrated operation.

Single integrated operation
Occurs when all the below criteria are met:

(a) the activities are carried out under the day-to-day management of a single responsible individual, for example, a site or operations manager
(b) the activities are operationally interrelated
(c) the activities are, or will be, carried out at one or more places
(d) the places where the activities are carried out are separated by distances short enough to make feasible the integrated day-to-day management of the activities.
GUIDE

If you require assistance in answering any part of this form, or have any questions about your application please contact the relevant department. Contact details are at the end of this form.

The environmental authority number and details may be found on the existing environmental authority or quoted in other correspondence received from the administering authority.

If more space is required for any responses, please attach additional information as a separate page.

If there is an agent acting on behalf of the environmental authority holder, provide details in this section. An agent could be a consultant or a contact for the environmental authority holder.

As statutory documents need to be sent to all applicants, this section can also be used when there are multiple environmental authority holders to nominate an address for statutory documentation to be sent "care of" to.

### Application details

1. **Environmental authority number**

   | ENVIRONMENTAL AUTHORITY NUMBER | EPML00699113 |
   | ENVIRONMENTAL AUTHORITY HOLDER NAMES | AMCOL AUSTRALIA PTY LTD |

**Agent details / address for service**

The address supplied here will also be used as a service address for sending statutory documents. If blank, statutory documents will be sent to the address previously supplied for the holder or principal applicant for the environmental authority.

| INDIVIDUAL OR BUSINESS NAME (INCLUDE TRADING NAME IF RELEVANT) | AUSROCKS PTY LTD |
| RESIDENTIAL ADDRESS OR REGISTERED BUSINESS ADDRESS (NOT A POST OFFICE BOX ADDRESS) | 17/71 JUAWS STREET SUMNER PARK, QLD 4074 |
| POSTAL ADDRESS (WHERE DIFFERENT FROM ABOVE) | PO BOX 1007 TOOWONG BC QLD 4066 |
| CONTACT PERSON | ADEBAYO BAYOOKE |
| PHONE | 07 3376 6839 |
| FACSIMILE |
| EMAIL | ADEBAYO.BAYOOKE@AUSROCKS.COM.AU |
| CROSS IF YOU DO NOT WANT TO RECEIVE CORRESPONDENCE VIA EMAIL |
Application to amend an environmental authority

2. Describe in detail the proposed amendment and the reason the amendment is being sought

The decision of whether the amendment is major or minor is made by the administering authority. However, the administrative process requires you to indicate whether you think the proposed amendment will constitute a major or minor amendment. If you have questions regarding whether your amendment will be minor or major you are encouraged to arrange a pre-lodgement meeting with the administering authority.

Please indicate below whether you think the proposed amendment will constitute a major or minor amendment.

☐ Minor amendment – select minor amendment type

☐ Minor amendment (condition conversion) – you wish to convert all conditions of your EA to the standard conditions for the ERAs to which the EA relates

Go to question 22.

By selecting this amendment type you are certifying that you have a complete and thorough understanding of, and can comply with the ERA Standard (eligibility criteria and standard conditions).

☐ Minor amendment (threshold) – Please complete the detailed description below

☒ Major amendment – please complete the detailed description below

For a minor amendment (threshold) or major amendment, provide a detailed description of your proposed amendment.

Include a justification of how your proposed amendment meets the criteria for a major or minor amendment and attach any supporting information to this application.

If the amendment is to add or delete a location, tenure or activity, or to change the threshold of an activity, provide details.
Application form
Application to amend an environmental authority

Background Information

PROVIDE DETAILS OF THE CIRCUMSTANCES GIVING RISE TO THE PROPOSED AMENDMENT (IF INSUFFICIENT ROOM, ATTACH A SEPARATE DOCUMENT).

Additional Mining Lease area (ML55017) to be added to existing ML 55007 and ML55008 operations, the type of activity remains unchanged.

Please refer to the attached Cover letter, Plan of Operations and Environmental Management Plan for more detail on these activities.

Details of Proposed Amendments

<table>
<thead>
<tr>
<th>PROVIDE FULL DETAILS OF EACH PROPOSED CHANGE TO CONDITION(S) OF THE ENVIRONMENTAL AUTHORITY</th>
<th>PROVIDE JUSTIFICATION FOR EACH PROPOSED CHANGE</th>
</tr>
</thead>
</table>


3. Describe the land where the proposed amended activities will be carried out

☐ The activity will be carried out within the existing designated areas of the environmental authority.

☐ The activity is mobile and temporary and will be carried out in a new area:

AREA OF OPERATION E.G. PARTICULAR LOCAL GOVERNMENTS

GURULMUNDI RD GURULMUNDI, WESTERN DOWNS REGIONAL COUNCIL ON TAROOM SHIRE PLANNING SCHEME

☐ An additional site(s) will be added to the environmental authority as follows:

Location(s)

<table>
<thead>
<tr>
<th>STREET NUMBER</th>
<th>STREET NAME</th>
<th>SUBURB/TOWN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GURULMUNDI RD</td>
<td>GURULMUNDI</td>
</tr>
<tr>
<td></td>
<td>GURULMUNDI</td>
<td></td>
</tr>
<tr>
<td>POSTCODE</td>
<td>LOT/PLAN</td>
<td>SURFACE AREA (MF)</td>
</tr>
<tr>
<td>Q4415</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PORT (IF APPLICABLE)</td>
<td></td>
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</tr>
</tbody>
</table>

TENURE DETAILS (IF APPLICABLE)

LOT 10 FT142, 11 FT142 & 34 FT167 WITH ML55007, ML55008 AND ML55017 (APPLICATION)
General Description of Land e.g. Environmental Values, Bioregions and Regional Ecosystems, Terrain, Shallow Ground Water Systems, Floodplains, Springs and Soil Descriptions. A Site Map or Satellite Imagery Showing These Features and the Designated Area for the Activity Should Be Attached.

Details of ERAs Conducted at New Site(s)

<table>
<thead>
<tr>
<th>ERA Number and Description</th>
<th>ERA Threshold</th>
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<tbody>
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</tr>
</tbody>
</table>
4. Do you currently operate under an ERA standard?
   ☒ No → go to question 5
   ☐ Yes ☐ In making the proposed amendment, I can comply with the eligibility criteria and do not need to vary any of the standard conditions.
   ☐ In making the proposed amendment, I can comply with the eligibility criteria but am seeking to vary one or more of the standard conditions. Details of the proposed variation are provided in the table below:

<table>
<thead>
<tr>
<th>ERA NUMBER AND THRESHOLD</th>
</tr>
</thead>
<tbody>
<tr>
<td>STANDARD CONDITION TO BE VARIED</td>
</tr>
</tbody>
</table>

| JUSTIFICATION FOR REQUESTED VARIATION |

☐ In making the proposed amendment, I cannot comply with the relevant eligibility criteria for all relevant activities. This is due to factors beyond my control. Further details have been provided below.

| DETAILS INCLUDING THE RELEVANT ELIGIBILITY CRITERIA, ERA NUMBER AND THRESHOLD, AND FACTORS AFFECTING COMPLIANCE |

If you cannot comply with the eligibility criteria as a result of the proposed amendment, then an amendment to the relevant eligibility criteria condition will also be required. You should revisit Section 1 of the checklist at the beginning of this form to see whether an amendment application can still be made.
5. **What is the ERA type you are applying to amend?**

- [ ] Prescribed ERA—this application involves only prescribed ERA activities → go to question 6
- [x] Resource activity—this application involves resource activities → go to question 11

**Prescribed ERA information**

This question is only relevant to prescribed ERAs as resource activities will not trigger assessable development under the *Sustainable Planning Act 2009.*

6. **Are there any development permits in effect or have any development applications been made under the Sustainable Planning Act 2009 to carry out the proposed amendment?**

- [ ] No → go to question 7
- [ ] Yes → provide a list of applicable development permits or applications below

<table>
<thead>
<tr>
<th>DEVELOPMENT PERMIT/ APPLICATION NUMBER</th>
<th>DEVELOPMENT PERMIT/ APPLICATION NAME</th>
<th>ASSESSMENT MANAGER</th>
<th>DATE OF APPLICATION OR APPROVAL</th>
<th>EXPIRY DATE</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

7. **Is this application to remove an ERA from your environmental authority?**

- [ ] No → If your amendment application also involves resource activities, go to question 10. Otherwise, go to question 16.
- [ ] Yes → indicate which ERAs are to be removed, then go to question 8

<table>
<thead>
<tr>
<th>ERA NUMBER AND NAME</th>
<th>THRESHOLD</th>
<th>HAS THE ERA COMMENCED? (YES/NO)</th>
<th>LOCATION (INCLUDING ALL LOT ON PLAN/TENURE DETAILS)</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>

If you have identified above that any of the ERAs have not commenced, please complete the below:

- [ ] I declare that where identified, the ERAs above have not commenced.
8. Does your environmental authority contain any rehabilitation conditions that are applicable to the ERAs that you are requesting be removed from the environmental authority?

