

**Dixon Sand  
Old Northern Road Quarry, Maroota**

**Addendum  
Annual Review  
2019 – 2020**

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Client: Dixon Sand Pty Ltd

Prepared by: Project Environmental Services Pty Ltd

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## Document Control

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## 1.0 Introduction

### 1.1 Project Background

Dixon Sand Pty Ltd (Dixon Sand) operates two sand quarries on the Old Northern Road (Lots 29 and 196 DP 752025 and Lots 1 and 2 DP 547255) and on Haerses Road (Lot 170 DP 664766, Lot 170 DP 664767, Lots A and B DP 407341, Lots 176 and 177 DP 752039 and Lot 216 DP 752039) in Maroota, New South Wales. The quarry sites are located approximately 40 kilometres north of Parramatta.

Extraction commenced on Lots 29 and 196, DP752025 on the Old Northern Road in the early 1980s, with Dixon Sand undertaking extraction from 1992 to December 1998. The continued approval for extraction on Lots 29 and 196 was granted by the Land and Environment Court NSW on 7 July 2000 with subsequent multiple Modification applications being lodged. Current extraction operations occur on Lot 196, 1 and 2, with materials being processed at the central processing plant, stockpiled and sold to the market on Lot 196.

Extraction commenced at the Haerses Road quarry in 2006 with current extraction operations in Stages 1 and 2, and Cell 1A. Sand is being transferred to the Old Northern Road quarry for processing and sales. Products are also permitted to be sold directly to the market from Haerses Road quarry. Modification to the development approval under Section 75W of the *Environmental Planning and Assessment Act 1979* was granted on 22 January 2018 which permits the expansion of the extraction areas.

The Old Northern Road quarry operates in accordance with development consent DA250-09-01 (Modification 5).

### 1.2 Annual Review Submission

The Annual Review for the period 1 July 2019 to 30 June 2020 (document title: **Dixon Sand - Old Northern Road Quarry Annual Review 2019 – 2020**, document name: **J16-001\_AR\_ONR\_2019-20**) was submitted to the Department of Planning, Industry and Environment (the “Department”) on 28 September 2020.

Dixon Sand received correspondence from the Department on 24 December 2020, requesting for information (RFI) to be provided and for the Annual Review to be revised or an Addendum document to be submitted.

### 1.3 Scope of this document

This document has been prepared as an addendum to the abovementioned Annual Review in accordance with Condition 4 of Schedule 2 of DA250-09-01. This document addresses the Department’s RFI on specific environmental performance and management of noise, surface water, traffic, biodiversity and rehabilitation, and complaints.

## 2.0 Noise Management

### 2.1 Non-Compliance

#### Noise Exceedance

Figure 1 depicts the locations of the attended noise monitoring locations at Maroota Public School (OR1) and other receivers (R2, R3, R4, R5, OR2 and OR3).

Noise monitoring undertaken on 3 December 2019 identified noise exceedances at receivers R3, R4 and R5 during the shoulder period. The cause of the noise exceedance was due to the trial use of a diamond tip blade attachment on an excavator for sandstone cutting operation on Lot 2. During breaks in traffic on the Old Northern Road, the rock saw was audible at the receivers and reached noise levels up to 45 – 46 dBA.

Once Dixon Sand was made aware of the noise exceedance, an investigation was carried out which enabled Management to identify the specific equipment causing the noise exceedance. The quarry operator was trialling a new diamond tip configured blade attachment which the supplier claimed would produce less noise than the standard tungsten tip blade. The trial of this new equipment was deliberately undertaken during the noise monitoring event in order to establish compliance with the operating noise criteria in the attempt to reduce the overall quarry operational noise.

Noise levels measured during the June 2020 monitoring indicated that the quarry was operating in compliance with the noise criteria.

#### Corrective actions taken to prevent re-occurrence:

Results from the noise monitoring during the daytime period indicated the use of the diamond tip configured blade complies with the operating noise criteria.

To prevent any re-occurrence of such noise exceedance, the quarry will only utilise the diamond tip configured blade attachment after 7:00am.

#### Identification of Non-Compliance against Development Consent:

The identified noise exceedance resulted in a non-compliance against the shoulder noise criteria specified in Table 2 of Condition 3 of Schedule 3 of DA250-09-01.

#### Incident Notification and Reporting

The incident was notified, and a written report provided to the DPIE and EPA on 16 and 17 December 2019, respectively.



Figure 1: Noise Monitoring Locations at receivers (courtesy of Hutchison Weller, 2020).

## 2.2 Discrepancies between Predicted and Actual Noise Impacts

Table 1 compares the predicted noise levels contained in the EIS (ERM, 2001) during non-adverse weather with quarry operations in Strip 2 on Lots 1 and 2. The extrapolated noise levels from December 2019 and June 2020 assessment at the receivers are also presented here for comparison.

Modelled noise impacts contained in the EIS (ERM, 2001) show that a maximum external level of LAeq 36 dB(A) has been calculated for the Maroota Public School (the school) and assuming that internal noise levels are 10 dB less than external noise levels (with windows opened), the predicted internal noise level is approximately 26 dB(A).

**Table 1: EIS (ERM, 2001) predicted daytime noise levels, daytime noise criteria and quarry noise levels extrapolated during this monitoring period.**

Receptor	EIS (ERM, 2001) Predicted Daytime Noise Levels LAeq (dB(A))	Daytime Noise Criteria LAeq (dB(A))	December 2019 Daytime Noise Levels	June 2020 Daytime Noise Levels	Compliance with Daytime Noise Criteria
R1	43	44	N/M	N/M	Yes
R2	40	44	42	43	Yes
R3	37	44	39	44	Yes
R4	35	44	41	44	Yes
R5	34	44	41	44	Yes
R6 (OR3)	N/A	44	43	39	Yes
School Building 1 (OR1)	36 (external) ~26 (internal)	45	42	44	Yes
School Building 2	35 (external) ~25 (internal)				

Note: N/A – R6 residential building constructed after the EIS (ERM, 2001)

N/M – R1 noise levels not measured due to existing Noise Agreement between Acurso and Dixon Sand.

Extrapolated December 2019 and June 2020 noise monitoring results at the school (external) yield noise levels of 42 dB(A) and 44 dB(A) respectively. Extrapolated noise monitoring results for residences on Old Northern Road yielded levels between 39 and 44 dB(A).

There are no discrepancies between the predicted and actual noise impacts experienced at the school and residences. All noise impacts comply with the daytime noise criteria. Dixon Sand is currently operating and extracting materials in Strip 3 which is east of Strip 2 which was the location used to model predicted impacts in the EIS (ERM, 2001). Therefore, current quarry operations are located closer to the school and receivers, which resulted in the recorded noise levels being higher than the predicted levels.



## 2.3 Noise Trend

As quarry operations progress eastwards on Lots 1 and 2 towards Maroota Public School and other identified private residences, noise levels are expected to increase as a result of reduced proximity between machinery and noise receivers.

