

**Dixon Sand Pty Ltd**

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



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## Document Control

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## Abbreviations

DA250-09-01	Development Consent DA250-09-01 (Modification 5) for the Old Northern 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
EPL3916	Environment Protection Licence 3916 for the Old Northern Road quarry
IEA	Independent Environmental Audit 2022
RWC	R.W. Corkery and Co Pty Ltd
TMP	Traffic Management Plan
WAL	Water Access Licence

# 1. Introduction

## 1.1 Development Approval Requirement

Dixon Sand Pty Ltd (Dixon Sand) operates the Old Northern Road Quarry located in Maroota, New South Wales under the Development Consent DA 250-09-01 (Modification 5).

Condition 13 of Schedule 5 of DA 250-09-01 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 250-09-01 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: Old Northern Road Report* (RW Corkery & Co, January 2022, Document No. 1021/02) was issued to Dixon Sand on 14<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, Old Northern Road Quarry* (this Document) has been prepared in accordance with Condition 14 of Schedule 5 of DA 250-09-01. 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: Old Northern Road Report* (RW Corkery & Co, November 2022, Document No. 1021/02). 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 250-09-01, Environment Protection Licence (EPL) 3916, and Water Access Licence (WAL) 24341.

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

Approval	DA 250-09-01	EPL 3916	WAL 24341
Compliant	190	41	2
Non-compliant	10	7	0
Not triggered	17	6	8
<b>Total</b>	<b>217</b>	<b>54</b>	<b>10</b>

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

A total of 12 compliance-based recommendations and 7 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(s) relevant to Non-Compliance	IEA Comments and Recommended Action	Proposed Action and Implementation Timeframe by Dixon Sand
ONR R1/22		<p>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.</p> <p><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></p>	<p><b>Proposed Action:</b> 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.</p> <p><b>Implementation Timeframe:</b> Training will be conducted by 31 January 2023.</p>
ONR R2/22		<p>The current Site Traffic Management Plan should be updated to reflect all requirements of truck drivers when within the Quarry Site and on the public road network travelling to and from the Quarry.</p> <p><i>The current Site Traffic Management Plan contains a range of requirements for truck drivers travelling to and from the Old Northern Road Quarry. Some of the requirements are outdated and no longer relevant This is an important document given it is to be cross-referenced in the Driver's Code of Conduct (see Suggested Improvement ONR I2/22).</i></p>	<p><b>Proposed Action:</b> The Site Traffic Management Plan will be reviewed to bring the requirements up-to-date. Cross references to other documents such as the Driver's Code of Conduct will be reviewed and revised accordingly.</p> <p><b>Implementation Timeframe:</b> The review of the Site 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>
ONR R3/22	3(21) 2(2)(c)	<p>The new Clearway software program to be installed at the Old Northern Road Quarry in November/December 2022 should ensure that the vehicles entering the Quarry between 5:45am and 7:00am are accounted for in the total traffic counts for that period.</p>	<p><b>Proposed Action:</b> The Clearway software program is to provide tracking of vehicles entering the quarry between 5:45 am and 7:00 am which will be included in the total traffic counts for the morning truck period.</p>

