# Malabar Water Resource Recovery Facility June Pollution Monitoring Summary

## Sydney WATER

## EPL 372

Summary period: 01-06-2023 to 30-06-2023 Date obtained: 03-07-2023 Date published: 13-07-2023 Licensee: Sydney Water Corporation PO Box 399 PARRAMATTA NSW 2124

#### Table 1: 3 Day Geometric Mean data

EPA Point 6 Site code MA0006	Point description: Upstream of the bulkhead in the effluent channel						
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits		
oil and grease	mg/L	monthly	70	53	yes		
total suspended solids	mg/L	monthly	350	169	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 6 Site code MA0006	Point description: Upstream of the bulkhead in the effluent channel					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	744
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	60
nonylphenol ethoxylate	ug/L	monthly	1	-	-	407
oil and grease	mg/L	every 6 days	5	50	53	55
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	0.9
total suspended solids	mg/L	every 6 days	5	170	186	220

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

Effluent quality monitoring results obtained from EPA Point 6 are used to indicate the quality of water discharged at EPA Point 2 (deep water ocean outfall).

As per clause M2.4 under EPL 372, collection of samples from EPA Point 7 or EPA Point 8 is required when sewage or effluent is discharged from EPA Point 3 or 4. There was no discharge from EPA Point 3 or 4 during the June monitoring period.

# Malabar Water Resource Recovery Facility May Pollution Monitoring Summary

## Sydney WATER

## EPL 372

Summary period: 01-05-2023 to 31-05-2023 Date obtained: 07-06-2023 Date published: 21-06-2023 Licensee: Sydney Water Corporation PO Box 399 PARRAMATTA NSW 2124

#### Table 1: 3 Day Geometric Mean data

EPA Point 6 Site code MA0006	Point description: Upstream of the bulkhead in the effluent channel						
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits		
oil and grease	mg/L	monthly	70	39	yes		
total suspended solids	mg/L	monthly	350	149	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 6 Site code MA0006	Point description: Upstream of the bulkhead in the effluent channel					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	723
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	160
nonylphenol ethoxylate	ug/L	monthly	1	-	-	364
oil and grease	mg/L	every 6 days	5	33	39	51
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	2.2
total suspended solids	mg/L	every 6 days	5	130	152	180

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

Effluent quality monitoring results obtained from EPA Point 6 are used to indicate the quality of water discharged at EPA Point 2 (deep water ocean outfall).

As per clause M2.4 under EPL 372, collection of samples from EPA Point 7 or EPA Point 8 is required when sewage or effluent is discharged from EPA Point 3 or 4. There was no discharge from EPA Point 3 or 4 during the May monitoring period.

# Malabar Water Resource Recovery Facility April Pollution Monitoring Summary



## EPL 372

Summary period: 01-04-2023 to 30-04-2023 Date obtained: 15-05-2023 Date published: 19-05-2023 Licensee: Sydney Water Corporation PO Box 399 PARRAMATTA NSW 2124

#### Table 1: 3 Day Geometric Mean data

EPA Point 6 Site code MA0006	Point description: Upstream of the bulkhead in the effluent channel						
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits		
oil and grease	mg/L	monthly	70	30	yes		
total suspended solids	mg/L	monthly	350	140	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 6 Site code MA0006	Point description: Upstream of the bulkhead in the effluent channel					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	690
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	30
nonylphenol ethoxylate	ug/L	monthly	1	-	-	151
oil and grease	mg/L	every 6 days	5	24	33	41
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	1
total suspended solids	mg/L	every 6 days	5	110	144	160

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

Effluent quality monitoring results obtained from EPA Point 6 are used to indicate the quality of water discharged at EPA Point 2 (deep water ocean outfall).

As per clause M2.4 under EPL 372, collection of samples from EPA Point 7 or EPA Point 8 is required when sewage or effluent is discharged from EPA Point 3 or 4. There was no discharge from EPA Point 3 or 4 during the April monitoring period.