Charts 1 to 6 illustrate the long-term trend in noise monitoring levels for the Maroota Public School and residences on Old Northern Road. Noise monitoring were undertaken during the period 2003 to 2007 however data has been omitted from this trending analysis due to the monitoring locations differing from the locations identified in the current Noise Management Plan.

It can be seen from Chart 1 that quarry noise levels fluctuations occurred at Maroota Public School over the ten-year period, with a general increasing trend with daytime noise level peaking in December 2015 at  $L_{Aeq1hr}$  45 dB(A).

Chart 2 provides long-term data for receiver OR2 at 4624 Old Northern Road. Fluctuations in daytime and shoulder noise levels can be observed where reduced daytime noise levels were recorded between December 2011 to May 2014, possibly a consequence of reduced quarry activities on Lots 29 and 196. From December 2014 to date, a general increasing daytime noise levels trend can be observed, with noise levels ranging from  $L_{Aeq15min}$  34.1 to 44 dB(A).

Charts 4 to 6 inclusive display an increasing trend in quarry noise levels at receivers R2, R3, R4 and R5, from December 2018 to date, peaking at  $L_{Aeq15}$  44 dB(A).

Chart 3 shows long term trend at receiver OR3 (R6) ranging between  $L_{Aeq15}$  37 and 44 dB(A).

