

# Memorandum

---



To: Department of State  
Development, Infrastructure,  
Local Government and Planning

Date: 13 May 2022

Ref: Requirement Notice Response.docx

Subject: Ensham - Life of Mine Extension Zones 2 and 3  
Response to Requirement notice dated 29 March 2022

---

## CONFIDENTIALITY

This document is confidential and may contain legally privileged information. If you are not a named or authorised recipient you must not read, copy, distribute or act in reliance on it. If you have received this document in error, please telephone our operator immediately and return the document by mail.

This document has been drafted in response to a Requirement Notice (WR21/35440) from the Department of State Development, Infrastructure, Local Government and Planning (DSDILGP) to the Ensham Joint Venture Partners (the Applicants) dated 29 March 2022. The Requirement Notice requests further information on the application for a regional interests development approval (RIDA) for a resource activity in regards to the Ensham Life of Mine Extension - Zones 2 and 3 Project. The application seeks approval to undertake the resource activity within the priority agricultural area (PAA) and strategic cropping area (SCA) located within the Central Highlands local government area.

The following table provides responses to each of the issues raised in the Requirement Notice including locations of where referenced material can be located, where applicable.

Reference	Issue	Action	Response
1	The legend for Figure 12 in the application form indicates dryland cropping. This is inconsistent with other parts of the assessment materials that state that this area is use for grazing modified pastures.	Confirm and update relevant assessment application material.	Confirmed this area is used for grazing modified pastures. The figure has been updated and provided as Figure 4 in the Application Form.
2	Section 4 of the RPI Act Assessment Application Form (application form) states that areas for Mining Lease (ML) 73026 is 2,766 hectare (ha) and ML 70365 is 26 ha, whereas ML 73026 is 26 ha and ML 70365 is 2,766 ha.	Confirm and update relevant assessment application material.	Section 4 of the Application Form has been updated to reflect the correct areas.
3	Section 4 for the application form details that the existing Ensham Mine operates under Environmental Authority (EA) EPML00732813. The EA was not provided to confirm that it covers the various MLs the subject of the application.	Provide an extract of the EA to confirm the holder of the EA, its currency and coverage of MLs detailed in the assessment application.	An extract of the of the current EA has been provided in Appendix A of the Application Form to confirm the holder of the EA, its currency, and coverage of MLs.
4	Section 4 for the application form details that the Ensham Mine operates under seven MLs. However, no supporting material was provided to confirm the ownerships of these MLs.	Provide extracts of the listed MLs to confirm that these cover the operation of the existing and proposed activities at the Ensham Mine.	An extract from the current Ensham EA (refer to Appendix A of the Application Form) shows the seven MLs that exist for the Ensham Mine, and, the ML ownership. Zone 2 partially includes existing leases ML 70326, ML 70365, and ML 7459. Zone 3 partially includes existing leases ML 7459 and ML 70366 (refer Figure 1 of the Application Form).

Reference	Issue	Action	Response
5	Section 5 of the application form states the applicant is Ensham Joint Venture. However, no supporting material was provided to confirm this entity.	Provide supporting materials to confirm the entity Ensham Joint Venture, for example extract copies of the partnership agreement and articles of association, or other appropriate documents etc.	<ol style="list-style-type: none"> <li>1) The Applicants for the RIDA is Bligh Coal Limited (ACN 010186393), Idemitsu Australia Pty Ltd (ACN 010236272) and Bowen Investment (Australia) Pty Ltd (ACN 002806831) who are the current EA holders; and</li> <li>2) The land owners are also Bligh Coal Limited (ACN 010186393), Idemitsu Australia Pty Ltd (ACN 010236272) and Bowen Investment (Australia) Pty Ltd (ACN 002806831) as per the title searches included in the Application Form as Appendix B.</li> </ol> <p>These entities were collectively described as the Ensham JV for convenience in the application and RIDA supporting documentation. The Applicants are listed on the EA extract noted in Issue 4.</p>
6	<p>Section 1 of the Regional Interests Development Approval Supporting Document (supporting document) details company structure and corporate relationships between various corporate entities. This Section details that the ACN for Idemitsu Australia Resources Pty Ltd is the same as Idemitsu Australia Pty Ltd. It is unclear whether Idemitsu Australia Resources Pty Ltd is the same entity as Idemitsu Australia Pty Ltd.</p> <p>Idemitsu Australia Pty Ltd is detailed in many parts of the assessment application as one of the Ensham Joint Venture partners and the Applicant. It is unclear whether Bligh Coal Limited Pty Ltd a subsidiary (partially or wholly owned) of Idemitsu Australia Pty Ltd.</p>	Confirm and update relevant assessment material.	<p>Idemitsu Australia Resources Pty Ltd changed its name to Idemitsu Australia Pty Ltd on 5 October 2021. The Certificate of Registration on Change of Name and accompanying Idemitsu Australia Pty Ltd letter are provided as Attachment A and Attachment B of this memorandum. Section 1 of the RIDA Supporting Document has been updated to reference Idemitsu Australia Pty Ltd.</p> <p>Bligh Coal Limited is a wholly owned subsidiary of Idemitsu Australia Pty Ltd.</p>

