

Dixon Sand Pty Ltd

-

**Response and Action Plan for the
Independent Environmental Audit 2019,
Haerses Road Quarry**



File Name: J16-001_IEA2019_HR RESP

Version 1.0

Date: January 2020

Document Control

Name of Operations	Haerses Road, Maroota
Name of Operator	Dixon Sand Pty Ltd
Development Consent / Project Approval #	DA 165-7-2005 (Modification 2)

File name	J16-001_IEA2019_HR RESP	Version	1.0
Report name	Response and Action Plan for the Independent Environmental Audit 2019, Haerses Road Quarry		
Cover Page Image	<i>Leptospermum trinervium</i> , Haerses Road Quarry (courtesy: PES, June 2017)		
Prepared by:	Hunsamon Churcher (Environmental Consultant)	Date:	13/01/2020
Approved by:	David Dixon (Director & Quarry Manager)	Date:	13/01/2020

Table of Contents

- 1. Introduction..... 1
 - 1.1 Development Approval Requirement 1
 - 1.3 Objective..... 2
- 2. Independent Environmental Audit Finding..... 2
 - 2.1 IEA Finding Summary 2
 - 2.2 Response, Proposed Actions and Implementation Timeframe for Compliance based Recommendations and Suggested Improvements 2

Tables

- Table 1: Compliance Status for the Development Consent and Licences..... 2
- Table 2: Proposed Action and Implementation Timeframe for the Recommendations arising from Non-Compliances 3
- Table 3 Response, Proposed Action and Implementation Timeframe for the Suggested Improvements 9

Abbreviations

BRMP	Biodiversity and Rehabilitation Management Plan
DA 165-7-2005	Development Consent DA 165-7-2005 (Modification 2) for the Haerses Road Quarry
Dixon Sand	Dixon Sand Pty Ltd, formerly Dixon Sand (Penrith) Pty Ltd
DPIE	Department of Planning, Industry and Environment
EMS	Environmental Management Strategy
EPA	NSW Environment Protection Authority
EPL 12513	Environment Protection Licence 12513 for the Haerses Road quarry
IEA 2019	Independent Environmental Audit 2019
NMP	Noise Management Plan
RWC	R.W. Corkery and Co Pty Ltd
SWMP	Soil and Water Management Plan
TMP	Traffic Management Plan
WAL	Water Access Licence

1. Introduction

1.1 Development Approval Requirement

Dixon Sand Pty Ltd (Dixon Sand) operates the Haerses Road Quarry located in Maroota, New South Wales under the Development Consent DA 165-7-2005 Modification 2.

Condition 13 of Schedule 5 of DA 165-7-2005 requires:

By the end of November 2019, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant must commission, commence and pay the full cost of an Independent Environmental Audit of the development. This audit must:

- (a) be led and conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;*
- (b) include consultation with the relevant agencies and the CCC;*
- (c) assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent and any relevant EPL or necessary water licences for the development (including any assessment, strategy, plan or program required under these approvals);*
- (d) review the adequacy of strategies, plans or programs required under the abovementioned approvals;*
- (e) recommend appropriate measures or actions to improve the environmental performance of the development, and/or any assessment, strategy, plan or program required under the abovementioned approvals; and*
- (f) be conducted and reported to the satisfaction of the Secretary.*

Condition 14 of Schedule 5 of DA 165-7-2005 requires:

Within 12 weeks of commencing this audit, or as otherwise agreed by the Secretary, the Applicant must submit a copy of the audit report to the Secretary and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of these recommendations as required. The Applicant must implement these recommendations, to the satisfaction of the Secretary.

1.2 Background Information

The appointment of R.W. Corkery and Co Pty Ltd (RWC) to carry out the Independent Environmental Audit (IEA) for Dixon Sand as per the consent conditions above was approved by the Department of Planning, Industry and Environment (DPIE) on 11th July 2019. The IEA commenced on 22 October 2019 for both the Old Northern Road and Haerses Road Quarries and the *Independent Environmental Audit: Old Northern Road Report* (RW Corkery & Co, January 2020, Document No. 1022/01) issued on 11th January 2020.

1.3 Objective

The *Dixon Sand Pty Ltd – Response and Action Plan for the Independent Environmental Audit 2019, Haerses Road Quarry* (this Document) has been prepared in accordance with Condition 14 of Schedule 5 of DA 165-7-2005. This Document outlines Dixon Sand's response and proposed actions toward the IEA findings, recommendations for non-compliances and suggested improvements as identified in *the Independent Environmental Audit: Haerses Road Report* (RW Corkery & Co, January 2020, Document No. 1022/01). This Document has been prepared in accordance with the *Independent Audit – Post Approval Requirements June 2018* (Department of Planning and Environment, 2018).

