

Penrith Wastewater Treatment Plant

2021-22 Pollution monitoring yearly limit summaries



EPL 1409

Summary period: 01-07-2021 to 30-06-2022

Date published: 30-08-2022

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

50 percentile yearly summary								
EPA Point 5 Site code PR0005		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	60	<2	4	10	<2	yes
carbonaceous biochemical oxygen demand	mg/L	every 6 days	60	<2	3	10	<2	yes
nitrogen (ammonia)	mg/L	every 6 days	60	0.02	2.11	0.9	0.04	yes
nitrogen (total)	mg/L	every 6 days	60	2.59	5.77	10	3.75	yes
phosphorus (total)	mg/L	every 6 days	60	0.06	0.56	0.2	0.1	yes
total suspended solids	mg/L	every 6 days	60	<2	19	5	<2	yes

80 percentile yearly summary								
EPA Point 5 Site code PR0005		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	470	200	59	yes

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90 percentile yearly summary								
EPA Point 5 Site code PR0005	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 limits
aluminium	ug/L	monthly	12	96	227	270	216	yes
biochemical oxygen demand	mg/L	every 6 days	60	<2	4	15	<2	yes
cadmium	ug/L	monthly	12	<0.1	<0.1	0.2	<0.1	yes
carbonaceous biochemical oxygen demand	mg/L	every 6 days	60	<2	3	15	<2	yes
copper	ug/L	monthly	12	2.1	4.7	9	4.6	yes
hydrogen sulphide (unionised)	ug/L	monthly	12	<30	<30	60	<30	yes
iron	ug/L	monthly	12	84	173	350	151	yes
nitrogen (ammonia)	mg/L	every 6 days	60	0.02	2.11	1.4	0.72	yes
nitrogen (total)	mg/L	every 6 days	60	2.59	5.77	15	4.94	yes
phosphorus (total)	mg/L	every 6 days	60	0.06	0.56	0.4	0.23	yes
total suspended solids	mg/L	every 6 days	60	<2	19	10	3	yes
zinc	ug/L	monthly	12	13	39	180	33	yes

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Average yearly summary								
EPA Point 5 Site code PR0005	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	96	227	200	152	yes
cadmium	ug/L	monthly	12	<0.1	<0.1	0.2	<0.1	yes
copper	ug/L	monthly	12	2.1	4.7	8	4	yes
hydrogen sulphide (unionised)	ug/L	monthly	12	<30	<30	30	<30	yes
iron	ug/L	monthly	12	84	173	330	127	yes
zinc	ug/L	monthly	12	13	39	60	25	yes
arsenic	ug/L	bi-annually	2	0.2	0.4	-	0.3	n/a
cobalt	ug/L	bi-annually	2	0.7	1	-	0.85	n/a
nickel	ug/L	bi-annually	2	1.5	2.1	-	1.8	n/a

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90 percentile yearly summary								
EPA Point 21 Site code PR0021		Point description: Disinfected plant effluent quality downstream of the St Marys AWTP return stream						
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	90 percentile limit	90 percentile value	within limits
chlorine (total residual)	mg/L	every 6 days	61	<0.04	<0.04	0.1	<0.04	yes

50 percentile yearly summary								
EPA Point 21 Site code PR0022		Point description: Upstream of the St Marys Advanced Water Treatment Plant return stream						
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	50 percentile limit	50 percentile value	within limits
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	12	100	100	50	100	yes

Effluent quality monitoring results obtained from EPA Points 5, 21 and 22 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).