

Liverpool Wastewater Treatment Plant

February Pollution Monitoring Summary

EPL 372



Summary period: 01-02-2021 to 28-02-2021

Date obtained: 24-02-2021

Date published: 05-03-2021

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 100 percentile data

EPA Point 15 Site code LP0015 Overflow Point		Point description: Effluent diversion structure at Chipping Norton			
pollutant	unit of measure	sampling frequency	100 percentile limit	100 percentile actual	within limits
biochemical oxygen demand	mg/L	on bypass	100	53	yes
carbonaceous biochemical oxygen demand	mg/L	on bypass	100	50	yes
total suspended solids	mg/L	on bypass	100	27	yes

Under Environment Protection Licence 372 conditions, as set by the NSW Environment Protection Authority, the 100 percentile limits are allowed to be exceeded during wet weather.

Table 2: Routine monitoring data

EPA Point 15 Site code LP0015 Overflow Point		Point description: Effluent diversion structure at Chipping Norton				
pollutant	unit of measure	sampling frequency	number of samples	minimum results	mean results	maximum results
biochemical oxygen demand	mg/L	on bypass	7	8	29.43	53
carbonaceous biochemical oxygen demand	mg/L	on bypass	7	5	27	50
faecal coliforms	CFU/100mL	on bypass	7	1,100	2621443	6,000,000
total suspended solids	mg/L	on bypass	7	15	19	27

Wet weather on 7-10 February resulted in the plant operating under Environment Protection Licence wet weather requirements.

Table 1: 100 percentile data

EPA Point 76 Site code LP0076		Point description: Chlorine contact tank adjacent to reuse pumps			
pollutant	unit of measure	sampling frequency	100 percentile limit	100 percentile actual	within limits
biochemical oxygen demand	mg/L	monthly during discharge	100	<2	yes
carbonaceous biochemical oxygen demand	mg/L	monthly during discharge	100	<2	yes
total suspended solids	mg/L	monthly during discharge	100	2	yes

100 percentile means that 100 % of samples (or all samples) taken must not exceed the limit for that pollutant.

Table 2: Routine monitoring data

EPA Point 76 Site code LP0076		Point description: Chlorine contact tank adjacent to reuse pumps				
pollutant	unit of measure	sampling frequency	number of samples	minimum results	mean results	maximum results
biochemical oxygen demand	mg/L	monthly during discharge	1	-	-	<2
carbonaceous biochemical oxygen demand	mg/L	monthly during discharge	1	-	-	<2
total suspended solids	mg/L	monthly during discharge	1	-	-	2

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

As per clause M2.4 under EPL 372, collection of samples is required from LP0081 after 3 hours of continuous discharge from EPA Point 81. There was no discharge from EPA ID 81 during the December monitoring period.

Liverpool Wastewater Treatment Plant

January Pollution Monitoring Summary

EPL 372



Summary period: 01-01-2021 to 31-01-2021

Date obtained: 13-01-2021

Date published: 27-01-2021

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 100 percentile data

EPA Point 15 Site code LP0015 Overflow Point		Point description: Effluent diversion structure at Chipping Norton			
pollutant	unit of measure	sampling frequency	100 percentile limit	100 percentile actual	within limits
biochemical oxygen demand	mg/L	on bypass	100	46	yes
carbonaceous biochemical oxygen demand	mg/L	on bypass	100	36	yes
total suspended solids	mg/L	on bypass	100	48	yes

Under Environment Protection Licence 372 conditions, as set by the NSW Environment Protection Authority, the 100 percentile limits are allowed to be exceeded during wet weather.

Table 2: Routine monitoring data

EPA Point 15 Site code LP0015 Overflow Point		Point description: Effluent diversion structure at Chipping Norton				
pollutant	unit of measure	sampling frequency	number of samples	minimum results	mean results	maximum results
biochemical oxygen demand	mg/L	on bypass	2	32	39	46
carbonaceous biochemical oxygen demand	mg/L	on bypass	2	19	28	36
faecal coliforms	CFU/100mL	on bypass	2	620,000	1960000	3,300,000
total suspended solids	mg/L	on bypass	2	28	38	48

Wet weather on 6 January resulted in the plant operating under Environment Protection Licence wet weather requirements..

Table 1: 100 percentile data

EPA Point 76 Site code LP0076		Point description: Chlorine contact tank adjacent to reuse pumps			
pollutant	unit of measure	sampling frequency	100 percentile limit	100 percentile actual	within limits
biochemical oxygen demand	mg/L	monthly during discharge	100	<2	yes
carbonaceous biochemical oxygen demand	mg/L	monthly during discharge	100	<2	yes
total suspended solids	mg/L	monthly during discharge	100	3	yes

100 percentile means that 100 % of samples (or all samples) taken must not exceed the limit for that pollutant.

