Port Taranaki Industries

Monitoring Programme

Annual Report

2022-2023

Technical Report 2023-36

Working with people | caring for Taranaki

Taranaki Regional Council

Taranaki Regional Council
Private Bag 713
Stratford

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Executive summary

Port Taranaki Ltd operates Port Taranaki. Downer New Zealand Ltd (Downer) and Technix Bitumen Technologies Ltd (Technix) operate bitumen plants within the bounds of the port. Methanex New Zealand Ltd (Methanex) operates a methanol storage facility at the port, and Liquigas Ltd (Liquigas) is a storage and distribution depot for liquid petroleum gas.

This report for the period July 2022 to June 2023 describes the monitoring programme implemented by the Taranaki Regional Council (the Council) to assess the environmental and consent compliance performance of the various companies operating in and around Port Taranaki, New Plymouth. The report also details the results of the monitoring undertaken and assesses the environmental effects of the Company's activities.

During the year, Port Taranaki demonstrated a good level of environmental performance. Downer, Methanex, Technix and Liquigas all demonstrated a high level of environmental performance. With regards to administrative performance, Port Taranaki, Downer, Technix, Methanex and Liquigas demonstrated a high level of performance.

The companies hold a total of eight resource consents, which include 65 conditions setting out the requirements that they must satisfy. The companies hold six consents to discharge effluent/stormwater into the Tasman Sea, and two consents to discharge emissions into the air. In addition, Port Taranaki also holds a Certificate of Compliance with regards to air discharges.

The Council's monitoring programme for the period under review included four site inspections of Port Taranaki, three inspections of Downer and Technix, and several inspections of Methanex and Liquigas from the site boundaries. Additionally, stormwater samples were collected for physicochemical analysis during two wet weather sampling surveys. Consent holder data was also supplied to the Council for review.

The monitoring showed that maintenance and housekeeping around Port Taranaki had improved during the year. There were no major issues observed during routine inspections at the remaining industries throughout the year. There were no substantiated complaints of odour beyond the port boundary in 2022-2023.

Three stormwater samples collected as part of routine compliance monitoring were found to exceed the consent limit for total suspended solids. However, Port Taranaki presented an explanation for these exceedances and no further enforcement action was taken.

For reference, in the 2022-2023 year, consent holders were found to achieve a high level of environmental performance and compliance for 878 (87%) of a total of 1007 consents monitored through the Taranaki tailored monitoring programmes, while for another 96 (10%) of the consents, a good level of environmental performance and compliance was achieved. A further 27 (3%) of consents monitored required improvement in their performance, while the remaining one (< 1%) achieved a rating of poor.

In terms of overall environmental and compliance performance by the consent holders over the last several years, this report shows that, with the exception of Port Taranaki, the performances of the port industries have remained at a high level. Port Taranaki's performance has improved compared to last monitoring year.

This report includes recommendations for the 2023-2022 year.

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1 Introduction

1.1 Compliance monitoring programme reports and the Resource Management Act 1991

1.1.1 Introduction

This report for the period July 2022 to June 2023 by the Taranaki Regional Council (the Council) describing the monitoring programme associated with resource consents held by Port Taranaki Ltd, Downer New Zealand Ltd, Technix Bitumen Technologies Ltd (formerly Russell Matthews Industries Ltd), Methanex New Zealand Ltd, and Liquigas Ltd. Port Taranaki Ltd operates the Port of Taranaki. Downer New Zealand Ltd operates a bitumen facility based at the Port. Technix Bitumen Technologies Ltd has a bulk bitumen industry at the Port which became operational in November 2012. Methanex New Zealand Ltd operates a methanol storage facility and Liquigas operates a liquid petroleum gas (LPG) storage and distribution depot.

The report includes the results and findings of the monitoring programme implemented by the Council in respect of the consents held by the Companies that relate to discharges of water to the Tasman Sea and the Hongihongi Stream, and the air discharge permits held by Downer New Zealand Ltd and Technix Bitumen Technologies Ltd to cover emissions to air from the site.

One of the intents of the *Resource Management Act 1991* (RMA) is that environmental management should be integrated across all media, so that a consent holder's use of water, air, and land should be considered from a single comprehensive environmental perspective. Accordingly, the Council generally implements integrated environmental monitoring programmes and reports the results of the programmes jointly. This report discusses the environmental effects of each Company's use of water, land and air, and is the 27th combined annual report by the Council for the Companies.