# Malabar Water Resource Recovery Facility March Pollution Monitoring Summary



## EPL 372

Summary period: 01-03-2023 to 31-03-2023 Date obtained: 04-04-2023 Date published: 14-04-2023 Licensee: Sydney Water Corporation PO Box 399 PARRAMATTA NSW 2124

#### Table 1: 3 Day Geometric Mean data

EPA Point 6 Site code MA0006	Point description: Upstream of the bulkhead in the effluent channel						
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits		
oil and grease	mg/L	monthly	70	41	yes		
total suspended solids	mg/L	monthly	350	149	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 6 Site code MA0006	Point description: Upstream of the bulkhead in the effluent channel						
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result	
aluminium	ug/L	monthly	1	-	-	939	
hydrogen sulphide (unionised)	ug/L	monthly	1	-	_	<30	
nonylphenol ethoxylate	ug/L	monthly	1	-	_	283	
oil and grease	mg/L	every 6 days	5	33	41	51	
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	_	2.1	
total suspended solids	mg/L	every 6 days	5	150	180	220	

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

Effluent quality monitoring results obtained from EPA Point 6 are used to indicate the quality of water discharged at EPA Point 2 (deep water ocean outfall).

As per clause M2.4 under EPL 372, collection of samples from EPA Point 7 or EPA Point 8 is required when sewage or effluent is discharged from EPA Point 3 or 4. There was no discharge from EPA Point 3 or 4 during the March monitoring period.

# Malabar Water Resource Recovery Facility February Pollution Monitoring Summary



## EPL 372

Summary period: 01-02-2023 to 28-02-2023 Date obtained: 06-03-2023 Date published: 17-03-2023 Licensee: Sydney Water Corporation PO Box 399 PARRAMATTA NSW 2124

#### Table 1: 3 Day Geometric Mean data

EPA Point 6 Site code MA0006	Point description: Upstream of the bulkhead in the effluent channel						
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits		
oil and grease	mg/L	monthly	70	41	yes		
total suspended solids	mg/L	monthly	350	155	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 6 Site code MA0006	Point description: Upstream of the bulkhead in the effluent channel						
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result	
aluminium	ug/L	monthly	1	-	-	866	
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30	
nonylphenol ethoxylate	ug/L	monthly	1	-	_	188	
oil and grease	mg/L	every 6 days	5	28	40	53	
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	_	1.1	
total suspended solids	mg/L	every 6 days	5	160	190	240	

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

Effluent quality monitoring results obtained from EPA Point 6 are used to indicate the quality of water discharged at EPA Point 2 (deep water ocean outfall).

As per clause M2.4 under EPL 372, collection of samples from EPA Point 7 or EPA Point 8 is required when sewage or effluent is discharged from EPA Point 3 or 4. There was no discharge from EPA Point 3 or 4 during the February monitoring period.

# Malabar Water Resource Recovery Facility January Pollution Monitoring Summary



## EPL 372

Summary period: 01-01-2023 to 31-01-2023 Date obtained: 01-02-2023 Date published: 14-02-2023 Licensee: Sydney Water Corporation PO Box 399 PARRAMATTA NSW 2124

#### Table 1: 3 Day Geometric Mean data

EPA Point 6 Site code MA0006	Point description: Upstream of the bulkhead in the effluent channel						
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits		
oil and grease	mg/L	monthly	70	42	yes		
total suspended solids	mg/L	monthly	350	246	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 6 Site code MA0006	Point description: Upstream of the bulkhead in the effluent channel					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	927
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nonylphenol ethoxylate	ug/L	monthly	1	-	-	254
oil and grease	mg/L	every 6 days	5	28	37	45
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	3.8
total suspended solids	mg/L	every 6 days	5	150	196	240

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

Effluent quality monitoring results obtained from EPA Point 6 are used to indicate the quality of water discharged at EPA Point 2 (deep water ocean outfall).

As per clause M2.4 under EPL 372, collection of samples from EPA Point 7 or EPA Point 8 is required when sewage or effluent is discharged from EPA Point 3 or 4. There was no discharge from EPA Point 3 or 4 during the January monitoring period.

