

North Head Water Resource Recovery Facility

April Pollution Monitoring Summary

Air Quality



EPL 378

Summary period: 01-04-2026 to 30-04-2026

Date obtained: 08-05-2026

Date published: 11-05-2026

Licensee: Sydney Water

PO Box 399

PARRAMATTA NSW 2124

EPA Point 33		Point description: Ventilation outlet at Scotts Creek					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
hydrogen sulphide gas	mg/m ³	30 minutes	1440	<0.004	0.067	5	yes

EPA Point 34		Point description: Ventilation outlet at Lane Cove River West					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
hydrogen sulphide gas	mg/m ³	30 minutes	1440	<0.004	0.025	5	yes

EPA Point 35		Point description: Ventilation outlet at North Head WRRF for Northside Storage Tunnel					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
hydrogen sulphide gas	mg/m ³	30 minutes	1440	<0.01	1.31	5	yes

EPA Point 63		Point description: Central scrubber outlet at North Head WRRF					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
chlorine gas	mg/m ³	30 minutes	1440	<0.15	2.88	200	yes
hydrogen sulphide gas	mg/m ³	30 minutes	1440	<0.075	1.17	5	yes

EPA Point 66		Point description: Bio Trickle Filter / Standby Scrubber at North Head WRRF					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
chlorine gas	mg/m ³	30 minutes	1440	<0.59	7.01	200	yes
hydrogen sulphide gas	mg/m ³	30 minutes	1440	<0.071	0.26	5	yes

*Maximum limits for air quality are based on the Protection of the Environment Operations (Clean Air) Regulation 2022 - Schedule 2 - Part 2 Scheduled premises - Division 3 General activities and plant - General standards of concentration

North Head Water Resource Recovery Facility

March Pollution Monitoring Summary

Air Quality



EPL 378

Summary period: 01-03-2026 to 31-03-2026

Date obtained: 06-05-2026

Date published: 11-05-2026

Licensee: Sydney Water

PO Box 399

PARRAMATTA NSW 2124

EPA Point 33		Point description: Ventilation outlet at Scotts Creek					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
hydrogen sulphide gas	mg/m ³	30 minutes	1488	<0.004	0.022	5	yes

EPA Point 34		Point description: Ventilation outlet at Lane Cove River West					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
hydrogen sulphide gas	mg/m ³	30 minutes	1488	<0.004	0.030	5	yes

EPA Point 35		Point description: Ventilation outlet at North Head WRRF for Northside Storage Tunnel					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
hydrogen sulphide gas	mg/m ³	30 minutes	1488	<0.01	6.24	5	no ²

EPA Point 63		Point description: Central scrubber outlet at North Head WRRF					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
chlorine gas	mg/m ³	30 minutes	1488	<0.15	3.85	200	yes
hydrogen sulphide gas	mg/m ³	30 minutes	1488	<0.075	0.93	5	yes

EPA Point 66		Point description: Bio Trickle Filter / Standby Scrubber at North Head WRRF					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
chlorine gas	mg/m ³	30 minutes	1488	<0.59	<0.59	200	yes
hydrogen sulphide gas	mg/m ³	30 minutes	1488	<0.071	0.82	5	yes

*Maximum limits for air quality are based on the Protection of the Environment Operations (Clean Air) Regulation 2022 - Schedule 2 - Part 2 Scheduled premises - Division 3 General activities and plant - General standards of concentration

² One exceedance recorded for hydrogen sulphide gas at EPA Point 35 (6.24 mg/m³ on 03/03/2026 at 03:00). NST scrubber was not in operation during storm flow for a few days. On 03/03/2026 at approximately 2:30 am, when NST scrubber started, a surge in H₂S concentration of approximately 35 ppm was observed at the NST scrubber inlet. The H₂S levels gradually settled down around 4 am. This inlet surge resulted in an exceedance at the NST scrubber outlet. When H₂S surge in outlet noticed, the ORP dosing controller setpoint was increased from 710 mV to 735 mV to manage the higher H₂S loading.