Reference	Issue	Action	Response
7	Section 1.1 of the supporting document details the proposed project activities. These activities do not include the expansion of open cut mining activities. However, spatial data provided detail a future open cut pit at the northern end of Lot 31 CP864573 outside of Zone 2 (Refer to image below).	Confirm if the proposed activities include the expansion open cut pits including one at the northern end of Lot 31CP864573. Confirm and update relevant assessment material.	The proposed activities do not include any future open cut activities and the inclusions of that activity in the spatial data was erroneous. That data has been removed from the spatial package.
8	Section 1.1 of the supporting document details the footprint areas of the proposed underground mining activities as 346 ha in Zone 2 and 175 ha in Zone 3. However, the spatial data details that the footprint of the underground mining activities in Zone 2 is approximately 117 ha, and in Zone 3 approximately 60 ha, with an overall total area of approximately 177 ha.	Confirm and update relevant application material.	The 117 ha and 60 ha for Zones 2 & 3, respectively, represent the projected actual underground mining panel areas. The 346 ha and 175 ha for Zones 2 & 3, respectively, include the mining areas and the areas between the panels, which are hence larger in area than just the underground mining panels alone, and act as a conservative approach.
9	Section 1.1 of the supporting document details that the mining technique for the expansion of the underground mining activities will be the continuation of bord and pillar mining. This technique is often referred to as first workings of a coal deposit. Section 4.2 in Appendix A details that an extension to MLs 7459, 70326 and 70365 to 2050 would be sought to accommodate additional underground mining.	(a) Confirm the long-term plans for underground mining up to 2050 and if the proposed bord and pillar mining the subject of the assessment application is intended to be first workings with subsequent workings to remove the pillars at a later date.	The existing mining leases which include Zones 2 & 3 will require renewal in 2028 to allow ongoing underground mining as per the mine schedule to 2029 (as shown in Figure 4 of the RIDA Supporting Document), and, open cut rehabilitation works currently underway. The existing portals to the current underground operation would also allow access to Zones 2 and 3. These portals are located in Pit C and Pit D where open cut mining has ceased. The open cut rehabilitation (which includes Pit C and Pit D) would continue out to approximately 2050 and does not form part of the scope of this application.

Reference	Issue	Action	Response
		(b) Update relevant application material as required.	The bord and pillar mining technique does not involve workings where pillars are removed under the floodplain as per the approved EA and will remain as a permanent feature. Section 1.1.1 of the RIDA Supporting Document has been updated to confirm this approach.
10	The third row of Table 3 of the supporting document details that Ensham is an eligible person. However, no supporting materials have been provided that Ensham is the holder of the EA or relevant resource authorities.	Provided extracts of: (a) the EA to confirm the holder of the EA, its currency and coverage of MLs detailed in the application material (b) the listed MLs to confirm that these cover the operation of the existing and proposed activities at the Ensham Mine.	Please refer to Issue 4 response.
11	Section 4.1 of the supporting document details priority agricultural land use (PALU) identification and states that a portion of Zone 2 may qualify for land as used for a PALU – irrigated pastures. It is stated, based on advice from the Superintendent Environment for the Ensham Mine, that the area mapped in Zone 2 as irrigated pasture has been utilised for cattle grazing on Leucaena (a woody fodder plant) since 2011, and has not been irrigated. However, apart from two satellite images taken in 2017 and 2019 (provided as Figures 8 and 9), no other supporting information such as site photographs, site	Provide a table and with accompanying narrative and evidence to support the view that no PALU, as defined in Section 8(2) in the Regional Planning Interests Act 2014), has been undertaken in this area or other areas in Zones 2 and 3 for the period 2012-2021 (Refer to Schedule 2, Section 1(1) in the Regional Planning Interests Regulation 2014).	Tables and accompanying discussion are provided in updated Section 4.1 of the RIDA Supporting Document.


Reference	Issue	Action	Response
	management plans, site inspection or observation records from staff at Ensham Mine, or forage frequency mapping is provided to confirm that no cultivation or cropping activities were undertaken during the period of 2012 to 2021.		
12	Figure 9 provided in the supporting document includes Dryland cropping in its legend. However, this is inconsistent with Issue 13 above.	Confirm and update relevant assessment application material.	Assumption is that Issue 12 text: "inconsistent with Issue 13 above" is in fact referring to Issue 1. On this basis, it is confirmed that this area is used for grazing modified pastures. Figure 9 has been removed and PALU Satellite Imagery for 2017 now found in Table 10 of the RIDA Supporting Document.
13	Figure 10 provided in the supporting document includes priority agricultural land use (irrigated cropping) in its legend. However, this is inconsistent with Issue 13 above	Confirm and update relevant assessment application material.	Assumption is that Issue 13 text: "inconsistent with Issue 13 above" is again referring to Issue 1. On this basis, it is confirmed that this area is used for grazing modified pastures. Figure 10 has been removed and PALU Satellite Imagery for 2019 now found in Table 12 of the RIDA Supporting Document.
14	Figure 11 provided in the supporting document (a) is titled as Figure 12 in the legend (b) includes Dryland cropping in its legend, which is inconsistent with Issue 13 above.	Confirm and update relevant assessment application material.	Assumption is that Issue 14 text: "inconsistent with Issue 13 above" is referring to Issue 1. It is confirmed that this area is used for grazing modified pastures and not dryland cropping. Figure 11 has been removed and the above changes provided in Figure 7 of the RIDA Supporting Document.
15	Figure 12 provided in the supporting document includes Dryland cropping in its legend. However, this is inconsistent with Issue 13 above.	Confirm and update relevant assessment application material.	Assumption is that Issue 15 text: "inconsistent with Issue 13 above" is referring to Issue 1. It is confirmed that this area is used for grazing modified pastures and not dryland cropping. Figure 12 has been removed and the above changes provided in Figure 8 of the RIDA Supporting Document.