☐ Yes → you must attach a final rehabilitation report

☐ No

9. Compliance with conditions

A statement addressing compliance with environmental authority conditions must be completed by, or on behalf of the environmental authority holder.

Attach a separate document to this application form which states the extent to which:

- the ERAs being removed from the environmental authority have complied with each relevant condition of approval
- the final rehabilitation report is accurate (include the date of the final rehabilitation report). Note: The compliance statement only needs to be made for the final rehabilitation report if the answer to question 8 is ‘Yes’

Describe the qualifications and experience of the person signing the statement.
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Provide details of the date, method and evidence used to verify compliance and accuracy.

Provide the contact number of the person signing the statement

I ........................................................................................................................................

(insert name and position of person making the compliance statement)

- make the statement by or for the holder of the environmental authority
- confirm that, to the best of my knowledge, all information provided as part of this statement, including attachments, is true, correct and complete. I am aware that it is an offence under section 480 of the Environmental Protection Act 1994, to give the administering authority information that I know is false, misleading or incomplete
- confirm that, to the best of my knowledge, this statement, including attachments, does not include false, misleading or incomplete information
- confirm that, to the best of my knowledge, I have not knowingly failed to reveal any relevant information or document to the administering authority
- confirm that, to the best of my knowledge, all information provided in this statement, including attachments, address the relevant matters and are factually correct
- confirm that the opinions expressed in this statement, including attachments, are honestly and reasonably held
- I understand that all information supplied as part of this statement, including attachments, can be disclosed publicly in accordance with the Right to Information Act 2009 and the Evidence Act 1977.

SIGNATURE

DATE

If your amendment application also involves resource activities, go to question 10. Otherwise, go to question 16.
Resource activity information

A regional interests development approval (RIDA) is required when a resource activity is proposed in an area of regional interest under the Regional Planning Interests Act 2014. Further information, including applications forms, can be found on the Department of Infrastructure, Local Government and Planning (DLGP) website, www.dlgp.qld.gov.au.

10. Is the resource activity located anywhere within an area of regional interest?

☐ No

☐ Yes, which regional interest area, have or will you require a regional interests development approval?

☐ Priority Agricultural Areas (PAAs) application reference:

☐ Priority Living Areas (PLAs) application reference:

☐ Strategic Environmental Areas (SEAs) application reference:

☐ Strategic Cropping Area (SCA, formerly Strategic Cropping Land) application reference:

☐ No regional interests development approval required, I am an exempt activity.

11. Environmental offsets

An environmental offset may be required for an ERA where despite all reasonable measures to avoid and minimise impacts on certain environmental matters, there is still likely to be a significant residual impact on one or more of those matters.

You must verify the presence, whether temporary or permanent, of those environmental matters. For more information refer to the State Significant Impact Guideline at the Queensland Government website at: www.qld.gov.au/environment/pollution/management/offsets/index.html

<table>
<thead>
<tr>
<th>Will the proposed amendment cause a significant residual impact to a prescribed environmental matter (other than a matter of local environmental significance)?</th>
</tr>
</thead>
<tbody>
<tr>
<td>☑ No</td>
</tr>
<tr>
<td>☑ Yes, please attach supporting information that:</td>
</tr>
<tr>
<td>• details the magnitude and duration of the likely significant residual impact on each prescribed environmental matter (other than matters of local environmental significance) for the entire activity; and</td>
</tr>
<tr>
<td>• demonstrates that all reasonable measures to avoid and minimise impacts on each of those matters will be undertaken; and</td>
</tr>
<tr>
<td>• if the activity is to be staged, details of how the activity is proposed to be staged</td>
</tr>
<tr>
<td>☑ I have attached the supporting information.</td>
</tr>
</tbody>
</table>
12. Public notice requirements. Please select one of the options below:

☐ The application relates to a mining activity only and public notice requirements will not apply

☐ I have included details of the website where copies of the application notice and application documents will be made available during public notification stage. If the administering authority will require permission to link to this website, also provide contact details of the person who will be able to assist the administering authority in this process.

☒ I cannot make this information available on a website. All of the application information has been provided to the administering authority in an electronic format.

| WEBSITE ADDRESS |
| CONTACT NAME | TELEPHONE |
| EMAIL ADDRESS |

13. Does the application relate to an environmental authority for a coal seam gas activity that is an ineligible ERA?

☒ No → go to question 14

☐ Yes →

☐ I have determined that the amendment will not change the way that CSG water is managed.

☐ I have determined that the amendment will change the way that CSG water is managed and have provided the mandatory information set out below.

| MANDATORY INFORMATION |
| The quantity of CSG water the applicant reasonably expects will be generated in connection with carrying out each relevant CSG activity. |
| The flow rate at which the applicant reasonably expects the water will be generated. |
| The quality of the water, including changes in the water quality the applicant reasonably expects will happen while each relevant CSG activity is carried out. |
| The proposed management of water including, for example, the use, treatment, storage or disposal of the water. |
Application to amend an environmental authority

<table>
<thead>
<tr>
<th>The measurable criteria ('management criteria') against which the applicant will monitor and assess the effectiveness of the management of the water, including, for example, criteria for each of the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) the quantity and quality of the water used, treated, stored or disposed of</td>
</tr>
<tr>
<td>(ii) protection of the environmental values affected by each relevant CSG activity</td>
</tr>
<tr>
<td>(iii) the disposal of waste, including, for example, salt, generated for the management of the water.</td>
</tr>
</tbody>
</table>

| The action proposed to be taken if any of the management criteria are not complied with, to ensure that the criteria will be able to be complied with in the future. |

<table>
<thead>
<tr>
<th>If the application includes a CSG evaporation dam, an evaluation of the following must be provided:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) best practice environmental management for managing CSG water</td>
</tr>
<tr>
<td>(ii) alternative ways for managing CSG water</td>
</tr>
<tr>
<td>(iii) whether there is a feasible alternative to a CSG evaporation dam for managing the water. Note if the evaluation shows that there is a feasible alternative option, the CSG evaporation dam cannot form part of the water management for this amendment application.</td>
</tr>
</tbody>
</table>

General ERA information

Completion of an EIS process is defined in section 60 of the EP Act.

14. Has an environmental impact statement (EIS) process that includes the proposed amendment, been completed?

- ☒ No

- ☐ Yes → ☐ I have assessed the environmental risks of the proposed amendment and consider them to be the same as was assessed in the EIS. A copy of the assessment is attached. Go to question 17

- ☐ I have assessed the environmental risks of the proposed amendment and consider them to be different to what was assessed in the EIS. Go to question 15
The information provided here will assist the administering authority in deciding whether an EIS is required.

