

Environmental Monitoring Data

Project: Sydney Gateway Project

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01	04/11/2021	D Windnagel	R. Muir	R. Muir	For publication

Project Summary

The Sydney Gateway Road Project ('the Project') is a new direct high-capacity road connection linking the Sydney motorway network at St Peters interchange, where the M4 and M8 motorways meet, with Sydney Airport's domestic and international terminals and the Port Botany Precinct. John Holland Seymour Whyte have been contracted by Transport for New South Wales to design and construct the works for the Sydney Gateway Road Project. Figure 1 provides an overview of the Project.

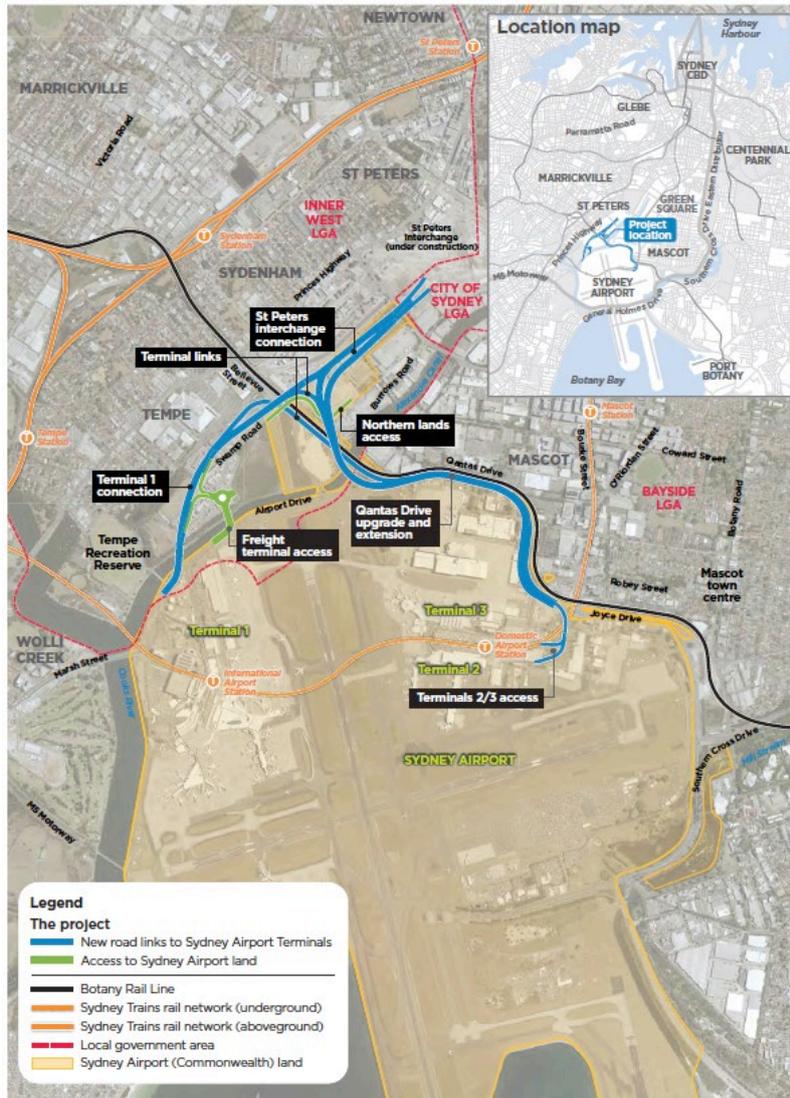


Figure 1: Project Overview

Environmental Protection Licence and Reporting Requirements

John Holland Pty Ltd obtained the Environment Protection Licence (EPL No. 21524) from the NSW Environment Protection Authority for the Project on behalf of the John Holland Seymour (JHSW) Joint Venture. The licence is for construction works relating Scheduled Activities as defined under Schedule 1 of the *Protection of the Environment Operations Act, 1997* (POEO Act).

The licence describes monitoring and reporting requirements for the Works. The following report details environmental monitoring undertaken during this reporting month conducted in accordance with the EPL.