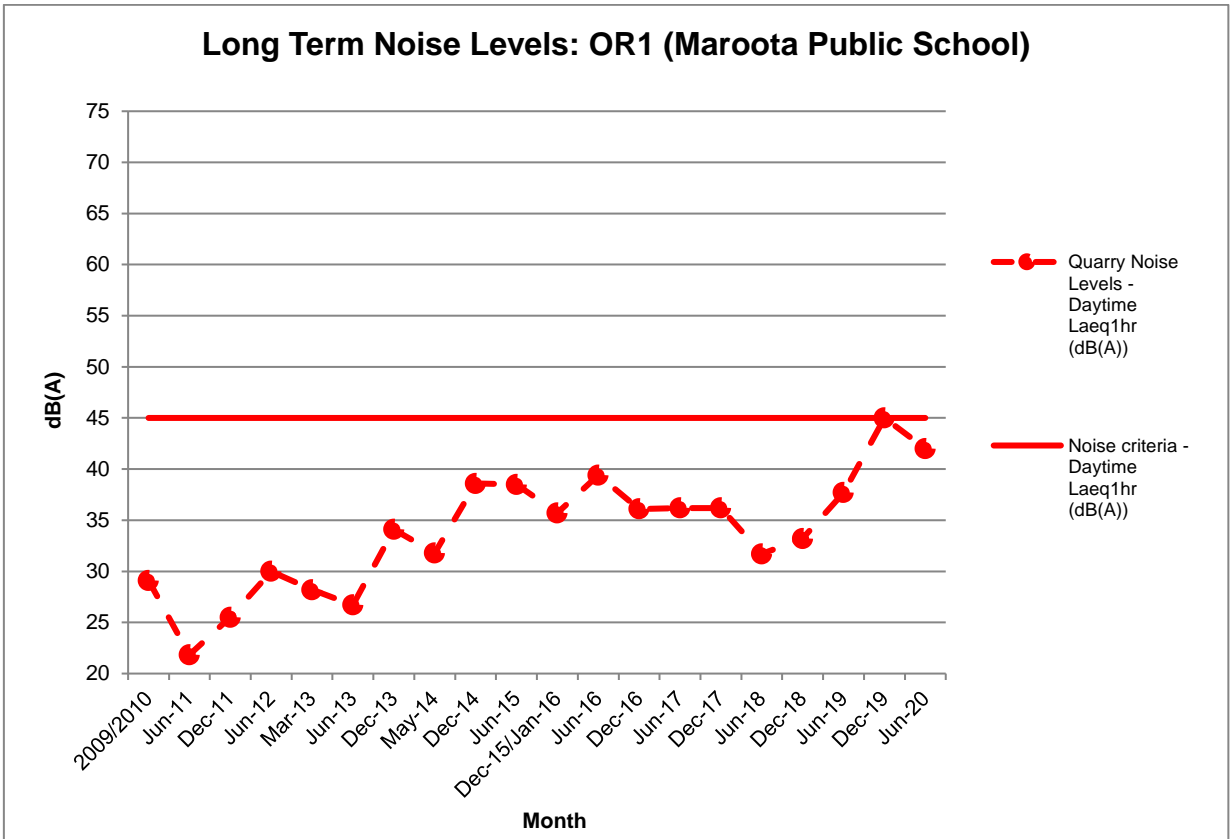


Chart 1 - Long term Noise Trend – Maroota Public School

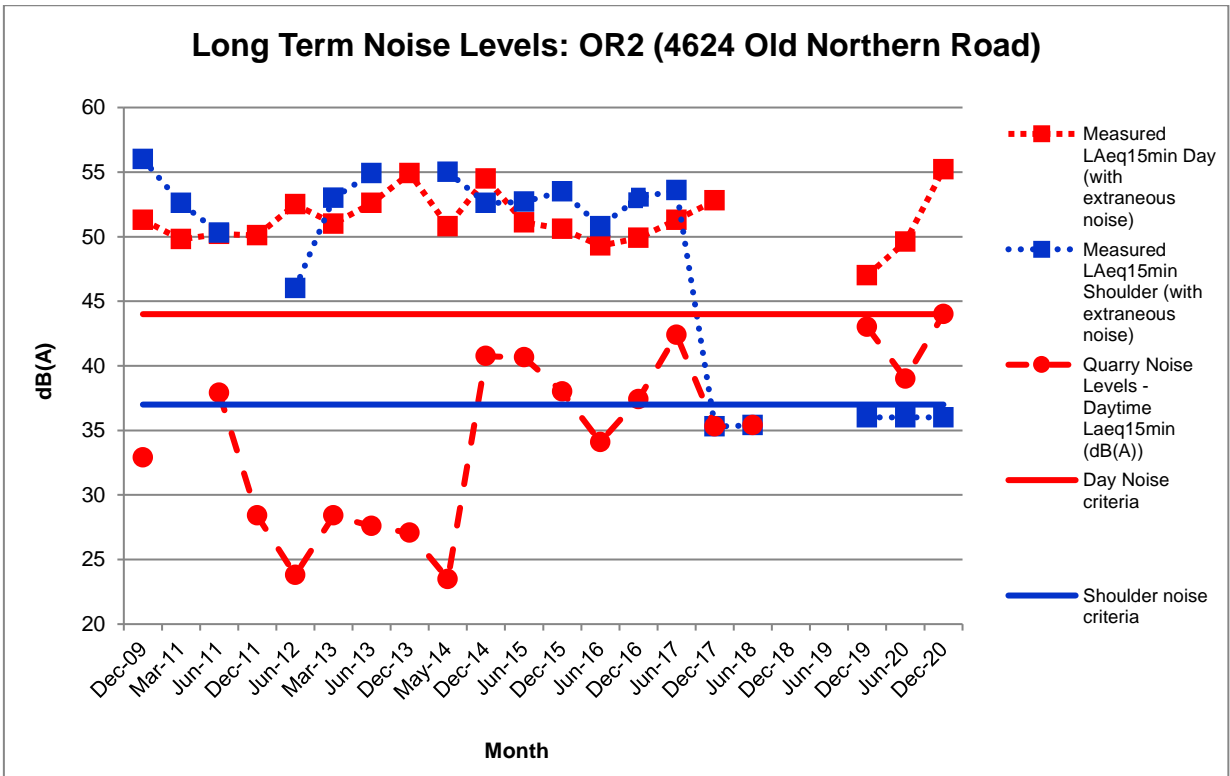


Chart 2 - Long term Noise Trend – OR2 (No. 4624 Old Northern Road)

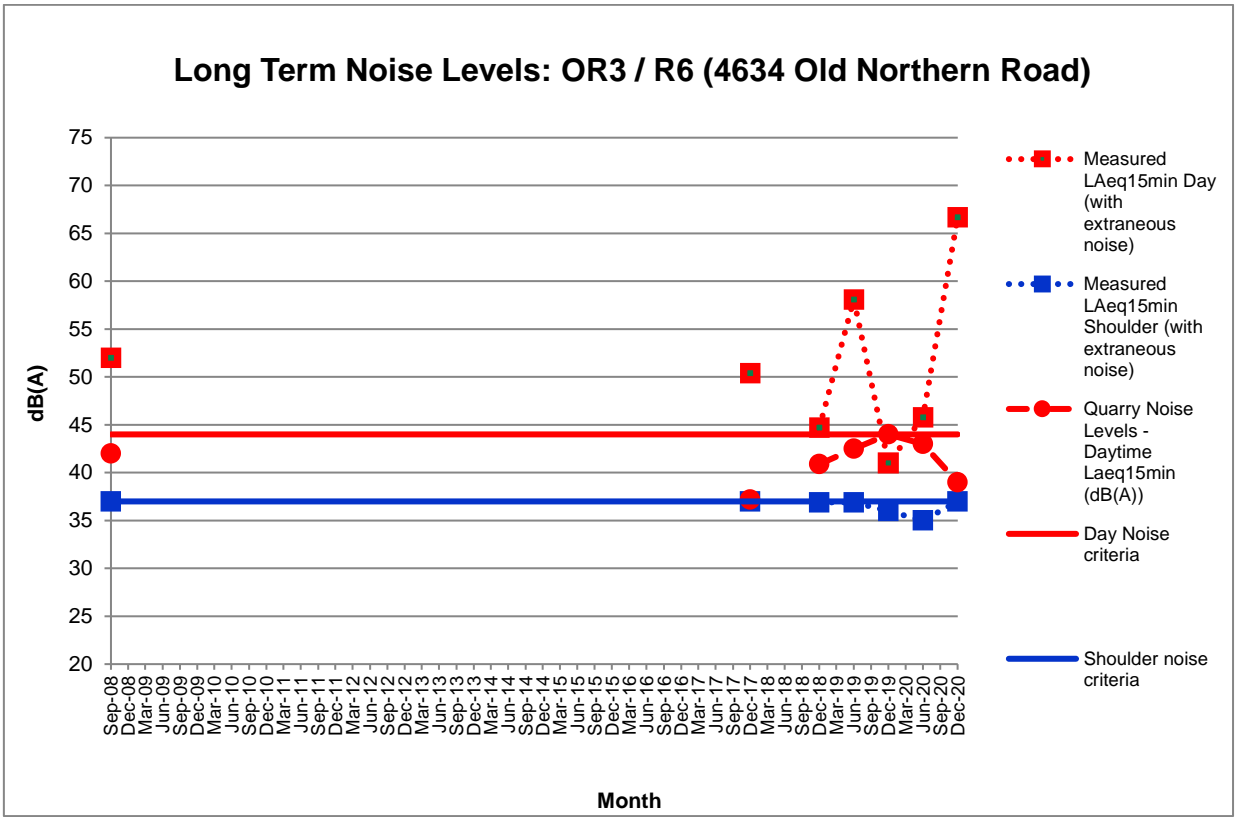


Chart 3 - Long term Noise Trend – OR3/R6 (No. 4634 Old Northern Road)

