

St Marys Wastewater Treatment Plant 2022-23 Pollution Monitoring Summary



EPL 1729

Summary period: 01-07-2022 to 30-06-2023

Date published: 01-09-2023

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 50 percentile yearly summary								
EPA Point 5 Site code SM0005		Point description: At the outlet of the chlorine contact tank						
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	50 percentile limit	50 percentile value	within limits
biochemical oxygen demand	mg/L	every 6 days	61	<2	<2	10	<2	yes
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	12	93.8	100	50	100	yes
nitrogen (ammonia)	mg/L	every 6 days	61	0.01	0.98	0.9	0.02	yes
total suspended solids	mg/L	every 6 days	61	<2	4	5	<2	yes

St Marys Wastewater Treatment Plant 2022-23 Pollution Monitoring Summary



EPL 1729

Summary period: 01-07-2022 to 30-06-2023

Date published: 01-09-2023

Licensee: Sydney Water Corporation
PO Box 399
PARRAMATTA NSW 2124

Table 2: 80 percentile yearly summary								
EPA Point 5 Site code SM0005		Point description: At the outlet of the chlorine contact tank						
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	80 percentile limit	80 percentile value	within limits
faecal coliforms	CFU/100mL	every 6 days	61	<1	52	200	3	yes

St Marys Wastewater Treatment Plant

2022-23 Pollution Monitoring Summary

EPL 1729



Summary period: 01-07-2022 to 30-06-2023

Date published: 01-09-2023

Licensee: Sydney Water Corporation
 PO Box 399
 PARRAMATTA NSW 2124

Table 3: 90 percentile yearly summary								
EPA Point 5 Site code SM0005	Point description: At the outlet of the chlorine contact tank							
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	90 percentile limit	90 percentile value	within limit
aluminium	ug/L	monthly	12	52	110	200	91	yes
biochemical oxygen demand	mg/L	every 6 days	61	<2	<2	15	<2	yes
chlorine (total residual)	mg/L	every 6 days	61	<0.04	0.06	0.1	<0.04	yes
copper	ug/L	monthly	12	2.4	14.2	8	12.2	no ¹
diazinon	ug/L	monthly	12	<0.1	<0.1	0.1	<0.1	yes
hydrogen sulphide (unionised)	ug/L	monthly	12	<30	<30	60	<30	yes
iron	ug/L	monthly	12	46	96	96	89	yes
nickel	ug/L	monthly	12	3.2	4.3	16.9	4.2	yes
nitrogen (ammonia)	mg/L	every 6 days	61	0.01	0.98	1.4	0.05	yes
total suspended solids	mg/L	every 6 days	61	<2	4	10	<2	yes
zinc	ug/L	monthly	12	22	38	46	32	yes

¹ Copper 90th percentile limit exceedance was largely influenced by the implementation of tighter limits following the Stage 1 concentration limit review and significant technology changes in biosolids treatment as part of the Lower South Creek Treatment Program.

St Marys Wastewater Treatment Plant 2022-23 Pollution Monitoring Summary

EPL 1729

Summary period: 01-07-2022 to 30-06-2023

Date published: 01-09-2023



Licensee: Sydney Water Corporation
PO Box 399
PARRAMATTA NSW 2124

Table 4: 100 percentile yearly summary

EPA Point 5 Site code SM0005		Point description: At the outlet of the chlorine contact tank						
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	100 percentile limit	100 percentile value	within limits
nitrogen (total)	mg/L	every 6 days	61	1.85	9.07	45	9.07	yes
phosphorus	mg/L	every 6 days	61	0.02	0.11	5	0.11	yes

St Marys Wastewater Treatment Plant 2022-23 Pollution Monitoring Summary

EPL 1729

Summary period: 01-07-2022 to 30-06-2023

Date published: 01-09-2023



Licensee: Sydney Water Corporation
PO Box 399
PARRAMATTA NSW 2124

Table 5: Average yearly summary

EPA Point 5 Site code SM0005		Point description: At the outlet of the chlorine contact tank						
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	Average limit	Average value	within limits
aluminium	ug/L	monthly	12	52	110	120	75	yes
copper	ug/L	monthly	12	2.4	14.2	6	8	no ²
diazinon	ug/L	monthly	12	<0.1	<0.1	0.2	<0.1	yes
hydrogen sulphide (unionised)	ug/L	monthly	12	<30	<30	30	<30	yes
iron	ug/L	monthly	12	46	96	156	69	yes
nickel	ug/L	monthly	12	3.2	4.3	12.3	4	yes
zinc	ug/L	monthly	12	22	38	37	26	yes

² Copper average limit exceedance was largely influenced by the implementation of tighter limits following the Stage 1 concentration limit review and significant technology changes in biosolids treatment as part of the Lower South Creek Treatment Program.