



Hymix

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# 2021 Annual Environmental Management Report

## Hymix – Chinderah Concrete Plant

**Prepared by:**

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## Document Control

### Document Details

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## 1.0 Background

Hymix Australia Pty Ltd (Hymix) operates Chinderah Concrete Plant which is located on 28 – 30 Ozone Street, NSW 2487 in the local government area of the Tweed Shire Council (TSC). The site is a concrete batching operation that delivers ready-mix concrete to customers in both Northern New South Wales and South East Queensland.

The plant was commissioned in 2005. Hymix supplies the market with approximately 20,000m<sup>3</sup> of concrete per annum

The tenure of property is freehold. It consists of the following land parcel(s):

### Freehold

- Lot 1 DP1090468 (formerly registered as Lot 17 and 18 DP610959)

Hymix Chinderah Concrete Plant operates under prescribed conditions specified in Development Consent (DA-118-03-2003-i) and Environmental Protection License (EPL 12401). The Development Consent and Environmental Protection License were issued to Hymix on 5 February 2004 and 1 November 2005, respectively.

In 2009, amendments to the Protection of the Environmental Operations (POEO) Regulation 2009 deregulated several activities under certain production thresholds. Deregulated activities are no longer required to hold an Environmental Protection License to operate.

As an Environmental Protection License is not required, the local authorities become the regulatory authorities for non-scheduled activities. In general, local councils can regulate non-scheduled activities through notice and enforcement powers in their Local Government Area. However, the EPA can issue a licence to regulate pollution from a non-scheduled activity. If it does, the EPA becomes the regulator for all environmental impacts from the activity under the POEO Act instead of the local council.

In the case of Hymix – Chinderah Concrete Plant, the NSW Department of Planning, Industry and Environment (DPIE) and Tweed Shire Council (TSC) are the administering authorities for the site.



**Figure 1: Hymix - Chinderah Concrete Plant**

## 2.0 Purpose

The purpose of the Annual Environmental Management Report (AEMR) is to undertake the necessary assessment and review compliance, report on the effectiveness of environmental management systems, and provide recommendations to remediate any instances of non-compliance identified during the review.

The report shall:

- Include a detailed summary of all complaints received during the past year
- Include a detailed summary of monitoring results for the past year, and assess monitoring results against the relevant impact assessment criteria identified within the conditions of the Development Consent and EIS
- Identify the non-compliances during the previous year; and
- Describe any remedial actions that are being taken to ensure compliance



**Figure 2: Hymix - Chinderah Concrete Plant**

### 3.0 Complaints Register

In summary, Hymix – Chinderah Concrete Plant received zero complaints for the reporting period January 2017 to December 2021 (see Table 1)

**Table 1: Summary of Complaints**

Nature of Complaint	2017	2018	2019	2020	2021
Public	Air Quality – nil Water – nil Noise – nil	Air Quality – nil Water – nil Noise – nil	Air Quality – nil Water – nil Noise – nil	Air Quality – nil Water – nil Noise – nil	Air Quality – nil Water – nil Noise – nil
Local	Air Quality – nil Water – nil Noise – nil	Air Quality – nil Water – nil Noise – nil	Air Quality – nil Water – nil Noise – nil	Air Quality – nil Water – nil Noise – nil	Air Quality – nil Water – nil Noise – nil
Customer	Air Quality – nil Water – nil Noise – nil	Air Quality – nil Water – nil Noise – nil	Air Quality – nil Water – nil Noise – nil	Air Quality – nil Water – nil Noise – nil	Air Quality – nil Water – nil Noise – nil
Other	Air Quality – nil Water – nil Noise – nil	Air Quality – nil Water – nil Noise – nil	Air Quality – nil Water – nil Noise – nil	Air Quality – nil Water – nil Noise – nil	Air Quality – nil Water – nil Noise – nil

### 4.0 Monitoring

#### 4.1 Air Quality

As prescribed in Section 3.1 to 3.3 of the Development Consent (DA 118-03-2003-i), the applicant shall:

- Design, construct, operate and maintain the development in a manner that minimises dust emissions from the site
- Take all practical measures to ensure that all vehicles entering or leaving the site and carrying a load that may generate dust are managed at all times in a manner that will prevent emissions of dust from the vehicle
- Ensure all trafficable areas and vehicles manoeuvring areas on the site shall be maintained in a condition that will minimise the generation or emission of windblown or traffic generated dust from the site at all times

In 2019 Hymix – Chinderah Concrete Plant implemented an air quality monitoring program to establish baseline data to identify trends and assess operational performance against prescribed air quality criteria. The program satisfies the relevant Australian Standard for dust sampling (AS3580.10.1). No air quality complaints were received for the site during 2021. Dust sampling locations can be found in Figure 3 and Figure 4 respectively. Air quality results have been provided in table 2.