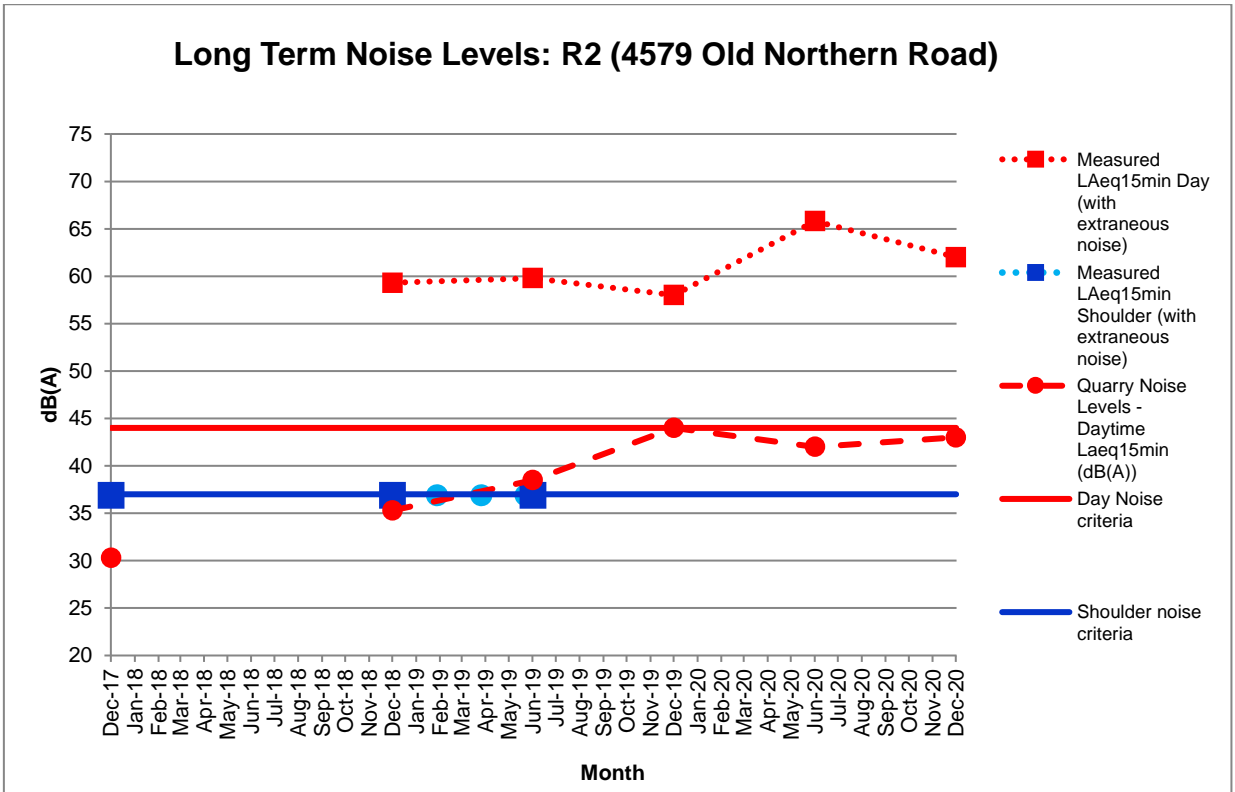


Chart 4 - Long term Noise Trend – R2 (No. 4579 Old Northern Road)

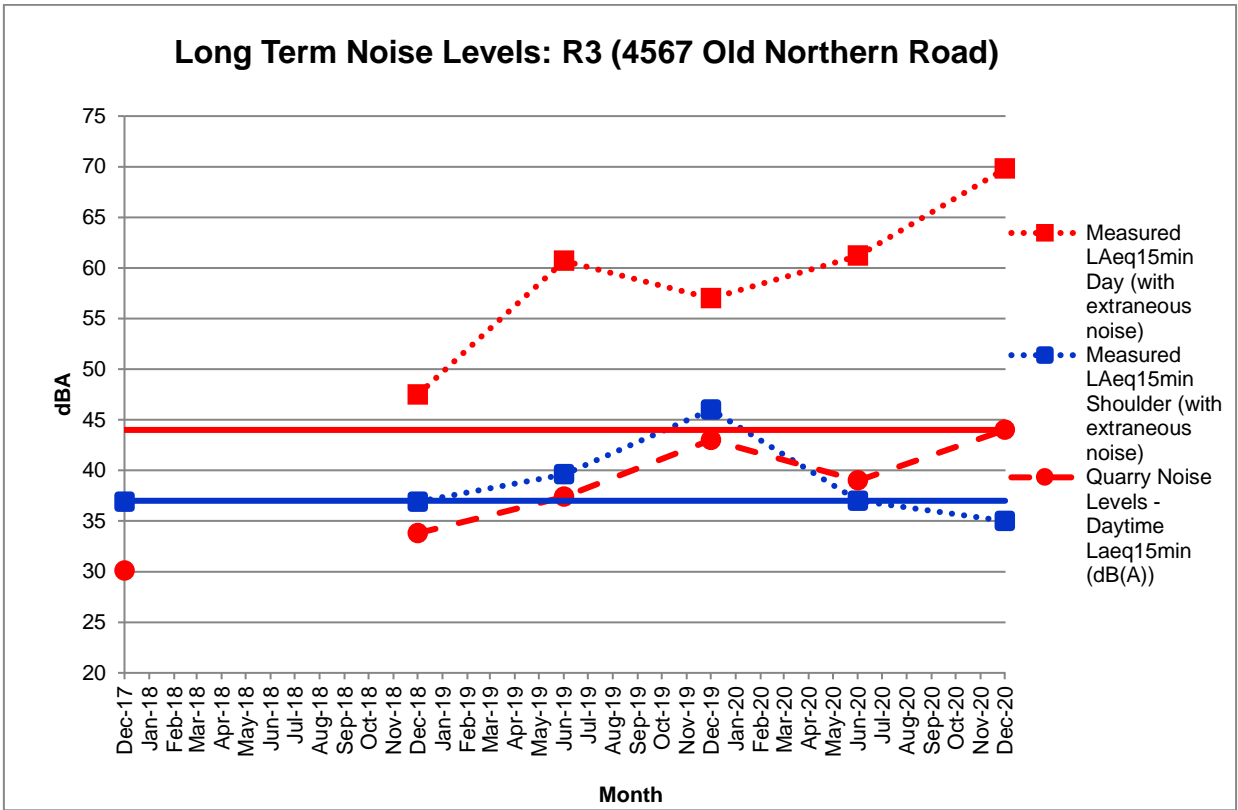


Chart 5 - Long term Noise Trend – OR3/R6 (No. 4634 Old Northern Road)

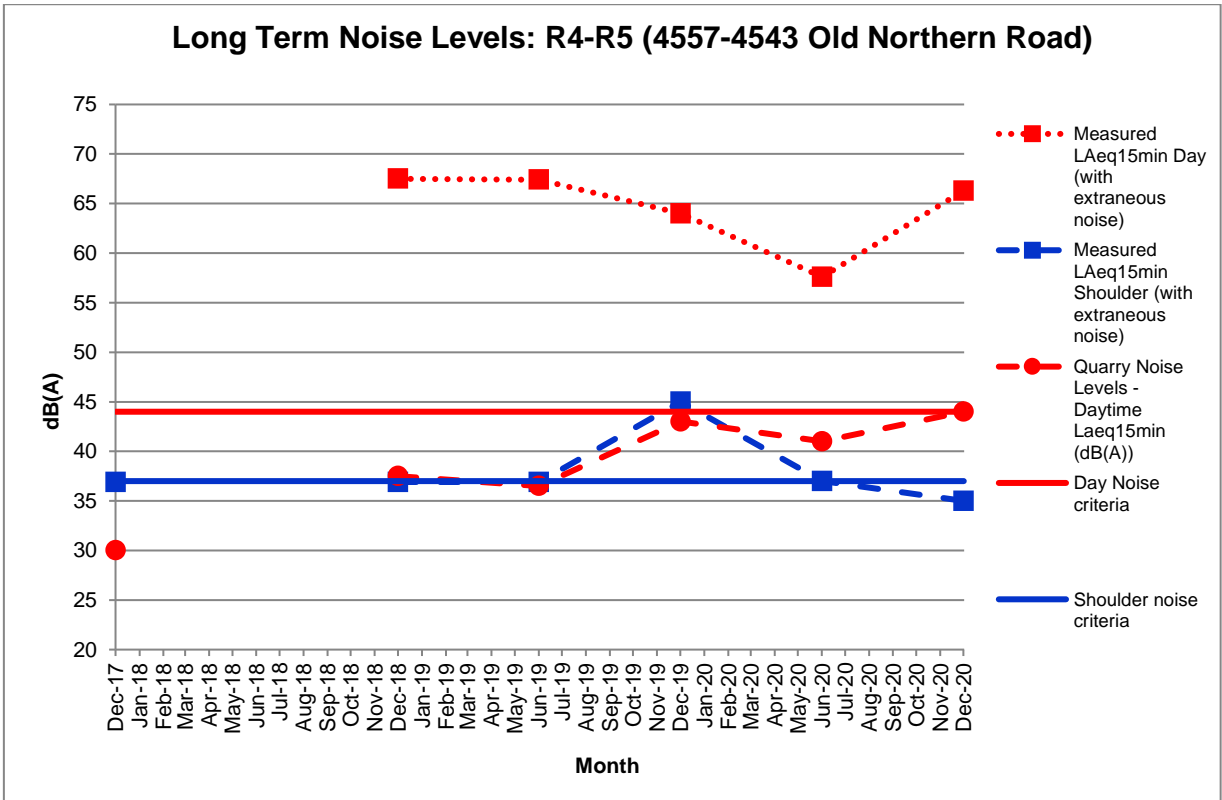


Chart 6 - Long term Noise Trend – R4/R5 (No. 4634 Old Northern Road)