2. Independent Environmental Audit Finding

2.1 IEA Finding Summary

Table 1 outlines the status of compliance against the conditional components of Development Approval DA 165-7-2005, Environment Protection Licence (EPL) 12513, and Water Access Licences (WAL) 25941 and 25956.

Table 1: Compliance Status for the Development Consent and Licences.

Approval	DA 165-7-2005	EPL 12513	WAL 25941	WAL 25956
Compliant	168	49	5	5
Non-compliant	7	0	0	0
Not triggered	36	11	5	5
Not Determined	1	0	1	1
Total	213	60	11	11

2.2 Response, Proposed Actions and Implementation Timeframe for Compliance based Recommendations and Suggested Improvements

A total of 20 compliance-based recommendations and 15 suggested improvements were provided by the IEA.

The proposed actions and implementation timeframe for the recommendations arising from non-compliances are outlined in Table 2.

The response, proposed actions and implementation timeframe for the suggested improvements are contained in Table 3.

Table 2: Proposed Action and Implementation Timeframe for the Recommendations arising from Non-Compliances

ID	IEA Comments and Recommended Action	Proposed Action and Implementation Timeframe by Dixon Sand
HR R1/19	<p>Ensure that all non-compliances or exceedances are reported in accordance with the relevant requirements and timeframes specified in the conditions of both DA 165-7-2005 and EPL 12513.</p> <p><i>Dust exceedances were reported to EPA but not to DPE. Additionally, non-compliances were reported as part of the Annual Review but not reported to DPE within the required 7 day timeframe.</i></p>	<p>Proposed Action: Non-compliances or exceedances will be reported in accordance with the relevant requirements and timeframes specified in the conditions of both DA 165-7-2005 and EPL 12513.</p> <p>Implementation Timeframe: From the point this document is submitted.</p>
HR R2/19	<p>Include details of VENM/ENM receipt at the Quarry in Annual Reviews, including date, time and quantity of material received.</p> <p><i>Schedule 2 Condition 10(b) of DA 165-7-2005 requires a copy of the VENM/ENM records to be included with the Annual Review. VENM importation commenced in 2019 with a total volume reported but not all required records.</i></p>	<p>Proposed Action: The VENM/ENM Register which records the date, time of tipping and quantity of material received will be included in future Annual Reviews.</p> <p>Implementation Timeframe: Immediate – next Annual Review to be submitted by 30 September 2020.</p>
HR R3/19	<p>Include in the Biodiversity and Rehabilitation Management Plan a description of the short-, medium- and long-term measures to be implemented to manage remnant vegetation and habitat on site, including within the Biodiversity Offset Area, and to ensure compliance with the rehabilitation objectives and progressive rehabilitation obligations required under DA 165-7 2005 Mod 2.</p> <p><i>Section 5.4 of the Biodiversity and Rehabilitation Management Plan notes that the required information is outlined in the approved Biobanking Agreement. To ensure compliance with the development approval, this information must be included in the Biodiversity and Rehabilitation Management Plan either as a summary or by appending the Biobanking Agreement to the Plan.</i></p>	<p>Proposed Action: The approved Biobanking Agreements for the 1) Haerses Road and 2) Porters Road Biodiversity Offsets will be referenced and appended to the Biodiversity and Rehabilitation Management Plan (BRMP).</p> <p>Implementation Timeframe: Condition 5 (c) of Schedule 5 of DA 250-09-01 requires Dixon Sand to undertake a review of the EMS and Management Plans within 3 months of the submission of the IEA report and a notification to be provided to the DPIE. Should the review lead to revisions of the document, the revised document will be submitted within 6 weeks of the review notification date.</p>
HR R4/19	<p>Rationalise the water level and water quality trigger values nominated in the Surface Water Management Plan using either default water quality guideline values or site-specific trigger values.</p> <p><i>Current water quality and water level trigger values specified by the Surface Water Management Plan are restrictive and inadequately reflect natural variation in water levels and water quality. Default water quality guideline values should be utilised until appropriate site-specific trigger values (20th and 80th percentile values) can be derived from a minimum of two years of monthly data.</i></p>	<p>Proposed Action: The Soil and Water Management Plan (SWMP) will be revised and updated to rationalise the water level and water quality trigger values.</p> <p>Implementation Timeframe: Condition 5 (c) of Schedule 5 of DA 250-09-01 requires Dixon Sand to undertake a review of the EMS and Management Plans within 3 months of the submission of the IEA report and a notification to be provided to the DPIE.</p>