# Malabar Water Resource Recovery Facility December Pollution Monitoring Summary

## Sydney WATER

## EPL 372

Summary period: 01-12-2022 to 31-12-2022 Date obtained: 04-01-2023 Date published: 10-01-2023 Licensee: Sydney Water Corporation PO Box 399 PARRAMATTA NSW 2124

#### Table 1: 3 Day Geometric Mean data

EPA Point 6 Site code MA0006	Point description: Upstream of the bulkhead in the effluent channel						
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits		
oil and grease	mg/L	monthly	70	47	yes		
total suspended solids	mg/L	monthly	350	189	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 6 Site code MA0006	Point description: Upstream of the bulkhead in the effluent channel						
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result	
aluminium	ug/L	monthly	1	-	-	816	
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30	
nonylphenol ethoxylate	ug/L	monthly	1	-	-	39	
oil and grease	mg/L	every 6 days	5	45	48	53	
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	1.1	
total suspended solids	mg/L	every 6 days	5	180	210	240	

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

Effluent quality monitoring results obtained from EPA Point 6 are used to indicate the quality of water discharged at EPA Point 2 (deep water ocean outfall).

As per clause M2.4 under EPL 372, collection of samples from EPA Point 7 or EPA Point 8 is required when sewage or effluent is discharged from EPA Point 3 or 4. There was no discharge from EPA Point 3 or 4 during the December monitoring period.

# Malabar Water Resource Recovery Facility November Pollution Monitoring Summary

## Sydney WATER

## EPL 372

Summary period: 01-11-2022 to 30-11-2022 Date obtained: 07-12-2022 Date published: 16-12-2022 Licensee: Sydney Water Corporation PO Box 399 PARRAMATTA NSW 2124

#### Table 1: 3 Day Geometric Mean data

EPA Point 6 Site code MA0006	Point description: Upstream of the bulkhead in the effluent channel						
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits		
oil and grease	mg/L	monthly	70	43	yes		
total suspended solids	mg/L	monthly	350	163	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 6 Site code MA0006	Point description: Upstream of the bulkhead in the effluent channel					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	624
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nonylphenol ethoxylate	ug/L	monthly	1	-	-	192
oil and grease	mg/L	every 6 days	5	31	42	47
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	0.75
total suspended solids	mg/L	every 6 days	5	160	172	200

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

Effluent quality monitoring results obtained from EPA Point 6 are used to indicate the quality of water discharged at EPA Point 2 (deep water ocean outfall).

As per clause M2.4 under EPL 372, collection of samples from EPA Point 7 or EPA Point 8 is required when sewage or effluent is discharged from EPA Point 3 or 4. There was no discharge from EPA Point 3 or 4 during the November monitoring period.

# Malabar Water Resource Recovery Facility October Pollution Monitoring Summary



### EPL 372

Summary period: 01-10-2022 to 31-10-2022 Date obtained: 04-11-2022 Date published: 16-11-2022 Licensee: Sydney Water Corporation PO Box 399 PARRAMATTA NSW 2124

#### Table 1: 3 Day Geometric Mean data

EPA Point 6 Site code MA0006	Point descrip	Point description: Upstream of the bulkhead in the effluent channel						
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits			
oil and grease	mg/L	monthly	70	22	yes			
total suspended solids	mg/L	monthly	350	128	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 6 Site code MA0006	Point description: Upstream of the bulkhead in the effluent channel						
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result	
aluminium	ug/L	monthly	1	-	-	1,140	
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30	
nonylphenol ethoxylate	ug/L	monthly	1	-	-	150	
oil and grease	mg/L	every 6 days	5	26	31	38	
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	0.44	
total suspended solids	mg/L	every 6 days	5	120	172	220	

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

Effluent quality monitoring results obtained from EPA Point 6 are used to indicate the quality of water discharged at EPA Point 2 (deep water ocean outfall).

As per clause M2.4 under EPL 372, collection of samples from EPA Point 7 or EPA Point 8 is required when sewage or effluent is discharged from EPA Point 3 or 4. There was no discharge from EPA Point 3 or 4 during the October monitoring period.