For further information refer to the guideline: 'Triggers for Environmental Impact Statements under the Environmental Protection Act 1994 for mining, petroleum and gas activities. This guideline is available at www.qld.gov.au, using the search term 'triggers for environmental impact statements'.
### Application to amend an environmental authority

<table>
<thead>
<tr>
<th>Is the proposed ERA amendment for a mining activity that would involve a substantial change in mining operations? For example: from underground to open cut, or (for underground mining) a change in operations that currently causes little subsidence but with the proposed ERA amendment, is likely to cause substantial subsidence?</th>
<th>□ YES  ❌ NO  □ N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the proposed ERA amendment for a mining activity and a novel or unproven resource extraction process, technology or activity, is being proposed?</td>
<td>□ YES  ❌ NO  □ N/A</td>
</tr>
<tr>
<td>Is the proposed ERA amendment for a petroleum and gas activity that is likely to have a total disturbance area of greater than 2000 hectares at any time during the life of the proposed project? This includes areas occupied by well pads (single or multi-directional), access tracks and roads, water storages, and process plants</td>
<td>□ YES  ❌ NO  □ N/A</td>
</tr>
<tr>
<td>Is the proposed ERA amendment for a petroleum and gas activity that is likely to involve the construction of a high pressure pipeline over a distance of 300 kilometres or greater?</td>
<td>□ YES  ❌ NO  □ N/A</td>
</tr>
<tr>
<td>Is the proposed ERA amendment for a petroleum and gas activity that is likely to involve the construction of a liquefied natural gas plant?</td>
<td>□ YES  ❌ NO  □ N/A</td>
</tr>
</tbody>
</table>

16. **Assessment of the environmental impact and provision of specific supporting information**

You must provide an assessment of the likely impact of the proposed amendment on the environmental values, including the following mandatory information in the table below, unless the not applicable check box is ticked.

Only tick the ‘Not Applicable’ check box if the proposed amendment does not cause a change to the environmental values, aspects and impacts as approved under the current environmental authority.
Where the 'Not Applicable' option is selected, **sufficient information must be provided to support this determination**, as the determination forms part of the required assessment.

<table>
<thead>
<tr>
<th>MANDATORY INFORMATION</th>
<th>Provided □</th>
<th>N/A □</th>
</tr>
</thead>
<tbody>
<tr>
<td>A description of the environmental values likely to be affected by the proposed amendment</td>
<td>Provided □</td>
<td>N/A □</td>
</tr>
<tr>
<td>Reason for N/A:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Details of any emissions or releases likely to be generated by the proposed amendment</td>
<td>Provided □</td>
<td>N/A □</td>
</tr>
<tr>
<td>Reason for N/A:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A description of the risk and likely magnitude of impacts on the environmental values</td>
<td>Provided □</td>
<td>N/A □</td>
</tr>
<tr>
<td>Reason for N/A:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Details of the management practices proposed to be implemented to prevent or minimise adverse impacts</td>
<td>Provided □</td>
<td>N/A □</td>
</tr>
<tr>
<td>Reason for N/A:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Details of how the land the subject of the application will be rehabilitated after each relevant activity ceases.</td>
<td>Provided □</td>
<td>N/A □</td>
</tr>
<tr>
<td>Reason for N/A:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To provide a response to the mandatory information, specific supporting information must be provided to the administering authority, the type and detail of which will depend on your particular ERA project. Supporting material for technical information requirements is located on the business and industry website [www.business.qld.gov.au](http://www.business.qld.gov.au).
17. Provide details of the proposed measures for minimising and managing waste generated by any amendments to the relevant activity.

WASTE MANAGEMENT DETAILS. IF WASTE IS TO BE MANAGED ACCORDING TO AN EXISTING WASTE MANAGEMENT PLAN, PROVIDE THE RELEVANT PAGE OR SECTION NUMBERS.

Waste management on site will not be change, Details of this have been incorporation into the environmental management plan.

18. Do you currently have financial assurance held as part of the approved environmental authority

☐ No
☒ Yes →☒ I will not need to change the financial assurance in relation to this amendment.

☐ I will be changing the financial assurance and have attached the form Application to Amend or Discharge Financial Assurance for an Environmental Authority (EM875)

☐ I will be changing the financial assurance and will be amending or replacing my Plan of Operations.

19. Is this land currently subject to an environmental protection order or a site management plan?

☒ No

☐ Yes →☐ I have an environmental protection order in place and the details are provided below.

☐ I have a site management plan in place and the details are provided below.

PROVIDE THE REFERENCE NUMBER AND BRIEF DETAILS

Page 22 of 26 • 150930 • EM847 • Version 8.00 Department of Environment and Heritage Protection
20. Is any part of the land currently recorded in, or previously been recorded in, the environmental management register?

☐ No

☐ Yes, complete the below table and provide the additional details

<table>
<thead>
<tr>
<th>PLEASE TICK RELEVANT BOXES</th>
<th>YES</th>
<th>NO</th>
<th>ADDITIONAL DETAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has the land been removed from the environmental management register?</td>
<td>☐</td>
<td>☐</td>
<td>If yes is ticked, you must attach evidence (e.g. a notice) advising that details have been removed from the environmental management register</td>
</tr>
</tbody>
</table>

21. Payment of fees

Application fee: $ 295.60

You may pay your fee via cheque, money order or credit card.

Select the payment method below:

☐ Payment by cheque or money order made payable to the Department of Environment and Heritage Protection (attached).

☐ Payment by cheque or money order made payable to the Department of Agriculture and Fisheries (attached).

☒ Please contact me (the applicant) for credit card payment:

Phone number: 0732779586
Where there is more than one holder of the environmental authority, this declaration is to be signed by all holders, unless there is an agreement between all holders that one can sign on behalf of the other.

Note: If only one holder is signing this application form, they are committing all holders to the content of the application and the declaration.

Where the environmental authority holder is a company, this form must be signed by an authorised person for that company.

Privacy statement
The Departments of Environment and Heritage Protection (EHP) and Agriculture and Fisheries (DAF) are collecting the information on this form to process your amendment application for an environmental authority. This collection is authorised under sections 226 and 227 of the Environmental Protection Act 1994. Some information may be given to the Department of Natural Resources and Mines (DNRM) for the purposes of processing this application. Your personal information will only be accessed by authorised employees within these departments and will not be disclosed to any other parties unless authorised or required by law. For queries about privacy matters please email privacy@ehp.qld.gov.au or telephone: (07) 3330 5435.

22. Declaration

Note: If you have not told the truth in this application you may be prosecuted.

Where an agreement is in place between all holders of the environmental authority, that 1 holder can sign on behalf of the other joint holders, please tick the below checkbox.

I have the authority to sign this form on behalf of all the joint holders of the environmental authority.

I declare that:

- I am the holder of the environmental authority, or authorised signatory for the holder of the environmental authority.
- If the proposed amendment is made, the relevant activities will continue to comply with the ERA Standard (eligibility criteria and standard conditions) for all eligible ERAs, or where they cannot, I have indicated otherwise in my application and provided the required support information.
- If the proposed amendment is a minor amendment (condition conversion) that I can comply with the ERA Standard (eligibility criteria and standard conditions) for each of the ERAs authorised by the environmental authority.
- The information provided is true and correct to the best of my knowledge. I understand that it is an offence under section 480 of the Environmental Protection Act 1994 to give to the administering authority or an authorised person a document containing information that I know is false, misleading or incomplete in a material particular.
- I understand that I am responsible for managing the environmental impacts of these activities, and that approval of this application is not an endorsement by the administering authority of the effectiveness of management practices proposed or implemented.
Application form

Application to amend an environmental authority

<table>
<thead>
<tr>
<th>JOINT HOLDER'S NAME (IF APPLICABLE)</th>
<th>JOINT HOLDER'S SIGNATURE (IF APPLICABLE)</th>
</tr>
</thead>
</table>

Applicant checklist

☑️ Application form has been signed and all questions completed.

☐ Question 12: Supporting information for environmental offsets attached (if applicable)

☐ Question 13: mandatory information for the assessment of coal seam gas activities attached (if applicable)

☐ Question 16: mandatory information for assessment of environmental impacts attached (if applicable)

☐ Question 18: Application to Amend or Discharge Financial Assurance for an Environmental Authority (EM875) is attached (if applicable).