Table 2: Routine monitoring data

EPA Point 76 Site code LP0076		Point description: Chlorine contact tank adjacent to reuse pumps				
pollutant	unit of measure	sampling frequency	number of samples	minimum results	mean results	maximum results
biochemical oxygen demand	mg/L	monthly during discharge	1	-	-	<2
carbonaceous biochemical oxygen demand	mg/L	monthly during discharge	1	-	-	<2
total suspended solids	mg/L	monthly during discharge	1	-	-	3

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

As per clause M2.4 under EPL 372, collection of samples is required from LP0081 after 3 hours of continuous discharge from EPA Point 81. There was no discharge from EPA ID 81 during the January monitoring period.

Liverpool Wastewater Treatment Plant

December Pollution Monitoring Summary

EPL 372



Summary period: 01-12-2020 to 31-12-2020

Date obtained: 31-12-2020

Date published: 01-01-2021

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 100 percentile data

EPA Point 15 Site code LP0015 Overflow Point		Point description: Effluent diversion structure at Chipping Norton			
pollutant	unit of measure	sampling frequency	100 percentile limit	100 percentile actual	within limits
biochemical oxygen demand	mg/L	on bypass	100	28	yes
carbonaceous biochemical oxygen demand	mg/L	on bypass	100	25	yes
total suspended solids	mg/L	on bypass	100	37	yes

Under Environment Protection Licence 372 conditions, as set by the NSW Environment Protection Authority, the 100 percentile limits are allowed to be exceeded during wet weather.

Table 2: Routine monitoring data

EPA Point 15 Site code LP0015 Overflow Point		Point description: Effluent diversion structure at Chipping Norton				
pollutant	unit of measure	sampling frequency	number of samples	minimum results	mean results	maximum results
biochemical oxygen demand	mg/L	on bypass	2	19	23.5	28
carbonaceous biochemical oxygen demand	mg/L	on bypass	2	18	22	25
faecal coliforms	CFU/100mL	on bypass	2	19,000	42000	65,000
total suspended solids	mg/L	on bypass	2	26	32	37

Wet weather on 22 December resulted in the plant operating under Environment Protection Licence wet weather requirements..

Table 1: 100 percentile data

EPA Point 76 Site code LP0076		Point description: Chlorine contact tank adjacent to reuse pumps			
pollutant	unit of measure	sampling frequency	100 percentile limit	100 percentile actual	within limits
biochemical oxygen demand	mg/L	monthly during discharge	100	<2	yes
carbonaceous biochemical oxygen demand	mg/L	monthly during discharge	100	<2	yes
total suspended solids	mg/L	monthly during discharge	100	2	yes

100 percentile means that 100 % of samples (or all samples) taken must not exceed the limit for that pollutant.

Table 2: Routine monitoring data

EPA Point 76 Site code LP0076		Point description: Chlorine contact tank adjacent to reuse pumps				
pollutant	unit of measure	sampling frequency	number of samples	minimum results	mean results	maximum results
biochemical oxygen demand	mg/L	monthly during discharge	1	-	-	<2
carbonaceous biochemical oxygen demand	mg/L	monthly during discharge	1	-	-	<2
total suspended solids	mg/L	monthly during discharge	1	-	-	2

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

As per clause M2.4 under EPL 372, collection of samples is required from LP0081 after 3 hours of continuous discharge from EPA Point 81. There was no discharge from EPA ID 81 during the December monitoring period.

Liverpool Wastewater Treatment Plant

November Pollution Monitoring Summary

EPL 372



Summary period: 01-11-2020 to 30-11-2020

Date obtained: 16-11-2020

Date published: 30-11-2020

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 100 percentile data

EPA Point 15 Site code LP0015 Overflow Point		Point description: Effluent diversion structure at Chipping Norton			
pollutant	unit of measure	sampling frequency	100 percentile limit	100 percentile actual	within limits
biochemical oxygen demand	mg/L	on bypass	100	60	yes
carbonaceous biochemical oxygen demand	mg/L	on bypass	100	58	yes
total suspended solids	mg/L	on bypass	100	28	yes

Under Environment Protection Licence 372 conditions, as set by the NSW Environment Protection Authority, the 100 percentile limits are allowed to be exceeded during wet weather.