ID	IEA Comments and Recommended Action	Proposed Action and Implementation Timeframe by Dixon Sand
		Should the review lead to revisions of the document, the revised document will be submitted within 6 weeks of the review notification date.
HR R5/19	<p>Ensure that all components of the Environmental Management Strategy for the Quarry are distributed to the relevant stakeholders following approval.</p> <p><i>The entire Environmental Management Strategy, or individual sections following revision, should be provided to the relevant stakeholders including the Department of Planning, Infrastructure and Environment, Environment Protection Agency, Biodiversity Conservation Division, Heritage NSW under the Department of Premier and Cabinet, Roads and Maritime Services, the Hills Shire Council and the Community Consultative Committee.</i></p>	<p>Proposed Action: Future approved Environmental Management Strategy (EMS) and Management Plans will be distributed to the relevant stakeholders and government agencies.</p> <p>Implementation Timeframe: Immediately post approval of revised EMS and Management Plans.</p>
HR R6/19	<p>Include a monthly check of induction records as an item on the Site Condition Checklist in accordance with Section 11 of the Environmental Management Strategy.</p> <p><i>A documented check of the induction records was not available.</i></p>	<p>Proposed Action: The Monthly Site Condition Checklist will be revised to include an inspection/check of the induction records.</p> <p>Implementation Timeframe: Condition 5 (c) of Schedule 5 of DA 250-09-01 requires Dixon Sand to undertake a review of the EMS and Management Plans within 3 months of the submission of the IEA report and a notification to be provided to the DPIE. Should the review lead to revisions of the document, the revised document will be submitted within 6 weeks of the review notification date.</p>
HR R7/19	<p>Develop and implement a sediment basin inspection form for use during the inspection of sediment basins following storm events.</p> <p><i>The sediment basin inspection form should be used to record the date and time of inspection, meteorological data relevant to the preceding storm event (e.g. rainfall over the relevant period), comments on the visual quality of water in the sediment basin, and comments on the stability of the sediment basin and associated drainage structures.</i></p>	<p>Proposed Action: Develop a sediment basin inspection form to be used during the inspection of sediment basins following storm events. The form to include provisions to record the date and time of inspection, meteorological data relevant to the preceding storm event (e.g. rainfall over the specific period), comments on the visual water quality in the basin, and where applicable, record comments on the stability of the basin and associated drainage structures</p> <p>Implementation Timeframe: Condition 5 (c) of Schedule 5 of DA 250-09-01 requires Dixon Sand to undertake a review of the EMS and Management Plans within 3 months of the submission of the IEA report and a notification to be provided to the DPIE. Should the review lead to revisions of the document, the revised document will be submitted within 6 weeks of the review notification date.</p>

ID	IEA Comments and Recommended Action	Proposed Action and Implementation Timeframe by Dixon Sand
HR R8/19	<p>Maintain a record of monthly water cart fills, monthly water transfer volumes and monthly clean water import volumes.</p> <p><i>These records were not maintained during the audit period in accordance with Section 4.5 of the Soil and Water Management Plan.</i></p>	<p>Proposed Action: A record will be kept for:</p> <ul style="list-style-type: none"> • monthly watercart fills • monthly water transfer volumes • monthly clean water import volumes, <p>Implementation Timeframe:</p> <ul style="list-style-type: none"> • monthly watercart fills – logbook to be utilised immediately <p>Condition 5 (c) of Schedule 5 of DA 250-09-01 requires Dixon Sand to undertake a review of the EMS and Management Plans within 3 months of the submission of the IEA report and a notification to be provided to the DPIE. Should the review lead to revisions of the document, the revised document will be submitted within 6 weeks of the review notification date. The following changes will be made:</p> <ul style="list-style-type: none"> • monthly water transfer volumes – to be included in the site monthly checklist • monthly clean water import volumes – to be included in the site monthly checklist
HR R9/19	<p>Commence ‘receiving waters’ quality monitoring and continue monthly monitoring for a minimum of two years to establish baseline site-specific trigger values in accordance with Section 5.1.2.1 of the Soil and Water Management Plan (ensuring records of no flows are also maintained). Alternatively, update the Soil and Water Management Plan to specify alternate monitoring locations and/or approach to determining baseline conditions.</p> <p><i>As receiving water quality monitoring locations represent ephemeral drainage lines, monthly monitoring must be undertaken for the equivalent of at least two years. However, it is advised that, since the requirement to commence monitoring, no flows have been present during monitoring.</i></p>	<p>Proposed Action: After a storm event, the nominated sampling locations for water quality in the ephemeral drainage lines will be inspected and water sample obtained where possible.</p> <p>Implementation Timeframe: Immediate</p>
HR R10/19	<p>Ensure that inspections of water management dam walls are undertaken biennially by a suitably qualified engineer in accordance with Section 5.1.2.4 of the Soil and Water Management Plan.</p>	<p>Proposed Action: A suitably qualified engineer will be engaged to inspect the water management dam walls biennially. The report will be included in the Annual Review.</p>