## 3.0 Surface Water

### 3.1 Comparison of Surface Water Discharge Volumes and Quality with Historical Data

The long-term discharge volumes and analysed water quality at the EPA licensed discharge point LDP01 are shown in Table 2. A total of 1.50 megalitres of water have been discharged during the discharge events since the 2003 – 2004 monitoring period to date. Two planned and one unplanned discharge events occurred during this 2019 – 2020 monitoring period, totalling 0.875 megalitres in volume and constituting 58 percent of the total discharge volume to date.

Condition M2.3 of EPL lists the limits of water quality criteria to be met for water discharge which are:

- pH: 4.5 – 6.5
- Total suspended solids: 50 mg/L

Historically, laboratory results indicate that all water quality suites have met the EPL discharge criteria since the commencement of monitoring, except for one discharge event in the 2014 – 2015 monitoring period where the total suspended solids were slightly elevated and exceeded the EPL criteria.

The unplanned discharge event which occurred as the third discharge event in this monitoring period was reported to the EPA and the Department as an incident. No grab sample was taken for this discharge event. Details of this incident were previously reported and discussed in **Section 11.1 Environmental Non-Compliances and Incidents** of the **Annual Review 2019 – 2020 (September 2020)**.

**Table 2: Long Term Discharged Water Volume at LDP01 (EPL licensed discharged point)**

Annual Review Monitoring Period	Discharge Volume (Megalitre)	pH	Total Suspended Solid (mg/L)	Turbidity (NTU)	EPL Discharge Criteria Met
2003 – 2004	0.062 <sup>*1</sup>	4.9 <sup>*1</sup>	16 <sup>*1</sup>	21 <sup>*1</sup>	Yes <sup>*1</sup>
	0.034 <sup>*2</sup>	5.0 <sup>*2</sup>	31 <sup>*2</sup>	33 <sup>*2</sup>	Yes <sup>*2</sup>
2004 – 2005	0.374 <sup>*1</sup>	5.9 <sup>*1</sup>	33 <sup>*1</sup>	60 <sup>*1</sup>	Yes <sup>*1</sup>
	0.156 <sup>*2</sup>	6.3 <sup>*2</sup>	22 <sup>*2</sup>	6.3 <sup>*2</sup>	Yes <sup>*2</sup>
2005 – 2006	0	-	-	-	-
2006 – 2007	0	-	-	-	-
2007 – 2008	0	-	-	-	-
2008 – 2009	0	-	-	-	-
2009 – 2010	0	-	-	-	-

Annual Review Monitoring Period	Discharge Volume (Megalitre)	pH	Total Suspended Solid (mg/L)	Turbidity (NTU)	EPL Discharge Criteria Met
2010 – 2011	0	-	-	-	-
2011 – 2012	0	-	-	-	-
2012 – 2013	0	-	-	-	-
2013 – 2014	0	-	-	-	-
2014 – 2015	Not measured <sup>*1</sup>	4.7 <sup>*1</sup>	64 <sup>*1</sup>	40 <sup>*1</sup>	No <sup>*1</sup>
	Not measured <sup>*2</sup>	5.5 <sup>*2</sup>	32 <sup>*2</sup>	80 <sup>*2</sup>	Yes <sup>*2</sup>
2015 – 2016	0	-	-	-	-
2016 – 2017	0	-	-	-	-
2017 – 2018	0	-	-	-	-
2018 – 2019	0	-	-	-	-
2019 – 2020	0.350 <sup>*1</sup>	5.79 <sup>*1</sup>	18 <sup>*1</sup>	24.1 <sup>*1</sup>	Yes <sup>*1</sup>
	0.520 <sup>*2</sup>	4.60 <sup>*2</sup>	2 <sup>*2</sup>	4.2 <sup>*2</sup>	Yes <sup>*2</sup>
	0.005 <sup>*3</sup>	no sample <sup>*3</sup>	no sample <sup>*3</sup>	no sample <sup>*3</sup>	No <sup>*3</sup>
<b>TOTAL Volume Discharged (Megalitre)</b>	<b>1.500</b>				

Note: <sup>\*1</sup> denotes to discharge event number 1 within the monitoring period

<sup>\*2</sup> denotes to discharge event number 2 within the monitoring period

<sup>\*3</sup> denotes to discharge event number 3 within the monitoring period

### 3.2 Assessment of Receiving Water Quality Monitoring

The receiving surface water quality monitoring at SW19 was undertaken on a quarterly basis during this monitoring period in September 2019, December 2019, March 2020 and June 2020.

Table 3 presents the baseline surface water (SW19) quality and trigger values contained in the **Soil and Water Management Plan (v4, May 2020)** (SWMP). The trigger values adopted in the SWMP are as follow:

- pH: 20<sup>th</sup> and 80<sup>th</sup> percentile
- TSS: 80<sup>th</sup> percentile
- Turbidity: 80<sup>th</sup> percentile

Table 4 presents the surface water (SW19) quality results yielded during this monitoring period.

**Table 3: Baseline Surface Water (SW19) Quality and Trigger Values (July 2003 to July 2005).**

Parameter	Minimum	20 <sup>th</sup> Percentile	50 <sup>th</sup> Percentile	80 <sup>th</sup> Percentile	Maximum
pH	<2.0	4.0	4.2	4.8	7.1
TSS (mg/L)	<2.0	2.0	2.0	8.0	17
Turbidity (NTU)	0.1	0.1	0.3	3.8	21

**Table 4: Surface Water (SW19) Quality Results 2019 – 2020.**

Parameter	Sep 2019	Dec 2019	Mar 2020	Jun 2020
pH	4.0	4.3	4.7	4.3
TSS (mg/L)	5	2	2	2
Turbidity (NTU)	0.9	0.2	0.2	0.3
Flow Rate (Field Observation)	Medium flow	Medium flow	Medium flow	Medium flow
SW19 quality results comply with the Trigger Values (SWMP, V4, May 2020)	Yes	Yes	Yes	Yes

The surface water (SW19) quality results contained in Table 4 indicate that all parameters fall within the trigger value thresholds of Table 3. The analysed surface water quality results show no anomalies which indicates that quarry operations are not impacting on the receiving water quality.

