Stolthaven Newcastle

BIMONTHLY REPORT

November & December 2020



STOLTHAVEN NEWCASTLE LOT 2 STEELWORKS ROAD, MAYFIELD, 2304



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1 NOISE MONITORING

1.1 MONITORING CONDITIONS

In accordance with the conditions stipulated in the development approval SSD 7065 the Environmental Protection Licence 20193, Noise monitoring (NME) is an annual requirement occurring during the licenced reporting period. The most recent report was completed in December 2019.

1.2 MONITORING RESULTS

Year	Noise Monitoring Event Results
2015	Compliant
2016	Compliant
2017	Compliant
2018	Compliant
2019	Compliant

Brief summary from the last report:

AECOM Australia Pty Ltd (AECOM) was commissioned by Stolthaven Australia Pty Ltd (Stolthaven) to undertake a compliance noise assessment of operations at the Stolthaven Bulk Liquids Fuel Storage Facility (the Facility) operated by Stolthaven at the Port of Newcastle, Mayfield, NSW.

This acoustic assessment was conducted to determine compliance with the following site operational approvals and requirements:

- The NSW Environment Protection Authority (EPA) issued Environment Protection Licence No. 20193 (EPL 20193), License version date 14 September 2018;
- State Significant Development (SSD) 7065 15 December 2016; and
- Mayfield Concept Approval (MCP) (Application 09_0096) dated 16 July 2012 (latest modification 12 December 2014).

As the Facility lies within the Mayfield Concept Plan approval area, it requires noise emissions from the site to be consistent with the environmental assessment requirements of the Mayfield Concept Plan Approval, as stated in the approval SSD 7065, which have been demonstrated in this report.

Attended noise measurements were undertaken on 6 and 7 December 2019 at the closest nearby residential receiver locations. During the attended measurements, it was not possible to directly quantify the impacts of noise arising from operations at the Facility due to the influence from extraneous noise sources, i.e. existing industrial noise from other industrial areas unrelated to the Facility and traffic noise on Industrial Drive, or the noise impacts are significantly below the measured existing noise levels. As such, an alternative method was required in order to demonstrate compliance with the project approval requirements.

The compliance assessment was carried out using SoundPLAN noise modelling software, calibrated based upon attended noise measurements.

This method of noise compliance assessment is in accordance of the Chapter 11 of the EPA NSW Industrial Noise Policy (INP). In order to determine compliance of the Facility operational noise emissions with the required noise limits, 'reasonable' worst case operational scenarios where determined from 2015 to 2019 truck movement historical data provided by Stolthaven, and noise levels based upon on-site attended noise measurements undertaken over the period of 6 to 7 December 2019 and during previous site visits.

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Daytime, evening and night-time noise emissions were predicted to each of the required assessment locations and compared against the site noise limits for all scenarios. The Project approval requires that the noise emissions be assessed under worst case prevailing wind and temperature inversion conditions.

Results of the noise compliance modelling showed that the operation of the facility complies with the noise limits stated in EPL 20193 & SSD 7065 in addition to the project specific noise goals in the MCP for all outlined receivers.

Find below a link to the full/latest Noise compliance assessment.

https://www.stolt-nielsen.com/en/our-businesses/stolthaven-terminals/terminal-network/stolthaven-newcastle/stolthaven-newcastle-development-information/

1.3 NEXT MONITORING EVENT

The next Noise Monitoring Event is scheduled for December 2020 / January 2021.

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2 AIR QUALITY ASSESSMENT

The terminal is operated in accordance with the Air Quality Management Plan which was prepared in consultation with the Port of Newcastle, Department of Planning & Environment (DP&E) and consistent with the Mayfield Site Air Monitoring Program. The Mayfield Site Air Quality Monitoring Program uses the existing EPA monitoring system as a basis. The need for site specific monitoring to be implemented for projects in the Mayfield Concept Plan area is determined on a case by case basis during the planning and approval of each project. Stolthaven is operating under this framework to date.

Based on the outcomes of the Air Quality Impact Assessments undertaken for successive stages for the terminal, and in consultation with the EPA and DP&E, there has been no specific air quality monitoring requirements placed on Stolthaven. It should be noted that load limits are calculated on annual throughput and do not require regular monitoring to be undertaken.

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3 GROUNDWATER MONITORING

3.1 MONITORING CONDITIONS

Groundwater quality at the site is managed in accordance with a groundwater monitoring program, adherence to the sites Groundwater Management Plan and conditions of the Environmental Protection Licence (No. 20193). Groundwater beneath the site discharges into the Hunter River via groundwater mitigation. Four groundwater monitoring wells were installed in October 2013 (identified as Monitoring Points 1-4 in the EPL) and are subsequently identified as MW01 to MW04 in this report. As part of proposed Site expansion activities, a further five monitoring wells MW05 to MW09 (identified as Monitoring Points 16-20 in the EPL) were installed in July 2017 in order to develop a baseline of background groundwater quality (including residual contamination resulting from former BHP Steelworks remediation) in the area prior to any development of the lot.

