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Eastland
Port

Matawhero Logyard Annual Report

For Eastland Port Limited

August 2020

REPORT INFORMATION AND QUALITY CONTROL

Prepared for:	Eastland Port Limited	
Author:	Christine Oakey Senior Environmental Management Consultant	
Reviewer and Approved for Release:	Mark Poynter Principal Ecologist	
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1 INTRODUCTION

Eastland Port Limited (hereafter, Eastland Port) hold resource consent issued by Gisborne District Council for the discharge of stormwater from the Matawhero Logyard to the Awapuni Drain (DW-2019-106195-01 and WI-2019-106213-01). The consents require an annual report to be submitted.

Condition 8 of the resource consent states:

'The Consent Holder shall keep a record of all monitoring analyses and inspections results undertaken in accordance with the conditions of this consent and shall submit these records to the Council annually and also immediately upon written request. The Consent Holder shall immediately notify the consent authority in writing of any non-compliance with any condition of this Consent and shall keep a record of this and the action(s) taken to address the matter of non-compliance. These records shall be submitted to the Council annually and also immediately upon written request.

The consent holder shall produce a report annually by the 30 of June each year for the previous calendar year to the satisfaction of the Environmental Services Manager. The report shall include:

- Annual volume of cargo entering and leaving the facility
- A description of any modifications to the operation of the site.
- Non compliances with consent conditions and action taken
- Complaints and action
- Monitoring inspections and outcome
- Water quality monitoring results and an interpretive summary of results and any recommendations.'

This report presents the 2020 Annual Report, for the period 1 April 2019 to 31 March 2020. It has been prepared by 4Sight Consulting Ltd (4Sight) to be submitted on behalf of Eastland Port.

2 ANNUAL VOLUME OF CARGO ENTERING AND LEAVING THE FACILITY

Over the 2019/20 year (01 April 2019 – 31 March 2020) the volume of cargo that entered the facility was 169,962 tonnes and the volume of cargo that left the facility was 185,671 tonnes.

3 DESCRIPTION OF MODIFICATIONS TO THE OPERATION OF THE SITE

There have been no modifications to the operation of the site over the 2019/20 year, excluding the consented development of cell 3.

4 NON-COMPLIANCES WITH CONSENT CONDITIONS AND ACTION TAKEN

A summary of non-compliance with consent conditions and actions taken over the 2019/20 year are presented in Table 1 below.

Table 1: Non-compliance and actions taken over the 2019/20 year

Date	Non-compliance	Action taken
10/09/2019	Surface water sampling - total nitrogen, soluble inorganic nitrogen, and dissolved reactive phosphorus exceeded consent trigger limits.	No action as upstream results were higher than the downstream results.
10/09/2019	Groundwater sampling – total nitrogen exceeded consent trigger limit.	Site inspection undertaken on 29 October 2019.

15/10/2019	Surface water sampling - total suspended solids, BOD, total nitrogen, dissolved reactive phosphorus, and total resin acids exceeded the consent trigger limits.	Site inspection undertaken on 29 October 2019.
15/10/2019	Groundwater sampling - total nitrogen and total resin acids exceeded the consent trigger limits.	Site inspection undertaken on 29 October 2019.

5 COMPLAINTS AND ACTION

No complaints were recorded over the 2019/20 year.

6 MONITORING INSPECTIONS AND OUTCOME

A summary of the monitoring inspections and outcomes over the 2019/20 year are presented in Table 2 below.

Table 2: Monitoring inspections and outcomes over the 2019/20 year

Date	Inspection notes	Outcome
10/09/2019	Quarterly water quality monitoring	Complete water quality sampling completed
15/10/2019	Quarterly water quality monitoring	Complete water quality sampling completed
29/10/2019	Site inspection after water quality monitoring exceedances	No issues identified

7 WATER QUALITY MONITORING RESULTS

A summary of the surface water monitoring results (Table 3) and groundwater results (**Error! Reference source not found.**) for the 2019/20 year are presented below. Sampling was not undertaken in Quarter 2 2019 or Quarter 1 2020 as there were no discharge events during these periods.

Table 3: Summary of surface water monitoring results for the 2019/20 year. Consent trigger limit exceedances at site 2 and 3 are highlighted purple.

Parameter	Units	Consent trigger limits (10m below confluence)	Quarter 3 2019			Quarter 4 2019		
			10 September 2019			15 October 2019		
			Stormwater retention ponds outlet (MLYSW Site 1)	Awapuni Drain 10m downstream (MLYSW Site 2)	Awapuni Drain 10m upstream (MLYSW Site 3)	Stormwater retention ponds outlet (MLYSW Site 1)	Awapuni Drain 10m downstream (MLYSW Site 2)	Awapuni Drain 10m upstream (MLYSW Site 3)
pH	-LOG(H ⁺)	6.5 – 8.5	7.3	8.1	8.2	7.2	7.6	8.2
Temperature	Celsius	Changed by more than 3°C	10.3	10.9	10.9	12.9	13.2	13.9
Total Suspended Solids	g/m ³	100 g/m ³ above background site	7	6	6	270	440	17
Volatile Suspended Solids	g/m ³	No limit	<3	<3	<3	44	81	4
BOD ₅	g/m ³	20	<2	<2	<2	44	50	2
Total Petroleum Hydrocarbons	g/m ³	15	<7	<7	<7	<0.7	<0.7	<0.7
Total Tannins	g/m ³	Indicator test only	<1	<1	<1	10.3	12.6	0.6
Total Nitrogen	g/m ³	0.4	0.31	1.15	1.24	0.91	1.42	1.17