The EPL can be found by following the link below to the EPA's website: [ViewPOEOLicence.aspx](https://www.epa.nsw.gov.au/ViewPOEOLicence.aspx) ([nsw.gov.au](https://www.epa.nsw.gov.au/))

Noise and Vibration Monitoring

Noise and vibration monitoring was undertaken during this reporting period. Table 1 contains the vibration monitoring results, and Table 2 contains the noise monitoring results.

Vibration monitoring results were recorded below the adopted structural damage criteria and therefore are considered compliant with the EPL.

LEaq 15min readings collected on the 01/10/2021 and 08/10/2021 were recorded above the predicted level. In both instances, elevated LEaq readings can be attributed to local traffic passing the monitoring point. Construction noise was noted as being below the predicted noise level in the applicable CNVIS in both instances and it was therefore concluded that traffic was the dominant noise source, not construction activities. All noise readings collected in October are therefore considered to be compliant with the project EPL.

Discharge Water Quality Monitoring

No water was discharged from the premises area during the October 2021 reporting period. Water treatment plants are yet to be commissioned. Discharge monitoring data is displayed in Table 3.

Landfill Gas and Gas Accumulation Monitoring

Landfill gas and gas accumulation monitoring was undertaken during the October 2021 monitoring period. Results are summarised in Table 4 below.

Methane was recorded below the adopted criteria in all monitoring wells outside the bentonite cut-off wall. Sample locations GW9A and GW14 recorded methane levels consistent with historic results, both GW9A and GW14 are located within the landfill.

Table 1: Vibration Monitoring Data.

Monitoring location	Monitoring Date	Attended or Continuous Monitoring	Measured VDV (m/s ^{1.75})	VDV Target (m/s ^{1.75})	VDV Compliant	Measured PPV (mm/s)	PPV Target (mm/s)	PPV Compliant
Desal Pipeline, Joint 09	08/10/2021	Attended	N/A	N/A	N/A	0.56	20	Yes

Table 2: Noise Monitoring Data

Monitoring Location (Noise-Catchment Area, Street, Suburb)	Monitoring Date	Attended or Continuous Monitoring	Parameter	Measured Value dB(A)	Goals / Targets dB(A)	Comments
NCA_03, 3 Hart Street, Tempe	01/10/2021	Attended	LEaq 15min	57.5	57	SG Works Compliant - Traffic dominant noise source
NCA_03, 3 Hart Street, Tempe	08/10/2021	Attended	LEaq 15min	61.6	52	SG Works Compliant - Traffic dominant noise source

Table 3: Discharge Monitoring Data

No discharge occurred, no data to display.

Table 4: Landfill Gas Monitoring Results

EPA identification no.	Type of Monitoring Point*	Methane Limit	Results (Stabilised)
GW1A	Landfill Gas Monitoring ¹	1%v/v	0
GW2	Landfill Gas Monitoring ¹	1%v/v	0
GW3	Landfill Gas Monitoring ¹	1%v/v	0
GW4A	Landfill Gas Monitoring ¹	1%v/v	0
GW5A	Landfill Gas Monitoring ¹	1%v/v	0
GW6A	Landfill Gas Monitoring ¹	1%v/v	0
GW9A	Landfill Gas Monitoring ²	N/A	32.6
GW11A	Landfill Gas Monitoring ¹	1%v/v	0
GW12	Landfill Gas Monitoring ²	1%v/v	Destroyed unable to be sampled
GW13	Landfill Gas Monitoring ¹	1%v/v	Destroyed unable to be sampled
GW14	Landfill Gas Monitoring ²	N/A	5.6
GW16	Landfill Gas Monitoring ¹	1%v/v	0
GW19A	Landfill Gas Monitoring ¹	1%v/v	0
GW22s	Landfill Gas Monitoring ¹	1%v/v	0
OSA1	Gas Accumulation Monitoring ³	500ppm	0
OSA2	Gas Accumulation Monitoring ³	500ppm	0
OSA3	Gas Accumulation Monitoring ³	500ppm	0

1. Outside the passive interception and venting trench
2. Inside the passive interception and venting trench
3. Gas accumulation monitoring within buildings located outside of the landfill boundary