# Malabar Water Resource Recovery Facility September Pollution Monitoring Summary

## Sydney WATER

## EPL 372

Summary period: 01-09-2022 to 30-09-2022 Date obtained: 08-10-2022 Date published: 17-10-2022 Licensee: Sydney Water Corporation PO Box 399 PARRAMATTA NSW 2124

#### Table 1: 3 Day Geometric Mean data

EPA Point 6 Site code MA0006	Point description: Upstream of the bulkhead in the effluent channel						
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits		
oil and grease	mg/L	monthly	70	46	yes		
total suspended solids	mg/L	monthly	350	193	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 6 Site code MA0006	Point description: Upstream of the bulkhead in the effluent channel					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	828
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nonylphenol ethoxylate	ug/L	monthly	1	-	-	655
oil and grease	mg/L	every 6 days	5	37	45	52
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	2.7
total suspended solids	mg/L	every 6 days	5	170	194	230

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

Effluent quality monitoring results obtained from EPA Point 6 are used to indicate the quality of water discharged at EPA Point 2 (deep water ocean outfall).

As per clause M2.4 under EPL 372, collection of samples from EPA Point 7 or EPA Point 8 is required when sewage or effluent is discharged from EPA Point 3 or 4. There was no discharge from EPA Point 3 or 4 during the September monitoring period.

# Malabar Water Resource Recovery Facility August Pollution Monitoring Summary



## EPL 372

Summary period: 01-08-2022 to 31-08-2022 Date obtained: 08-09-2022 Date published: 14-09-2022 Licensee: Sydney Water Corporation PO Box 399 PARRAMATTA NSW 2124

#### Table 1: 3 Day Geometric Mean data

EPA Point 6 Site code MA0006	Point description: Upstream of the bulkhead in the effluent channel						
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits		
oil and grease	mg/L	monthly	70	45	yes		
total suspended solids	mg/L	monthly	350	182	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 6 Site code MA0006	Point description: Upstream of the bulkhead in the effluent channel					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	839
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nonylphenol ethoxylate	ug/L	monthly	1	-	-	156
oil and grease	mg/L	every 6 days	5	41	48	55
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	0.47
total suspended solids	mg/L	every 6 days	5	150	176	200

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

Effluent quality monitoring results obtained from EPA Point 6 are used to indicate the quality of water discharged at EPA Point 2 (deep water ocean outfall).

As per clause M2.4 under EPL 372, collection of samples from EPA Point 7 or EPA Point 8 is required when sewage or effluent is discharged from EPA Point 3 or 4. There was no discharge from EPA Point 3 or 4 during the August monitoring period.

# Malabar Water Resource Recovery Facility July Pollution Monitoring Summary



## EPL 372

Summary period: 01-07-2022 to 31-07-2022 Date obtained: 09-08-2022 Date published: 21-08-2022 Licensee: Sydney Water Corporation PO Box 399 PARRAMATTA NSW 2124

#### Table 1: 3 Day Geometric Mean data

EPA Point 6 Site code MA0006	Point description: Upstream of the bulkhead in the effluent channel						
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits		
oil and grease	mg/L	monthly	70	29	yes		
total suspended solids	mg/L	monthly	350	107	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 6 Site code MA0006	Point description: Upstream of the bulkhead in the effluent channel					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	613
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nonylphenol ethoxylate	ug/L	monthly	1	-	-	130
oil and grease	mg/L	every 6 days	6	21	34	43
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	0.37
total suspended solids	mg/L	every 6 days	6	100	138	200

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

Effluent quality monitoring results obtained from EPA Point 6 are used to indicate the quality of water discharged at EPA Point 2 (deep water ocean outfall).

As per clause M2.4 under EPL 372, collection of samples from EPA Point 7 or EPA Point 8 is required when sewage or effluent is discharged from EPA Point 3 or 4. There was no discharge from EPA Point 3 or 4 during the July monitoring period.