1.1.2 Structure of this report

Section 1 of this report is a background section. It sets out general information about:

- consent compliance monitoring under the RMA and the Council's obligations;
- the Council's approach to monitoring sites though annual programmes;
- the resource consents held by the Companies;
- the nature of the monitoring programme in place for the period under review; and
- a description of the activities and operations conducted in the Port.

Section 2 presents the results of monitoring during the period under review, including scientific and technical data.

Section 3 discusses the results, their interpretations, and their significance for the environment.

Section 4 presents recommendations to be implemented in the 2023-2024 monitoring year.

A glossary of common abbreviations and scientific terms, and a bibliography, are presented at the end of the report.

1.1.3 The Resource Management Act 1991 and monitoring

The RMA primarily addresses environmental 'effects' which are defined as positive or adverse, temporary or permanent, past, present or future, or cumulative. Effects may arise in relation to:

a. the neighbourhood or the wider community around an activity, and may include cultural and social-economic effects;
b. physical effects on the locality, including landscape, amenity and visual effects;
c. ecosystems, including effects on plants, animals, or habitats, whether aquatic or terrestrial;
d. natural and physical resources having special significance (for example recreational, cultural, or aesthetic); and
e. risks to the neighbourhood or environment.

In drafting and reviewing conditions on discharge permits, and in implementing monitoring programmes, the Council is recognising the comprehensive meaning of 'effects' in as much as is appropriate for each activity. Monitoring programmes are not only based on existing permit conditions, but also on the obligations of the RMA to assess the effects of the exercise of consents. In accordance with Section 35 of the RMA, the Council undertakes compliance monitoring for consents and rules in regional plans, and maintains an overview of the performance of resource users and consent holders. Compliance monitoring, including both activity and impact monitoring, enables the Council to continually re-evaluate its approach and that of consent holders to resource management and, ultimately, through the refinement of methods and considered responsible resource utilisation, to move closer to achieving sustainable development of the region's resources.

1.1.4 Evaluation of environmental and administrative performance

Besides discussing the various details of the performance and extent of compliance by the consent holders, this report also assigns a rating as to each Company's environmental and administrative performance during the period under review. The rating categories are high, good, improvement required and poor for both environmental and administrative performance. The interpretations for these ratings are found in Appendix II.

For reference, in the 2022-2023 year, consent holders were found to achieve a high level of environmental performance and compliance for 878 (87%) of a total of 1007 consents monitored through the Taranaki tailored monitoring programmes, while for another 96 (10%) of the consents, a good level of environmental performance and compliance was achieved. A further 27 (3%) of consents monitored required improvement in their performance, while the remaining one (< 1%) achieved a rating of poor.[1]

[1] The Council has used these compliance grading criteria for more than 19 years. They align closely with the 4 compliance grades in the MfE Best Practice Guidelines for Compliance, Monitoring and Enforcement, 2018

1.2 Process description

1.2.1 History

Port Taranaki Ltd (Port Taranaki) was established in 1875 and is the only deep water seaport on New Zealand's western seaboard. Work on a breakwater began in 1881 to provide safe anchorage from the Tasman Sea. Port Taranaki is now well sheltered by two breakwaters which extend from either end of the naturally curved bay.

The port has continued to grow and today handles large volumes of international and coastal cargo (Photo 1). The port is also a servicing base for sea transport and related industries and has been a provider of maritime support and heavy lift services since the 1960's. The port handles a diversity of cargo and offers a full range of providoring, stevedoring, ship agency and government border protection services.

Photo 1 Port Taranaki

1.2.2 Environment

Port Taranaki has continued to change from being primarily a hydrocarbon and container shipping port to one that handles large volumes of bulk dry cargo including logs, fertilisers and animal feed. Log exports have significantly increased in recent years, reaching 1,135,000 JAS (Japanese Agricultural Standard) in 2020-2021 (Figure 1). In the period 2022-2023, log exports accounted for over 1,000,000 JAS, showing a slight decrease compared to the previous year.