Reference	Issue	Action	Response
16	Section 5.2 provided in the supporting document details that the lots the subject of the assessment application is operated as a single agricultural enterprise. However, the nature, scope and extent of the agricultural enterprise is not discussed.	Confirm and update relevant assessment application material.	The Nogoja Pastoral Company (the Company) operates on Zones 2 and 3. The Company is owned by the Applicants. The Company is a commercial entity running cattle across land which includes areas covered by mining leases. Areas where running cattle will not interfere with mining operations are used as part of the grazing operation. There are some minor areas of dryland cropping across the "Duck Ponds" property, however cropping is not currently or historically undertaken within Zones 2 and 3.
17	Section 1 of the application form provides the real property descriptions of land the subject of the application. The lots on plan provided detail the land on which the proposed activities will be located on or underneath. Figure 13 of the supporting document supports that information. However, this is insufficient for the extent of the 'property' the subject of the application (Refer to Schedule 1 Dictionary of the Regional Planning Interest Act 2014 for definition of 'property'), for example, it does include Lot 1 on RL203458 or Lot 34 on RP804576.	Confirm and update relevant assessment application material.	<p>Ensham has confirmed that the property identified in Section 1 of the application form is owned by common owners (i.e. the Applicants) and is managed as a single agricultural enterprise. This Issue has been further addressed in the Issue 16 response.</p> <p>In addition, Figure 12 (assumed to be erroneously referred to as Figure 13 in Issue 17) of the RIDA Supporting Document has been updated to include all lots that form the property in question. Figure 12 has been removed and the above changes are provided in Figure 8 of the RIDA Supporting Document.</p>
18	Section 6.1 of the supporting document details that flare exclusion zones will be restored to the pre-activity condition. However, no detail is provided on the pre-activity condition or reference made to where such information is provided.	Confirm and update relevant assessment application material.	<p>Post-mining, each flare structure and associated equipment will be decommissioned and removed from site. Each exclusion area will be rehabilitated in accordance with the current EA (Appendix 3 – Rehabilitation Success Criteria).</p> <p>It is confirmed that there will be a permanent impact to SCA associated with one flare structure (Flare 3) within Zone 3 as shown in Figure 3 of the Application Document. This permanent impact will be limited to ground disturbance associated with flare removal and reinstatement (approximately 0.07 m<sup>2</sup>) as provided in Section 6.1 of RIDA Supporting Document.</p>

Reference	Issue	Action	Response
19	Section 1.1 in Appendix C of the supporting document states that “this level of subsidence (less than 10 mm) and compared to natural soil movement of approximately 50 mm (IESC, 2015), subsidence will not impact land resources for the Project. Accordingly, subsidence is not considered further in this Assessment”. However, this is not included in the supporting document itself.	(a) Provide adequate explanation to support this statement in the supporting documents (b) Update relevant assessment application material to inform that impacts from subsidence is not considered in the assessment of surface disturbance.	The modelling results indicated that low levels of subsidence (less than 35 mm) are predicted for the Project. Real-Time Kinematic Global Positioning System monitoring indicates actual measured subsidence levels of less than 10 mm exist above underground mining operations which are consistent with the modelling prediction. Given this level of subsidence compared to natural soil movement of approximately 50 mm (IESC, 2015), subsidence will not impact land resources for the Project. Section 5.3.1 in the RIDA Supporting Document has been updated to include the above explanation.
20	Figure 10 in Appendix C of the supporting document is titled ‘Soil Unit Map’.	Confirm whether Figure 10 should be titled ‘Soil Map Units’ and update the Figure 10 as required.	Updated to ‘Soil Map Units’ and provided as Figure 10 in Appendix C (Land Resources Report) of the RIDA Supporting Document.
21	The photograph provided in Appendix B (Detailed Profile Descriptions) to Appendix C of the supporting document for detailed site BH16 appears to be of Leucaena growing in Zone 2. However, there is no data or geo-stamp on this photograph to confirm when it was taken and as such it does not assist in the identification of land uses undertaken in that area.	Confirm the date the photograph was taken and if it is of Leucaena growing in Zone 2, the subject of PALU identification detailed in Section 4.1 of the supporting document.	The photograph was taken on 19 November 2021 and is of the Leucaena growing in Zone 2. This photo with coordinates along with further supporting information regarding PALU has been included in Section 4.1 of the RIDA Supporting Document.