North Head Water Resource Recovery Facility

February Pollution Monitoring Summary

Air Quality



EPL 378

Summary period: 01-02-2026 to 28-02-2026

Date obtained: 08-05-2026

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Licensee: Sydney Water

PO Box 399

PARRAMATTA NSW 2124

EPA Point 33		Point description: Ventilation outlet at Scotts Creek					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
hydrogen sulphide gas	mg/m ³	30 minutes	1344	<0.004	0.014	5	yes

EPA Point 34		Point description: Ventilation outlet at Lane Cove River West					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
hydrogen sulphide gas	mg/m ³	30 minutes	1344	<0.004	0.088	5	yes

EPA Point 35		Point description: Ventilation outlet at North Head WRRF for Northside Storage Tunnel					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
hydrogen sulphide gas	mg/m ³	30 minutes	1344	<0.01	5.02	5	no ¹

EPA Point 63		Point description: Central scrubber outlet at North Head WRRF					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
chlorine gas	mg/m ³	30 minutes	1344	<0.15	1.68	200	yes
hydrogen sulphide gas	mg/m ³	30 minutes	1344	<0.075	1.31	5	yes

EPA Point 66		Point description: Bio Trickling Filter / Standby Scrubber at North Head WRRF					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
chlorine gas	mg/m ³	30 minutes	1344	<0.59	<0.59	200	yes
hydrogen sulphide gas	mg/m ³	30 minutes	1344	<0.071	2.13	5	yes

*Maximum limits for air quality are based on the Protection of the Environment Operations (Clean Air) Regulation 2022 - Schedule 2 - Part 2 Scheduled premises - Division 3 General activities and plant - General standards of concentration

¹ One exceedance recorded for hydrogen sulphide gas at EPA Point 35 (5.02 mg/m³ on 03/02/2026 at 07:00). On 03/02/2026 at approximately 6:45 am, a surge in H₂S concentration of approximately 190 ppm was observed at the NST scrubber inlet. The H₂S levels gradually returned to normal around 7:50 am. This inlet surge resulted in an exceedance at the NST scrubber outlet. In response to the elevated inlet H₂S levels, the ORP dosing controller setpoint was initially increased from 710 mV to 740 mV and subsequently adjusted to 760 mV to manage the higher H₂S loading.

North Head Water Resource Recovery Facility

January Pollution Monitoring Summary

Air Quality



EPL 378

Summary period: 01-01-2026 to 31-01-2026

Date obtained: 06-05-2026

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Licensee: Sydney Water

PO Box 399

PARRAMATTA NSW 2124

EPA Point 33		Point description: Ventilation outlet at Scotts Creek					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
hydrogen sulphide gas	mg/m ³	30 minutes	1488	<0.004	<0.004	5	yes

EPA Point 34		Point description: Ventilation outlet at Lane Cove River West					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
hydrogen sulphide gas	mg/m ³	30 minutes	1488	<0.004	0.079	5	yes

EPA Point 35		Point description: Ventilation outlet at North Head WRRF for Northside Storage Tunnel					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
hydrogen sulphide gas	mg/m ³	30 minutes	1488	<0.01	1.09	5	yes

EPA Point 63		Point description: Central scrubber outlet at North Head WRRF					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
chlorine gas	mg/m ³	30 minutes	1488	<0.15	2.39	200	yes
hydrogen sulphide gas	mg/m ³	30 minutes	1488	<0.075	1.91	5	yes

EPA Point 66		Point description: Bio Trickle Filter / Standby Scrubber at North Head WRRF					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
chlorine gas	mg/m ³	30 minutes	1488	<0.59	<0.59	200	yes
hydrogen sulphide gas	mg/m ³	30 minutes	1488	<0.071	1.44	5	yes

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North Head Water Resource Recovery Facility

December Pollution Monitoring Summary

Air Quality



EPL 378

Summary period: 01-12-2025 to 31-12-2025

Date obtained: 08-05-2026

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Licensee: Sydney Water

PO Box 399

PARRAMATTA NSW 2124

EPA Point 33		Point description: Ventilation outlet at Scotts Creek					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
hydrogen sulphide gas	mg/m ³	30 minutes	1488	<0.004	<0.004	5	yes

EPA Point 34		Point description: Ventilation outlet at Lane Cove River West					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
hydrogen sulphide gas	mg/m ³	30 minutes	1488	<0.004	0.006	5	yes

EPA Point 35		Point description: Ventilation outlet at North Head WRRF for Northside Storage Tunnel					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
hydrogen sulphide gas	mg/m ³	30 minutes	1488	<0.01	4.36	5	yes

EPA Point 63		Point description: Central scrubber outlet at North Head WRRF					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
chlorine gas	mg/m ³	30 minutes	1488	<0.15	10.59	200	yes
hydrogen sulphide gas	mg/m ³	30 minutes	1488	<0.075	1.87	5	yes