☑️ Fees paid or enclosed.

Please include a word searchable electronic PDF copy of the application documents when you lodge your application.
Application form
Application to amend an environmental authority

Further information
The latest version of this publication and other publications referenced in this document can be found at www.qld.gov.au using the relevant publication number (EM847 for this form) or title as a search term.

Please submit your completed application to:
For a mining ERA where the proposed amendment impacts upon the resource tenure:
Mining Registrar
Department of Natural Resources and Mines
DNRM have a list of office locations for mining registrars on their website www.dnrm.qld.gov.au

For ERA 2, ERA 3 or ERA 4
Post:
Senior Environmental Scientist
Animal Industries
Department of Agriculture and Fisheries
PO Box 102
TOOWOOMBA QLD 4350

Enquiries:
Phone: (07) 4688 1374
Fax: (07) 4688 1192
Email: livestockregulator@daf.qld.gov.au

For all other ERAs
Post:
Permit and Licence Management
Department of Environment and Heritage Protection
GPO Box 2454
BRISBANE QLD 4001

Enquiries:
Website: www.business.qld.gov.au
Email: palm@ehp.qld.gov.au
Phone: 13 QGOV (13 74 68)

Courier or hand delivery:
Permit and Licence Management
Department of Environment and Heritage Protection
Level 3, 400 George Street
BRISBANE QLD 4000
Business hours: 8:30am-4:30pm
Authorisation letter to nominate an authorised holder representative

I/we the undersigned, being the applicants/holders of the relevant application/permit below, nominate the following Authorised Holder Representative to complete application and permit transactions and request and receive information and statutory documents on my/our behalf.

**Details of authorised holder representative**

<table>
<thead>
<tr>
<th>Name - individual or chief executive officer if applicant is an organisation</th>
<th>Date of birth if an individual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alan Robertson / Adebayo Bayoko</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Organisation name</th>
<th>Organisation number (e.g. ACN/ABN etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ausrocks Pty Ltd</td>
<td>64056939014</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Residential or registered business address (not a post office box)</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>17/71 Jilaws Street, Sumner Park Q4074</td>
<td>07 3375 6839</td>
<td><a href="mailto:alan.robertson@ausrocks.com.au">alan.robertson@ausrocks.com.au</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Postal address (if different from above)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PO Box 1007, Toowong BC, Q4066</td>
<td></td>
</tr>
</tbody>
</table>

This authorisation is in relation to the following permit/s or application/s, and future submissions of applications. If an application listed below is granted the authorisation extends to the resulting permit while the permit remains current.

**Permit and or application numbers**

<table>
<thead>
<tr>
<th>Permit and or application numbers</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPML006991113 (ML55017, ML55007 and ML55008)</td>
<td>Application/Permit</td>
</tr>
<tr>
<td>EPM16950</td>
<td>Application/Permit</td>
</tr>
<tr>
<td></td>
<td>Application/Permit</td>
</tr>
<tr>
<td></td>
<td>Application/Permit</td>
</tr>
<tr>
<td></td>
<td>Application/Permit</td>
</tr>
</tbody>
</table>

I/we agree if there are changes to this authority, or there are changes in the ownership of the application/s, or resulting permit/s, I/we will complete a new letter of authority and submit it to the Queensland Government, C/- Executive Director, Mining and Petroleum Operations. Unless and until such notification is received, the Queensland Government will be entitled to continue to rely on this authority.

The Authorised Holder Representative nominated above has my/our explicit authority to undertake all activities and transactions under the Mineral Resources Act, Petroleum and Gas (Production and Safety) Act, Petroleum Act, Geothermal Energy Act, Greenhouse Gas Storage Act, Mineral and Energy Resources (Common Provisions) Act or any other mining associated legislation or the Environmental Protection Act or any corresponding Regulations.
with the Queensland Government in relation to the application/s or permit/s listed above. Examples of these activities and transactions are:

1. Completing and lodging the permit related applications.
2. Responding to requests for information from any Queensland Government department relating to the permit application, or if granted, the permit.
3. Being the point of contact for application and permit notices, letters or other interactions and transactions.
4. Completion and submission of notices, reports, returns, letters and other information or communication required to be completed by any Queensland Government department.
5. Completion and submission of transactions throughout the active life of the permit (if granted), including the payment of annual fees and completion of annual returns for environmental authorities.
6. Granting access to the MyMinersOnline computer system to other people to have the ability to perform authorised holder representative responsibilities, but not the ability to grant additional access.
7. Requesting and obtaining access to confidential information (as defined in the Mineral Resources Act or the Petroleum and Gas (Production and Safety) Act) concerning royalty obligations in relation to the permit/s or application/s listed above.

I/we acknowledge that it is our responsibility to be informed of any actions undertaken by the Authorised Holder Representative and to inform the Authorised Holder Representative of any actions undertaken by me/us. I/we also acknowledge that in regard to the above activities and transactions, any legislative notification provision that refers to notifying either the applicant or the holder of a permit or authorisation may be met by notifying the Authorised Holder Representative, except where legislatively provided to the contrary, whether expressly or impliedly.

I/we acknowledge that the Authorised Holder Representative and I/we am/are jointly and severally liable for knowingly or having reasonably ought to have known and/or intentionally giving the administering authority under the Environmental Protection Act false, misleading or incomplete statements or documents in relation to the above permits/applications.

Details of all applicants/permit holders making this authorisation

<table>
<thead>
<tr>
<th>Name - individual or chief executive officer if applicant is an organisation</th>
<th>Date of birth if an individual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dougal Scott</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Organisation name</th>
<th>Organisation number (e.g. ACN/ABN etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMCOL AUSTRALIA PTY LTD</td>
<td>37 004 377 155</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Residential or registered business address (not a post office box)</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>94 Bailham Road Archerfield, Q4108</td>
<td>0402608146</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Postal address (if different from above)</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>PO Box 87 Archerfield, Q4108</td>
<td><a href="mailto:dougal.scott@amcol.com">dougal.scott@amcol.com</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>[signature]</td>
<td>24/11/15</td>
</tr>
</tbody>
</table>
Authorised Holder Representative

I understand and accept the responsibilities of the authorised holder representative as defined in this letter.

Signature of Authorised Holder Representative named above

<table>
<thead>
<tr>
<th>Name - individual or chief executive officer if applicant is an Organisation</th>
<th>Date of birth if an individual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alan Robertson</td>
<td>Adebayo Bayooke</td>
</tr>
</tbody>
</table>

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<tr>
<th>Organisation name</th>
<th>Organisation number (e.g. ACN/ARBN etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ausrocks Pty Ltd</td>
<td>64 056 939 014</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Signature]</td>
<td>24/11/2015</td>
</tr>
</tbody>
</table>
Environmental Management Plan

Amcol Australia Pty Ltd

Angrocks Pty Ltd
November 2015
This document has been prepared for the exclusive use of the client on the basis of instructions, information and data supplied by the Client (Amcol Australia Pty Ltd) as at November 2015. This document has been prepared by Ausrocks Pty Ltd. Ausrocks has no financial association with the Client other than carrying out this report as requested by the Client.
EXECUTIVE SUMMARY

PURPOSE OF REPORT
Amcol Australia Pty Ltd has engaged Ausrocks (consultant) to review and update their Environmental Management Plan (EMP) for the operations at Gurulmundi. This EMP covers the changes in the mining lease area to include new mining lease area of ML55017. Information presented in this report addresses those issues has been considered by the Department of Environment and Heritage Protection (EHP) under the Environmental Protection Act (1994) and the Sustainable Planning Act (2009) as well as Queensland Mines and Energy (QME) under the Mineral Resources Act (1989) and Regulation (2003).

MINING OPERATIONS
A detailed description of the mining operations carried out on site is provided in this report. The operation involves removal of overburden and waste to access the bentonite deposit lying approximately 5 to 15m beneath the surface. Bentonite products are based on grade, which include 5A, 5B, 5C and 5D. These products have many useful properties that prove effective as absorbents, coagulant drilling, waterproofing and ceramic.