ID	IEA Comments and Recommended Action	Proposed Action and Implementation Timeframe by Dixon Sand
	<p><i>Section 5.1.2.4 of the Soil and Water Management Plan requires that all water management dam walls be inspected by a suitably qualified engineer every 2 years. These inspections should be undertaken or the management plan amended.</i></p>	<p>Implementation Timeframe: Inspection by a suitably qualified engineer to be undertaken by 31 December 2020.</p>
HR R11/19	<p>Ensure that the Annual Reviews include all relevant aspects committed to be reported to within the Soil and Water Management Plan, including comparisons of receiving water quality results against relevant trigger values, sediment dam spill frequencies, clean water imports compared to the predicted water balance, etc.</p> <p><i>The Annual Reviews did not include all information committed to within the management plans.</i></p>	<p>Proposed Action: Future Annual Reviews will include all information committed to be reported within the SWMP.</p> <p>Implementation Timeframe: Immediate – next Annual Review to be submitted by 30 September 2020.</p>
HR R12/19	<p>Ensure that the Annual Reviews report on water take in accordance with the Annual Review Guideline (DPE, 2015 – or latest version).</p> <p><i>The Annual Reviews did not include the details of water take under the Water Access Licences.</i></p>	<p>Proposed Action: Water take volumes from Water Access Licences will be reported in future Annual Reviews</p> <p>Implementation Timeframe: Immediate – next Annual Review to be submitted by 30 September 2020.</p>
HR R13/19	<p>Ensure that water monitoring results are reviewed against the relevant trigger and criteria values as soon as possible following receipt of results. If water quality or levels exceeds the nominated trigger values, implement measures outlined in the trigger action response plan.</p> <p><i>Exceedances of the nominated trigger values must be identified as soon as possible to permit the effective implementation of response measures outlined in the trigger action response plan (e.g. confirmation sampling, increase in sampling frequency or investigation of possible causes).</i></p>	<p>Proposed Action: Water monitoring results will be reviewed against the relevant trigger and criteria values as soon as possible following receipt of the results. Implement measures outlined in the trigger response plan where applicable.</p> <p>Implementation Timeframe: From the point this document is submitted.</p>
HR R14/19	<p>Ensure that monthly and annual summaries of truck movements (number of trucks, arrival time and despatch time) and product volumes transported from the Quarry are published on the Dixon Sand website every six months.</p> <p><i>Six monthly truck movement summaries are provided on the Dixon Sand website however six monthly production summaries are not provided.</i></p>	<p>Proposed Action: The six monthly truck movement summaries and production summaries will be published on Dixon Sand website every six months.</p> <p>Implementation Timeframe: From the point this document is submitted.</p>