EPA Point 66		Point description: Bio Trickle Filter / Standby Scrubber at North Head WRRF					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
chlorine gas	mg/m ³	30 minutes	1488	<0.59	<0.59	200	yes
hydrogen sulphide gas	mg/m ³	30 minutes	1488	<0.071	1.24	5	yes

*Maximum limits for air quality are based on the Protection of the Environment Operations (Clean Air) Regulation 2022 - Schedule 2 - Part 2 Scheduled premises - Division 3 General activities and plant - General standards of concentration

North Head Water Resource Recovery Facility

November Pollution Monitoring Summary

Air Quality



EPL 378

Summary period: 01-11-2025 to 30-11-2025

Date obtained: 06-05-2026

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Licensee: Sydney Water

PO Box 399

PARRAMATTA NSW 2124

EPA Point 33		Point description: Ventilation outlet at Scotts Creek					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
hydrogen sulphide gas	mg/m ³	30 minutes	1440	<0.004	<0.004	5	yes

EPA Point 34		Point description: Ventilation outlet at Lane Cove River West					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
hydrogen sulphide gas	mg/m ³	30 minutes	1440	<0.004	0.006	5	yes

EPA Point 35		Point description: Ventilation outlet at North Head WRRF for Northside Storage Tunnel					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
hydrogen sulphide gas	mg/m ³	30 minutes	1440	<0.01	2.19	5	yes

EPA Point 63		Point description: Central scrubber outlet at North Head WRRF					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
chlorine gas	mg/m ³	30 minutes	1440	<0.15	4.71	200	yes
hydrogen sulphide gas	mg/m ³	30 minutes	1440	<0.075	1.95	5	yes

EPA Point 66		Point description: Bio Trickle Filter / Standby Scrubber at North Head WRRF					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
chlorine gas	mg/m ³	30 minutes	1440	<0.59	<0.59	200	yes
hydrogen sulphide gas	mg/m ³	30 minutes	1440	<0.071	1.19	5	yes

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North Head Water Resource Recovery Facility

October Pollution Monitoring Summary

Air Quality



EPL 378

Summary period: 01-10-2025 to 31-10-2025

Date obtained: 06-05-2026

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Licensee: Sydney Water

PO Box 399

PARRAMATTA NSW 2124

EPA Point 33		Point description: Ventilation outlet at Scotts Creek					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
hydrogen sulphide gas	mg/m ³	30 minutes	1486 ¹	<0.004	<0.004	5	yes

EPA Point 34		Point description: Ventilation outlet at Lane Cove River West					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
hydrogen sulphide gas	mg/m ³	30 minutes	1486 ¹	<0.004	0.016	5	yes

EPA Point 35		Point description: Ventilation outlet at North Head WRRF for Northside Storage Tunnel					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
hydrogen sulphide gas	mg/m ³	30 minutes	1486 ¹	<0.01	3.26	5	yes

EPA Point 63		Point description: Central scrubber outlet at North Head WRRF					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
chlorine gas	mg/m ³	30 minutes	1486 ¹	<0.15	4.45	200	yes
hydrogen sulphide gas	mg/m ³	30 minutes	1486 ¹	<0.075	1.28	5	yes

EPA Point 66		Point description: Bio Trickle Filter / Standby Scrubber at North Head WRRF					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
chlorine gas	mg/m ³	30 minutes	1486 ¹	<0.59	<0.59	200	yes
hydrogen sulphide gas	mg/m ³	30 minutes	1486 ¹	<0.071	2.46	5	yes

*Maximum limits for air quality are based on the Protection of the Environment Operations (Clean Air) Regulation 2022 - Schedule 2 - Part 2 Scheduled premises - Division 3 General activities and plant - General standards of concentration

¹ Scheduled daylight savings changeover caused the non-existence of two data points on 05/10/2025 at 02:00 & 02:30 am.