EQUIPMENT & INFRASTRUCTURE
The mine uses medium scale equipment on a campaign basis including excavators, loaders, haul trucks, dozers, forklifts along with a grader and water truck for road maintenance. Site infrastructure includes a site office, weighbridge, mill shed, screening plant, storage shed, drying pads and stockpiles.

VALUE OF THE RESOURCE
The resource is of significant value to the Western Downs Region as it offers an alternative source of supply to the local, interstate and international market. This reduces transport costs (importing) and cumulative exhaust gas emissions for material transporting.

EXISTING ENVIRONMENTAL CHARACTERISTICS
The site has been mined for Bentonite over the last 24 years under a Level 2 EA and recent exploration and expansion has increased the disturbed area over the 10ha limit. The operational activities have remained relatively constant but minimal successful rehabilitation (due to drought conditions prior to the recent wet season) has resulted in a larger than expected disturbed area. The vegetation cover around the extraction areas is described as open forest and minimal areas of environmental significance will be affected due to the operations expanding into the open (cleared) area towards the north within ML 55007 and into the cleared area around the Bailey’s front gate to the east within ML55008. The existing watercourse of Juandah Creek lies between the main extraction area and the northern pit and runs from west to east.

POTENTIAL ENVIRONMENTAL IMPACTS OF THE PROJECT
The key aims of the site environmental management programme are to:
- Reduce the total disturbed area on site and continue operations with progressive rehabilitation.
- Prevent flow of sediment or contaminated water into Juandah Creek by upgrading current on site sedimentation storage facilities.

Visual Amenity
The site is well situated in terms of visual amenity due to the surrounding open forest vegetation and significant distance from major roads. A large portion of the surrounding land is owned by the site landowner and is used for grazing purposes. The only residence of note in the surrounding area is the landowner’s residence at a distance of 1.7km from the operations. Visual amenity is acceptable from the

November
2015

Environmental Management Plan
access road leading up to the site but works have been undertaken to make this area more visually appealing.

**Air Quality**
Due to the significant distance between the operations and residences it is assumed that no nuisance will be caused by air emissions from the operations on site. However, if required, an air quality assessment program using gravimetric dust analysis in accordance with AS 3580.10.1, 2003 will be implemented at the site and will be monitored by Ausrocks. This would incorporate three monitoring stations installed on site at strategic locations for monthly collection and analysis. There are similar bentonite mining and processing operations in the area (approximately 4 km to the South – East) which may hinder the air quality analysis and some background testing may be required. There is also a water truck on site for dust suppression management.

**Noise**
Due to the significant distance between operations on site and the neighbouring residences it is assumed that sufficient noise attenuation will occur. However the site haulage route travels past the small community of Gurulmundi. This section of road is sealed and has a reduced speed limit, which assists with limiting the impact caused by noise.

**Water Quality**
Juandah Creek flows through the operation between the Main pit and the Northern pit. This creek is significant to the local ecology and must be protected. A series of sedimentation dams will be constructed to capture and filter the stormwater runoff from operational areas. In addition regular water monitoring will be carried out in strategic locations (WS1-WS5) to monitor the background, site runoff and discharge conditions of the watercourse. The watercourse flows only after heavy rainfall events (although this is also dependent on the saturation level of the catchment area prior to receiving this rain) and subsequent continuous surface water flow is normally only for two or three days. Ongoing water quality monitoring, particularly in respect to conductivity, pH and dissolved solids to meet ANZECC Guidelines for stock water drinking is recommended during the life of the mine.

**Traffic**
The site operates via a number of two-way road systems and has a general site speed limit of 40km/h, and lower around heavily trafficked areas such as the plant area. The operation produces minimal traffic on local roads and is limited to peak hour trips by site workers and a maximum of 1-2 heavy vehicles per day for plant and equipment transport.

**REHABILITATION AND FINAL USE**
An ongoing Rehabilitation Management Plan has been developed by the site operators, Amcol management, Ausrocks and external consultants in conjunction with the landholder. The key issues relating to the rehabilitation and final use are:

- The landowner has specified that planting of trees should be kept to minimum as his preferred rehabilitation programme is site water storage and grassed slopes, accessible by his cattle.
- It is proposed that the main access roads within the site be left after final site works for use by the landowner.

Ausrocks has calculated the revised Security Deposit using EHP guidelines for the Level 1 Activity at $496,000.00 corresponding to 34.07 ha disturbed area. Within the first five years of operation it is expected that at least 5.9 ha of rehabilitation will have been completed resulting in an overall disturbed area of 35.46 ha in June 2019.
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<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amcol, AAPL</td>
<td>Amcol Australia Pty Ltd</td>
</tr>
<tr>
<td>Ausrocks</td>
<td>Ausrocks Pty Ltd</td>
</tr>
<tr>
<td>Klipstone</td>
<td>Klipstone Pty Ltd</td>
</tr>
<tr>
<td>QME</td>
<td>Queensland Mines and Energy</td>
</tr>
<tr>
<td>TMR</td>
<td>Department of Transport &amp; Main Roads</td>
</tr>
<tr>
<td>EMP</td>
<td>Environmental Management Plan</td>
</tr>
<tr>
<td>EHP</td>
<td>Department of Environmental and Resource Management</td>
</tr>
<tr>
<td>JORC</td>
<td>The Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy</td>
</tr>
<tr>
<td>KRA</td>
<td>Key Resource Area</td>
</tr>
<tr>
<td>SPP</td>
<td>State Planning Policy</td>
</tr>
<tr>
<td>SBMP</td>
<td>Site Based Management Plan</td>
</tr>
<tr>
<td>WDRC</td>
<td>Western Downs Regional Council</td>
</tr>
</tbody>
</table>
1 INTRODUCTION

1.1 Background to Application

Amcol Australia Pty Ltd (Amcol), the applicant, is proposing to add additional mining lease area ML55017 to the west of the current mining lease (ML55007 and ML55008) into existing Environmental Authority (EA) (MIN103670412). This report intends to address the issues considered by EHP and QME under the Mineral Resources Act (1989) and Regulation (2003).

Figure 1.1 shows a map of the project site and ML 55007 and Figure 1.2 is a Cadastral Plan showing the property boundaries.
1.2 The Proponent

The proponent is AMCOL Australia Pty Ltd (AAPL) formerly known as Volclay. Amcol is an international (AMCOL International Corporation) and public liability company. AAPL is a company with significant experience in bentonite and clay mining internationally and has been operating for over 80 years. Dougal Scott, Queensland manager of Amcol has experience in site operations and sales management and Athol Seville, Site Senior Executive (SSE) has relative experience in clay mining and equipment operation. Athol has more than 5 years’
experience with AAPL and has an excellent knowledge of the operations. Amcol employ an experienced mining contractor, Karez Contracting, to carry out operational works. Karez Contracting have been working on this site for almost 10 years. Karez also have experience with Bentonite mining for other local operators.

1.3 Proposed Operations

The proposed operations include the ongoing operation of the main operating pit as well as any additional works associated with the increase in EA such as any drainage works, sedimentation dams, safety and noise bunds. The establishment of this infrastructure will be programmed with waste materials being sourced from the mine overburden material. The materials will be extracted by scraper, excavator and loader with the use of tractors for spreading material on the drying pads. It should be noted that until approval of the new Mining Leases 55017 operations will remain the same as those carried out under ML55007. Once these Leases are approved extraction will slowly merge into these new areas but site operations and environmental conditions will remain similar to those currently in place. Operations within ML55017 will only include extraction using open cut methods with all bentonite being transported to the infrastructure area on ML55007 for processing.