## 4.0 Traffic

### 4.1 Effectiveness of Traffic Management

Current traffic management and mitigation measures are being implemented through Old Northern Road Quarry Traffic Management Plan (TMP). The mitigation measures listed in Table 5.1 in the TMP are categorised into three main categories: (1) truck movement measures, (2) site operational control measures and (3) transport related consultation measures.

During the period of this Annual Review, the adopted mitigation measures have been effective in managing traffic on the quarry premise. Restrictions on number of truck movements to and from site during morning and daytime period have been complied with. All haulage truck operators have been inducted onto site and a record maintained.

During induction, the haulage truck operators were provided with a copy of the following documents:

- *Site Traffic Management Plan* - outlining specific requirements the responsibilities and requirements,

- *Quarry Premise Map* - showing traffic flow directions,
- *Maroota Local Traffic Management Policy* - outlining the inter-pit agreement between the three signatories of local quarries, and
- *Site Induction Declaration* – declaration to be made *and* signed by haulage truck operators confirming induction requirements.

The implemented mitigation measures and educational campaign increases awareness and emphasises the importance of traffic related compliance. This has proven to be effective as there is a decreasing trend in the number of traffic related complaints over the last three reporting years, as discussed in Section 6.0 below.

## 4.2 Additional Management Controls

The Maroota Local Traffic Management Policy (MLTMP) has been reviewed, updated and signed by the local quarry signatories on 17 January 2020. This MLTMP (2020) supersedes the original MLTMP.

Additional traffic management controls have been proposed for the next Annual Review period as a result of the review and revision of the TMP. A compliance procedure is an additional management control added to the TMP and induction documents. The inclusion of a compliance procedure in the induction documents provides reiteration to haulage truck operators of the expected outcome should the requirements contained in the TMP are not complied with.

Dixon Sand continues to show its support towards the CCC's recommendation to extend the school zone time outside Maroota Public School in the afternoon from 16:00 to 16:30 due to safety concerns for students waiting for school bus pickup within that period. The matter has been raised by the CCC Chairperson with the member of the Hawkesbury Electorate and future correspondences will be dealt with in the CCC meetings.

## 5.0 Biodiversity and Rehabilitation

### 5.1 Progressive Rehabilitation

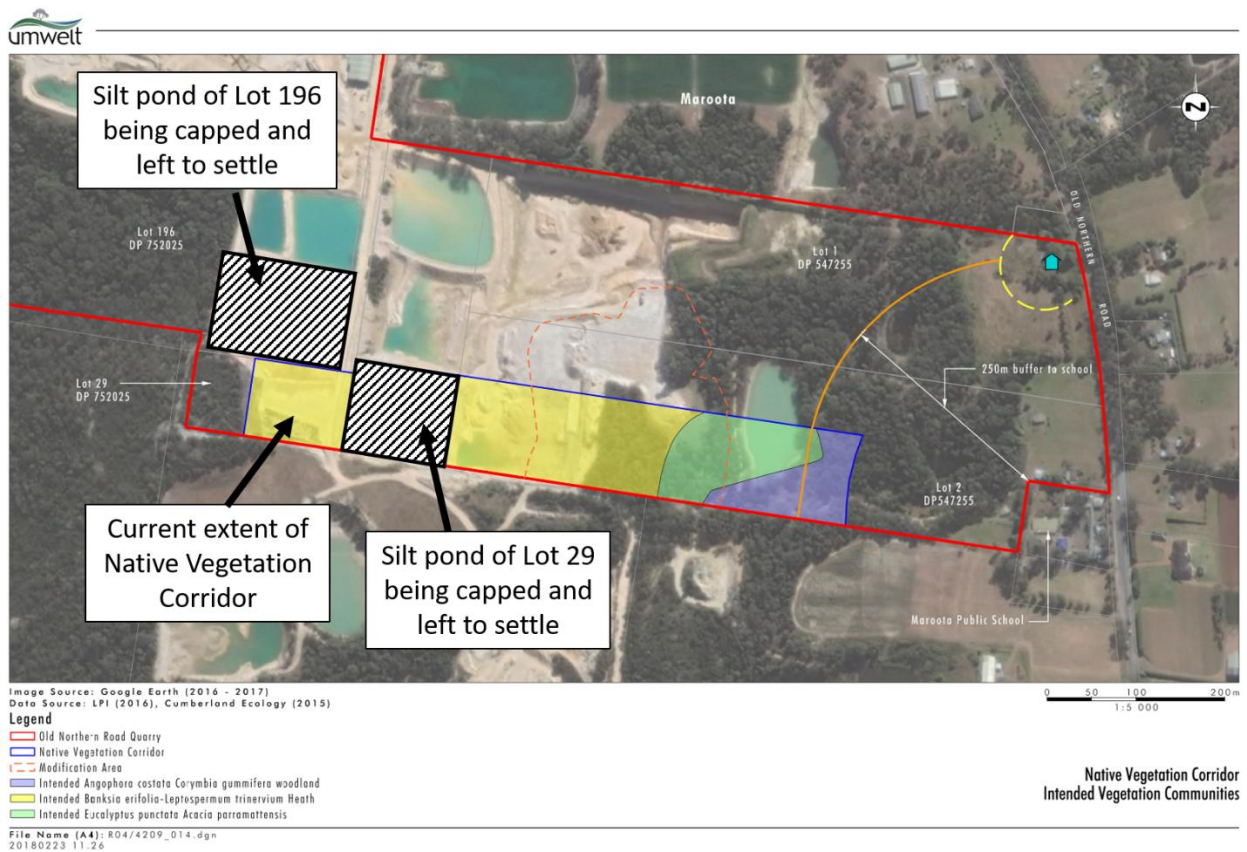
Progressive rehabilitation of the quarry during this reporting period included:

- capping and settlement of the silt pond located on Lot 196 directly north of the current Native Vegetation Corridor (NVC). Part of the silt pond will form the northern boundary of the NVC and the remainder will be revegetated to Class 4 Agriculture.
- Capping and settlement of the silt pond located on Lot 29 directly east of the current haul road separating Lots 29 and 196. Once optimal status is obtained, stockpiled windrows of material and topsoil will be applied to this area for rehabilitation of Banksia Heath Community, extending east from the current NVC on Lot 29.

The locations of the capped and settling silt ponds are shown in Figure 2 below.

No revegetation was carried out for rehabilitation during this reporting period. Revegetation of the silt ponds may occur in the next reporting period if ground conditions are deemed suitable.