Table 2: Routine monitoring data

EPA Point 15 Site code LP0015 Overflow Point		Point description: Effluent diversion structure at Chipping Norton				
pollutant	unit of measure	sampling frequency	number of samples	minimum results	mean results	maximum results
biochemical oxygen demand	mg/L	on bypass	7	11	33.43	60
carbonaceous biochemical oxygen demand	mg/L	on bypass	7	9	31	58
faecal coliforms	CFU/100mL	on bypass	7	2	64261	390,000
total suspended solids	mg/L	on bypass	7	20	23	28

Wet weather on 1 - 3 and 5 - 8 November resulted in plant operating under EPL wet weather requirements.

Table 1: 100 percentile data

EPA Point 76 Site code LP0076		Point description: Chlorine contact tank adjacent to reuse pumps			
pollutant	unit of measure	sampling frequency	100 percentile limit	100 percentile actual	within limits
biochemical oxygen demand	mg/L	monthly during discharge	100	<2	yes
carbonaceous biochemical oxygen demand	mg/L	monthly during discharge	100	<2	yes
total suspended solids	mg/L	monthly during discharge	100	4	yes

100 percentile means that 100 % of samples (or all samples) taken must not exceed the limit for that pollutant.

Table 2: Routine monitoring data

EPA Point 76 Site code LP0076		Point description: Chlorine contact tank adjacent to reuse pumps				
pollutant	unit of measure	sampling frequency	number of samples	minimum results	mean results	maximum results
biochemical oxygen demand	mg/L	monthly during discharge	1	-	-	<2
carbonaceous biochemical oxygen demand	mg/L	monthly during discharge	1	-	-	<2
total suspended solids	mg/L	monthly during discharge	1	-	-	4

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

As per clause M2.4 under EPL 372, collection of samples is required from LP0081 after 3 hours of continuous discharge from EPA Point 81. There was no discharge from EPA ID 81 during the November monitoring period.

Liverpool Wastewater Treatment Plant

October Pollution Monitoring Summary

EPL 372

Summary period: 01-10-2020 to 31-10-2020

Date obtained: 10-11-2020

Date published: 20-11-2020

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 100 percentile data

EPA Point 15 Site code LP0015 Overflow Point		Point description: Effluent diversion structure at Chipping Norton			
pollutant	unit of measure	sampling frequency	100 percentile limit	100 percentile actual	within limits
biochemical oxygen demand	mg/L	on bypass	100	200	no ²
carbonaceous biochemical oxygen demand	mg/L	on bypass	100	86	yes
total suspended solids	mg/L	on bypass	100	38	yes

Under Environment Protection Licence 372 conditions, as set by the NSW Environment Protection Authority, the 100 percentile limits are allowed to be exceeded during wet weather. Wet weather on 28 October resulted in plant operating under EPL wet weather requirements.

Table 2: Routine monitoring data

EPA Point 15 Site code LP0015 Overflow Point		Point description: Effluent diversion structure at Chipping Norton				
pollutant	unit of measure	sampling frequency	number of samples	minimum results	mean results	maximum results
biochemical oxygen demand	mg/L	on bypass	6	15	57.5	200
carbonaceous biochemical oxygen demand	mg/L	on bypass	6	13	37	86
faecal coliforms	CFU/100mL	on bypass	6	5	618929	3,700,000
total suspended solids	mg/L	on bypass	6	16	27	38

Wet weather on 25 - 29 and 31 October resulted in plant operating under EPL wet weather requirements.

Table 1: 100 percentile data

EPA Point 76 Site code LP0076		Point description: Chlorine contact tank adjacent to reuse pumps			
pollutant	unit of measure	sampling frequency	100 percentile limit	100 percentile actual	within limits
biochemical oxygen demand	mg/L	monthly during discharge	100	410	no ²
carbonaceous biochemical oxygen demand	mg/L	monthly during discharge	100	310	no ²
total suspended solids	mg/L	monthly during discharge	100	2,800	no ²

100 percentile means that 100 % of samples (or all samples) taken must not exceed the limit for that pollutant.

Table 2: Routine monitoring data

EPA Point 76 Site code LP0076		Point description: Chlorine contact tank adjacent to reuse pumps				
pollutant	unit of measure	sampling frequency	number of samples	minimum results	mean results	maximum results
biochemical oxygen demand	mg/L	monthly during discharge	1	-	-	410
carbonaceous biochemical oxygen demand	mg/L	monthly during discharge	1	-	-	310
total suspended solids	mg/L	monthly during discharge	1	-	-	2,800

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

² Elevated results for biochemical oxygen demand, carbonaceous biochemical oxygen demand and total suspended solids collected on 7 October was in relation to the autosampler tubing being shifted and collecting solids that had accumulated over time from the very bottom of the tank. These results are not indicative of the recycled water supplied. The plant online suspended solids instrument that interlocks recycled water supply when TSS is above the set-point was calibrated and shown to be representative of recycled water supplied on 7 October through plant lab checks and field observations. The tank was subsequently drained and cleaned and the autosampler tubing was repositioned and secured.