Existing extraction areas covered by this EMP are the Main, North, West and Test pits. Figure 1.3 Site Plan (A3 Plan attached) shows the existing roads, disturbed areas and sedimentation ponds (100 x 100m grid). The products will be transported on local roads namely Gurulmundi road and the Warrego Highway into Miles. The unsealed portion of the access road is jointly maintained on a regular basis by the Western Downs Regional Council and AMCOL.
1.4 Site Details

The mine site is situated along Baileys road near Gurulmundi, west of the Leichhardt Highway, approximately 33km north of Miles on Lots 10 & 11 FT142 and Lot 34 FT167. Mining Leases 55007 and ML55008 were granted to Amcol in January 2014 and cover 321.2ha and 15.28ha respectively. An application for ML55017 (21.67ha) are currently lodged. Table 1.1 shows details of the site and Figure 1.4 shows an aerial view of the site. Site Plans are provided in Appendix 1.

<table>
<thead>
<tr>
<th>Table 1.1 Site Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descriptions</td>
</tr>
<tr>
<td>1 Site Address</td>
</tr>
<tr>
<td>2 Property Description</td>
</tr>
<tr>
<td>3 Property Areas</td>
</tr>
<tr>
<td>4 Landowner</td>
</tr>
<tr>
<td>5 Mining Lease Area</td>
</tr>
<tr>
<td>6 Current EA</td>
</tr>
<tr>
<td>7 Planning Scheme</td>
</tr>
<tr>
<td>8 Zone</td>
</tr>
<tr>
<td>9 Overlays</td>
</tr>
<tr>
<td>10 Local Government Area</td>
</tr>
</tbody>
</table>
1.5 Site History

The site has been recently disturbed by various activities over the past 24 years (Refer Section 1.5.1); including rural uses and more recently mining for bentonite clay.

1.5.1 Chronology of Mining Activities

Table 1.2 shows a chronology of events and activities on site:
Table 1.2
Chronology of Mining Activities at Gurulmundi

<table>
<thead>
<tr>
<th>Periods</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1987</td>
<td>Walton Brothers applied for Authority to Prospect 5984.</td>
</tr>
<tr>
<td>1990</td>
<td>Discovery Hole was DH 30 drilled and two mining leases applied for</td>
</tr>
<tr>
<td>1992</td>
<td>M.L. 50560 and M.L. 50057 were granted and the mine commenced production.</td>
</tr>
<tr>
<td>1992</td>
<td>First sale was 5,200 tonnes of Bentonite supplied to the BCC’s Gurulmundi Secured Landfill</td>
</tr>
<tr>
<td>1987 - 1998</td>
<td>From 1987 to June 1999 the mine did not incur a single workers injury and did not incur a single Environmental breach</td>
</tr>
<tr>
<td>June 1999 - 2006</td>
<td>Pacific Minerals/Integrated Mineral Technology (IMT) takes over ML. During this period 10-15,000 Mt per year were mined.</td>
</tr>
<tr>
<td>June 2006</td>
<td>Volclay takes over lease from IMT</td>
</tr>
<tr>
<td>2006 - Current</td>
<td>Volclay/Amcol have been mining between 8,000 to 26,000 t per year of Bentonite. (Volclay changed name to Amcol Australia Pty Ltd on 1st July 2010)</td>
</tr>
</tbody>
</table>

1.5.2 Extent of Extraction

Extraction has been occurring in various areas within the Mining Lease including the West, North, Main and Test pits. Further exploration has indicated Resources to the north of the current operating area and works will continue in that direction after the completion of the Main pit. An extension of ML55007 and new ML55008 have been approved and the addition of ML55017 has been lodged to allow mining of the new resources.

1.6 Site Layout

The site is segmented into three different operating areas and a separate infrastructure/processing area. The main operating pit is located near the centre of the site while the western and northern pits are to the west and north respectively. The plant and infrastructure area is located to the south of the site along with the access road. The site shares the southern boundary with a State Forest and the northern area is mainly open grazing land. Figure 1.5 shows the layout of the mine including some of the property boundaries.
Figure 1.5
Site Layout
1.7 **Current Use of Site**

The current use of Lots 10 & 11 FT142 and Lot 34 FT167 is mining under Level 1 Environmental Authority MIN103670412. The proposed use is consistent with the current use of the site and will use the existing site facilities.

1.8 **Road Frontage and Access**

The property fronts onto Gurulmundi Road and this forms the main site access. There is a main gate located at the entrance to the mine and is clearly signed upon approach. The access to ML55008 is located at the Bailey’s property access further to the ease of the main entrance. Baileys Road leads south-east towards the Leichhardt Highway and travels past the small township of Gurul mundi. The access road is mainly unsealed apart from a small section at the township. See Appendix 1 for the Traffic Plan.
SITE GEOLOGY

The following is sourced from 'EPM16950 Gurulmundi Annual Report Year 2' 2010 by Klipstone Pty Ltd.

'Topographically the area is characterised by a relatively flat plateau which has been incised and partly eroded by numerous creeks, with an undulating lowland north of a marked escarpment. The line of the Gurulmundi Road is essentially the drainage divide between south flowing streams which drain into the Murray-Darling system and north flowing streams of the Dawson-Fitzroy river system.

Rocks forming the plateau comprise sediments of the Cretaceous Mooga Sandstone. Within these incised areas are exposures of the Upper Jurassic Orallo Formation, which form rounded ridges and hills in valleys and low lying areas. A low scarp has developed along the outcrop boundaries of the resistant Mooga Sandstone.

The Orallo Formation comprises clayey lithic sandstone, siltstone, minor mudstone and bentonite. According to published geological map Chinchilla 5609, the Kumbarlla Beds comprise labile sandstone, siltstone, mudstone and polymict conglomerate, apparently similar lithologies to the Orallo Formation. The contact between the Orallo Formation and the Mooga Sandstone is characterised by bentonitic shales of the upper Orallo Formation and a laterally discontinuous polymictic conglomerate at the base of the Mooga Sandstone.

The Mooga Sandstone comprises clayey, fine to medium grained quartzose to lithic sandstone and siltstone. The unit has a generally southwesterly dip, although local variations in dip and strike reflect gentle folding / warping of Late to Post Cretaceous age.'

The Regional Geology is shown in Figure 2.1; this figure also shows the Exploration for Minerals (EPM) tenure held by AMCOL.
Figure 2.1
Regional Geology

- Sandstone, siltstone, conglomerate
- Sandstone, siltstone, mudstone
- Sandstone, siltstone, mudstone, conglomerate, bentonite

'EPM16950 Gurulmundi Partial Relinquishment Report For Year 2' 2010 Kilipstone
3 RESOURCE

Amcol have an annual drilling campaign with 84 RAB holes being drilled within EPM 16950 during 2009. The Reserves have been calculated using sophisticated 3D modeling software, as shown in Figure 3.1.

The Resource reported for the mine prepared by Klipstone in December 2010 indicated the Resource currently identified on EPM 16950 and within current ML55007, these are listed in Table 3.1. With ongoing resource drilling and current Reserves the mine has the potential to meet demand for the foreseeable future.

<table>
<thead>
<tr>
<th>Location</th>
<th>Classification</th>
<th>Tonnage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within ML 50179 (now ML55007)</td>
<td>Probable Reserve</td>
<td>699Kt</td>
</tr>
<tr>
<td>On EPM 16950</td>
<td>Probable Reserve</td>
<td>196Kt</td>
</tr>
<tr>
<td></td>
<td>Indicated Resource</td>
<td>445Kt</td>
</tr>
<tr>
<td></td>
<td>Inferred Resource</td>
<td>1000Kt</td>
</tr>
</tbody>
</table>
4 EQUIPMENT & INFRASTRUCTURE

4.1 Road Transport

Contractor equipment and mine product is transported via the main access on a regular basis subject to demand and weather conditions (access road susceptible to flooding during severe rain events). Product is transported from the mine via 36t B'double truck, Figure 4.1 shows the transport vehicle.

Figure 4.1
Photograph of Transport Vehicle

4.2 Equipment

The mine uses medium scale equipment, some of which is supplied and operated by a contractor. Equipment used on site includes (Refer also Table 4.1):

- *25t Komatsu Excavator;
- *CAT D7 Dozer;
- *CAT 631 Scraper;
- *Mack & Kenworth Side-Tipper Trucks;
- *Water Truck;
- CAT 980C Loader;
- CASE International 4wd Tractor; and
- 2 x 2.5t Toyota Forklifts.