Reference	Issue	Action	Response
22	Section 4.8 in Appendix E (Subsidence Management Plan) of the supporting document details mitigation measures that may be required if a significant detection of subsidence occurs. There is insufficient information to consider if these measures are appropriate.	Confirm what significant detection means and provide mitigation strategies and measures that detail actions and compensation (if required) to ensure there is no agricultural loss in affected areas, in terms of capacity, productivity and area used.	<p>“Significant detection” as discussed in Section 4.8 of the Subsidence Management Plan (located in Appendix E of the RIDA Supporting Document) refers to measured subsidence that exceeds the trigger levels listed in Table 4.1 in Section 4.7 of the Subsidence Management Plan.</p> <p>The mitigation strategies and measures are discussed in Section 4.7 (including compensation agreements) and Section 4.8 page 30 which says:</p> <p>“Where surface levels indicate a difference in elevation greater than the trigger levels in Table 4-1 and likely as a result of mining activities, an investigation will be undertaken by Ensham. Where the investigation supports that the elevation change is associated with mining, then a detailed investigation will be completed by a suitably qualified person and, where warranted, an investigation report will be prepared and submitted to the Administering Authority and to the land owner/land occupier. ”</p>
23	The spatial data provided for the underground mining activities details that these activities encroach subterranean areas under both Lot 06TT309 and a road reserve parcel adjacent to Zone 2. This encroachment occurs in eight locations. These activities also were identified to exceed the boundary of Zone 2 in two other instances (Refer to images below).	Confirm and update relevant assessment application material.	The spatial data has been updated to reflect actual underground mine workings for Zone 2 are within the Zone 2 boundary. The boundaries are presented below and the updated spatial data has been attached with this application.

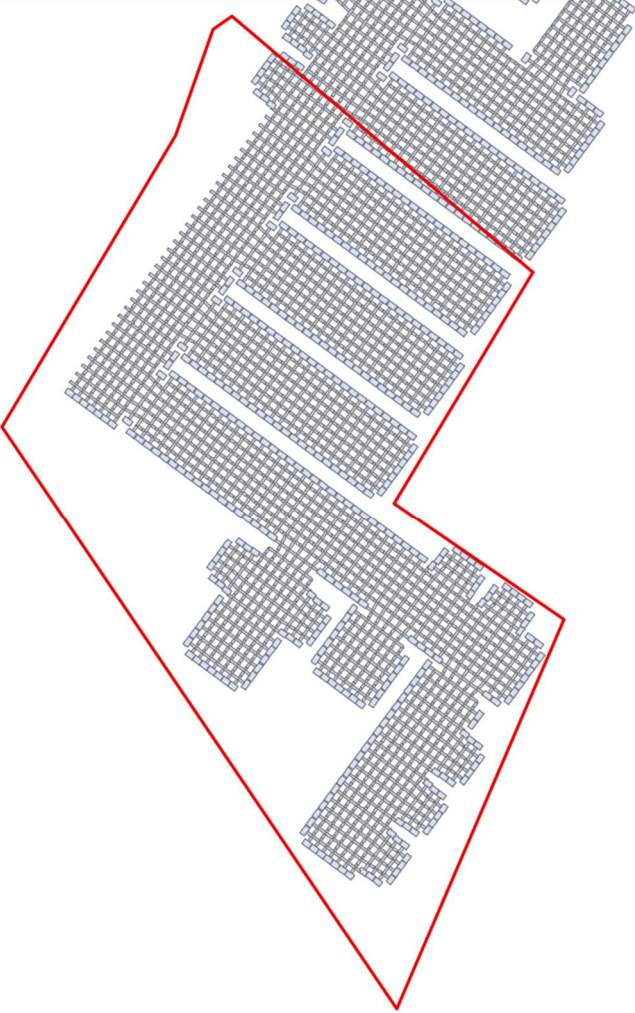
Reference	Issue	Action	Response
			
24	The application material does not include a plan which clearly demonstrates the location of the proposed activities within the areas of regional interest, or coordinates.	Provide and update relevant assessment application material.	Figure 5 and Figure 6 of the RIDA Supporting Document include flare locations and have been updated to show the underground mining areas in the PAA and SCA.

Reference	Issue	Action	Response
25	<p>The application has not demonstrated how permanent impacts will be avoided in accordance with the RPI Statutory Guideline 03/14. In section 6.1 of the supporting document, it states that the impact of the flares will not be permanent as these impacts can be restored to the pre-activity condition. In section 6.1.1 it then states that post mining, each flare structure will be rehabilitated in accordance with the EA. This is inconsistent with the requirements of the RPI Statutory Guideline 03/14, which requires 'Restoration' (defined in RPI Statutory Guidelines 09/14) for areas contained within the SCA. There is only one Flare identified within SCA (Flare 3) shown on Figure 3 of the supporting document, and it is described as disturbing a small area of SCA (0.16 ha). As the strategic cropping land (SCL) status has not been challenged, this small area of SCA will require 'Restoration', and not rehabilitation.</p> <p>'For land to be restored to pre-activity condition, it will require an adequate restoration to the</p>	<p>Should restoration be required, amend section 6.1.1 to include the 'restoration' of Flare 3 in accordance with the RPI Statutory Guidelines 03/14.</p>	<p>Restoration will not be undertaken for SCA associated with a single flare location (Flare 3) within Zone 3 as shown in Figure 3 of the Application Document as this will be permanent impact. This permanent impact will be limited to ground disturbance associated with flare removal and reinstatement (e.g. approximately 0.07 m<sup>2</sup>) as included in Section 6.1 of the RIDA Supporting Document.</p>