ID	IEA Comments and Recommended Action	Proposed Action and Implementation Timeframe by Dixon Sand
HR R15/19	<p>Ensure that pre-clearing surveys, including surveys by a qualified ecologist no more than two weeks prior to felling and surveys by the Environmental Officer within 24 hours of clearing, are undertaken prior to any vegetation clearing.</p> <p><i>Pre-clearing surveys were not undertaken at the Quarry prior to, albeit minor, vegetation clearing associated with the establishment of access tracks, monitoring bores, and the installation of fencing.</i></p>	<p>Proposed Action: Ensure pre-clearing surveys are conducted prior to any vegetation clearing. Ensure holdpoints outlined in the current vegetation clearing and tree felling procedures are followed.</p> <p>Implementation Timeframe: Immediate - from the point this document is submitted.</p>
HR R16/19	<p>Ensure that topsoil stockpiles are constructed in accordance with the topsoil management measures outlined in the Biodiversity and Rehabilitation Management Plan.</p> <p><i>Topsoil stockpile management measures include the location of stockpiles away from quarrying, traffic affected areas and watercourses, positioning within closed water management areas and within the Quarry disturbance footprint, positioning on level or gently sloping ground, establishment in windrows to a height no greater than 3m, and the establishment of silt fences at the base of stockpiles. Topsoil stockpiles to be kept longer than 3 months must be sown with a vegetation cover, with weed growth monitored on a monthly basis and controlled appropriately.</i></p>	<p>Proposed Action: A review of the current topsoil stockpile locations will be undertaken and were required, the stockpiles will be rectified and/or establish a windrow to a height no greater than 3 metres and silt fences installed at the base on the downslope side.</p> <p>Advice from a qualified ecologist will be sought regarding the best approach to preserve the native seedbank within topsoil stockpiles whilst limiting dust generation.</p> <p>Implementation Timeframe: 31 March 2020</p>
HR R17/19	<p>Distribute copies of the approved Bushfire Management Plan, or summaries of the most relevant sections including bushfire control measures and response procedures, to key stakeholders including relevant land managers and neighbours.</p> <p><i>It is understood that the Bushfire Management Plan has been distributed to Quarry personnel and consultation was undertaken with Council and RFS. However, Section 5.2.5 of the Biodiversity and Rehabilitation Management Plan also requires the bushfire management measures to be communicated to land managers and neighbours. The Bushfire Management Plan may inform bushfire management strategies employed by local landholders and feedback from local landholders and land managers may inform future updates to the Plan.</i></p>	<p>Proposed Action: The Bushfire Management Plan (BMP) will be published on Dixon Sand website. Section 5.2.5 of the Biodiversity and Rehabilitation Management Plan will be revised to state that details of the bushfire management measures are contained in the BMP which is available for public access on Dixon Sand website (note that the BMP is currently already published on the website).</p> <p>Implementation Timeframe: Condition 5 (c) of Schedule 5 of DA 250-09-01 requires Dixon Sand to undertake a review of the EMS and Management Plans within 3 months of the submission of the IEA report and a notification to be provided to the DPIE. Should the review lead to revisions of the document, the revised document will be submitted within 6 weeks of the review notification date.</p>
HR R18/19	<p>Ensure that, when a verified complaint or non-compliance with the Driver's Code of Conduct occurs, notification is provided to the other quarries who are</p>	<p>Proposed Action: A meeting between the signatories of the Maroota Local Traffic Management</p>

ID	IEA Comments and Recommended Action	Proposed Action and Implementation Timeframe by Dixon Sand
	<p>also signatories to the Maroota Local Traffic Management Policy and request confirmation as to whether that truck or driver have any verified complaints/non-compliances at those quarries. Should it be verified that the driver has multiple verified complaints/non-compliances, ensure disciplinary action is undertaken in accordance with the Policy.</p> <p><i>Traffic is a key management measure for the community given 5 of 6 complaints received during the audit period related to trucks and that traffic was the key matter raised during the community survey presented at the CCC meeting on 21 November 2017. Whilst the fundamentals of the traffic management is included in the traffic management plan, effective implementation through collaboration with the other local quarries is needed.</i></p>	<p>Policy will be held to discuss the procedure for verifying complaint and non-compliances between the three quarries.</p> <p>The Maroota Local Traffic Management Policy will be reviewed and revised where appropriate.</p> <p>Implementation Timeframe: 31 March 2020.</p>
HR R19/19	<p>Notify all truck drivers of verified complaints / non-compliances relating to traffic and transportation (but maintain complainant and driver privacy) to ensure that they are aware of what types of complaints are being received and that these are being actioned.</p> <p><i>Supplementing driver induction documentation with ongoing reminders that any non-compliance with these requirements is being actioned may assist in improving driver behaviour</i></p>	<p>Proposed Action: Truck drivers will be notified of any complaints received or non-compliances relating to traffic and transportation. On-going educational campaign for truck drivers which are currently in place will continue to be carried out. Please note that Dixon Sand is currently implementing the above measures in the form verbal and written notifications to drivers.</p> <p>Implementation Timeframe: Immediate</p>
HR R20/19	<p>Ensure that the fuel drum for the water pump is stored in a suitably bunded manner, remove the drum, or replace the pump with an electric pump.</p> <p><i>A 205L drum of fuel was observed adjacent the water pump located adjacent "Work 1 Dam". Whilst located within a covered area, given the location and volume of the drum, appropriate bunding is considered necessary to achieve compliance with Condition 3(43) of DA 165-07-2005.</i></p>	<p>Proposed Action: The fuel drum located adjacent the water pump at "Work Dam 1" will be removed or bunded in a suitable manner.</p> <p>Implementation Timeframe: Immediate</p>

Table 3 Response, Proposed Action and Implementation Timeframe for the Suggested Improvements