Parameter	Units	Consent trigger limits (10m below confluence)	Quarter 3 2019			Quarter 4 2019		
			10 September 2019			15 October 2019		
			Stormwater retention ponds outlet (MLYSW Site 1)	Awapuni Drain 10m downstream (MLYSW Site 2)	Awapuni Drain 10m upstream (MLYSW Site 3)	Stormwater retention ponds outlet (MLYSW Site 1)	Awapuni Drain 10m downstream (MLYSW Site 2)	Awapuni Drain 10m upstream (MLYSW Site 3)
Soluble Inorganic Nitrogen	g/m ³	0.4	0.011	0.51	0.73	<0.011	<0.011	0.46
Dissolved Reactive Phosphorus	g/m ³	0.1	0.007	0.33	0.34	0.039	0.110	0.36
Total Phenols	g/m ³	0.72	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Dissolved Oxygen	g/m ³	Not less than 4	2.62	8.4	8.6	3.2	5.39	8.55
Conductivity	µmhos/cm	Indicator test only	890	6620	6160	731	1560	3990
Total Resin Acids	g/m ³	0.06	<0.0001	<0.0001	<0.0001	0.2906	0.2586	<0.0001
Light Absorbance	AU cm ⁻¹	Indicator test only	0.01	0.009	0.01	0.057	0.049	0.012
Dissolved Copper	g/m ³	0.0025	<0.0005	0.0006	0.0003	0.0010	0.0012	0.0040
Dissolved Lead	g/m ³	0.0094	<0.0001	<0.0003	<0.0003	<0.00010	<0.0001	<0.002

Parameter	Units	Consent trigger limits (10m below confluence)	Quarter 3 2019			Quarter 4 2019		
			10 September 2019			15 October 2019		
			Stormwater retention ponds outlet (MLYSW Site 1)	Awapuni Drain 10m downstream (MLYSW Site 2)	Awapuni Drain 10m upstream (MLYSW Site 3)	Stormwater retention ponds outlet (MLYSW Site 1)	Awapuni Drain 10m downstream (MLYSW Site 2)	Awapuni Drain 10m upstream (MLYSW Site 3)
Dissolved Zinc	g/m ³	0.031	<0.001	<0.005	<0.005	0.0014	0.0013	0.004

Table 4: Summary of groundwater monitoring results for the 2019/2020 year

Parameter	Units	Consent trigger limits (at sump tile drainage outlet)	Limit from background samples at the sump tile drainage outlet	Quarter 3 2019			Quarter 4 2019		
				10 September 2019			15 October 2019		
				MLY GW 01	MLY GW 02	Sump Tile Drainage	MLY GW 01	MLY GW 02	Sump Tile Drainage
Groundwater level	m	No limit	No limit	1.7	1.58	n/a	1.65	1.75	n/a
pH	-LOG(H ⁺)	6.5 – 8.5	6.5 - 8.5	7.3	7.1	7.2	7.4	7.4	8.1
Conductivity	µmho/cm	0.3 above background	866.3	874	964	1000	830	984	458
Total Petroleum Hydrocarbons	g/m ³	15	15	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7
Total Resin Acids	g/m ³	0.06 above background	n/a	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.8145
Total Nitrogen	g/m ³	0.6 above background	1.49	0.34	0.26	1.06	0.33	0.21	2.5

7.1 Summary of water quality results and recommendations

7.1.1 Surface Water

The results of the quarterly water quality monitoring completed on 10 September 2019 showed that total nitrogen, soluble inorganic nitrogen, and dissolved reactive phosphorus exceeded the consent trigger limits at the downstream compliance point. However, the upstream (background) results had higher values than the downstream compliance point values.

The results of the quarterly water quality monitoring completed on 15 October 2019 showed that total suspended solids, BOD, total nitrogen, dissolved reactive phosphorus, and total resin acids exceeded the consent trigger limits at the downstream compliance point. Total nitrogen and dissolved reactive phosphorus also exceeded the consent trigger limits at the upstream site.

Re-testing of exceeded parameters is yet to be undertaken. In accordance with Condition 25 the site was inspected to identify possible causes of non-compliance, this inspection was undertaken on 29 October and no issues were identified.

7.1.2 Groundwater

The results of the quarterly groundwater monitoring completed on 10 September 2019 showed that total nitrogen exceeded the consent trigger limits at the compliance point.

The results of the quarterly groundwater monitoring completed on 15 October 2019 showed that total nitrogen and total resin acids exceeded the consent trigger limits at the compliance point.

Re-testing of the exceeded parameter was discussed with Gisborne District Council (GDC) and the sampling contractors were instructed to carry out sampling of total nitrogen at the sump tile drainage and downstream and upstream Awapuni Drain sampling sites. Samples have yet to be collected. In accordance with Condition 25 the site was inspected to identify possible causes of non-compliance, this inspection was undertaken on 29 October and no issues were identified.

There have been ongoing issues with the bore at the GW 02 sampling location. The reconditioning of the bore is currently being investigated.

