

**Dixon Sand Pty Ltd**

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**Response and Action Plan for the  
Independent Environmental Audit 2022,  
Haerses Road Quarry**



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## Document Control

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## Abbreviations

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
DPE	Department of Planning and Environment
EMS	Environmental Management Strategy
EPA	NSW Environment Protection Authority
EPL 12513	Environment Protection Licence 12513 for the Haerses Road quarry
IEA 2022	Independent Environmental Audit 2022
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 5.

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 and Environment (DPE) on 8<sup>th</sup> September 2022.

The IEA commenced on 18 October 2022 for both the Old Northern Road and Haerses Road Quarries and the *Independent Environmental Audit: Haerses Road Quarry Report* (RW Corkery & Co, December 2022, Document No. 1022/02) was issued to Dixon Sand on 15<sup>th</sup> December 2022. This IEA covers an audit period between 23 October 2019 and 18 October 2022.

## 1.3 Objective

The *Dixon Sand Pty Ltd – Response and Action Plan for the Independent Environmental Audit 2022, 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 Quarry Report* (RW Corkery & Co, December 2022, Document No. 1022/02). This Document has been prepared in accordance with the *Independent Audit – Post Approval Requirements May 2020* (Department of Planning, Industry and Environment, 2020).

## 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	181	56	5	5
Non-compliant	7	0	0	0
Not triggered	29	7	6	6
<b>Total</b>	217	63	11	11

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

A total of 15 compliance-based recommendations and 5 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	Consent Condition relevant to Non-compliance	IEA Comments and Recommended Action	Proposed Action and Implementation Timeframe by Dixon Sand
HR R1/22	2(18)(c) 2(2)	<p>All disturbed surveyed star posts around the boundaries of the approved extraction areas should be re-instated prior to painting (see Recommendation R2).</p> <p><i>A number of star posts were observed to be pushed over, bent or buried around Cells 1A and 1B. These star posts should not have been disturbed and need to be replaced.</i></p>	<p><b>Proposed Action:</b> The disturbed surveyed star posts will be reinstated.</p> <p><b>Implementation Timeframe:</b> 31 March 2023.</p>
HR R2/22		<p>All surveyed star posts installed to define the perimeter of the approved extraction area should be painted in a bright colour to alert all Quarry personnel of the location of the boundary.</p> <p><i>The surveyed star posts which are steel grey in colour were observed around Cells 1A and 1B, a number of which had been disturbed during extraction operations. The recommended painting of the posts should assist to clearly define the boundary that should not be disturbed.</i></p>	<p><b>Proposed Action:</b> The surveyed star posts installed to define the perimeter of the approved extraction area will be painted in a bright colour to improve visibility.</p> <p><b>Implementation Timeframe:</b> 31 March 2023.</p>
HR R3/22		<p>There should be no disturbances within at least 1m of any surveyed boundary of an approved extraction area in Cell 1A. This requirement should be incorporated in each Job Safety and Environmental Analysis (see Improvement HR 14/22)</p> <p><i>Many of the surveyed star posts were observed to be disturbed/pushed over during the initial activities around the boundary of the approved extraction areas.</i></p>	<p><b>Proposed Action:</b> See HR 14/22 - The Quarry will include this as a control in the environmental impacts review</p> <p><b>Implementation Timeframe:</b> Immediate – prior to new extraction area</p>
HR R4/22		<p>Additional marking in the form of a PVC pole up to 3.5m high (or an alternate system) should be placed above each surveyed boundary star post during the period when land clearing activities are undertaken in close proximity to assist operators of earthmoving equipment to easily observe and ensure that no disturbance occurs within at least 1m of the defined boundary.</p>	<p><b>Proposed Action:</b> An additional marker pole up to 3.5m high or alternate system will be placed above each surveyed boundary star post during the period when land clearing activities are undertaken in close proximity to the defined boundary.</p>