North Head Water Resource Recovery Facility

September Pollution Monitoring Summary

Air Quality



EPL 378

Summary period: 01-09-2025 to 30-09-2025

Date obtained: 06-05-2026

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Licensee: Sydney Water

PO Box 399

PARRAMATTA NSW 2124

EPA Point 33		Point description: Ventilation outlet at Scotts Creek					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
hydrogen sulphide gas	mg/m ³	30 minutes	1440	<0.004	<0.004	5	yes

EPA Point 34		Point description: Ventilation outlet at Lane Cove River West					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
hydrogen sulphide gas	mg/m ³	30 minutes	1440	<0.004	0.125	5	yes

EPA Point 35		Point description: Ventilation outlet at North Head WRRF for Northside Storage Tunnel					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
hydrogen sulphide gas	mg/m ³	30 minutes	1440	<0.01	1.99	5	yes

EPA Point 63		Point description: Central scrubber outlet at North Head WRRF					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
chlorine gas	mg/m ³	30 minutes	1440	<0.15	1.84	200	yes
hydrogen sulphide gas	mg/m ³	30 minutes	1440	<0.075	0.86	5	yes

EPA Point 66		Point description: Bio Trickle Filter / Standby Scrubber at North Head WRRF					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
chlorine gas	mg/m ³	30 minutes	1440	<0.59	<0.59	200	yes
hydrogen sulphide gas	mg/m ³	30 minutes	1440	<0.071	1.76	5	yes

*Maximum limits for air quality are based on the Protection of the Environment Operations (Clean Air) Regulation 2022 - Schedule 2 - Part 2 Scheduled premises - Division 3 General activities and plant - General standards of concentration

North Head Water Resource Recovery Facility

August Pollution Monitoring Summary

Air Quality



EPL 378

Summary period: 01-08-2025 to 31-08-2025

Date obtained: 06-05-2026

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Licensee: Sydney Water

PO Box 399

PARRAMATTA NSW 2124

EPA Point 33		Point description: Ventilation outlet at Scotts Creek					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
hydrogen sulphide gas	mg/m ³	30 minutes	1488	<0.004	<0.004	5	yes

EPA Point 34		Point description: Ventilation outlet at Lane Cove River West					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
hydrogen sulphide gas	mg/m ³	30 minutes	1488	<0.004	0.127	5	yes

EPA Point 35		Point description: Ventilation outlet at North Head WRRF for Northside Storage Tunnel					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
hydrogen sulphide gas	mg/m ³	30 minutes	1488	<0.01	0.89	5	yes

EPA Point 63		Point description: Central scrubber outlet at North Head WRRF					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
chlorine gas	mg/m ³	30 minutes	1488	<0.15	1.05	200	yes
hydrogen sulphide gas	mg/m ³	30 minutes	1488	<0.075	0.11	5	yes

EPA Point 66		Point description: Bio Trickle Filter / Standby Scrubber at North Head WRRF					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
chlorine gas	mg/m ³	30 minutes	1488	<0.59	<0.59	200	yes
hydrogen sulphide gas	mg/m ³	30 minutes	1488	<0.071	0.55	5	yes

*Maximum limits for air quality are based on the Protection of the Environment Operations (Clean Air) Regulation 2022 - Schedule 2 - Part 2 Scheduled premises - Division 3 General activities and plant - General standards of concentration

North Head Water Resource Recovery Facility

July Pollution Monitoring Summary

Air Quality



EPL 378

Summary period: 01-07-2025 to 31-07-2025

Date obtained: 08-08-2025

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Licensee: Sydney Water

PO Box 399

PARRAMATTA NSW 2124

EPA Point 33		Point description: Ventilation outlet at Scotts Creek					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
hydrogen sulphide gas	mg/m ³	30 minutes	1488	<0.004	0.009	5	yes

EPA Point 34		Point description: Ventilation outlet at Lane Cove River West					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
hydrogen sulphide gas	mg/m ³	30 minutes	1488	<0.004	0.103	5	yes

EPA Point 35		Point description: Ventilation outlet at North Head WRRF for Northside Storage Tunnel					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
hydrogen sulphide gas	mg/m ³	30 minutes	1488	<0.01	2.02	5	yes

EPA Point 63		Point description: Central scrubber outlet at North Head WRRF					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
chlorine gas	mg/m ³	30 minutes	1488	<0.15	3.24	200	yes
hydrogen sulphide gas	mg/m ³	30 minutes	1488	<0.075	0.58	5	yes

EPA Point 66		Point description: Bio Trickle Filter / Standby Scrubber at North Head WRRF					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	maximum limit	within limits*
chlorine gas	mg/m ³	30 minutes	1488	<0.59	<0.59	200	yes
hydrogen sulphide gas	mg/m ³	30 minutes	1488	<0.071	0.28	5	yes

*Maximum limits for air quality are based on the Protection of the Environment Operations (Clean Air) Regulation 2022 - Schedule 2 - Part 2 Scheduled premises - Division 3 General activities and plant - General standards of concentration