ID	Consent Condition(s) relevant to Non-Compliance	IEA Comments and Recommended Action	Proposed Action and Implementation Timeframe by Dixon Sand
		<p><i>The current practice to control the total number of trucks entering and leaving the Quarry between 5:45am and 7:00am is reliant upon preventing no more than 20 laden trucks to leave the weighbridge before 7am. This approach assumes only 20 trucks enter during this period. At present, uncertainty exists about the number of unladen trucks that enter the Quarry during this period. Hence, it is important that the new software system accounts for both unladen vehicles entering and laden trucks leaving the Quarry during this period. The new program would also record the number of laden trucks entering and leaving the Quarry at other times of day, i.e. in accordance with Condition 3(21).</i></p>	<p><b>Implementation Timeframe:</b> 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 and fine tuning prior to full implementation.</p>
ONR R4/22		<p>The upper surface of the entire western wall of the Twin Ponds and the adjoining current overburden stockpile area roadway should be reshaped to prevent runoff flowing over the western slope into areas without any sediment control. All areas where erosion has occurred should be repaired.</p> <p><i>Areas were observed where runoff from the upper surface of the western wall of the Twin Dams had flowed to the west and over the steep slopes on the western side of the Twin Dams and adjoining current overburden stockpile area. In one area, considerable erosion had occurred with runoff potentially being able to flow beyond the western boundary of the Quarry (Photo 13).</i></p>	<p><b>Proposed Action:</b></p> <p>The upper surface western wall of the Twin Ponds area and the adjoining current overburden stockpile area roadway on Lot 29 will be reshaped to manage any runoff water and sediments are contained within the quarry area.</p> <p>All areas where erosion has occurred will be repaired as soon as it is safe to do so and weather permitting.</p> <p><b>Implementation Timeframe:</b> 31 January 2023.</p> <p>Note that remediation work has commenced mid January 2023.</p>
ONR R5/22		<p>All star posts installed around the perimeter of the approved extraction area should be painted in a bright colour to alert all Quarry personnel of their location on the boundary.</p> <p><i>The surveyed star posts observed on the eastern boundary of Stage 5 within Lot 1 DP 547255 are steel grey in colour and not readily detected, particularly by operators of earthmoving equipment (Photo 28).</i></p>	<p><b>Proposed Action:</b></p> <p>Star posts installed around the perimeter of the approved extraction area will be painted in a bright colour to improve visibility. This will be communicated to the teams at a tool box talk and prior to clearing activities.</p> <p><b>Implementation Timeframe:</b></p>



ID	Consent Condition(s) relevant to Non-Compliance	IEA Comments and Recommended Action	Proposed Action and Implementation Timeframe by Dixon Sand
			28 February 2023
ONR R6/22		<p>All monuments above the groundwater piezometers on site and deposited dust gauges within the Quarry should be better identified with a painted / engraved / panel displaying the monitoring site reference number.</p> <p><i>The monument on Monitoring Well MW2 on the eastern side of Lot 1 DP 547255 was observed to be without any external identification.</i></p>	<p><b>Proposed Action:</b> The groundwater piezometer monuments on site and deposited dust gauges within the Quarry will be installed with permanent identification tags to display the monitoring site reference number.</p> <p><b>Implementation Timeframe:</b> 31 March 2023.</p>
ONR R7/22		<p>The SDS register should be structured to record alphabetically the product type and manufacturer.</p> <p><i>Uncertainty existed on site during the audit site inspection regarding how various products were filed within the register. 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></p>	<p><b>Proposed Action:</b> 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.</p> <p><b>Implementation Timeframe:</b> 31 March 2023.</p>
ONR R8/22	3(3) 2(2)(b)	<p>The introduction of new and potentially noisy items of equipment, or undertaking new tasks where operating circumstances are different to those previously encountered, should be planned to occur in an isolated area of the Quarry or at a time when all other equipment is not operating.</p> <p><i>This modified procedure is recommended in response to the measured noise exceedances recorded in December 2019 and June 2021. Gaining an appreciation of the implications upon the total noise generated prior to the introduction of the new equipment or procedures would assist to identify if additional controls are needed or the use of certain equipment needs to be adjusted.</i></p>	<p><b>Proposed Action:</b> Undertake noise monitoring on newly introduced equipment which has the potential to generate excessive noise to determine the overall implications of the quarry operation.</p> <p><b>Implementation Timeframe:</b> Immediate – undertake an isolated noise monitoring on any future introduced noisy equipment prior to its introduction to the whole quarry operation.</p>