ID	Consent Condition relevant to Non-compliance	IEA Comments and Recommended Action	Proposed Action and Implementation Timeframe by Dixon Sand
		<i>Whilst painted star posts are visible, at ground level, it is important that the boundary is well recognised by earthmoving equipment operators. The additional marking would only need to be in place during the initial establishment of an active extraction area.</i>	<b>Implementation Timeframe:</b> Immediate – future clearing activities
HR R5/22	2(18)(c) 2(2)	The bund wall on the western side of Cell 1A (Photos 10 and 11) should be removed with the material brought back into the adjoining extraction area. The disturbed footprint should be rehabilitated and the boundary star posts (painted) re-instated. <i>Recent earthworks on the western side of Cell 1A has resulted in a bund wall approximately 1.5m to 2m high being constructed on its western side just beyond the boundary of Cell 1A. A number of the boundary star posts appear to have been covered during the earthworks.</i>	<b>Proposed Action:</b> The disturbed area identified on the western side of Cell 1A will be rehabilitated appropriately and the boundary star posts will be re-instated and painted.  <b>Implementation Timeframe:</b> 31 March 2023 (pending suitable weather and accessibility to the disturbed area).
HR R6/22		All groundwater piezometers on site should be fitted with monuments (with identifying reference numbers) and the deposited dust gauges within the Quarry should be better identified with a painted/engraved/panel displaying the monitoring site reference number. <i>Piezometer H2 (Photo 2) was observed to be without a monument and any external identification. Deposited dust gauge D10/EPL 3 (Photo 1) was also not appropriately numbered.</i>	<b>Proposed Action:</b> The groundwater piezometer monuments on site and deposited dust gauges will be installed with permanent identification tags to display the monitoring site reference number.  <b>Implementation Timeframe:</b> 31 March 2023.
HR R7/22		All employees undertaking pre-start checks for any equipment used on site should be requested to fully and accurately complete the Daily Plant Inspection List. Periodic checks should be undertaken to ensure all lists have been accurately completed.  <i>Three random examples of Daily Plant Inspection Lists were inspected (51428, 51653 and 51903) and each list was found to contain insufficient or clearly wrong information or insufficient information about which Quarry the equipment was located. Attention to detail on all documentation within the Quarry is fundamental to accurately recording information required regarding quarry operations.</i>	Employees will be retrained in the requirements of how to complete the Daily Plant Inspection Lists. Quarry Manager will continue to review the Daily Plant Inspection Lists on a daily basis for the first 2 weeks post training.  <b>Implementation Timeframe:</b> Training will be conducted by 31 January 2023.



ID	Consent Condition relevant to Non-compliance	IEA Comments and Recommended Action	Proposed Action and Implementation Timeframe by Dixon Sand
HR R8/22		<p>All documentation referred to in the Driver's Code of Conduct should be reviewed and updated, where appropriate. These include:</p> <ul style="list-style-type: none"> <li>• the Maroota Local Traffic Management Policy;</li> <li>• the Site Induction for Drivers; and</li> <li>• the Site Traffic Control Plan.</li> </ul> <p>A copy of the Code should be signed by a representative of the Company and the nominated driver, with a copy of the Code and all attachments held by both the Company and the driver. Ideally, re-inductions should occur annually to ensure any adjustments to the Code are brought to the attention of all drivers. Section 4 of the TMP, and the Table of Contents of the TMP, should be updated to correctly identify appendices which form part of the Code.</p> <p><i>The current version of the Site Induction for Drivers is outdated and requires review and improvement. It is important that all drivers sign a copy of the Site Induction and are given a full set of all documents. The importance of annual re-inductions cannot be over-emphasised.</i></p>	<p><b>Proposed Action:</b></p> <p>Documents referred to in the Driver's Code of Conduct will be reviewed and revised appropriately.</p> <p>Annual re-inductions for truck drivers will be undertaken where changes to the TMP or traffic related procedures have occurred.</p> <p>The Traffic Management Plan will be reviewed and revised accordingly.</p> <p><b>Implementation Timeframe:</b></p> <p>The Driver's Code of Conduct and associated documentation will be reviewed and revised by 30 June 2023.</p> <p>The review and revision of the Traffic Management Plan will form part of the review and revision of the Environmental Management Strategy (EMS) and Management Plans post IEA. Timeline to undertake the review and revision will be in accordance with the Consent Condition 5(c) of Schedule 5 that is review the EMS and Management Plans within 3 months of the submission of the IEA and submit the revised documents within 6 weeks of the review notification.</p>
HR R9/22		<p>The new Clearway software program to be installed for both the Old Northern Road and Haerses Road Quarries in November/December 2022 should ensure that the vehicles entering the Quarry are accounted for in the total traffic counts.</p> <p><i>The current practice to control the total number of trucks entering and leaving the Quarry focusses upon the number of laden trucks departing the Quarry and not those unladen trucks entering the Quarry. It is important that the new software system accounts for both unladen vehicles entering and laden trucks leaving the Quarry.</i></p>	<p><b>Proposed Action:</b></p> <p>The Clearway software program allows tracking of vehicles entering the quarry to account for the total traffic counts.</p> <p><b>Implementation Timeframe:</b></p> <p>31 January 2023</p> <p>Note that the pilot Clearway software program was launched on 14 December 2022 and Dixon Sand is currently undergoing software testing/fine tuning period.</p>
HR R10/22		<p>The SDS register for Haerses Road Quarry should be structured to record alphabetically the product type and manufacturer.</p>	<p><b>Proposed Action:</b></p>

