

Castle Hill Wastewater Treatment Plant

2020-21 Pollution monitoring yearly limit summaries



EPL 1725

Summary period: 01-07-2020 to 30-06-2021

Date published: 13-08-2021

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

50 percentile yearly summary								
EPA Point 5 Site code CH0005		Point description: In the channel between the tertiary filters and the disinfection facilities						
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	50	<2	<2	7	<2	yes
nitrogen (ammonia)	mg/L	every 6 days	61	0.01	1.45	0.9	0.13	yes
nitrogen (total)	mg/L	every 6 days	61	4.24	18.7	20	15.7	yes
phosphorus (total)	mg/L	every 6 days	61	0.03	0.22	0.3	0.08	yes
total suspended solids	mg/L	every 6 days	61	<2	3	5	<2	yes

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90 percentile yearly summary

EPA Point 5 Site code CH0005		Point description: In the channel between the tertiary filters and the disinfection facilities						
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	62	129	400	111	yes
cadmium	ug/L	monthly	12	<0.1	<0.1	0.2	<0.1	yes
biochemical oxygen demand	mg/L	every 6 days	50	<2	<2	10	<2	yes
cobalt	ug/L	monthly	2	0.4	0.5	-	0.5	n/a
copper	ug/L	monthly	12	5.6	7.7	11	7.6	yes
diazinon	ug/L	monthly	12	<0.1	<0.1	0.1	<0.1	yes
iron	ug/L	monthly	12	31	133	1,100	53	yes
nitrogen (ammonia)	mg/L	every 6 days	61	0.01	1.45	1.4	0.4	yes
nitrogen (total)	mg/L	every 6 days	61	4.24	18.7	25	17.4	yes
phosphorus (total)	mg/L	every 6 days	61	0.03	0.22	1	0.16	yes
total suspended solids	mg/L	every 6 days	61	<2	3	10	<2	yes
zinc	ug/L	monthly	12	16	25	37	22	yes

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Average yearly summary

EPA Point 5 Site code CH0005		Point description: In the channel between the tertiary filters and the disinfection facilities						
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	Average Limit	Average value	within limits
aluminium	ug/L	monthly	12	62	129	160	90	yes
cadmium	ug/L	monthly	12	<0.1	<0.1	0.2	<0.1	yes
cobalt	ug/L	monthly	2	0.4	0.5	1.4	0.5	yes
copper	ug/L	monthly	12	5.6	7.7	8	7	yes
diazinon	ug/L	monthly	12	<0.1	<0.1	0.2	<0.1	yes
iron	ug/L	monthly	12	31	133	360	49	yes
zinc	ug/L	monthly	12	16	25	29	19	yes

50 percentile yearly summary

EPA Point 6 Site code CH0006		Point description: At the outlet from the STP disinfection facilities						
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

80 percentile yearly summary

EPA Point 6 Site code CH0006		Point description: At the outlet from the STP disinfection facilities						
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	110,000	200	18	yes

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90 percentile yearly summary								
EPA Point 6 Site code CH0006		Point description: At the outlet from the STP disinfection facilities						
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	90 percentile limit	90 percentile value	within limits
hydrogen sulphide (unionised)	ug/L	monthly	12	<30	<30	60	<30	yes

Average yearly summary								
EPA Point 6 Site code CH0006		Point description: At the outlet from the STP disinfection facilities						
pollutant	unit of measure	sampling frequency	number of samples	minimum result	maximum result	Average Limit	Average value	within limits
hydrogen sulphide (unionised)	ug/L	monthly	12	<30	<30	30	<30	yes

Effluent quality monitoring results obtained from EPA Points 5 and 6 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

Note: Sydney Water commenced monitoring of biochemical oxygen demand from 1st September 2020. Historically, carbonaceous biochemical oxygen demand was monitored.