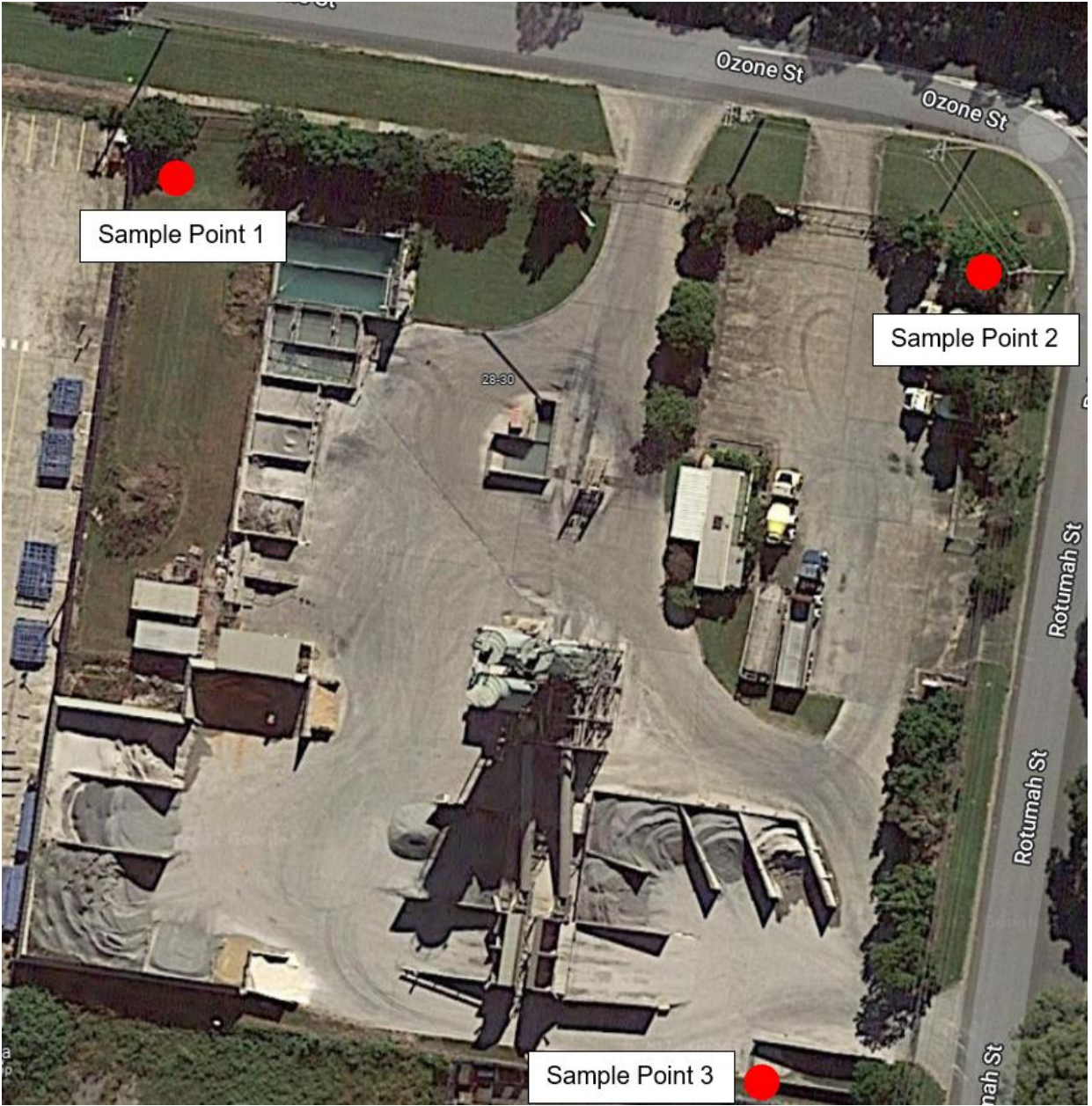


Figure 3: Dust Sampling Locations

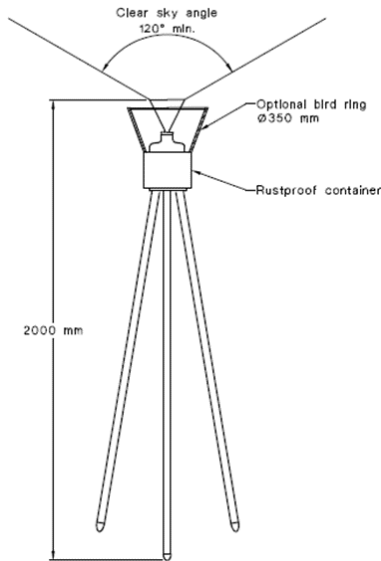


Figure 4: Dust Deposition Gauge Design

Table 2: 2021 - 2019 Dust monitoring results

Year	Date	Report number	Sample Point 1 (g/m <sup>2</sup> /month)	Sample Point 2 (g/m <sup>2</sup> /month)	Sample Point 3 (g/m <sup>2</sup> /month)
2021	5.04.2021 – 5.01.2022	CE157499	0.4	1.6	1.0
	22.01.2021 – 21.03.2021	CE151829	1.1	Sample damaged in transit	Sample damaged in transit
	23.09.2020 – 23.12.2020	CE150370	2.3	3 (new)	14
2020	12.05.2020 – 12.09.2020	CE148366	0.6	3.1 (new)	2.7
	28.01.2020 – 28.04.2020	CE146145	0.8	30*	2.3
	25.7.2019 – 25.10.2019	CE142882	2.4	120	13
	9.3.2019 – 14.4.2019	CE141009	1.5	74	8.7



	9.3.2019 – 17.4.2019	CE139499	1	12	4
	4.2.2019 – 8.3.2019	CE138658 ( )	4.2	210	9
Nil previous readings were recorded					

*\*This reading was found to be giving a false high reading because of its close proximity to the raw material stockpiles and load point. As a result, sample point 2 was moved to the northern boundary to provide results indicative of dust leaving site.*

Ongoing monitoring results indicate a level of continual improvement for dust emission control between the 2019-2021 monitoring periods. Results from 2019-2020 monitoring activities show numerous elevated results, particularly from Sample Point 2. Results gathered through 2021 show a significant reduction in particulate emissions, and although one third of samples collected during the period were damaged, Hymix considered it highly unlikely these results would have resulted in levels in-excess of results collected for the same period at Sample Point 1.

In general, the site satisfies the requirements of the approval and is deemed compliant as per prescribed air quality conditions. The site effectively manages dust by:

- Enclosing the load bay and using a dust suppression system
- Locating plant in an industrial zone
- Using sprays on aggregate ground bins
- Maintaining dust barriers around aggregate ground bins
- Daily housekeeping of hardstand areas

## 4.2 Noise

As prescribed in Section 3.4 to 3.6 of the Development Consent (DA 118-03-2003-i), the applicant shall:

- Comply with the requirements of this consent, the construction of the development may occur 7:00am to 7:00pm Mondays to Fridays and 7:00am to 1:00pm Saturdays. Construction works may only occur on Saturday afternoon (after 1:00pm), Sunday or public holidays with the prior approval of the Director-General
- Comply with the requirements of this consent, the development may be operated: 24 hours per day, on Mondays to Fridays; midnight Fridays to 6:00pm Saturday and at no time on Sundays and Public Holidays. Where practicable, delivery of raw materials and cleaning of the yard shall be restricted to daylight hours
  - **Ensure that the noise generated by the development during operation does not exceed the sound pressure level (noise limits) at the described receptors, as presented in**
- Table 3.