ID	Consent Condition relevant to Non-compliance	IEA Comments and Recommended Action	Proposed Action and Implementation Timeframe by Dixon Sand
		<i>Arrangement of the register by both product type and manufacturer should assist any person to quickly locate the relevant SDS sheet, particularly in the event of an emergency.</i>	The SDS register will be reviewed and restructured to make locating SDS easier. It will also be reviewed to rationalise the need for SDS as required under the WHS legislation. <b>Implementation Timeframe:</b> 31 March 2023.
HR R11/22		A general Incident Response Checklist should be prepared for the Haerses Road Quarry (similar to the Old Northern Road Quarry) to ensure that all relevant follow up actions, including review of strategies, plans and programs and notification of the review process to relevant authorities, are undertaken within appropriate timeframes in the event of an incident.  <i>The recommended checklist will be beneficial for all required actions for the Haerses Road Quarry to be undertaken within the required timeframe.</i>	<b>Proposed Action:</b> The current Incident Response Checklist will be reviewed and revised to manage the relevant follow up actions, reporting and notification timeframes that are required to be undertaken within the appropriate timeframes in the event of an incident.  <b>Implementation Timeframe:</b> The review and revision of the Incident Response Checklist will form part of the review and revision of the Environmental Management Strategy (EMS) and Management Plans post IEA. Timeline to undertake the review and revision will be in accordance with the Consent Condition 5(c) of Schedule 5 that is review the EMS and Management Plans within 3 months of the submission of the IEA and submit the revised documents within 6 weeks of the review notification.
HR R12/22	3(16)(d) 2(2)	Appropriate water level loggers, or an alternate method of recording, should be installed at each of the on-site quarry dams and any new quarry dams.  <i>The requirement for water level loggers is documented in Schedule 3 Condition 16(d). Reference to an alternate method of recording is suggested should Dixon Sand identify a more practical and cost effective way to record the information required.</i>	<b>Proposed Action:</b> Water depth gauge boards will be installed in all onsite quarry related water storage/dams. These do not include agricultural dams which are not utilised for quarry operations.  <b>Implementation Timeframe:</b> 30 June 2023.
HR R13/22		The recently constructed stockpile of soil and related materials on Lots 176 and 177 should be relocated to an area already disturbed within the approved extraction areas – as soon as possible.	<b>Proposed Action:</b>

