

Environmental Monitoring Data

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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.

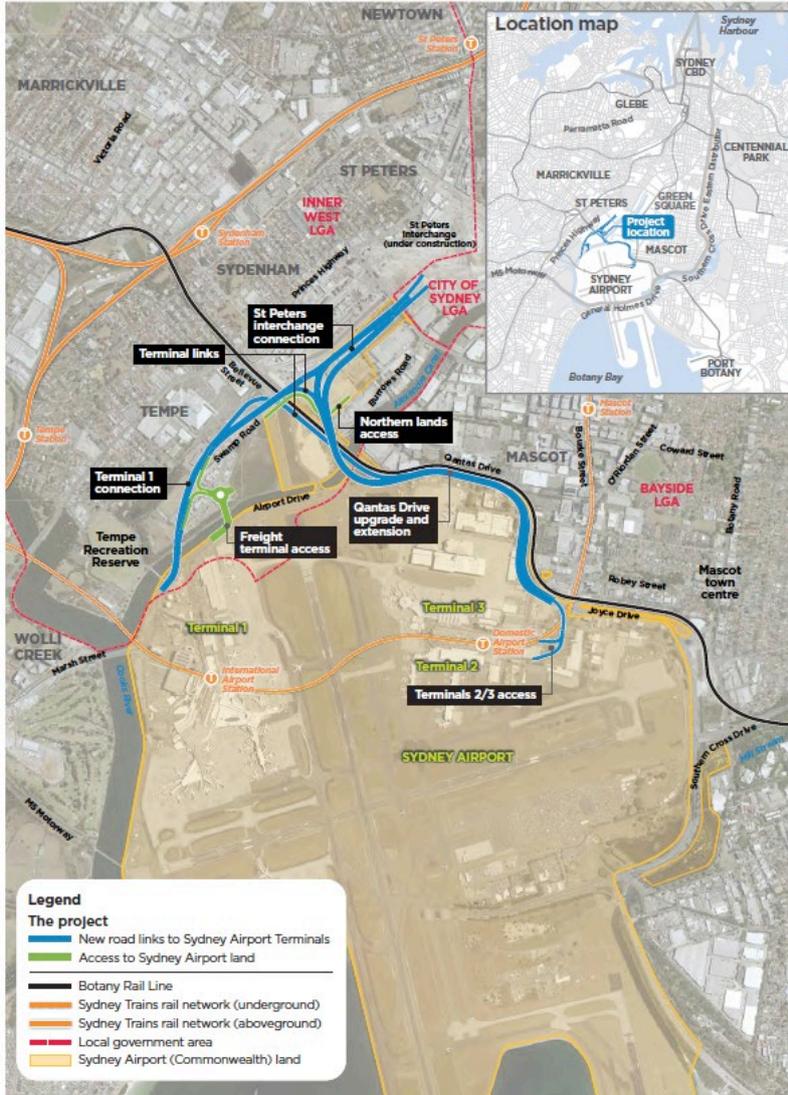


Figure 1: Project Overview

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. In all but one occasion on 21/02/22. During set up of the monitor on the desalination pipeline at 7:27am, the geophone was knocked causing a single reading of 20.16mm/s. No further vibration readings were recorded more than the mgt limit.

Although both noise monitoring results recorded on the 13/02/22 were recorded in excess of the assessment criteria, it was determined to be caused by background noise levels, specifically local traffic and aircraft. Both readings noted that construction noise was not audible for the duration of the monitoring periods and are therefore considered to be compliant.

Discharge Water Quality Monitoring

No offsite discharge occurred during the February 2022 monitoring period.

Landfill Gas and Gas Accumulation Monitoring

Landfill gas and gas accumulation monitoring was undertaken during the February 2022 monitoring period. Results are summarised in Table 4 below.

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

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
SB51 piling pad, Desal Pipeline (Bentonite wall)	01/02/22 – 02/02/22	Continuous	NA	NA	NA	1.26	20	Yes
Adjacent to ATL, Desal Pipeline	01/02/22 – 03/02/22	Continuous	NA	NA	NA	20.16	20	Yes ¹
SB51 piling pad, Desal Pipeline (Bentonite wall)	07/02/22 – 10/02/22	Continuous	NA	NA	NA	2.93	20	Yes
Adjacent to ATL, Desal Pipeline	03/02/22 – 05/02/22	Continuous	NA	NA	NA	4.89	20	Yes
Adjacent to ATL, Desal Pipeline	07/02/22 – 09/02/22	Continuous	NA	NA	NA	8.49	20	Yes
Adjacent to ATL, Desal Pipeline	21/02/22 – 24/02/22	Continuous	NA	NA	NA	1.22	20	Yes

¹ monitor knocked during set up, reading not associated with construction works.

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_02, 2 Bellevue Street, Tempe	13/02/22	Attended-	LAeq 15min	65.7	61	SG Work Compliant – traffic dominant noise source.
NCA_02, 2 Bellevue Street, Tempe	13/02/22	Attended-	LAeq 15min	66.3	61	SG Work Compliant – traffic dominant noise source.

Table 3: Discharge Monitoring Data

No discharge data to display.

Table 4: Landfill Gas Monitoring Results (17/01/2022)

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
GW7	Landfill Gas Monitoring ¹	1%v/v	Destroyed unable to be sampled
GW8	Landfill Gas Monitoring ¹	1%v/v	Destroyed unable to be sampled
GW9A	Landfill Gas Monitoring ²	N/A	22
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	10.7
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	<3
OSA2	Gas Accumulation Monitoring ³	500ppm	<3
OSA3	Gas Accumulation Monitoring ³	500ppm	<3
C3 Site Compound	Gas Accumulation Monitoring ⁴	500ppm	<3

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
4. Gas accumulation monitoring within buildings located onsite