**Figure 2: Locations of capped and settling silt ponds, in preparation for future rehabilitation/revegetation.**

Current progress of rehabilitation is in line with the ‘Mid stage 2016 – 2023’ staging of rehabilitation and rehabilitation strategy contained in Table 7.1 of the BRMP which includes:

- completion of rehabilitation on selected extracted areas on Lots 196 and 29,
- commencement of rehabilitation on strip 1,
- continual extraction on strips 2 and 3, and
- maintenance of previous revegetation, setbacks, buffer zones and bunds.

## 5.2 Pest Species Monitoring and Control

Feral pest species monitoring was undertaken by South East Environmental utilising direct observation of prints and burrows, sand pads, scat identification and digs. The following feral pest species were identified to be present on the quarry premise:

- European Red Fox – identified through scat and sand pad,
- Noisy Minor – identified through on-site observation,
- Dog – identified through sand pad,
- Domestic Cat – identified through sand pad, and
- European Rabbit – identified through scat, digs and sand pad.

European rabbit scats were observed in several locations on Lots 1 and 2 in low to moderate density. Carnivore scats observed on site were highly likely to be those of European Red Fox. No rabbits were observed to be feeding during the day, scats were not in high density and warrens were not observed. The population of rabbits is therefore, considered to be low to moderate, and likely to be kept under control by biological means such as predation from foxes, dogs, cats and birds of prey such as Wedge-tailed Eagle that are present nearby. Should the number of rabbits become problematic, it may be necessary to engage in a control program to reduce or eliminate the population. Noisy minors, although a native species, was observed on Lots 1 and 2. Noisy minors are considered a pest if present in high density and is a key threatening process to a number of threatened native species of small birds such as the Brown Tree Creeper which is present in the area. The population of the Noisy Minor was considered to be small and the presence of other small native bird species was observed on site. The population of the Noisy Minor is to be monitored over time and management strategy to be implemented to prevent the species from becoming dominant which can lead to elimination and displacement of other native bird species.

No fauna pest species were observed in the fenced off rehabilitated area within the Native Vegetation Corridor on Lot 29.

Overall, occurrences of fauna pest species are not at a level considered to require active management and on-going monitoring will be undertaken to determine appropriate dynamic management strategy.

### **5.3 Progressive Achievement of Completion Criteria**

Section 5.2 of the BRMP contains the preliminary rehabilitation performance and completion criteria. The status of targets being achieved against the preliminary rehabilitation performance and completion criteria are contained in Table 5.

**Table 5: Assessment against criteria to monitor success of rehabilitation.**

Aspect	Preliminary Rehabilitation Performance and Completion Criteria	Target Achieved	Comments
Decommissioning	All surface infrastructure will be decommissioned and removed.	N/A	Noted – completion criteria not yet triggered
Soil	Rehabilitated slopes are stable	Yes	Complied with – managed through a combination of weekly and monthly inspections by Quarry Managers and Environmental Officer, or Delegates. Aspects managed through mitigation measures contained in the Soil and Water Management.
	No significant erosion is present that would constitute a safety hazard or compromise the capability of supporting the end land use.		
	Contour banks are stable and there is no evidence of overtopping or significant scouring as a result of runoff.		
	Surface layer is free of any hazardous materials.		
Water	Runoff water quality from the site does not pose a threat to downstream water quality.	Yes	Complied with. Aspects managed through downstream surface water monitoring, and other mitigation measures contained in the Soil and Water Management.
Native Vegetation	Revegetation areas contain flora species assemblages characteristic of the desired native vegetation communities.	N/A	At this stage it is too early in the rehabilitation process to determine if the desired vegetation community is being established. Species planted have been specifically chosen to recreate a Banksia Heath community.
	Second generation tree seedlings are present or likely to be, based on monitoring in comparable older rehabilitation sites (i.e., evidence of fruiting of native species observed).	N/A	It is too early in the rehabilitation process for second generation tree seedlings. Fruiting of tree species is not expected for 5 years following the original planting (i.e., 2022).
	More than 75 per cent of trees are healthy and growing as indicated by long term monitoring.	Yes	More than 75% of the native vegetation within the active rehabilitation area is healthy and is growing as expected for long term survival. All shrub and ground cover species have reached maturity with flowering and seed production observed. Some species have begun self-propagation within rehabilitation sites. Eucalyptus, Angophora and Corymbia species have not yet reached maturity.

Aspect	Preliminary Rehabilitation Performance and Completion Criteria	Target Achieved	Comments
	<p>More than 50 per cent of translocated or propagated threatened flora species survive as indicated by long term monitoring.</p>	<p>Yes</p>	<p>More than 50% of translocated and planted propagated threatened flora species has survived despite the dry conditions of the previous reporting period which led into this current reporting period. To date at least 45 propagated <i>Darwinia fascicularis</i> subsp. <i>Oligantha</i> and 21 propagated <i>Melaleuca deanei</i> have survived transplanting in the rehabilitation area. A complete count of translocated <i>Darwinia fascicularis</i> subsp. <i>Oligantha</i> was not undertaken at the time of relocation however it appears that any losses that may have occurred were minimal and new recruits are now visible throughout much of the area.</p>
	<p>There is no significant weed infestation such that weeds do not comprise a significant proportion of species in any stratum.</p>	<p>Yes</p>	<p>Minor weed species are present within the rehabilitation areas and are being effectively managed. Lantana is present on Lots 1 and 2, outside the rehabilitation area, and is being managed by licensed bush regenerator.</p>
<p>Stream and Riparian Zone Restoration</p>	<p>Drainage line stable displaying no signs of erosion</p> <p>Weed species densities no greater than surrounding vegetation</p> <p>Access to riparian zone is restricted</p> <p>Riparian zone established to a width of 20 metres</p> <p>Riparian zone is considered self-sustaining and exhibits 60% or more of the control site scores for each riparian condition monitoring attribute</p>	<p>N/A</p>	<p>Noted – aspect not yet triggered.</p>

Aspect	Preliminary Rehabilitation Performance and Completion Criteria	Target Achieved	Comments
Weed and Pests	Regular inspections indicate a decline weed diversity, density and abundance and a decline in signs of feral animal activity.	Yes	On-going weed management by licensed bush regenerator aims to control the presence of Lantana within areas yet to be quarried to ensure the species do not spread and maximise quantity of translocatable materials. Minor weed species are present within the rehabilitation areas and are being effectively managed. On-going monitoring of feral animal activities will be undertaken to establish long term trend in occurrence and density, and to determine appropriate cause of action.
	There is no significant weed infestation such that weeds do not comprise a significant proportion of species in any stratum.	Yes	Minor weed species are present within the rehabilitation areas and are being effectively managed.
	There is no evidence of significant damage resulting from feral animal activity	Yes	Occurrences of feral fauna species are not at a level considered to require active management and on-going monitoring will be undertaken to determine appropriate management strategy. There is no evidence of significant damage caused from feral animal activity within the rehabilitation area.
Bushfire Hazard	Appropriate bushfire hazard controls have been implemented.	Yes	Complied with – bushfire hazards are managed through the Bushfire Management Plan (Parts 1 and 2). Annual meeting between Dixon Sand and the representative of Rural Fire Service are carried out before the start of the bushfire season to review and revise the status of hazards and mitigation measures. The annual meeting was carried out on 21 August 2019 for this reporting period.
Ongoing Public Safety	Appropriate mechanisms are established to control access and manage public safety post-closure.	N/A	Noted – aspect not yet triggered

## 5.4 Stream Restoration

Riparian stream restoration has not commenced. The areas where the riparian stream was to be reinstated are either still being extracted or yet to be extracted.