ID	Consent Condition relevant to Non-compliance	IEA Comments and Recommended Action	Proposed Action and Implementation Timeframe by Dixon Sand
		<p><i>The soil and related materials recently stockpiled on Lots 176 and 177 to depths of up to 2.5m are positioned on naturally occurring topsoil. The stockpiling of this material will cause the deterioration in the viability of the naturally occurring soils beneath the stockpiles. These materials need to be relocated as soon as possible to ensure that the underlying topsoil remains viable for use in future rehabilitation. It is noted that this stockpiling activity is not documented in the Soil and Water Management Plan.</i></p>	<p>The stockpile of soil and related materials on Lots 176 and 177 will be relocated within the approved extraction areas as soon as possible.</p> <p><b>Implementation Timeframe:</b> Actioned on 10/01/2023 – R13/22 closed out</p>
HR R14/22	3(11)(g) 3(11)(h) 2(2)	<p>The Air Quality Management Plan should be updated to document the sandstone cutting operations to be undertaken within the Quarry.</p> <p><i>The requirements in Schedule 3 Conditions 11(g) and 11(h) to describe the air quality mitigation measures relating to the sandstone cutting operation in the Air Quality Management Plan have not been addressed.</i></p>	<p><b>Clarification:</b> The AQMP (V1, Nov 2021) addressed the requirements of DA Mod 3 and 4 conditions. This AQMP (V1, Nov 2021) was submitted to DPE for review and approval in November 2021 but Dixon Sand never received any correspondence from the DPE.</p> <p>Conditions 11(g) and 11(h) of Schedule 3 were introduced in Development Consent Modification 5 which was approved in June 2022, issued after the AQMP (V1, Nov 2021) was submitted to DPE.</p> <p>The latest AQMP (V2, Nov 2022) was submitted to DPE for review and approval on 28/11/22 – this document already includes Conditions 11(g) and 11(h) of Schedule 3.</p> <p>During the IEA audit, the draft AQMP (V2, Nov 2022) was sent out to the relevant agencies for consultation, it was not provided to RWC as this was not requested.</p> <p>Therefore, Dixon Sand believes that HR R14/22 does not constitute a non-compliance as the requirements of Conditions 11(g) and 11(h) of Schedule 3 have been fulfilled.</p> <p><b>Proposed Action:</b> No additional action is required as Conditions 11(g) and 11(h) of Schedule 3 have been included in the current draft of AQMP.</p>