The groundwater monitoring program consists of quarterly collection of data and samples from the groundwater wells. Monitoring events are scheduled so that groundwater conditions beneath the site are investigated during both 'wet' and 'dry' seasons.

EPA Identification Number	Type of Monitoring Point	Location Area
1	Groundwater	Developed land area
2	Groundwater	Developed land area
3	Groundwater	Developed land area
4	Groundwater	Developed land area
16 (MW05)	Groundwater	Undeveloped land area
17 (MW06)	Groundwater	Undeveloped land area
18 (MW07)	Groundwater	Undeveloped land area
19 (MW08)	Groundwater	Undeveloped land area
20 (MW09)	Groundwater	Undeveloped land area

3.2 MONITORING RESULTS

https://www.stolt-nielsen.com/en/our-businesses/stolthaven-terminals/terminal-network/stolthaven-newcastle/stolthaven-newcastle-development-information/

3.3 SUMMARY FROM LATEST AECOM REPORTING

Nine groundwater wells were sampled in accordance with the Site's EPL.

Groundwater level monitoring and groundwater sampling was conducted at the Current Site Area (MW01 to MW04) and the Proposed Expansion Area (MW05 to MW09) on the 23 November 2020 in accordance with the Site's EPL.

The analytical results of the groundwater quality monitoring at the Site reported no exceedances of the adopted GAC at groundwater wells MW01, MW02, MW03, MW04, MW05, MW06, MW07 and MW09.

Review of analytical results and MKA indicated results are generally consistent with historical data and confirmed that groundwater quality from this GME is comparable to pre-operational baseline conditions at the Site. It is considered that Site operations have not had any measurable impact on

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the quality of groundwater beneath the Site. Overall, it is considered that Stolthaven has complied with the groundwater monitoring requirements of the EPL and GMP.

As at this GME, 14 rounds of baseline groundwater monitoring have been undertaken on monitoring wells MW05 to MW09 at the Proposed Expansion Area. Baseline analytical results have identified consistent exceedances of the adopted GAC for Benzene, Toluene and meta & para Xylenes at MW08 and elevated TRH concentrations, also at MW08. It is considered residual hydrocarbon impacts identified at MW08 are localised within fill deposits immediately surrounding MW08 and are effectively laterally delineated to the north-east and south by MW08A and MW08B.

In the August 2020 sampling event MW06 reported concentrations of TRH C16 -C34 fractions, which was uncharacteristic. TRH concentrations were reported less than LOR at MW06 at the November 2020 sampling event, therefore the result in August 2020 could be considered as an anomaly.

To date, no infrastructure related to storage and transfer of hydrocarbons is in place at the Proposed Expansion Area. It is considered that the elevated results related to residual historical contamination from the former BHP Steelworks (which previously occupied areas of the Current Site Area and Proposed Expansion Area) and are unrelated to current operations at the Site.

It is acknowledged that development of the Proposed Expansion Area may take several months to complete. Baseline data recorded to date at MW05 to MW09 should be reassessed prior to commencement of construction works to allow adequate contamination management measures to be established.

3.4 NEXT MONITORING EVENT

The next Groundwater Monitoring Event is scheduled for: February 2021.

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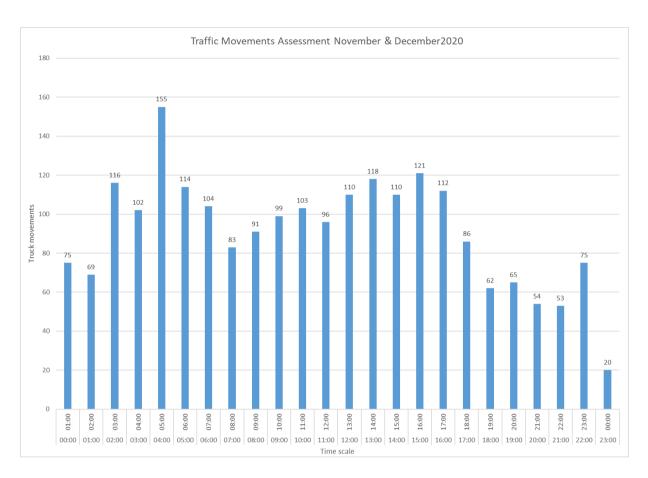


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4 TRAFFIC MOVEMENT ASSESSMENT

The traffic movement assessment is the collation of all the transactions made at Stolthaven Newcastle during the reporting period. This is displayed in hourly intervals shown in the bar chart below.



In accordance with Schedule 3, Condition 2.3 of the Mayfield Concept Plan, the following table details truck movements against the prescribed criteria. Note a loaded vehicle is measured as two movements, inward and outward bound of the terminal.

	Total Truck Movements per annum	Total Truck Movements per day	Total Hourly Truck Movements in peak periods
MCP Criteria	462,104	1,268	95
Stolthaven	27'950†	77.0*	3.2*

 $\mbox{\dag}$ Rolling cumulative total truck movements over 12 month period

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^{*} Based on an average over an actual 12 month period