

# St Marys Advanced Water Treatment Plant



## June Pollution Monitoring Summary

### EPL 13210

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

Date obtained: 10-07-2023

Date published: 24-07-2023

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

**Table 1: Routine monitoring data**

EPA Point 1 Site code PRHTRW		Point description: The discharge channel from Penrith STP				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
chlorine (total residual)	mg/L	every 6 days during discharge	5	<0.04	<0.04	<0.04

EPA Point 2 Site code SMHTRW		Point description: Highly treated recycled water balance tank				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
conductivity	uS/cm	every 6 days during discharge	5	23.3	25	26.1
nitrogen (ammonia)	mg/L	every 6 days during discharge	5	0.05	0.12	0.17
nitrogen (total)	mg/L	every 6 days during discharge	5	0.37	0.42	0.48
phosphorus (total)	mg/L	every 6 days during discharge	5	<0.002	<0.002	0.002

Average and percentile limits are only applied annually for routine monitoring data in Table 1.

As per clause M2.2 under EPL 13210, collection of samples from PRHTRW and SMHTRW are required when recycled water is discharged from EPA Points 1 and 2 respectively.

# St Marys Advanced Water Treatment Plant



## May Pollution Monitoring Summary

### EPL 13210

Summary period: 01-05-2023 to 31-05-2023

Date obtained: 06-06-2023

Date published: 13-06-2023

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

**Table 1: Routine monitoring data**

EPA Point 1 Site code PRHTRW		Point description: The discharge channel from Penrith STP				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
chlorine (total residual)	mg/L	every 6 days during discharge	5	<0.04	<0.04	<0.04

EPA Point 2 Site code SMHTRW		Point description: Highly treated recycled water balance tank				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
conductivity	uS/cm	every 6 days during discharge	5	23.4	26	28.3
nitrogen (ammonia)	mg/L	every 6 days during discharge	5	0.06	0.11	0.14
nitrogen (total)	mg/L	every 6 days during discharge	5	0.42	0.49	0.56
phosphorus (total)	mg/L	every 6 days during discharge	5	<0.002	<0.002	0.004

Average and percentile limits are only applied annually for routine monitoring data in Table 1

As per clause M2.2 under EPL 13210, collection of samples from PRHTRW and SMHTRW are required when recycled water is discharged from EPA Points 1 and 2 respectively.

# St Marys Advanced Water Treatment Plant



## April Pollution Monitoring Summary

### EPL 13210

Summary period: 01-04-2023 to 30-04-2023

Date obtained: 04-05-2023

Date published: 16-05-2023

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

**Table 1: Routine monitoring data**

EPA Point 1 Site code PRHTRW	Point description: The discharge channel from Penrith STP					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
chlorine (total residual)	mg/L	every 6 days during discharge	5	<0.04	<0.04	0.19

EPA Point 2 Site code SMHTRW	Point description: Highly treated recycled water balance tank					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
conductivity	uS/cm	every 6 days during discharge	4	27.1	29	30.7
nitrogen (ammonia)	mg/L	every 6 days during discharge	4	0.05	0.95	0.12
nitrogen (total)	mg/L	every 6 days during discharge	4	0.45	0.46	0.5
phosphorus (total)	mg/L	every 6 days during discharge	4	0.002	0.004	0.011

Average and percentile limits are only applied annually for routine monitoring data in Table 1

As per clause M2.2 under EPL 13210, collection of samples from PRHTRW and SMHTRW are required when recycled water is discharged from EPA Points 1 and 2 respectively.

Discharge from Point 1 on 26th April 2023 was sampled during plant flow reinstatement. High chlorine concentration was observed due to poor mixing of dechlorination chemicals as process had yet to stabilise.

Discharge from Point 2 was off-line 30th April 2023.

# St Marys Advanced Water Treatment Plant



## March Pollution Monitoring Summary

### EPL 13210

Summary period: 01-03-2023 to 31-03-2023

Date obtained: 11-04-2023

Date published: 14-04-2023

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

**Table 1: Routine monitoring data**

EPA Point 1 Site code PRHTRW		Point description: The discharge channel from Penrith STP				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
chlorine (total residual)	mg/L	every 6 days during discharge	5	<0.04	<0.04	0.19

EPA Point 2 Site code SMHTRW		Point description: Highly treated recycled water balance tank				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
conductivity	uS/cm	every 6 days during discharge	4	27.6	32	35.6
nitrogen (ammonia)	mg/L	every 6 days during discharge	4	0.05	0.1	0.16
nitrogen (total)	mg/L	every 6 days during discharge	4	0.39	0.44	0.5
phosphorus (total)	mg/L	every 6 days during discharge	4	<0.002	<0.002	0.002

Average and percentile limits are only applied annually for routine monitoring data in Table 1

Discharge from Point 2 was off-line 7 and 19 March 2023.

