

Rouse Hill Water Resource Recovery Facility

September Pollution Monitoring Summary



EPL 4965

Summary period: 01-09-2024 to 30-09-2024

Date obtained: 09-10-2024

Date published: 23-10-2024

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 4 Site code RH0004		Point description: Outlet of the dechlorination tanks			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	20	2	yes
total suspended solids	mg/L	monthly	10	<2	yes

3 Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

Table 2: Routine monitoring data

EPA Point 4 Site code RH0004		Point description: Outlet of the dechlorination tanks				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	94
biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	2
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
chlorine (total residual)	mg/L	every 6 days	5	<0.04	<0.04	<0.04
copper	ug/L	monthly	1	-	-	2.6
faecal coliforms	CFU/100mL	every 6 days	5	<1	<1	1
iron	ug/L	monthly	1	-	-	39
nitrogen (ammonia)	mg/L	every 6 days	5	0.14	0.36	0.99
nitrogen (total)	mg/L	every 6 days	5	4.80	5.23	5.67
phosphorus (total)	mg/L	every 6 days	5	0.02	0.02	0.03
total suspended solids	mg/L	every 6 days	5	<2	<2	<2
zinc	ug/L	monthly	1	-	-	27

Average and percentile limits are only applied annually for routine monitoring data in Table 2.

As per clause M2.4 under EPL 4965, collection of samples from EPA Point 5 is required during the occurrence of any bypass during normal working hours. There was no bypass recorded at EPA Point 5 during the September monitoring period.

Effluent quality monitoring results obtained from EPA Points 4 and 5 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

Rouse Hill Water Resource Recovery Facility

August Pollution Monitoring Summary



EPL 4965

Summary period: 01-08-2024 to 31-08-2024

Date obtained: 07-09-2024

Date published: 13-09-2024

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 4 Site code RH0004		Point description: Outlet of the dechlorination tanks			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	20	<2	yes
total suspended solids	mg/L	monthly	10	<2	yes

3 Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

Table 2: Routine monitoring data

EPA Point 4 Site code RH0004		Point description: Outlet of the dechlorination tanks				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	128
biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
chlorine (total residual)	mg/L	every 6 days	5	<0.04	<0.04	<0.04
cobalt	ug/L	bi-annually	1	-	-	0.3
copper	ug/L	monthly	1	-	-	1.9
cyanide	ug/L	bi-annually	1	-	-	<5
faecal coliforms	CFU/100mL	every 6 days	5	<1	<1	1
iron	ug/L	monthly	1	-	-	26
nitrogen (ammonia)	mg/L	every 6 days	5	0.04	0.13	0.30
nitrogen (total)	mg/L	every 6 days	5	4.44	5.65	6.53
phosphorus (total)	mg/L	every 6 days	5	0.02	0.02	0.02
total suspended solids	mg/L	every 6 days	5	<2	<2	2
zinc	ug/L	monthly	1	-	-	24

Average and percentile limits are only applied annually for routine monitoring data in Table 2.

As per clause M2.4 under EPL 4965, collection of samples from EPA Point 5 is required during the occurrence of any bypass during normal working hours. There was no bypass recorded at EPA Point 5 during the August monitoring period.

Effluent quality monitoring results obtained from EPA Points 4 and 5 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

Rouse Hill Water Resource Recovery Facility

July Pollution Monitoring Summary



EPL 4965

Summary period: 01-07-2024 to 31-07-2024

Date obtained: 13-08-2024

Date published: 27-08-2024

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 4 Site code RH0004		Point description: Outlet of the dechlorination tanks			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	20	<2	yes
total suspended solids	mg/L	monthly	10	<2	yes

3 Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

Table 2: Routine monitoring data

EPA Point 4 Site code RH0004		Point description: Outlet of the dechlorination tanks				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	201
biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
chlorine (total residual)	mg/L	every 6 days	5	<0.04	<0.04	<0.04
copper	ug/L	monthly	1	-	-	2.4
faecal coliforms	CFU/100mL	every 6 days	5	<1	<1	2
iron	ug/L	monthly	1	-	-	28
nitrogen (ammonia)	mg/L	every 6 days	5	0.03	0.10	0.24
nitrogen (total)	mg/L	every 6 days	5	4.96	5.43	6.05
phosphorus (total)	mg/L	every 6 days	5	0.02	0.02	0.02
total suspended solids	mg/L	every 6 days	5	<2	<2	<2
zinc	ug/L	monthly	1	-	-	29

Average and percentile limits are only applied annually for routine monitoring data in Table 2.

As per clause M2.4 under EPL 4965, collection of samples from EPA Point 5 is required during the occurrence of any bypass during normal working hours. There was no bypass recorded at EPA Point 5 during the July monitoring period.

Effluent quality monitoring results obtained from EPA Points 4 and 5 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).