* Denotes contractor owned equipment. Earthworks are carried out through an experienced contractor on a campaign basis (Karez Contracting), who has many years' experience operating on site.
<table>
<thead>
<tr>
<th>Equipment</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front End Loader</td>
<td>Caterpillar 980C with a 4 tonne bucket. No implements on the back.</td>
</tr>
<tr>
<td>Plough Tractor</td>
<td>Case International 4WD tractor equipped with bucket on the front. Used with rotary hoe and disc plough on drying pads.</td>
</tr>
<tr>
<td>Fork lift x 2</td>
<td>Toyota 2.5 tonne fork lifts used for bagging product and loading trucks with finished product.</td>
</tr>
<tr>
<td>Fine Grind mill</td>
<td>Raymond Mill – 50 inch with 4 rollers</td>
</tr>
<tr>
<td>Screening Plant</td>
<td>Granular Mill – 3 screens (5m x 1.8m) and a 45kw hammer mill.</td>
</tr>
<tr>
<td>Excavator</td>
<td>Komatsu Excavator (25t).</td>
</tr>
<tr>
<td>Dozer</td>
<td>Caterpillar D7 Dozer (25t).</td>
</tr>
<tr>
<td>Scraper</td>
<td>Caterpillar 631 Scraper (46t).</td>
</tr>
<tr>
<td>Trucks</td>
<td>Mack &amp; Kenworth side tipper trucks with water tank trailer for dust suppression.</td>
</tr>
</tbody>
</table>
4.3 Infrastructure

The addition of ML55017 does not require any changes to the infrastructure requirements on site, which include:

- Site office;
- Weighbridge;
- Mill shed;
- Screening plant;
- Storage shed;
- Drying pads; and
- Stockpiles.

Figure 4.4 shows the processing facilities and Figure 4.5 shows a tractor on the drying pad.
Figure 4.4
Photograph of Processing Facilities

Figure 4.5
Photograph of Tractor on Drying Pad
ENVIRONMENTAL MANAGEMENT

The following environmental issues that require management are as follows:

- Air Quality/Dust;
- Noise and Vibration;
- Traffic;
- Waste and Rubbish;
- Oil and Fuel;
- Water;
- Bushfires;
- Flora (including weeds) and Fauna;
- Visual Amenity; and
- Rehabilitation

To ensure the purpose of the EMP is achieved, the following strategy will be used to assess and each of the environmental issues:

- Objective(s)
- Management Strategies
- Performance Indicator(s)
- Monitoring and Reporting

5.1 Site Dust Management

Dust emissions would be potentially generated from the following sources:

- Site clearing, earthworks and site excavation;
- Screening plant and stacker conveyors;
- Truck movements associated with material haulage;
- Product stockpiles and drying pads;
- Exposed areas; and
- Site rehabilitation works.

<table>
<thead>
<tr>
<th>Objective(s)</th>
<th>Management Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>To minimise the air quality (dust) impact from the site operations</td>
<td>Dust extraction systems to be installed where possible on processing plant.</td>
</tr>
<tr>
<td>To adhere to the relevant provisions of the Environmental Protection (Air)</td>
<td>Regular watering of haul roads during dry weather periods.</td>
</tr>
<tr>
<td>Policy 2008.</td>
<td></td>
</tr>
</tbody>
</table>
• Stringent control of vehicle speeds around the plant and stockpile area.

• Haul roads sheeted with ironstone roadbase to provide good traction and to reduce dust.

• Trucks hauling from site will have covered loads.

• The site is located a significant distance from the nearest residence (1.7km to the landowner’s residence) which provides an effective buffer in terms of potential nuisance dust.

• If required (following a dust complaint), an onsite dust management programme would be established including gravimetric dust monitoring and data collection in accordance with AS3580.10.1:2003.

**Performance Indicator(s)**

• No complaints about air quality

• Total suspended particulate matter: 120 mg/m²/month

• Particulate matter less than 10μm diameter: 150 mg/m³ over 24 hour average

**Monitoring & Reporting**

• Air quality is routinely monitored especially during the dry season and reported to the onsite manager.

### 5.2 Site Noise and Vibration Management

There would not be any significant impacts from vibration on the site environment since no drilling and blasting is required. Minor vibration is anticipated from excavator and loader operation, moving trucks, truck loading and dumping as well as screening.

**Objective(s)**

• To minimise noise and vibration disturbances to residences

• To adhere to the relevant provisions of the Environmental Protection (Noise) Policy 2008.

**Management Strategies**

• Compliance with the designated hours of operation.

• Continuous maintenance of operational equipment.

• Good operating practice, e.g. keeping feed bins full.

• The site is located a significant distance from the nearest residence, which will adequately attenuate any nuisance noise and vibration.

• If required (following a noise or vibration complaint), an onsite noise survey would be carried out to determine the source and any required remediation works such as bunding.
Performance Indicator(s)  • No complaints about noise or vibration quality.  
  • Presence of wildlife in surrounding areas.

Monitoring & Reporting  • Ongoing evaluation of new work areas and the potential impacts these areas may have on the surrounding residences.  
  • Community consulting to ensure that the site operations are not disrupting the surrounding residences.

5.3 Traffic Management

Objective(s)  • To safely and effectively manage traffic movements on site as well as on local roads.

Management Strategies  • Enforce site speed limits, especially around heavily trafficked areas such as the site office and processing area.  
  • Maintain site road conditions to ensure roads are safe for vehicle access.  
  • All vehicles are to give way to heavy vehicles when on site roads.  
  • Vehicles to have a radio for communicating with other vehicles on site.

Performance Indicator(s)  • Nil traffic incidents

Monitoring & Reporting  • All traffic incidents should be reported immediately to the site supervisor.  
  • Traffic performance should be reported on an annual basis.

A Traffic Map is provided in Appendix 1.

5.4 Waste and Rubbish Management

The Gurulmundi Mine site is not on the Environmental Management Register or Contaminated Land Register under the Environmental Protection Act 1994 and the proposed development is considered not to pose any serious impact on the environment. A waste management programme will be developed as part of the SBMP.

Objective(s)  • To manage rubbish in an environmentally sustainable manner.  
  • To ensure stockpiled waste does not contribute to the generation of contaminated stormwater runoff  
  • To adhere to the relevant provisions of the Environmental Protection (Waste) Policy 2000.
Management Strategies

- Garbage bags are kept in the site utility and transported to the appropriate place for disposal. Ensure that all rubbish is to be collected and the site left neat and tidy.
- Where possible, rubbish material will be recycled. This includes drink cans, oils, cardboard and steel cutting edges on ground-engaging buckets and blades.
- Waste storage to be located away from ignition sources.
- Ensure that the removal of waste/overburden is scheduled with the backfilling of previous extraction areas, this will minimise the disturbed area and assist with rehabilitation and stormwater management.
- If waste stockpiles are to be developed, ensure that the appropriate measures are taken to minimise the contaminated stormwater runoff.

Performance Indicator(s)

- No complaints about waste management or water quality

Monitoring & Reporting

- Management to monitor and report on workplaces with respect to waste management.
- Regular review of overburden handling and planning to ensure that appropriate measures are taken to minimise contaminated stormwater.

5.5 Oil and Fuel

Oils and fuel will be delivered to site in a mobile service truck. A detailed oil and fuel handling procedure, including a list of Material Safety Data Sheets (MSDS) will be included as part of the SBMP.

Objective(s)

- To manage oil and fuel in an environmentally sustainable manner.
- To ensure oil and fuel stored on site does not pose an environmental threat.