**Table 3: Noise Limits**

Location	Time	LA <sub>eq</sub> (15 minutes) noise level criteria
All residential locations	07:00am to 6:00pm Monday to Saturday	44 dB(A)*
All residential locations	6:00pm to 10:00pm Monday to Friday	45 dB(A)*
All residential locations	At all other times	43 dB(A)*

\*Noise measured at the nearest effected residence on Sand Street Chinderah

The site is surrounded by other industrial activities including a concrete batching operation and recycling business. The Pacific Motorway is approximately 180m away. The nearest sensitive receptor is approximately 380m from the site (see Figure 5).

In 2019 Hymix – Chinderah Concrete Plant implemented a noise monitoring program to establish baseline data and identify trends and identify and instances of non-compliance. Results from monitoring have been provided in table 4.



**Figure 5: Closest Sensitive Receptor**

**Table 4: 2021 -2019 Noise Monitoring Data**

<b>Year</b>	<b>Date</b>	<b>Time</b>	<b>LA<sub>eq</sub> (15 minute) Plant Running</b>	<b>LA<sub>eq</sub> (15 minute) Plant closed</b>
<b>2021</b>	29.03.2021	8:11am – 8:26am	53 bB (A)	
	29.03.2021	8:26am – 8:41am	53 dB (A)	
	29.03.2021	8:42am – 8:59am		51dB(A)
<b>2020</b>	17.06.2020	7:38am – 8:09am		59 dB (A)
	18.06.2020	8:39am – 9:24am	55 dB (A)	
	12.11.2020	6:53am – 7:08am		47 dB(A)
	12.11.2020	7:08am – 7:39am	50 dB (A)	
<b>2019</b>	29.3.2019	10:51am –11:15am		45 dB(A)
	5.4.2019	9:20am – 10:00am	47 dB(A)	
Nil monitoring prior to this				

In comparison to historical data, noise monitoring results for 2021 show no significant increase or decrease in noise emissions from the operation. Hymix notes that while monitoring results show levels in-excess of prescribed limits, noise emissions from the operation at the monitoring location are not identifiable above traffic noise from the highway, air traffic, and environmental noise. Hymix believes that no environmental harm or noise nuisance would have occurred from the operation during the reporting period.

### **4.3 Water**

As prescribed in Section 3.7 of the Development Consent (DA 118-03-2003-i), the applicant shall:

- Comply with Section 120 of the *Protection of the Environmental Operations Act 1997* during the carrying out of the development

Although Hymix – Chinderah Concrete Plant does not have a mandated water quality performance criterion, the site continually works towards minimising environmental harm through effective implementation of the Environmental Management Plan.

The site has commenced monitoring water at the following locations (see Figure 6).



Figure 6: Internal and External Water Monitoring Locations

Table 5: Water monitoring results

Year	Date	Location	Reading
2021	2021 results were lost when batch computer failed. Results are now being stored on a remote server to prevent reoccurrence.		
2020	20.05.2020	O1	pH 9
		O2	pH 9
		O3	pH 9
2019	22.2.2019	O1	pH9
		O2	pH9
		O3	pH9
	27.2.2019	O1	pH9

		O2	pH9
		O3	pH8.5

Although monitoring results for 2021 were lost due to a computer failure, Hymix can confirm that no changes have occurred onsite that could impact the otherwise stable water quality onsite.

In general, the site satisfies the requirements of the approval and is deemed compliant as per prescribed water quality impact requirements. The site effectively manages water quality by:

- Cleaning wedge pits daily
- Hosing of yard daily to wash sediments into water treatment areas (wedge pits)
- Maintaining first flush capacity at all times

Furthermore, an inspection of vegetation at the water discharge outlet indicate no evidence of environmental harm.

## 5.0 Improvements carried out during 2021

Throughout 2021, Hymix continued to maintain the environmental management/monitoring systems implemented in 2019 to improve the environmental performance of the site. Moving forward environmental monitoring data will be stored in an online location to prevent data from being lost.

Hymix operates under a process of continual improvement with environmental management systems and is committed to providing better environmental outcomes the local community and environment from all its operations.

## 6.0 Statement of Compliance

Hymix thanks the Department for taking the time to review the 2021 Annual Environmental Management Report for Hymix Chinderah.

Hymix can confirm that the operation remained compliant with conditions of the site's Development Consent and Environmental Protection License, and no complaints have been received against the operation. Hymix will continue to monitor the operations environmental performance as required and will notify the Department should any instances of non-compliance be identified.