## 6.0 Complaints

### 6.1 Long Term Complaints Trend

Long term complaints monitoring data commencing since the 2003 – 2004 monitoring period is depicted in Chart 7 below. It must be noted that complaints were recorded for the Old Northern Road and Haerses Road quarries combined from the 2006 – 2007 to 2017 – 2018 monitoring periods, with complaints recorded separately for individual quarries from hereon.

A total of twenty complaints have been received by Dixon sand since the 2003 – 2004 monitoring period.

The number complaints were between nil and up to three from the 2003 - 2004 to 2007 – 2008 monitoring periods, all of which were associated with haulage trucks driving in a dangerous manner or exceeding the speed limit.

During the 2008 – 2009 monitoring period, the number of complaints increased to six, with the majority associated with trucks driving in a dangerous manner or exceeding the school zone speed limit. One complaint was in regards to excessive noise generation where the source of noise was identified to be caused by a different operation.

From 2009 – 2010 to 2016 – 2017 monitoring periods, the number of complaints were minimal and fluctuated between nil and two. These complaints were associated with haulage trucks driving in a dangerous manner or exceeding the speed limit.

The 2016 – 2017 monitoring period recorded an increase in number of complaints to eight complaints which were associated with haulage trucks driving in a dangerous manner, excessive noise generation, operation outside of approved hours and excessive dust generation.

From this point, a downward trend in number of complaints was observed. The number of complaints received reduced to five haulage truck related complaints during the 2018 – 2019 monitoring period. The number of complaints further reduced to two truck related complaints (exceedance of speed limit) during this 2019 – 2020 monitoring period.

The majority of the complaints were made by residents of Maroota, residents of neighbouring suburbs or local road users. One complaint was made by Dixon Sand Quarry Manager. Timing of events leading to complaints were mainly during quarry operation hours with the exception of complaints associated with operations outside of consented hours. The locations of haulage trucks driving in a dangerous manner, exceeding the speed limit or excessively using engine brakes were mainly on Old Northern Road and Wisemans Ferry Road in the local areas.

Dixon Sand implemented the steps to identify the validity of the complaints received and employed appropriate actions outlined in the complaints procedure and the Maroota Local Traffic Management Policy (inter-pit policy). Several complaints were identified to have been associated with other operations in or outside the local areas. All complaints have been closed out.

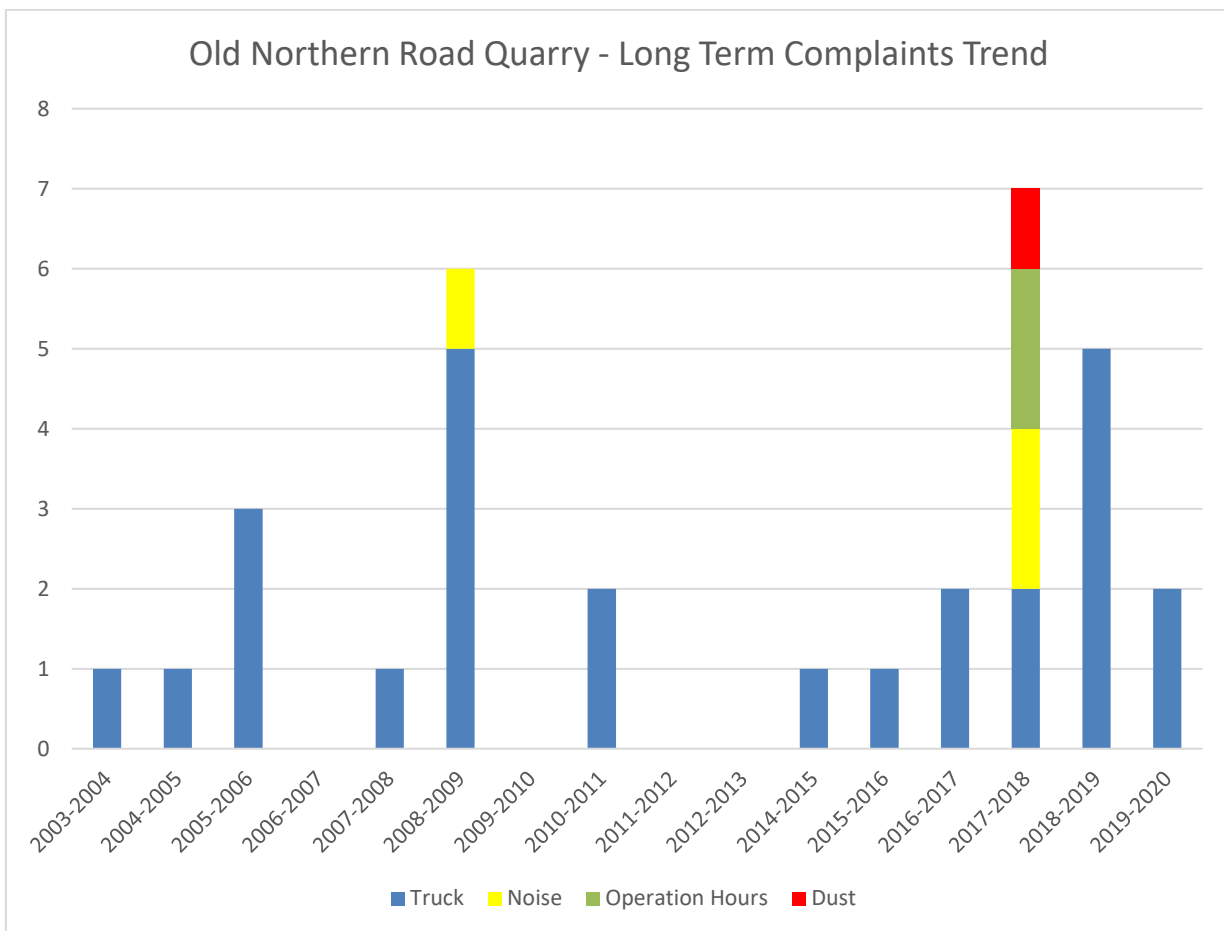


Chart 7 - Long term complaints monitoring data.

## 7.0 Conclusion

Additional information has been provided to satisfy the Department’s RFI. No additional non-compliances in addition to the those contained in the original Annual Review have been identified in this Addendum Annual Review.