

REVIEW OF ENVIRONMENTAL PERFORMANCE OF SYDNEY ZOO

Dated October 2022

Condition D7 requires annual reporting of the environmental performance of the Development. The provisions of Condition D7 are:

Condition D7

Each year, unless otherwise agreed by the Planning Secretary, the Applicant shall review the environmental performance of the Development to the satisfaction of the Planning Secretary. This review shall:

(a) include a comprehensive review of the monitoring results and complaints records received by the Development over the previous calendar year, which includes a comparison of these results against the:

- i) relevant statutory requirements, limits or performance measures/criteria;
- ii) requirements of any plan or program required under this consent;
- iii) monitoring results of the previous years; and
- iv) relevant predictions in the EIS;

(b) identify any non-compliance over the last year and describe the actions that were (or are being) taken to ensure compliance;

(c) identify any trends in monitoring data over the life of the Development;

(d) identify any discrepancies between the predicted and actual impacts of the Development and analyse the potential cause of any significant discrepancies;

(e) describe what measures will be implemented over the next year to improve the environmental performance of the Development; and

(f) verify the total daily visitor numbers for private zoo experiences / small group tours commencing between the hours of 7:30 am and 9 am has not exceeded the limit of 300 persons and include an outline of management actions to be taken to address any exceedance of the limit on visitor numbers and ensure ongoing compliance with the requirements of this consent.

Delay in Reporting

It is noted that this is an annual requirement under Condition D7. Whilst the monitoring required under Condition D7 were being undertaken for the whole period, and due to a number of conditions including the interaction of the COVID shutdowns and other influences, these have not been included in an annual report previously. As a result, this report covers the period from opening to present, and moving forward this report will be submitted annually covering the previous 12 month period

Monitoring Results and complaints records

Sydney Zoo monitors its trade waste and discharge water quality as part of its monitoring requirements. As is set out below, the reports received address the relevant requirements and parameters. There have been no non-compliance issues recorded and no significant trends have been identified. There do not appear to be any significant discrepancies in the actual results.

The following addresses parts a)-e) of Condition D7 for Trade waste analysis.

Trade waste Analysis

Since opening in December 2019, Sydney Zoo has put in place a water monitoring policy in accordance with the requirements of Sydney Water for its trade waste.

The test results are submitted to Sydney Water quarterly and no adverse results have been received and the results are within the expected parameters. The table below summarises the parameters tested. Copies of reports are contained in [Annexure A](#) and those reports address the issues listed.

Sydney Zoo Trade Waste Analysis									
	Total Dissolved solids	Suspended solids	Ammonia as N	Biochemical Oxygen Demand	pH finish	Calcium	Magnesium	Sodium	
13-Feb-20	284	7	<0.1	<2	7.6				
28-Feb-20	209	16	<0.1	15	7.7				
26-Mar-20	212	<5	<0.1	<2	8.3				
16-Apr-20	6300	<5	<0.1	2	7.8				
14-May-20	6540	<5	<0.1	<2	8				
28-May-20	2090	<5	<0.1	<2	8.2				
9-Oct-20	3070	9	<0.1	<2	8.5				
1-Dec-20	6120	<5	<0.1	2					
28-Jan-21	193	<5	<0.1	<2					
15-Apr-21	1830	<5	<0.1		7.8	22	4	582	
21-Sep-21	2910	7	<0.1		2	22	5	896	
19-Nov-21	5400	<5	<0.1		2	7.8	46	6	1720
25-Jan-22	3600	5	0.3		3	40	64	1080	
24-Mar-22	3020	10	<0.1		3	35	7	982	
20-May-22	4000	12	<0.1	<2	8	42	7	1340	
15-Jul-22	4120	<5	0.7		3	7.9	46	5	1280

Discharge Water Quality Assessment

The following addresses parts a)-e) of Condition D7 for Discharge Water Quality analysis.

This assessment was required to assist in the demonstration of the effective performance of the effluent and stormwater systems at Sydney Zoo in minimising environmental impact off-site and facilitate the validation of the system by the NSW EPA. A report dated 31 August 2020 was completed and was submitted to the EPA for their assessment (a copy of this report is contained in **Annexure B**).

The EPA advised by e-mail dated 24 November 2020 that the EPA does not have an ongoing regulatory role for this matter.

It is noted that no adverse trends or results were recorded.

From: Claire McQueeney <Claire.McQueeney@epa.nsw.gov.au>
Sent: 24 November 2020 14:58
To: Jake Burgess <jake.burgess@sydneyzoo.com>
Cc: Jacqueline Ingham <Jacqueline.Ingham@epa.nsw.gov.au>; Mark Challoner <mark.challoner@consultingearth.com.au>; tim@aquamanagement.com.au; Peter Thiel <peter.thiel@sydneyzoo.com>; Mauritz Basson <mauritz.basson@sydneyzoo.com>
Subject: RE: SSD 7228 - Sydney Zoo - Consent Condition C12 - Water Quality Monitoring Program - Consultation

Hi Jake,

Thanks for following up and sorry for the delayed response.

Thank you for the opportunity to comment on the Discharge Water Monitoring Assessment for Sydney Zoo. As the EPA does not have an ongoing regulatory role for this matter, the EPA has decided that we will not provide any further comments on the water quality program or assessment.

I take this opportunity to remind you that it is the responsibility of Sydney Zoo to ensure that it has sufficient checks and balances in place, including to robust Water Quality Monitoring Program, to ensure that no pollution of water under s.120 of the POEO Act occurs due to your activities.

Kind regards,

Claire McQueeney
Operations Officer
Regulatory Operations Metro
NSW Environment Protection Authority
D 02 8837 6393



Sydney Zoo has continued with discharge event testing with the results continuing to show no significant impacts from the development. The test reports are contained in **Annexure C**.

The reports received address the relevant requirements and parameters. There have been no non-compliance issues recorded and no significant trends have been identified. There do not appear to be any significant discrepancies in the actual results.

Complaints Register

Since the opening of the Zoo, there have been no complaints received regarding the environmental performance of the zoo

Daily Visitor Numbers between 7:30am and 9am (condition D7 f)

For the period from the opening of the zoo up to 30 June 2022 there have been no visitors prior to 9am.

Other Environmental Assessment

An independent Environmental Assessment was obtained on 14 February 2020, a copy of which was lodged with the Department. A further assessment will be undertaken in 2023.

ANNEXURE A – Trade Waste Analysis Records

ANNEXURE B – Water Quality Discharge Report

ANNEXURE C – Discharge Event Testing results