ID	Consent Condition relevant to Non-compliance	IEA Comments and Recommended Action	Proposed Action and Implementation Timeframe by Dixon Sand
			<b>Implementation Timeframe:</b> Not Applicable.
HR R15/22	3(8)(g)	<p>The Noise Management Plan should be updated to document the sandstone cutting operations within the Quarry.</p> <p><i>The requirements in Schedule 3 Condition 8(g) to describe the noise mitigation measures relating to the sandstone cutting operation in the Noise Management Plan have not been addressed.</i></p>	<p><b>Clarification:</b></p> <p>The currently approved NMP (V1a, May 2022) addressed the requirements of DA Mod 3 and 4 conditions.</p> <p>Condition 8(g) of Schedule 3 was introduced in Development Consent Modification 5 which was approved in June 2022, issued after the above NMP was approved.</p> <p>The latest NMP (V2, Nov 2022) was submitted to DPE for review and approval on 28/11/22 – this document already includes Condition 8(g)</p> <p>During the IEA audit, the draft NMP (V2, Nov 2022) was sent out to the relevant agencies for consultation, it was not provided to RWC as this was not requested.</p> <p>Therefore, Dixon Sand believes that HR R15/22 does not constitute a non-compliance as the requirement of Condition 8(g) of Schedule 3 has been fulfilled.</p> <p><b>Proposed Action:</b></p> <p>No additional action is required as Condition 8(g) of Schedule 3 has been included in the current draft of NMP.</p> <p><b>Implementation Timeframe:</b></p> <p>Not Applicable.</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 11/22	<p>Position Statements for all employees should include a list of work tasks that need to be undertaken and the safety and environmental responsibilities / requirements contained in the Development Consent for Quarry to be undertaken as they carry out their work tasks. A copy of the Position Statement should be signed by a company representative and the employee with a copy retained by both parties.</p> <p><i>Current Position Statements simply state the title of the position without documenting the required work tasks and the employee's responsibilities for safety and environmental matters that are specific to their position. Where appropriate, the environmental matters should be cross-referenced to the relevant Development Consent conditions, Management Plan(s) or site-based operational procedures. These matters need to be discussed during an induction with a copy of the entire statement (signed) held by both the Company and new employee.</i></p>	<p><b>Proposed Action:</b></p> <p>The current position statements which form part of the employee and contractor's induction will be reviewed and revised to include appropriate list of work tasks and relevant safety and environmental responsibilities contained in the Development Consent.</p> <p><b>Implementation Timeframe:</b></p> <p>30 June 2023</p>
HR 12/22	<p>All documentation relied upon on site with respect to environmental and other matters should include relevant document control information including the computer file path, date created and review date.</p> <p><i>Most of the documentation sighted during the audit didn't include sufficient document control information to assist in locating the document on the Company's server, whether it is the current version and when it should be reviewed. The progressive introduction of document control will assist in improved management of documentation on site. It is important to clarify differences for documentation for either Old Northern Road Quarry or Haerses Road Quarry.</i></p>	<p><b>Proposed Action:</b></p> <p>The quarry document management system, including document control will be reviewed and necessary improvements made. Note this is a significant task requiring time and resources to fulfil.</p> <p><b>Implementation Timeframe:</b></p> <p>Immediate and ongoing – commence review and revision of new document control system.</p> <p>Timeline may take several years however, Dixon Sand is committed to demonstrate improvement of the system in the next IEA 2025.</p>
HR 13/22	<p>The Company should introduce a Re-induction Program for all employees and relevant contractors on a regular basis to make each person aware of any changes to the requirements for environmental management practices on site and to re-enforce all other requirements.</p> <p><i>Currently there is no Re-induction Program on site with reliance placed upon relevant environmental practices being raised at Toolbox Meetings. Whilst this practice is commendable, a Re-induction Program would provide a more formal approach to ensure that all existing and recently required practices are fully</i></p>	<p><b>Proposed Action:</b></p> <p>The Quarry will introduce a re-induction program for employees and relevant contractors to communicate changes to the environmental management practices. A re-induction program will be carried out annually.</p> <p>Toolbox talks will continue to provide engaging group discussions around environmental news, incidents and awareness.</p> <p><b>Implementation Timeframe:</b></p>

ID	IEA Comments and Suggested Improvement	Proposed Action and Implementation Timeframe by Dixon Sand
	<i>understood by on-site personnel.</i>	Immediate – reinduction program will be carried out annually, commencing in 2023.
HR I4/22	<p>The Company should amend the current practices and documentation involved in the Job Safety Analysis (JSA) to incorporate environmental issues, i.e. to become Job Safety and Environmental Analysis (JSEA). This practice would ensure that for each new task/project undertaken on site that environmental issues are appropriately managed.</p> <p><i>A JSEA would ensure that all relevant environmental issues/documentation is addressed and consolidated in a structured manner before a new task or project is commenced. Issues to be addressed could include completion of a pre-clearance form, notifications to nearby neighbours, pre-operations photography, supply of relevant waste containers for solid/liquid wastes, placement of silt-stop fencing, adequate water for dust controls, are any noise mitigation measures needed?</i></p>	<p><b>Proposed Action:</b></p> <p>The Quarry will undertake an environmental impacts review for new tasks so that potential environmental issues and mitigation measures are identified. Note: this will be undertaken as part of the planning component of the works along with the safety review.</p> <p><b>Implementation Timeframe:</b></p> <p>30 June 2023.</p>
HR I5/22	<p>The locations and identification of all dams and sediments basins within the quarry site should be clarified to ensure all dams and basins are correctly identified.</p> <p><i>The identification and location of all dams and sediment basins will assist in the preparation of all documentation associated with the operation of the quarry and including the records required under Schedule 3 Condition 16(d).</i></p>	<p><b>Proposed Action:</b></p> <p>Identification labels/signs will be installed at each quarry related dam and sediment basin on site.</p> <p><b>Implementation Timeframe:</b></p> <p>30 June 2023.</p>