Liverpool Wastewater Treatment Plant

September Pollution Monitoring Summary

EPL 372



Summary period: 01-09-2020 to 30-09-2020

Date obtained: 15-09-2020

Date published: 12-10-2020

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 100 percentile data

EPA Point 76 Site code LP0076		Point description: Chlorine contact tank adjacent to reuse pumps			
pollutant	unit of measure	sampling frequency	100 percentile limit	100 percentile actual	within limits
biochemical oxygen demand	mg/L	monthly during discharge	100	<2	yes
carbonaceous biochemical oxygen demand	mg/L	monthly during discharge	100	<2	yes
total suspended solids	mg/L	monthly during discharge	100	15	yes

100 percentile means that 100 % of samples (or all samples) taken must not exceed the limit for that pollutant.

Table 2: Routine monitoring data

EPA Point 76 Site code LP0076		Point description: Chlorine contact tank adjacent to reuse pumps				
pollutant	unit of measure	sampling frequency	number of samples	minimum results	mean results	maximum results
biochemical oxygen demand	mg/L	monthly during discharge	1	-	-	<2
carbonaceous biochemical oxygen demand	mg/L	monthly during discharge	1	-	-	<2
total suspended solids	mg/L	monthly during discharge	1	-	-	15

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

As per clause M2.4 under EPL 372, collection of samples is required from LP0015 after 3 hours of continuous discharge from EPA Point 15. There was no discharge from EPA ID 15 during the September monitoring period.

As per clause M2.4 under EPL 372, collection of samples is required from LP0081 after 3 hours of continuous discharge from EPA Point 81. There was no discharge from EPA ID 81 during the September monitoring period.

Liverpool Wastewater Treatment Plant

August Pollution Monitoring Summary

EPL 372



Summary period: 01-08-2020 to 31-08-2020

Date obtained: 24-08-2020

Date published: 01-09-2020

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 100 percentile data

EPA Point 15 Site code LP0015 Overflow Point		Point description: Effluent diversion structure at Chipping Norton			
pollutant	unit of measure	sampling frequency	100 percentile limit	100 percentile actual	within limits
carbonaceous biochemical oxygen demand	mg/L	on bypass	100	37	yes
total suspended solids	mg/L	on bypass	100	42	yes

Under Environment Protection Licence 372 conditions, as set by the NSW Environment Protection Authority, the 100 percentile limits are allowed to be exceeded during wet weather. Wet weather on 8-11 & 15-16 August resulted in the plant operating under Environment Protection Licence wet weather requirements.

Table 2: Routine monitoring data

EPA Point 15 Site code LP0015 Overflow Point		Point description: Effluent diversion structure at Chipping Norton				
pollutant	unit of measure	sampling frequency	number of samples	minimum results	mean results	maximum results
carbonaceous biochemical oxygen demand	mg/L	on bypass	7	7	22	37
faecal coliforms	CFU/100mL	on bypass	7	21	224117	800,000
total suspended solids	mg/L	on bypass	7	11	29	42

Wet weather on 8-11 & 15-16 August resulted in the plant operating under Environment Protection Licence wet weather requirements.

Table 1: 100 percentile data

EPA Point 76 Site code LP0076		Point description: Chlorine contact tank adjacent to reuse pumps			
pollutant	unit of measure	sampling frequency	100 percentile limit	100 percentile actual	within limits
carbonaceous biochemical oxygen demand	mg/L	monthly during discharge	100	<2	yes
total suspended solids	mg/L	monthly during discharge	100	4	yes

100 percentile means that 100 % of samples (or all samples) taken must not exceed the limit for that pollutant.

Table 2: Routine monitoring data

EPA Point 76 Site code LP0076		Point description: Chlorine contact tank adjacent to reuse pumps				
pollutant	unit of measure	sampling frequency	number of samples	minimum results	mean results	maximum results
carbonaceous biochemical oxygen demand	mg/L	monthly during discharge	1	-	-	<2
total suspended solids	mg/L	monthly during discharge	1	-	-	4

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

Liverpool Wastewater Treatment Plant

August Pollution Monitoring Summary

EPL 372



Summary period: 01-08-2020 to 31-08-2020

Date obtained: 24-08-2020

Date published: 01-09-2020

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 100 percentile data

EPA Point 81 Site code LP0081 Overflow Point		Point description: Overflow chamber downstream of chlorine contact tank			
pollutant	unit of measure	sampling frequency	100 percentile limit	100 percentile actual	within limits
carbonaceous biochemical oxygen demand	mg/L	on bypass	100	70	yes
total suspended solids	mg/L	on bypass	100	24	yes

Under Environment Protection Licence 372 conditions, as set by the NSW Environment Protection Authority, the 100 percentile limits are allowed to be exceeded during wet weather. Wet weather on 10th August resulted in the plant operating under Environment Protection Licence wet weather requirements.