ID	Consent Condition(s) relevant to Non-Compliance	IEA Comments and Recommended Action	Proposed Action and Implementation Timeframe by Dixon Sand
ONR R9/22	3(25)(c) 2(2)	<p>Continue to follow up with the DPE to ensure that the Positive Public Covenant to provide long-term security of the Haerses Road Biodiversity Offset Area is fully processed to enable it to be implemented.</p> <p><i>Dixon Sand has submitted all required information regarding the Positive Public Covenant to DPE and awaits the Department's response in order for this matter to be finalised.</i></p>	<p><b>Proposed Action:</b> Dixon Sand will contact DPE to continue with the review of the proposed draft conditions in order to finalise the Positive Public Covenant registration.</p> <p><b>Implementation Timeframe:</b> Dixon Sand to contact DPE by 31 January 2023.</p>
ONR R10/22	5(5)(a) 5(7) 5(7)(c) 5(10) 2(2)(b)	<p>A general Incident Response Checklist should be prepared for the 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.</p> <p><i>No record of strategies, plans and programs having been reviewed within three months following the submission of incident reports were maintained during the audit period. Additionally, DPE was not notified in writing that a review of strategies, plans and programs had been undertaken within 3 months following the submission of an incident report. The period between the identification of an uncontrolled discharge event and notification of the incident to DPE and the EPA exceeded the specified 7-day notification period and 14-day reporting period.</i></p>	<p><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.</p> <p><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.</p>
ONR R11/22	3(13)	<p>The quality of any water discharging off site at the licenced discharge monitoring Point 1 should be established through the collection of a representative sample daily during the period of discharge (including uncontrolled discharge) and analysis at an accredited laboratory. Where access to Monitoring Point 1 (i.e. Main Dam weir, LDP01) is not possible during discharge due to safety concerns, a representative sample should be taken from the Main Dam daily during discharge.</p>	<p><b>Proposed Action:</b> Dixon Sand will obtain a daily water sample for water quality analysis by an accredited laboratory during the period of discharge for future planned and uncontrolled discharge events. Where access to LDP01 for sampling is restricted due to extreme weather or safety concerns, a representative sample will be obtained from the Main Dam for analysis.</p>

ID	Consent Condition(s) relevant to Non-Compliance	IEA Comments and Recommended Action	Proposed Action and Implementation Timeframe by Dixon Sand
		<i>The reported uncontrolled discharge of water at Monitoring Point 1 on 16 June 2020 did not include any water quality data, which is a requirement of the EPA and EPL 3916.</i>	<p><b>Implementation Timeframe:</b> Immediate – triggered in both instance during planned and uncontrolled discharge events.</p>
ONR R12/22	4(1)(a) 2(2)(b)	<p>All landowners affected by noise exceedances should be notified in the manner consistent with Condition 4(1)(a). <i>Not all affected landowners were notified regarding the results of noise monitoring undertaken on 3 December 2019.</i></p>	<p><b>Proposed Action:</b> Dixon Sand will notify affected landowners of the result of any future noise exceedances in accordance with Condition 4(1)(a) of Schedule 4.</p> <p><b>Implementation Timeframe:</b> Immediate – triggered when the noise criteria is exceeded at the receiver.</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
ONR 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>
ONR 12/22	<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><i>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. 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>

ID	IEA Comments and Suggested Improvement	Proposed Action and Implementation Timeframe by Dixon Sand
ONR 13/22	<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 the 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>
ONR 14/22	<p>The basis for indicating compliance with individual requirements on the Monthly Site Condition Check List should be clarified and/or the requirements adjusted to match the information relied upon.</p> <p><i>The current Monthly Site Condition Check List should be reviewed to ensure it captures all key operational management commitments documented in the Quarry's Development Consent, Environment Protection Licence and Management Plans.</i></p> <p><i>The current Monthly Site Condition Check List appears comprehensive – not withstanding this, it is preferable that all commitments for the Quarry are captured. It is noted that not all commitments would need to be assessment monthly.</i></p>	<p><b>Proposed Action:</b></p> <p>The Monthly Site Condition Checklist will be reviewed and revised to include the key operational management commitments as outlined in the Development Consent, EPL and Management Plans.</p> <p><b>Implementation Timeframe:</b></p> <p>The review and revision of the Monthly Site Condition 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.</p>
ONR 15/22	<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 understood by on-site personnel.</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
		Immediate – reinduction program will be carried out annually, commencing in 2023.
ONR 16/22	<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 preclearance 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 or notifications to adjoining landowners?</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>
ONR 17/22	<p>All publicly available documents placed on the Company's website should provide direct links from the Table of Contents or other references in the reports to the relevant Figure, table, photos or appendices.</p> <p><i>At present, all documents placed on the Company's website do not include the requested direct links which makes reviewing documents/search for information more difficult.</i></p>	<p><b>Proposed Action:</b></p> <p>Future new documents on the website will be compiled to enable direct links from the Table of Contents or other references in the reports to the relevant figure, table, photos or appendices.</p> <p>The existing documents on the website will not be edited for the above.</p> <p><b>Implementation Timeframe:</b></p> <p>Immediate – future documents.</p>