# St Marys Advanced Water Treatment Plant



## February Pollution Monitoring Summary

### EPL 13210

Summary period: 01-02-2023 to 28-02-2023

Date obtained: 06-03-2023

Date published: 15-03-2023

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

**Table 1: Routine monitoring data**

EPA Point 1 Site code PRHTRW	Point description: The discharge channel from Penrith STP					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
chlorine (total residual)	mg/L	every 6 days during discharge	4	<0.04	<0.04	<0.04

EPA Point 2 Site code SMHTRW	Point description: Highly treated recycled water balance tank					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
conductivity	uS/cm	every 6 days during discharge	4	29	33	34.5
nitrogen (ammonia)	mg/L	every 6 days during discharge	4	0.05	0.09	0.13
nitrogen (total)	mg/L	every 6 days during discharge	4	0.23	0.31	0.39
phosphorus (total)	mg/L	every 6 days during discharge	4	<0.002	0.002	0.003

Average and percentile limits are only applied annually for routine monitoring data in Table 1.

As per clause M2.2 under EPL 13210, collection of samples from PRHTRW and SMHTRW are required when recycled water is discharged from EPA Points 1 and 2 respectively.

Discharge from Point 1 was off-line 19th February.

# St Marys Advanced Water Treatment Plant



## January Pollution Monitoring Summary

### EPL 13210

Summary period: 01-01-2023 to 31-01-2023

Date obtained: 03-02-2023

Date published: 14-02-2023

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

**Table 1: Routine monitoring data**

EPA Point 1 Site code PRHTRW	Point description: The discharge channel from Penrith STP					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
chlorine (total residual)	mg/L	every 6 days during discharge	2	<0.04	<0.04	<0.04

EPA Point 2 Site code SMHTRW	Point description: Highly treated recycled water balance tank					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
conductivity	uS/cm	every 6 days during discharge	3	32.5	33	33.7
nitrogen (ammonia)	mg/L	every 6 days during discharge	3	0.09	0.13	0.19
nitrogen (total)	mg/L	every 6 days during discharge	3	0.37	0.41	0.47
phosphorus (total)	mg/L	every 6 days during discharge	3	<0.002	<0.002	0.002

Average and percentile limits are only applied annually for routine monitoring data in Table 1.

As per clause M2.2 under EPL 13210, collection of samples from PRHTRW and SMHTRW are required when recycled water is discharged from EPA Points 1 and 2 respectively.

Discharge from Point 1 was off-line 8th, 20th & 26th January.

Discharge from Point 2 was off-line 6th & 18th January.

# St Marys Advanced Water Treatment Plant



## December Pollution Monitoring Summary

### EPL 13210

Summary period: 01-12-2022 to 31-12-2022

Date obtained: 06-01-2023

Date published: 18-01-2022

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

**Table 1: Routine monitoring data**

EPA Point 1 Site code PRHTRW		Point description: The discharge channel from Penrith STP				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
chlorine (total residual)	mg/L	every 6 days during discharge	4	<0.04	<0.04	<0.04

EPA Point 2 Site code SMHTRW		Point description: Highly treated recycled water balance tank				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
conductivity	uS/cm	every 6 days during discharge	5	31	32	32.6
nitrogen (ammonia)	mg/L	every 6 days during discharge	5	0.06	0.1	0.13
nitrogen (total)	mg/L	every 6 days during discharge	5	0.23	0.39	0.55
phosphorus (total)	mg/L	every 6 days during discharge	5	<0.002	<0.002	0.002

Average and percentile limits are only applied annually for routine monitoring data in Table 1.

As per clause M2.2 under EPL 13210, collection of samples from PRHTRW and SMHTRW are required when recycled water is discharged from EPA Points 1 and 2 respectively.

Discharge from Point 1 was off-line 15th of December.

# St Marys Advanced Water Treatment Plant

## November Pollution Monitoring Summary



### EPL 13210

Summary period: 01-11-2022 to 30-11-2022

Date obtained: 06-12-2022

Date published: 09-12-2022

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

**Table 1: Routine monitoring data**

EPA Point 1 Site code PRHTRW	Point description: The discharge channel from Penrith STP					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
chlorine (total residual)	mg/L	every 6 days during discharge	5	<0.04	<0.04	<0.04

EPA Point 2 Site code SMHTRW	Point description: Highly treated recycled water balance tank					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
conductivity	uS/cm	every 6 days during discharge	4	29.8	31	31.9
nitrogen (ammonia)	mg/L	every 6 days during discharge	4	0.08	0.12	0.14
nitrogen (total)	mg/L	every 6 days during discharge	4	0.25	0.27	0.28
phosphorus (total)	mg/L	every 6 days during discharge	4	<0.002	<0.002	0.003

Average and percentile limits are only applied annually for routine monitoring data in Table 1

As per clause M2.2 under EPL 13210, collection of samples from PRHTRW and SMHTRW are required when recycled water is discharged from EPA Points 1 and 2 respectively. Discharge from Point 2 was off-line 14 November.