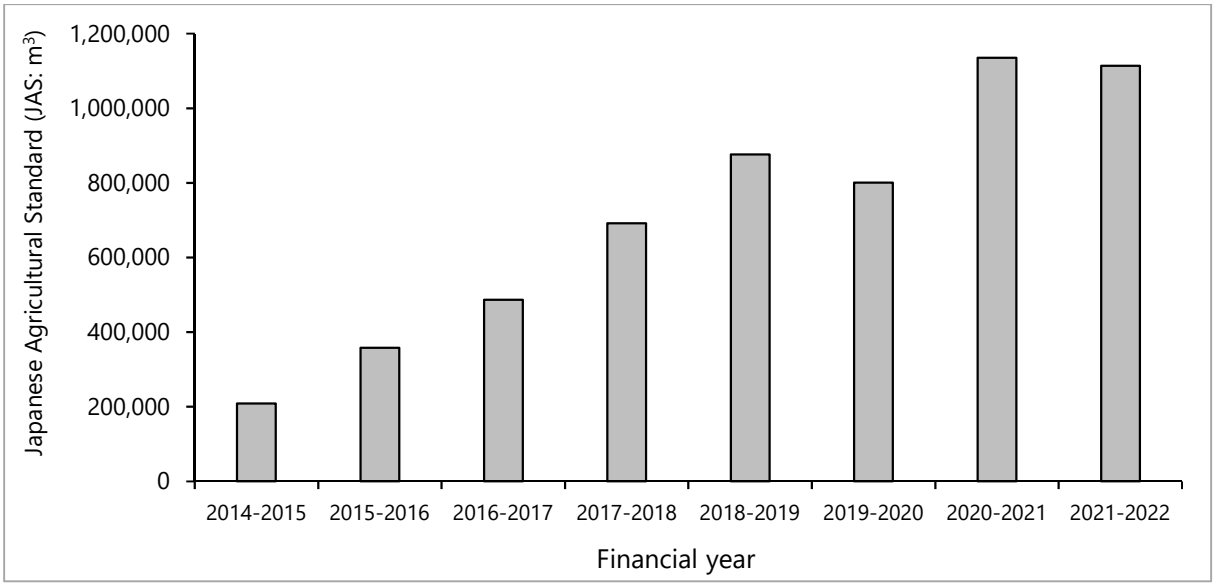

Figure 1 Port Taranaki log exports 2015 - 2022

The move to bulk cargo resulted in an increase in material deposited on the ground in the log and coal storage areas. When it rains this material washes into the stormwater system, and discharges into the harbour via the numerous piped outlets (Figure 2). In order to minimise deleterious effects on the receiving environment, Port Taranaki have implemented a number of preventative measures since 2012, including upgrading the stormwater treatment system and improving stormwater management procedures. This work is ongoing, as log exports continue to increase.

Another environmental issue associated with the increase in bulk dry cargo imports and log exports is that of dust control. Historically, during dry weather, dust was problematic within the works yard when log volume was high. In addition, product could be blown from bulk ships, particularly during offloading of palm kernel. Palm kernel is used as high-protein feed for dairy cattle and the offloading of large volumes from vessels has previously resulted in unpleasant odours and undesirable depositions. Recently, there has been a large increase in the volume of palm kernel being offloaded from ships at the port. Port Taranaki have implemented a number of dust control measures over recent years, including investing in two new replacement hoppers to reduce the risk of dust propagation, and sealing the W and B Log-yard storage areas.

