Stolthaven Newcastle

BIMONTHLY REPORT

March & April 2018



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 approvals SSD 6664 MOD1/SSD 7065 & the Environmental Protection Licence 20193, Noise monitoring (NME) is an annual requirement. The the most recent report was completed in December 2017.

1.2 MONITORING RESULTS

Brief summary:

Noise impacts were found to be consistent with operations in previous years with small 1 dB to 2 dB increases due to different equipment measured on site.

Results of the noise compliance modelling showed that the operation of the facility complies with the noise limits stated in EPL 20193 in addition to the project specific noise goals in the MCP for all outlined receivers. For the full detailed report, see below;

https://www.stolt-nielsen.com/media/1818/noise-assessment-2017.pdf

1.3 NEXT MONITORING EVENT

The next Noise Monitoring Event is scheduled for: December 2018

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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 PON and 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	Groundwater	Undeveloped land area
17	Groundwater	Undeveloped land area
18	Groundwater	Undeveloped land area
19	Groundwater	Undeveloped land area
20	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 REPORTING

Groundwater level monitoring and groundwater sampling was conducted at the current Site (MW01-MW04) and the proposed Expansion Area (MW05-MW09) by AECOM on the 16th of January 2018. The analytical results of the groundwater quality monitoring indicate that there were no exceedances of the adopted GAC as detailed above in **Table 8** or breaches of EPL conditions, relating to groundwater monitoring Points at the Site (MW01-MW04).

Review of analytical results and MKA (where undertaken) from this GME indicated results are consistent with historical data and confirmed that groundwater quality from this GME is comparable to pre-operational background conditions at the Site. It is considered that Site operations have not had an impact on the quality of groundwater beneath the Site. On the whole it is considered that Stolthaven has complied with the groundwater monitoring requirements of their EPL and GMP. Three rounds of groundwater monitoring have been undertaken on monitoring wells MW05-MW09 to establish an initial background range for groundwater quality prior to the proposed redevelopment of the Expansion Area located south of the current Site. Analytical results reported exceedances of the Site's adopted GAC for Benzene and Toluene at MW08 and elevated TRH results at MW08 and MW09.

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To date, Stolthaven have completed no works on the expansion site and have no infrastructure in place. It is considered that the elevated results related to residual historical contamination from the former BHP Steelworks (which previously occupied areas of the Site and proposed Expansion Area) and unrelated to current operations at the Site.

Groundwater quality at the proposed Expansion Area is considered uncharacteristic of conditions at the current Site, and should therefore not be assessed against background ranges derived from preoperational conditions at MW01-MW04.

Moreover, given the magnitude of detected hydrocarbon concentrations at MW08 and MW09, it is not considered realistic to create an overall background concentration range per analyte for this area. Rather, separate background groundwater quality ranges are proposed for the Expansion Area, and have incorporated analytical results reported as part of the August/ November 2017 and the January 2018 GME. Future analytical data from MW05-MW09 will therefore be assessed against the adopted GAC and background concentration ranges at each individual well to ensure operations at the proposed Expansion Area (once operational) do not cause deterioration from baseline conditions. It is acknowledged that the expansion of operations may take several months to complete. Therefore the background ranges identified to date at MW05-MW09 should be reassessed and confirmed prior to construction works.

Stolthaven is currently working with the Port of Newcastle to install a further 2 wells in close proximity to MW08, to further determine the extent of the pre-existing hydrocarbon concentration.

3.4 NEXT MONITORING EVENT

The next Groundwater Monitoring Event is scheduled for: May 2018

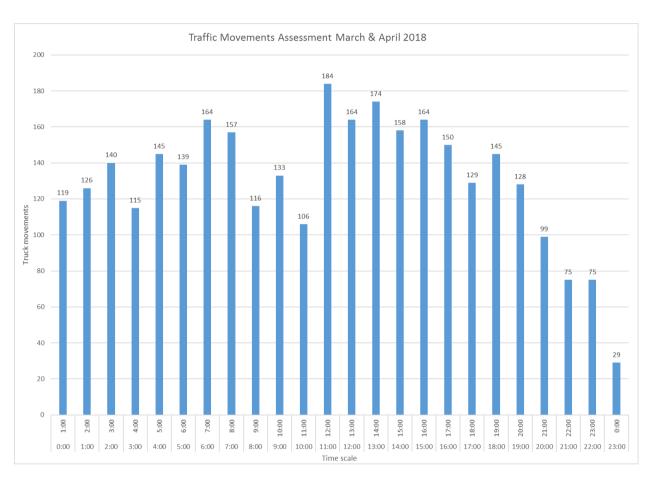
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4 TRAFFIC MOVEMENT ASSESSMENT

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 captured 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	40,060†	110*	4.5*

[†] Rolling cumulative total truck movements over 12 month period

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