# St Marys Advanced Water Treatment Plant



## October Pollution Monitoring Summary

### EPL 13210

Summary period: 01-10-2022 to 31-10-2022

Date obtained: 03-11-2022

Date published: 09-11-2022

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

**Table 1: Routine monitoring data**

EPA Point 1 Site code PRHTRW		Point description: The discharge channel from Penrith STP				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
chlorine (total residual)	mg/L	every 6 days during discharge	4	<0.04	<0.04	<0.04

EPA Point 2 Site code SMHTRW		Point description: Highly treated recycled water balance tank				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
conductivity	uS/cm	every 6 days during discharge	2	27.3	28	29.4
nitrogen (ammonia)	mg/L	every 6 days during discharge	2	0.06	0.07	0.07
nitrogen (total)	mg/L	every 6 days during discharge	2	0.15	0.19	0.22
phosphorus (total)	mg/L	every 6 days during discharge	2	<0.002	<0.002	0.002

Average and percentile limits are only applied annually for routine monitoring data in Table 1

As per clause M2.2 under EPL 13210, collection of samples from PRHTRW and SMHTRW are required when recycled water is discharged from EPA Points 1 and 2 respectively. Discharge from EPA Point 1 was off-line 10/10, Point 2 was off-line 2, 8, & 20 October.

# St Marys Advanced Water Treatment Plant

## September Pollution Monitoring Summary



### EPL 13210

Summary period: 01-09-2022 to 30-09-2022

Date obtained: 04-10-2022

Date published: 14-10-2022

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

**Table 1: Routine monitoring data**

EPA Point 1 Site code PRHTRW		Point description: The discharge channel from Penrith STP				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
chlorine (total residual)	mg/L	every 6 days during discharge	4	<0.04	0.13	0.52

EPA Point 2 Site code SMHTRW		Point description: Highly treated recycled water balance tank				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
conductivity	uS/cm	every 6 days during discharge	5	25.5	27	28.3
nitrogen (ammonia)	mg/L	every 6 days during discharge	5	0.07	0.12	0.14
nitrogen (total)	mg/L	every 6 days during discharge	5	0.18	0.26	0.33
phosphorus (total)	mg/L	every 6 days during discharge	5	<0.002	<0.002	0.003

Average and percentile limits are only applied annually for routine monitoring data in Table 1.

# St Marys Advanced Water Treatment Plant



## August Pollution Monitoring Summary

### EPL 13210

Summary period: 01-08-2022 to 31-08-2022

Date obtained: 01-09-2022

Date published: 09-09-2022

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

**Table 1: Routine monitoring data**

EPA Point 1 Site code PRHTRW		Point description: The discharge channel from Penrith STP				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
chlorine (total residual)	mg/L	every 6 days during discharge	4	<0.04	<0.04	<0.04

EPA Point 2 Site code SMHTRW		Point description: Highly treated recycled water balance tank				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
conductivity	uS/cm	every 6 days during discharge	5	26.6	29	30.7
nitrogen (ammonia)	mg/L	every 6 days during discharge	5	0.1	0.13	0.15
nitrogen (total)	mg/L	every 6 days during discharge	5	0.26	0.29	0.32
phosphorus (total)	mg/L	every 6 days during discharge	5	<0.002	<0.002	0.002

Average and percentile limits are only applied annually for routine monitoring data in Table 1

# St Marys Advanced Water Treatment Plant



## July Pollution Monitoring Summary

### EPL 13210

Summary period: 01-07-2022 to 31-07-2022

Date obtained: 24-07-2022

Date published: 19-08-2022

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

**Table 1: Routine monitoring data**

EPA Point 1 Site code PRHTRW		Point description: The discharge channel from Penrith STP				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
chlorine (total residual)	mg/L	every 6 days during discharge	1	-	-	<0.04

EPA Point 2 Site code SMHTRW		Point description: Highly treated recycled water balance tank				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
conductivity	uS/cm	every 6 days during discharge	1	-	-	28.6
nitrogen (ammonia)	mg/L	every 6 days during discharge	1	-	-	0.13
nitrogen (total)	mg/L	every 6 days during discharge	1	-	-	0.28
phosphorus (total)	mg/L	every 6 days during discharge	1	-	-	0.002

Average and percentile limits are only applied annually for routine monitoring data in Table 1

**St Marys Advanced Water Treatment Plant  
Pollution Monitoring Summary Correction Log**

EPL 13210

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124



EPA Point 1		Point description: The discharge channel from Penrith STP											
Site code PRHTRW	unit of measure	number of samples	Original data			Corrected data			Date corrected	Date originally published	Monthly report	Reason	
Pollutant			minimum	mean	maximum	number of samples	minimum	mean					maximum
chlorine (total residual)	mg/L	5		0.1	0.52	4		<0.04	<0.04	14-02-23	18-01-22	December	Incorrect number of samples, mean and max result reported