ID	IEA Comments and Suggested Improvement	Proposed Action and Implementation Timeframe by Dixon Sand
HR I1/19	<p>Consider preparing a formal document outlining the various plans, strategies, programs, forms, templates, registers etc. which form the Environmental Management System. The document should be structured so as to outline the framework of the Environmental Management System so that a new employee could locate all necessary documentation. In preparing the document, identify any gaps or updates required or where opportunity exists to consolidate or simplify.</p> <p><i>Whilst a certified Environmental Management System is not required, a formalised and documented system would assist both existing and future personnel in effectively implementing the system.</i></p>	<p>Proposed Action: A formal document outlining the components which constitute the Quarry's Environmental Management System will be prepared to highlight the framework of the system and procedures.</p> <p>Implementation Timeframe: 30 June 2020</p>
HR I2/19	<p>Update the Traffic Management Plan to reflect the current School Zone times and alert all truck drivers to this change in times.</p> <p><i>It was identified that the TMP current identifies school zone times as 8.30am - 9.00am and 3.00pm – 3.30pm, however, the Department of Education has confirmed they are currently between 8:00am and 9:30am and between 2:30pm and 4:00pm.</i></p>	<p>Proposed Action: The TMP will be updated to reflect the following school zone times:</p> <ul style="list-style-type: none"> • 8:00am to 9:30am, and • 2:30pm to 4:00pm <p>Implementation Timeframe: Condition 5 (c) of Schedule 5 of DA 250-09-01 requires Dixon Sand to undertake a review of the EMS and Management Plans within 3 months of the submission of the IEA report and a notification to be provided to the DPIE. Should the review lead to revisions of the document, the revised document will be submitted within 6 weeks of the review notification date.</p>
HR I3/19	<p>Include an additional column in the production summaries presented in the Annual Reviews which summarises the total extracted material in comparison to the approved limit of 250 000tpa.</p> <p><i>Whilst total extraction can be inferred from the information presented within the Annual Reviews, it would be preferable to explicitly confirm the amount extracted. This is particularly important when the amount of material exported</i></p>	<p>Proposed Action: A summary of the total extraction will be included in the Annual Review.</p> <p>Implementation Timeframe: To be reported in the next Annual Review which is due by 30 September 2020.</p>

	<i>from the Quarry nears the maximum limits given that additional material could possibly be extracted and stockpiled on site.</i>	
HR I4/19	<p>Include an unanticipated Aboriginal heritage find procedure within the Environmental Management Strategy (or separate document / attachment).</p> <p>Condition 2(29) of DA 165-07-2005 outlines actions required in the event that an object of suspected Aboriginal origin is identified. However, there is currently no procedure or other prompt for training and/or implementation in the event that a find occurs.</p>	<p>Proposed Action:</p> <p>An “Unexpected Finds Procedure” will be developed as part of the EMS. This is inclusive of any Aboriginal Heritage Finds to address the requirement of DA 165-7-2005 Schedule 2 Condition 29.</p> <p>Toolbox training for Quarry operators will include the above new procedure once the revised EMS is approved by the DPIE.</p> <p>Implementation Timeframe:</p> <p>Condition 5 (c) of Schedule 5 of DA 250-09-01 requires Dixon Sand to undertake a review of the EMS and Management Plans within 3 months of the submission of the IEA report and a notification to be provided to the DPIE.</p> <p>Should the review lead to revisions of the document, the revised document will be submitted within 6 weeks of the review notification date.</p>
HR I5/19	<p>Review all Section cross references within the Biodiversity and Rehabilitation Management Plan and update as necessary.</p> <p><i>Numerous incorrect Section cross references were identified within the Biodiversity and Rehabilitation Management Plan, including cross references to incorrect sections or sections which do not exist.</i></p>	<p>Proposed Action:</p> <p>A review of the Biodiversity and Rehabilitation Management Plan will be undertaken to rectify any errors in cross referencing.</p> <p>Implementation Timeframe:</p> <p>Condition 5 (c) of Schedule 5 of DA 250-09-01 requires Dixon Sand to undertake a review of the EMS and Management Plans within 3 months of the submission of the IEA report and a notification to be provided to the DPIE.</p> <p>Should the review lead to revisions of the document, the revised document will be submitted within 6 weeks of the review notification date.</p>
HR I6/19	<p>Ensure that the SWMP includes specific reference to the need for the development of specific measures for road and intersection works and noise bund construction as per Condition O4.2 of EPL 12513. Alternatively, include the specific measures within the SWMP.</p> <p><i>Whilst road and intersection works and noise bund construction are not currently applicable, to ensure that inclusion of relevant measures related to</i></p>	<p>Proposed Action:</p> <p>The SWMP will be revised to include a reference to the requirement for specific control measures to be developed for road and intersection works and noise bund construction.</p> <p>Implementation Timeframe:</p>