Management Strategies

- During oil changes, all used oil would be collected and relocated to an oil recycling drum on the service truck.
- A fuel and oil spill kit will be provided for attending to oil and fuel spills and this will be stored on the service truck.
- Oil and fuel storage to be located away from ignition sources.
- Site storage is provided for diesel and is contained in a secure compound with appropriate bunding and safety measures in place.
- Oil and fuel MSDS kept at the storage location.
5.6 Water Management

A Stormwater Management Plan has been developed for the site and incorporates the site stormwater calculations and site procedures for handling high rainfall events. The Stormwater Management Plan is attached in Appendix 3.

| Objective(s) | • To ensure that no contaminated stormwater reports to local waterways.  
|             | • To adhere to the relevant provisions of the Environmental Protection (Water) Policy 2008. |
| Management Strategies | • Ensure that clean stormwater is diverted from operational areas.  
|                     | • Maintain site roads and drains, especially before the wet season.  
|                     | • Install and maintain sedimentation dams in strategic locations to capture sediment.  
|                     | • ‘Push up’ stockpiles prior to high rainfall events.  
|                     | • If required, carry out a water analysis investigation to monitor the quality of water flowing in Juandah Creek. |
| Performance Indicator(s) | • Site storage dams do not overflow during high rainfall events.  
|                        | • No discharge of contaminated water to Juandah Creek. |
| Monitoring & Reporting | • Monitor dam levels on a regular basis especially during the wet season.  
|                        | • Report any overflows to DERM. |

5.7 Bushfire Management

The site maintains a low-medium bush fire risk according to the Taroom Shire Planning Scheme. The site contains a large section of mature bushland around the south and west of the operating areas. However, a Bushfire Management Plan will be completed in conjunction with the appropriate local authorities, including DERM as part of the SBMP.

| Objective(s) | • To minimise the risk of bushfires starting and/or spreading on site. |
5.8 Flora and Fauna Management;
Along with the Rehabilitation Management Plan (Appendix 2) the following procedures are to be used for flora and fauna management

| Objective(s) | Implement management strategies to minimise the potential impact on the native flora and fauna within ML 50179. |
| Management Strategies | Provide water storage locations suitable for native fauna.  
Keep new road clearing to a minimum to reduce the disturbance on the surrounding vegetation.  
When Resource drilling keeping disturbance to a minimum is a key priority.  
The northern operational areas of the site contain less vegetation and therefore have a reduced impact on flora and fauna.  
Rehabilitate with the long term goal of re-establishing the native flora and fauna. |
| Performance Indicator(s) | Keep a log of native fauna sightings around the operating areas.  
Compliance with objectives set out in the Rehabilitation Management Plan with respect to disturbed areas. |
| Monitoring & Reporting | Monitor and report the flora and fauna impacts on site and review the management strategies on a case by case basis. |
5.9 Amenity and Character of Landscape

Works have been implemented to ensure that the visual amenity is acceptable from the access road leading up to the site including a new site car park and office building. Existing operations cover approximately 15% of the two properties (Lot 11 & 34). The new ML55007 and 55008 also cover a small portion of Lot 10 FT142; operations near the front gate of the Bailey’s property on ML55008 will be largely shielded by vegetation. ML55017 will be located adjacent to the existing ML55007 therefore no additional amenity issues will arise. A large portion of the surrounding land is owned by the site landowner and is used for grazing purposes.

The landscape character of the locality is undulating and vegetated in parts and is predominantly rural. The character of the land is also dominated by bushland with views and vistas across the rural landscape. The southern part of the operations are located on elevated hills and ridgelines that remain largely vegetated whereas the northern areas are lower lying and have been extensively cleared for pasture. Significant discussions have been held with the landowner to determine the final character of landscape to be left after mining is complete. Due to the land being primarily used for grazing purposes the most advantageous final landscape would be grazing land with minimal tree cover. Trees should be planted in specific areas to provide shade for cattle.

| Objective(s)                          | • To minimise the visual amenity impacts on the local community.  
|                                       | • To ensure the final land use is compatible with the surrounding land uses.  
| Management Strategies                 | • The site is well situated in terms of visual amenity due to the surrounding open forest vegetation and significant distance from major roads and residences. The only residence of note in the surrounding area is the landowner's residence at a distance of 1.7km from the operations.  
|                                       | • Site vegetation to the south of the operations is protected by State Forest and therefore will remain to provide a visual buffer.  
|                                       | • Operational pits are rehabilitated by backfilling and contouring to maintain consistency with the character of the existing landscape.  
| Performance Indicator(s)              | • No visual amenity complaints  
| Monitoring & Reporting                | • Community consultation is regularly sought to ensure that the operations are not causing any visual amenity issues.  

November 2015
Environmental Management Plan
5.10 Rehabilitation Management

Amcol intends to carry out rehabilitation as mining progresses to reduce erosion and to minimise the overall disturbed area. Some remnant areas of the mine (western and northern pits) are currently undergoing continual rehabilitation works due to unsuccessful rehabilitation efforts during drought conditions.

It is proposed that rehabilitation of the operating areas be undertaken using the following philosophy;

- Topsoil is removed and will be stockpiled and maintained until its use for rehabilitation.
- At the completion of mining in the area the waste/overburden will be backfilled into the pit and contoured to an acceptable gradient.
- The stockpiled topsoil will be spread over the waste/overburden material. Site infrastructure areas and roads will require ripping before topsoil placement.
- Revegetation using native grasses to suit the character of landscape defined as grazing land.

A detailed Rehabilitation Management Plan including an updated security bond calculation has been included in Appendix 2.

<table>
<thead>
<tr>
<th>Objective(s)</th>
<th>• To successfully rehabilitate after mining works have been completed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Strategies</td>
<td>• Ensure that ongoing rehabilitation is carried out to minimise the overall disturbed area.</td>
</tr>
<tr>
<td></td>
<td>• Regularly monitor the total disturbed area of the site to ensure targets in the Plan of Operations are met.</td>
</tr>
<tr>
<td>Performance Indicator(s)</td>
<td>• To successfully rehabilitate the site after the completion of mining works.</td>
</tr>
<tr>
<td>Monitoring &amp; Reporting</td>
<td>• The rehabilitation must be monitored on an annual basis as part of the Plan of Operations.</td>
</tr>
</tbody>
</table>

5.11 Site Based Management Plan

A Site Based Management Plan (SBMP) has been prepared for the existing operations on site. The SBMP will be referred to for everyday operations and in case of emergencies. Current SBMP will be stored in the site office and a copy can be obtained from the operator.

5.12 Revised Security Deposit

To account for the increased disturbance on site, it was necessary to calculate the Security deposit. The calculations, based on current and proposed disturbed areas, are shown in Appendix 4. The Security Deposit is calculated at $496,000.00. The Plan of Operations is due for upgrading when the Mining Leases are granted in 2019.
6 OPERATIONAL MANAGEMENT

6.1 Hours of Operation

Generally the mine operations will be generally within daylight hours but the proposed operating hours are as follows;

- 7:00 am – 4:00 pm Monday to Friday (Approx. 250 days per year).
- 7:00 am – 12:00 pm Saturday (Approx. 40 days per year).
- 12:00 pm – 4:00 pm Saturdays (Maintenance Only).
- No operating on Sundays or Public Holidays.

6.2 Personnel

It is proposed that up to five personnel will be working on site at any particular time. These may be the site foreman (operating supervisor; machinery/processing plant), site equipment operator (excavator/dozer), screen operator, road truck operator and an additional person such as an equipment service contractor.

6.3 Fuel and Oils

Fuel is supplied by an approved supplier and delivered by a mobile fuel truck. The fuel storage tank on site is appropriately bunded and contains the required safety features. A mobile service truck will also carry engine and hydraulic oils which will be checked each shift. An emergency spill kit will be kept on site to aid in the case of a fuel or oil spill.

6.4 Mitigation Strategies

The following mitigation strategies will be implemented at the site operations:

Addressing complaints or environmental incidents:

- All environmental incidents to be reported to DERM within 24 hours; and
- Any complaints from neighbours to be recorded and reported to DERM and appropriate action taken.
REFERENCES


APPENDIX 1

Site Plans