Reference	Issue	Action	Response
	<p>former or original condition of the land, including the productive capacity of the land.</p> <p>It does not simply mean 'revegetated', 'rehabilitated' or 'reclaimed' which are all commonly used terms under other state government permit and approval processes.</p> <p>Restoring the land means that the land is not only returned to its pre-activity use but that it is also returned to its pre-activity productive capacity or potential productive capacity.'</p> <p>'In the context of SCL, the productive capacity refers to the intrinsic capability of the land and soil to store and supply the water and nutrients required to sustain crops in the future.</p>		
26	<p>Underground bord and pillar mining also has the potential to cause permanent impacts on SCL, therefore, accurate management and detection measures must be implemented to ensure that there is limited subsidence and the SCL is restored to its pre-activity condition. While many of the measures proposed in the Subsidence management plan (management plan) may be adequate for rehabilitation requirements under the EA, there is a concern that some of the measures are inadequate to detect, monitor or manage permanent impacts on the</p>	<p>Should restoration be required, provide a restoration plan in accordance with the requirements of the RPI Statutory Guideline 09/14. Given that the SCL status has not been challenged, it will need to include considerations of subsidence management and address any resulting</p>	

Reference	Issue	Action	Response
	<p>SCL. Several issues have been identified in the information provided by the proponent relating to restoration associated with subsidence and erosion this includes:</p> <ul style="list-style-type: none"> <li>• the accuracy of detection used to measure any changes in elevation (more accurate methods are now available)</li> <li>• the use of trigger levels for subsidence management to be based on inaccurate LiDAR monitoring (Table 4-1)</li> <li>• commitment in the management plan to rehabilitate (not restore) any SCL that has been impacted by underground mining</li> <li>• the lack of monitoring/management for soil erosion as a result of any surface elevation change-these may be considered an erosion event, and may warrant sediment and erosion control</li> <li>• limited detail to establish/confirm the pre-activity condition of the soils within the SCA.</li> </ul> <p>The restoration should be broad enough to include the nature and risk of any predicted impacts on the SCA (e.g., any associated impacts caused by subsidence and soil erosion, if relevant), a monitoring program and</p>	<p>soil erosion management/monitoring (within the SCA) and include restoration criteria that will satisfy the requirements of the RPI Act Statutory Guidelines.</p>	<ul style="list-style-type: none"> <li>• The accuracy of the LIDAR detection method is +/- 50mm, which is an acceptable accuracy range for broad scale monitoring. The accuracy of the RTKS GPS detection method is +/- 5mm, which provides a higher level of accuracy than LIDAR.</li> <li>• The LIDAR trigger level in Table 4-1 of the Subsidence Management Plan has been updated to greater than 0.1 m. Given the natural movement of the soil (50 mm, IESC, 2015) and accuracy of LIDAR (+/-50 mm), this is the most stringent value able to be applied and is suitable for indication of potential subsidence.</li> <li>• Based on predicted subsidence values for Zones 2 &amp; 3 as per the Subsidence Report (which has been peer reviewed – Appendix F of the RIDA Supporting Document) and actual monitoring data outlined in the Subsidence Management Plan (which has been peer reviewed – Appendix G of the RIDA Supporting Document), it is not expected that subsidence levels for Zones 2 &amp; 3 would exceed trigger values and impact SCL. As such, restoration is not expected to be required.</li> <li>• As per Section 4.8 of the Subsidence Management Plan, the monitoring of soil erosion associated with subsidence will be undertaken through the subsidence monitoring and if trigger levels are exceeded, an investigation will be initiated. The results of that investigation will determine management measures including erosion management.</li> <li>• The SCA status and pre-activity condition of the soils has not been assessed as restoration of that area is not expected to be required as noted in bullet point 3 above.</li> </ul>

Reference	Issue	Action	Response
	restoration criteria, among other details listed in the RPI Statutory Guidelines 09/14. While much of the information submitted in the assessment application goes to addressing these requirements (e.g., the land resource survey and subsidence management plan), it is evident that there are gaps and errors within these reports that require amendment to ensure compliance with restoration standards.		Restoration is not expected to be required as noted in bullet point 3 above and there is no indication, based on the peer reviewed Subsidence Report which is supported by real time subsidence monitoring data, that SCA will be impacted from surface elevation changes and/or erosion due to subsidence.
27	'Negligible impacts' are mentioned frequently throughout the assessment application material (including the management report).	Update the assessment application material to include a definition of 'negligible impacts.'	The definition of 'negligible impacts' is 'no material impact' and documentation has been updated accordingly.
28	The spatial information data provided for the underground component of the bord and pillars for Zone 3 appears to extend into the adjoining reserve.	Clarify whether the spatial data is incorrectly displaying encroachment into the adjoining reserve.	Spatial data has been updated to reflect that the underground mine workings for Zone 3 are within the ML boundary and do not extend into the adjoining reserve. The boundaries are presented below and the updated spatial data has been attached with this application.