Table 2: Routine monitoring data

EPA Point 81 Site code LP0081 Overflow Point		Point description: Overflow chamber downstream of chlorine contact tank				
pollutant	unit of measure	sampling frequency	number of samples	minimum results	mean results	maximum results
carbonaceous biochemical oxygen demand	mg/L	on bypass	1	-	-	70
faecal coliforms	CFU/100mL	on bypass	1	-	-	29
total suspended solids	mg/L	on bypass	1	-	-	24

Wet weather on 10th August resulted in the plant operating under Environment Protection Licence wet weather requirements.

Liverpool Wastewater Treatment Plant

July Pollution Monitoring Summary

EPL 372



Summary period: 01-07-2020 to 31-07-2020

Date obtained: 20-08-2020

Date published: 25-08-2020

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 100 percentile data

EPA Point 15 Site code LP0015 Overflow Point		Point description: Effluent diversion structure at Chipping Norton			
pollutant	unit of measure	sampling frequency	100 percentile limit	100 percentile actual	within limits
carbonaceous biochemical oxygen demand	mg/L	on bypass	100	880	no ²
total suspended solids	mg/L	on bypass	100	37	yes

²Under Environment Protection Licence 372 conditions, as set by the NSW Environment Protection Authority, the 100 percentile limits are allowed to be exceeded during wet weather.

Table 2: Routine monitoring data

EPA Point 15 Site code LP0015 Overflow Point		Point description: Effluent diversion structure at Chipping Norton				
pollutant	unit of measure	sampling frequency	number of samples	minimum results	mean results	maximum results
carbonaceous biochemical oxygen demand	mg/L	on bypass	5	8	195	880
faecal coliforms	CFU/100mL	on bypass	5	10	170590	640,000
total suspended solids	mg/L	on bypass	5	24	28	37

Wet weather on 26-30 July resulted in the plant operating under Environment Protection Licence wet weather requirements.

Table 1: 100 percentile data

EPA Point 76 Site code LP0076		Point description: Chlorine contact tank adjacent to reuse pumps			
pollutant	unit of measure	sampling frequency	100 percentile limit	100 percentile actual	within limits
carbonaceous biochemical oxygen demand	mg/L	monthly during discharge	100	<2	yes
total suspended solids	mg/L	monthly during discharge	100	6	yes

100 percentile means that 100 % of samples (or all samples) taken must not exceed the limit for that pollutant.

Table 2: Routine monitoring data

EPA Point 76 Site code LP0076		Point description: Chlorine contact tank adjacent to reuse pumps				
pollutant	unit of measure	sampling frequency	number of samples	minimum results	mean results	maximum results
carbonaceous biochemical oxygen demand	mg/L	monthly during discharge	1	-	-	<2
total suspended solids	mg/L	monthly during discharge	1	-	-	6

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

Liverpool Wastewater Treatment Plant July Pollution Monitoring Summary



EPL 372

Summary period: 01-07-2020 to 31-07-2020

Date obtained: 20-08-2020

Date published: 25-08-2020

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 100 percentile data

EPA Point 81 Site code LP0081 Overflow Point		Point description: Overflow chamber downstream of chlorine contact tank			
pollutant	unit of measure	sampling frequency	100 percentile limit	100 percentile actual	within limits
carbonaceous biochemical oxygen demand	mg/L	on bypass	100	420	no ²
total suspended solids	mg/L	on bypass	100	37	yes

²Under Environment Protection Licence 372 conditions, as set by the NSW Environment Protection Authority, the 100 percentile limits are allowed to be exceeded during wet weather.

Table 2: Routine monitoring data

EPA Point 81 Site code LP0081 Overflow Point		Point description: Overflow chamber downstream of chlorine contact tank				
pollutant	unit of measure	sampling frequency	number of samples	minimum results	mean results	maximum results
carbonaceous biochemical oxygen demand	mg/L	on bypass	3	29	163	420
faecal coliforms	CFU/100mL	on bypass	3	140	197	300
total suspended solids	mg/L	on bypass	3	28	32	37

Wet weather on 27-28 July resulted in the plant operating under Environment Protection Licence wet weather requirements..