	<p><i>these aspects, reference to these aspects should be included or, preferably the measures included now.</i></p>	<p>Condition 5 (c) of Schedule 5 of DA 250-09-01 requires Dixon Sand to undertake a review of the EMS and Management Plans within 3 months of the submission of the IEA report and a notification to be provided to the DPIE.</p> <p>Should the review lead to revisions of the document, the revised document will be submitted within 6 weeks of the review notification date.</p>
HR I7/19	<p>Consider removing from Section 7.1 of the Noise Management Plan the commitment to supply a summary of noise monitoring data with the EPL Annual Return.</p> <p><i>It is not a requirement of the EPL to include a summary of noise monitoring with the Annual Returns.</i></p>	<p>Proposed Action:</p> <p>Section 7.1 of the Noise Management Plan (NMP) will be revised and a commitment to provide a summary of noise monitoring data with the EPL Annual Return will be removed as this is not a requirement of the EPL.</p> <p>Implementation Timeframe:</p> <p>Condition 5 (c) of Schedule 5 of DA 250-09-01 requires Dixon Sand to undertake a review of the EMS and Management Plans within 3 months of the submission of the IEA report and a notification to be provided to the DPIE.</p> <p>Should the review lead to revisions of the document, the revised document will be submitted within 6 weeks of the review notification date.</p>
HR I8/19	<p>Ensure that the annual review of the Maximum Extraction Depth Map as required by Schedule 2 Condition 22 of DA 165-7-2005 is outlined explicitly within the respective Annual Review including where it has been assessed no update to the map is required.</p> <p><i>The 2018 and 2019 Annual Review notes that there have been no impacts and states that the Maximum Extraction Depth Map will require review following the 2019 Independent Environmental Audit. It would be preferable to confirm that the map has been reviewed as part of the Annual Review process and, where no change is considered necessary, explicitly state the existing map remains adequate.</i></p>	<p>Proposed Action:</p> <p>Ensure confirmation that the Maximum Extraction Depth Map has been reviewed is provided in the Annual Review and where no change is required, provide a statement that the existing MEDP remains adequate.</p> <p>Implementation Timeframe:</p> <p>Immediate – next Annual Review to be submitted by 30 September 2020.</p>
HR I9/19	<p>Update Section 8.3 of the Environmental Management Strategy to reflect the current EPA requirements for submitting EPL Annual Returns, i.e. via eConnect.</p> <p><i>Section 8.3 of the EMS refers to EPA providing a copy of the Annual Return form and that this must be submitted via registered post. This is no longer undertaken and registered post is no longer an accepted submission option.</i></p>	<p>Proposed Action:</p> <p>Section 8.3 of the Environmental Management Strategy will be updated to specify that EPL Annual Returns are submitted via eConnect.</p> <p>Implementation Timeframe:</p>

		<p>Condition 5 (c) of Schedule 5 of DA 250-09-01 requires Dixon Sand to undertake a review of the EMS and Management Plans within 3 months of the submission of the IEA report and a notification to be provided to the DPIE.</p> <p>Should the review lead to revisions of the document, the revised document will be submitted within 6 weeks of the review notification date.</p>
HR I10/19	<p>Rationalise the water level and water quality trigger values nominated in the Surface Water Management Plan using either 'standard' guideline values or values developed based upon the broader locality / region.</p> <p><i>in some instances, the interim surface water quality triggers and groundwater level and quality triggers provide a very narrow margin and may potentially lead to regular exceedances and unnecessary action response. For example, the upper and lower groundwater level trigger values for BH5 are 178.5m AHD and 178.6m AHD respectively.</i></p>	<p>Proposed Action:</p> <p>The water level and water quality trigger values nominated in the SWMP will be rationalised appropriately.</p> <p>Implementation Timeframe:</p> <p>Condition 5 (c) of Schedule 5 of DA 250-09-01 requires Dixon Sand to undertake a review of the EMS and Management Plans within 3 months of the submission of the IEA report and a notification to be provided to the DPIE.</p> <p>Should the review lead to revisions of the document, the revised document will be submitted within 6 weeks of the review notification date.</p>
HR I11/19	<p>Review and update the Soil and Water Management Plan taking into consideration the following.</p> <ul style="list-style-type: none"> • Review and update of the water level and quality trigger levels (see Recommendation HR I10/19). • Rectify the typographical error for the 80th percentile groundwater pH levels in Table 2.5. • Include level 4 headings in the table of contents to assist with document. <p><i>During the audit, a range of opportunities were identified to improve the value of the Soil and Water Management Plan. In some instances these improvements will assist in maintaining or demonstrating compliance.</i></p>	<p>Proposed Action:</p> <p>The SWMP will be reviewed particularly the following:</p> <ul style="list-style-type: none"> • Review and update of the water level and quality trigger levels (as outlined in Recommendation HR I10/19). • Rectify the typographical error for the 80th percentile groundwater pH levels in Table 2.5. • Include level 4 headings in the table of contents to assist with document where appropriate. <p>Implementation Timeframe:</p> <p>Condition 5 (c) of Schedule 5 of DA 250-09-01 requires Dixon Sand to undertake a review of the EMS and Management Plans within 3 months of the submission of the IEA report and a notification to be provided to the DPIE.</p> <p>Should the review lead to revisions of the document, the revised document will be submitted within 6 weeks of the review notification date.</p>
HR I12/19	<p>Continue to consult with the Department of Industry – Water in order to seek formal approval of the aquifer pumping test works undertaken at the Quarry.</p>	<p>Proposed Action:</p> <p>The Department of Industry – Water (DoI-Water) provided acknowledgement on 22/11/2019 regarding the installation of additional monitoring wells and water</p>

