Stolthaven Newcastle

BIMONTHLY REPORT

September & October 2019



STOLTHAVEN NEWCASTLE LOT 2 STEELWORKS ROAD, MAYFIELD, 2304





TABLE OF CONTENTS

1	NOIS	SE MONITORING	.4
	1.1	MONITORING CONDITIONS	.4
	1.2	MONITORING RESULTS	.4
	1.3	NEXT MONITORING EVENT	.4
2	AIR	QUALITY ASSESSMENT	.6
3	GRO	UNDWATER MONITORING	.8
	3.1	MONITORING CONDITIONS	.8
	3.2	MONITORING RESULTS	.8
	3.3	SUMMARY	.8
	3.4	NEXT MONITORING EVENT	.9
4	TRA	FFIC MOVEMENT ASSESSMENT	10





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 most recent report was completed in December 2018.

1.2 MONITORING RESULTS

Brief summary:

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 2018 historical data provided by Stolthaven, and noise levels based upon the site attended noise measurements undertaken over the measurement period.

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 6664 and 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/media/2044/noise-compliance-assessment-dec-18.pdf

1.3 NEXT MONITORING EVENT

The next Noise Monitoring Event is scheduled for December 2019.





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.



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/terminalnetwork/stolthaven-newcastle/stolthaven-newcastle-development-information/

3.3 SUMMARY FROM LATEST AECOM REPORTING

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 22 August 2019.

The analytical results of the groundwater quality monitoring at the Site(MW01 to MW04) indicate that there were no exceedances of the adopted GAC. Likewise there were no breaches of EPL conditions, relating to groundwater monitoring at the Site or Proposed Expansion Area.

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 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, nine 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.

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.

It is noted that Stolthaven carry out routine monitoring of surface water discharges emanating from the Site for compliance against the EPL. AECOM does not provide independent verification of surface water monitoring and a discussion of those results is beyond the scope of this groundwater monitoring program.

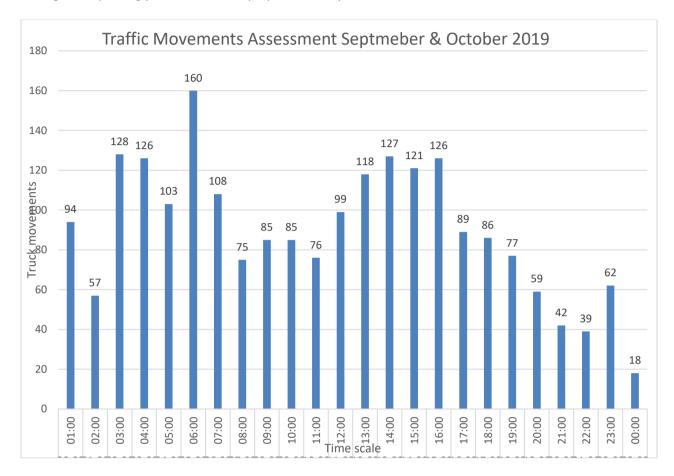
3.4 NEXT MONITORING EVENT

The next Groundwater Monitoring Event is scheduled for: November 2019.



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	25'932 †	71*	3.0*

Rolling cumulative total truck movements over 12 month period
* Based on an average over an actual 12 month period