Reference	Issue	Action	Response
			

Reference	Issue	Action	Response
29	Figure 5 of Appendix C Soil and Land Resource Assessment shows the location of 'BH01' twice in Zone 2, once in the SCA part of Soil Map Unit 2A, and secondarily in the non-SCA component of the unit. The soil descriptions and photographic evidence provided in the supporting document appear to suggest that BH01 is more likely in the non-SCA component of Zone 2, however no GPS coordinates have been provided	Confirm the location of BH01 and confirm whether this site has been used to assess land suitability for the SCA component of Zone 2 within Soil Map Unit 2A. Note: Should restoration be required, further scientific evidence to confirm the pre- activity condition of the SCA component of zone 2 is likely to be required.	BH01 confirmed to be within the non-SCA portion of Zone 2. Figure 5 has been updated to show one location of BH01 and included in Appendix C (Land Resources report). GPS coordinates have been provided in Appendix B of the Land Resources report.
30	Section 3.7.1.1 Soil classification of Appendix C indicates that Hansen Consulting found "Endohypersodic, or Epipedal Black, Grey or Brown Vertosols which occur at the southern boundary of Zone 2 and across the centre and north of Zone 3" while the most recent Land Resource report does not indicate the presence of any Vertosols in Zone 3.	Clarify the differences between the two reports, as the Hansen report describes soils that are more consistent with soils that would have a higher land suitability classification that of C2. Note: This will be an important clarification, should restoration be required.	The areas of the southern boundary of Zone 2 and across the centre and north of Zone 3 were not subject to soil sampling and soil classification by the Hansen investigation and soils mapped in those areas are based on a desktop study. The most recent Land Resources report includes boreholes in these areas, which is what the soil classification and mapping are based on.
31	Section 5.1 of Appendix C Soil and Land Resource Assessment indicates that the suitability framework used to assess land suitability-in Zones 2 and 3 for the Ensham extension application-was	Review the presentation of the land suitability assessment report to clearly show the steps taken and inputs used to	Table showing sub-classes assessment has been added to Appendix E of the Land Resources report. Restoration works are not proposed as discussed in Issue 26. The SCL status is not being challenged or assessed. As the land suitability and ALC classification were based on collected data, there will be some inconsistencies with mapped SCL areas.



Reference	Issue	Action	Response
	<p>the Suitability Framework for the Inland Fitzroy and Southern Burdekin the results of which have been presented in Appendix E. From the results provided it is unclear how limitation sub-classes were calculated (e.g. the Moisture (M) limitation and wetness (W) limitations for soil map unit 1) and subsequent suitability class and Agricultural Land Class (ALC). The report states that the Soil Map Unit 1 (Brown Vertosol) is Class 4 for cropping, but later states that this map unit has an ALC of A2 (A2 appears to be an error, and the text indicates that it should be A1, or in some parts of the report C2). As stated above, more evidence will be required to confirm the pre-activity condition of the SCA component of Map Unit 2A (around the BH01 discussed above, mapped as C2, not A2).</p>	<p>arrive at a final suitability and ALC.                      Clarify the inconsistency of conclusions regarding land suitability, ALC and SCL status for Soil Map Unit 1 and part of Soil Map Unit 2A in Zone 2, and for Zone 3 that fall within the SCA.                      Note: If restoration is required, this will be important for the SCA component.</p>	
32	<p>Several recurrent issues have been identified with the detailed site descriptions provided in Appendix B of the Soil and Land Resources Assessment Report, including:</p> <ul style="list-style-type: none"> <li>• poor site photographs where either soil, depth, site board or all three cannot be clearly seen.</li> <li>• majority of sites report sampling depths that cross horizon</li> </ul>	<p>As a minimum, the detailed soil descriptions should be revised to address the above concerns for the boreholes within the SCA, but preferably all sites if this report is to be re-submitted as part of the RPI Act approval</p>	<p>Identified issues have been addressed where possible (e.g. photos can't be retaken) in Appendix B of the Land Resources report.</p>

Reference	Issue	Action	Response
	<p>boundaries or depths not contained within that horizon.</p> <ul style="list-style-type: none"> <li>• coarse fragment abundance and lithology are not reported.</li> <li>• slopes shown as a range rather than a single value and slope determination method is not given.</li> <li>• surface characteristics (e.g. surface coarse fragments, surface condition) have not been reported.</li> <li>• location (GPS) information not provided.</li> </ul> <p>Issues identified specific sites include:</p> <ul style="list-style-type: none"> <li>• BH16 – Classification reported as both a Crusty Brown Dermosol and a Crusty Brown Vertosol. Site is located in Soil Map Unit 1 (Crusty Brown Vertosol).</li> <li>• BH03 – no reason given for ending hole at 40cm.</li> <li>• BH05 and BH11 – textures show wide variation. Light medium clay over sandy clay loam over medium clay. Reason for drop then increase in texture not discussed.</li> <li>• BH06 - no reason given for ending hole at 20cm, unlikely to be a Rudosol due to presence of B horizon.</li> <li>• BH07 – Reason for termination appears to be underlying rock but</li> </ul>	<p>process. The GPS coordinates should also be provided, as a minimum for the SCA detailed and check sites.</p> <p>Note: This will be required within the SCA, should restoration be required.</p>	