	<p><i>Given the potential for this matter to delay the commencement of extraction within the Mod 1 extraction area, the satisfaction of DoI with the pumping tests required DA 165-7-2005 Condition 3(16e) should be actively followed up.</i></p>	<p>level data loggers and pumping test carried out under Condition 16 of Schedule 3 of DA 165-7-2005. The DoI-Water requests:</p> <ol style="list-style-type: none"> 1. continued inclusion of monitoring of the groundwater levels in these monitoring bores as part of the on-going monitoring programme. 2. Submission of Form A's for the monitoring bores to WaterNSW, if this has not been done. <p>Dixon Sand submitted Form A's for completed works for the abovementioned monitoring bores to water.gds@dpi.nsw.gov.au on 29/11/2019.</p> <p>Implementation Timeframe: No further action required in addition to continual of monitoring of the groundwater levels in the abovementioned bores as part of the on-going monitoring programme.</p>
HR I13/19	<p>Undertake a documented formal review of the various requirements of the Soil and Water Management Plan that are to be completed prior to commencement of extraction within the Mod 1 extraction area or that will be triggered by the commencement of extraction.</p> <p><i>There a range of measures that are required to be established prior to the commencement of extraction within the Mod 1 extraction area and a range of management actions that are not triggered until extraction commences. A formal review of these matters will assist in ensuring compliance is maintained with the relevant commitments.</i></p>	<p>Proposed Action: Formal confirmation from the DPIE has been received on 02/12/2019 stating that the pre-commencement requirements for works within extraction cells 1A and 2A of the Mod 1 extraction area have been met. A review of the requirements in the SWMP to be completed prior to and post commencement of extraction within the Mod 1 extraction area will be undertaken and documented.</p> <p>Implementation Timeframe: Prior to extraction of cells 1A and 2A.</p>
HR I14/19	<p>Review and update the Soil and Water Management Plan to clearly specify what measures apply to what areas / aspects of the operation.</p> <p><i>Section 3.1 of the Soil and Water Management Plan outlines the existing and future operations, however, it is often not clear in the following subsections what measures are applicable to the existing site or which are applicable to future activities or locations.</i></p>	<p>Proposed Action: The SWMP will be reviewed and revised to clearly specify what measures apply to what areas/aspects of the quarry operation.</p> <p>Implementation Timeframe: Condition 5 (c) of Schedule 5 of DA 250-09-01 requires Dixon Sand to undertake a review of the EMS and Management Plans within 3 months of the submission of the IEA report and a notification to be provided to the DPIE. Should the review lead to revisions of the document, the revised document will be submitted within 6 weeks of the review notification date.</p>

HR I15/19	<p>Include in the logbook records the flow volume at Cattai Creek at the Cattai Ridge Road gauge [No. 2122951] for the day prior to and the day of any water take from WAL 25941 and WAL25956.</p> <p><i>Condition MW0078-00005 of WAL 25941 and WAL 25956 requires that the flow rate at the Cattai Ridge Road be >3ML/day. To ensure compliance with this requirement, it is suggested that the recorded flows be included in the logbook.</i></p>	<p>Proposed Action:</p> <p>Dixon Sand was unable to locate any online monitoring data for the specific location nominated on the WAL which is located approximately 30 minutes from the quarry.</p> <p>Dixon Sand will liaise with WaterNSW regarding the logistics of complying with Condition MW0078-00005 of WAL 25941 and WAL 25956. An application to modify the condition may be required.</p> <p>Implementation Timeframe:</p> <p>Immediate</p>
-----------	---	--