Reference	Issue	Action	Response
	<p>unlikely to be a Rudosol due to presence of B horizon. Missing description of depth between 20 and 40cm.</p> <ul style="list-style-type: none"> <li>BH12 – Incorrectly identified as a Red Dermosol</li> <li>the majority of check sites do not contain sufficient evidence to support decisions made.</li> </ul>		
33	<p>The application states that the Subsidence Report and the Subsidence Management Plan (management plan) have been peer reviewed. Peer reviews are not include in the assessment application material.</p>	<p>Provide a copy of the peer reviews.</p>	<p>The peer review letters have been provided as Appendix F and Appendix G in the RIDA Supporting Document.</p>
34	<p>It is recommended that subsidence monitoring be continued for five years after mining completion. This time period is similar to requirements placed on other bord and pillar underground mining operations that have required approvals under the RPI Act.</p>	<p>Amend the management plan to include a subsidence monitoring period of five years post-mining and delete the other options.</p>	<p>The Subsidence Management Plan has been updated to reflect that Subsidence monitoring would be continued for five years after mining completion and other options removed – refer Section 4.3.3, page 26 of Subsidence Management Plan.</p>

Reference	Issue	Action	Response
35	The management plan includes LiDAR measured subsidence investigation trigger values with large margins of error ( $\pm 0.5$ m for rigid soils, and $\pm 0.4$ m for non-rigid soils).	Provide scientifically based evidence to explain these discrepancies that are inconsistent with the movement of non-rigid and rigid soils (outside of flooding events, where soils on a floodplain are likely to move). Alternatively (preferably), remove reference to them from the supporting information of the application, and utilise more reliable/scientifically robust trigger values for vertical subsidence, that could also consider mining induced change in current tilt of the land.	Reference to natural variation in soil surface levels over time has been removed from the Subsidence Management Plan.  The Subsidence Management Plan trigger value for LIDAR has been updated to greater than 0.1 m for all soil types. LIDAR monitoring will be undertaken annually and LIDAR surfaces will be compared on an annual basis and assessed against the trigger value of greater than 0.1 m as shown in Table 4-1 – Monitoring Schedule, on page 29 of the Subsidence Management Plan.
36	The management plan proposes the continued use of annual LiDAR surveys to measure subsidence in areas not represented by RTK GPS monitoring poles. It is recommended that more accurate and easily repeatable methods of measuring subsidence be investigated for the broader area (especially where mining is occurring).	Use accurate and site-wide measurements to detect changes in surface elevation due both to natural variation and subsidence (e.g. RTK Drone LiDAR).	A total of nine RTK poles will be installed within Zones 2 & 3 where six will be located above where underground mining is scheduled to occur, and three will be located above a non-mining area (i.e. a control site) as stated in Section 4.2 of the Subsidence Management Plan. The pillar design criteria will remain similar to the current underground operation and accordingly similar levels of subsidence are predicted based on the peer reviewed Subsidence report.  LiDAR will be used as broad scale monitoring system in conjunction with the Real Time Kinematic GPS system. The LIDAR trigger value will be greater than 0.1 m movement when LIDAR surfaces are compared on an annual basis as shown in Table 4-1 – Monitoring Schedule, shown on page 29 of the Subsidence Management Plan.

Reference	Issue	Action	Response
37	The management plan specifies that a suitably qualified fish passage biologist will be responsible for investigating changes in elevation that is associated with underground mining. It is recommended that a subsidence specialist would be more qualified to investigate changes in elevation due to underground mining	Clarify, correct and/or update the management plan.	Page 30 of the Subsidence Management Plan has been modified to state a suitably qualified person be responsible as per the extract below: “Where surface levels indicate a difference in elevation greater than the trigger levels in Table 4-1 and likely as a result of mining activities, an investigation will be undertaken by Ensham. Where the investigation supports that the elevation change is associated with mining, then a detailed investigation will be completed by a suitably qualified person and, where warranted, an investigation report will be prepared and submitted to the Administering Authority and to the land owner/land occupier. The investigation will nominate the necessary rehabilitation to be undertaken if necessary. Land will be rehabilitated in accordance with the approved PRCP and the current Environmental Authority.”
38	The management plan discusses secondary workings panels at Ensham. The subsidence management plan also discusses mining under the Nogoa River.	(a) Confirm where/whether the management plan has accurately predicted subsidence for any secondary workings. (b) Clarify in the management plan whether underground mining will encroach under the Nogoa River.	a) Subsidence assessment has been undertaken on the secondary workings basis – it simply means that additional coal is taken from both the roof and floor of the panel when retreating from a panel i.e. the maximum roof height. b) As stated below and on page 31, Section 4.8 Subsidence Management Measures of the Subsidence Management Plan (Appendix E of the RIDA Supporting Document), there will be no mining under the Nogoa River in Zones 2 and 3: “No underground mining is proposed beneath the Nogoa River main channel within Zone 2, with mining only to occur to construct roadways to connect the bord and pillar mining areas.” The Nogoa River doesn’t intersect Zone 3.
39	Land Resource Report Section 4.1.3 Kandosols. “The Kandosols on site generally consisted of brown to black clayey sand to light medium clay A horizons (topsoil) with weak to strong structure, overlying a sandy clay loam to medium clay B2 horizon with weak to strong angular	(a) Clarify whether soils described and mapped in the Land Resource Report are Kandosols or Kurosols, as the descriptions are inconsistent with the Australian Soil	(a) Page 30 of the Land Resources report has been updated – the reference to Kurosols has been removed and updated to Kandosols. Soils described and mapped are Kandosols. (b) Soils described in the map are ‘Kandosols’, and the soil type assigned to SMU 3 in Figure 10 confirmed to be ‘Magnesian Brown Kandosol’. This is provided in Figure 10 of Appendix C (Land Resources report).

Reference	Issue	Action	Response
	<p>to sub angular blocky structure". There is also reference to Kurosols in this section. Land Resource Report Section 4.2.4 Soil Map Unit 3 (SMU 3). This section indicates that this map unit contains "Magnesian Brown Kandosols and the subdominant soil types included Dystrophic Brown Kandosols", Figure 11 shows it contains "Brown Kandosols" and sites are classified as Kandosols. However, Figure 10 indicates that SMU 3 has the soil type Magnesian-Natric Brown Kurosol</p>	<p>Classification, and these soils are different.                      (b) Clarify the soil type assigned to SMU 3.                      Note: This issue is likely to be of more interest to the Environmental Authority component of this land resource survey. If this report is to be re-submitted as part of the RPI Act approvals, then it is recommended that every effort be made to fix obvious errors, even if they are of more relevant to a different regulatory approval.</p>	
40	<p>There are several errors or omissions in the Land Resource Report, including:</p> <ul style="list-style-type: none"> <li>Section 2.3.1. states that "Soil profiles were assessed in accordance with the Australian Soil and Land Survey Field Handbook (NCST, 2009) soil classification procedures." (page 18). Soil classification is guided by The Australian Soil Classification (Isbell &amp; NCST 2021).</li> </ul>	<p>Amend the assessment application material.</p>	<ul style="list-style-type: none"> <li>Page 18 of Land Resources report – updated to "Soil profiles were assessed in accordance with the Australian Soil and Land Survey Field Handbook (NCST, 2009) soil assessment procedures"</li> <li>Appendix B of Land Resources report - Horizon distinctness added</li> </ul>

Reference	Issue	Action	Response
	<ul style="list-style-type: none"> <li>• horizons or horizon depths do not have distinctiveness -these are characteristics of horizon boundaries.</li> <li>• the report does not specifically state the intended scale of the Soil Map Unit mapping</li> <li>• gravel and larger non-soil elements within a profile are known as coarse fragments not “stones”. Stones are a category of coarse fragments with a size between 200 and 600mm. Using this term infers soils contain large coarse fragments, which may have been used to downgrade land suitability. Additionally, while this section indicates coarse fragment abundance was recorded, no evidence of abundance is provided in Appendix B</li> <li>• Reference Section – no references were listed to soil texts/guides used e.g. Soil and Land Survey Field Handbook (NCST 2009), Guidelines for Surveying Soil and Land Resources (McKenzie et al. 2008), The</li> </ul>		<ul style="list-style-type: none"> <li>• Page 16 of Land Resources report - Soil Map Unit cartographic scale added. Intended scale of 1:25 000</li> <li>• Page 18 of Land Resources report – the term ‘stones’ has been replaced with ‘coarse fragments’ and Appendix B has been updated to include coarse fragment abundance</li> <li>• Page 53 of Land Resources report References section has been updated accordingly</li> </ul>

---

Reference	Issue	Action	Response
	Australian Soil Classification (Isbell and NCST 2021).		



# ATTACHMENT A

## Certificate of Registration on Change of Name



**Certificate of Registration  
on Change of Name**

This is to certify that

**IDEMITSU AUSTRALIA RESOURCES PTY LTD**

**Australian Company Number 010 236 272**

did on the fifth day of October 2021 change its name to

**IDEMITSU AUSTRALIA PTY LTD**

**Australian Company Number 010 236 272**

The company is a proprietary company.

The company is limited by shares.

The company is taken to be registered under the Corporations Act 2001 in Queensland and the date of commencement of registration is the first day of May, 1981.

Issued by the  
Australian Securities and Investments Commission  
on this fifth day of October 2021.



Joseph Longo  
Chair

**CERTIFICATE**

# ATTACHMENT B

## Notice for Change of Company Name (SIGNED)



**Idemitsu Australia Pty Ltd**  
ABN 45 010 236 272  
Level 9, 175 Eagle Street, Brisbane QLD 4000 Australia  
GPO Box 301, Brisbane QLD 4001 Australia  
Phone: +61-(0)7-3222-5600 Fax: +61-(0)7-3222-5665

6 October 2021

To whom it may concern,

**Notification of change of company name**

We are writing to inform you that 'Idemitsu Australia Resources Pty Ltd' has changed its name to 'Idemitsu Australia Pty Ltd'. This change was effective from 5<sup>th</sup> October 2021.

We have made this change to better reflect Idemitsu's diversified business interests in Australia. The company ACN and ABN, our address and all of our contact details will remain the same. All contractual rights and obligations are unaffected by the change of name.

Please update your records and direct all future correspondence and invoices to 'Idemitsu Australia Pty Ltd'.

Please feel free to contact your regular Idemitsu representative if you have any questions about this change.

Yours sincerely,



Steve Kovac  
Chief Executive Officer