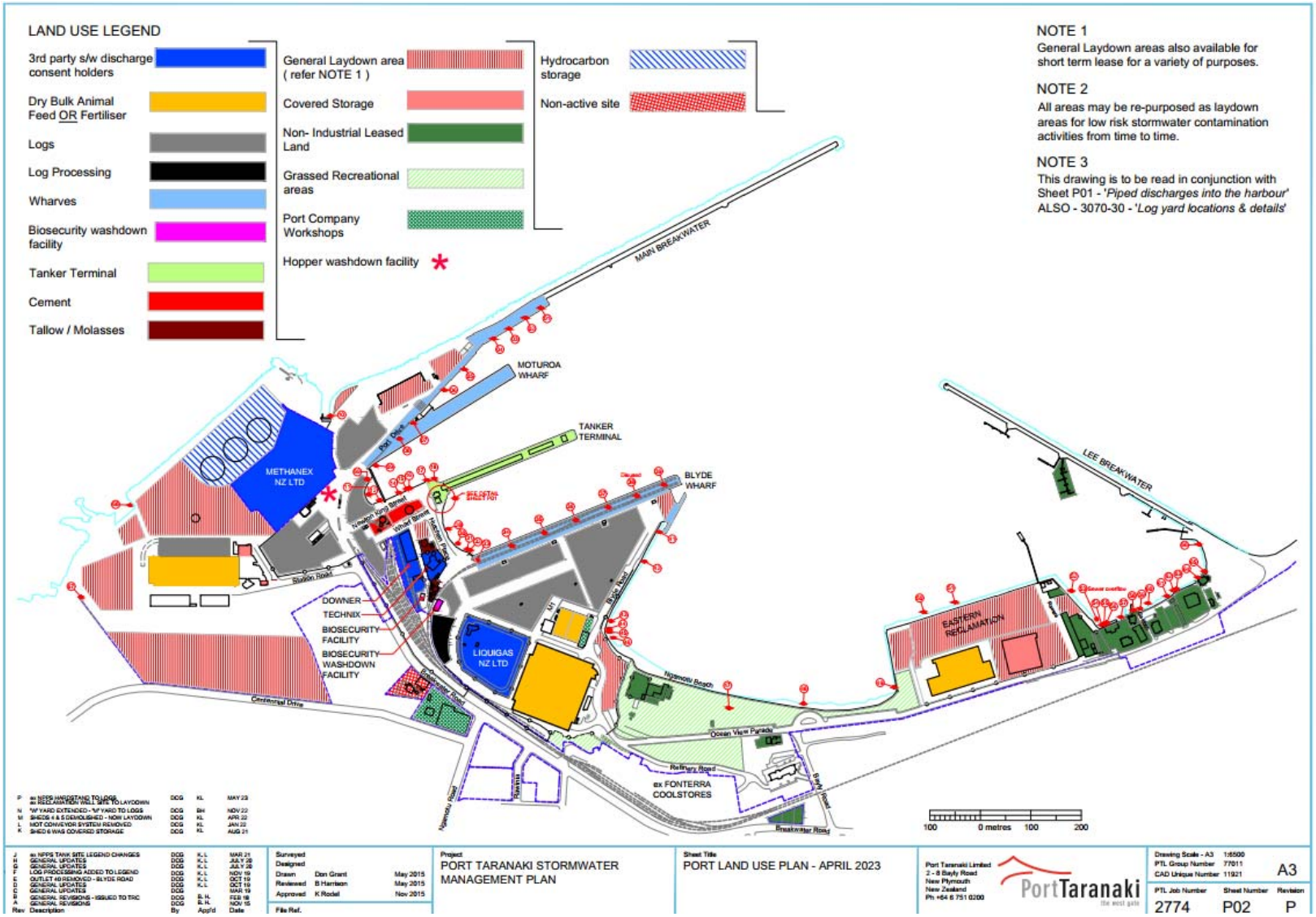

Figure 2 Land use plan of Port Taranaki showing the location of the piped stormwater discharges and the log yards (Revision April 2023)

1.2.3 Industries with separate resource consents operating within Port Taranaki

Downer New Zealand Ltd (Downer) operates a bitumen plant located within the bounds of Port Taranaki (Figure 3). The plant supplies bitumen for roading and associated uses across the North Island.

Technix Bitumen Technologies Ltd (Technix) also operates a bulk bitumen plant located within the bounds of Port Taranaki (Figure 3). The plant supplies bitumen for roading and associated uses.

Methanex New Zealand Ltd (Methanex) operates a methanol storage facility at the port (Figure 3). Methanol is piped to the tanks from the methanol plants at Motunui and Waitara Valley. Site stormwater is discharged via an outlet located adjacent to the New Plymouth Power Station cooling water outlet and can only occur when the discharge valve is opened manually. Due to the storage capacity available in the bunded area, the discharge of stormwater is periodic and can be planned in advance. Stormwater is tested to ensure compliance with consent requirements prior to release. Methanex provides monthly reports to the Council detailing when stormwater was discharged from the site and the results of chemical monitoring.

The Liquigas Ltd (Liquigas) LPG storage depot has been in operation since 1983 (Figure 3). Onsite storage consists of ten 220 m^3 bullet tanks which are encased in a minimum of 1 m of sand on all sides within two truncated brick pyramids. A cathodic protection system is used to minimise corrosion of the tanks. LPG is received via a pipeline from OMV's Maui Production Station at Oaonui and is piped offsite to Newton King Tanker Terminal (NKTT) for national distribution by ship.

Figure 3 Industries with separate resource consents operating within Port Taranaki, and location of associated discharge sampling points

1.3 Resource consents

The companies hold eight resource consents and one certificate of compliance; the details of which are summarised in Table 1. Summaries of the conditions attached to each permit are set out in Section 3 of this report.

A summary of the various consent types issued by the Council is included Appendix I, as are copies of all permits held by the Companies during the period under review.

Port Taranaki's stormwater and washdown wastewater discharge consents (0197-2.1 and 0198-2) both expired in June 2020. Renewal applications for both of these consents are currently being processed.

Table 1 Summary of resource consents

Consent holder	Consent number	Purpose	Review	Expires
Port Taranaki Ltd	**0197-2.1**	To discharge treated stormwater and washdown water from the Port Taranaki facility and environs into the Tasman Sea	-	Expired June 2020 s.124 protection
Port Taranaki Ltd	**0198-2**	To discharge up to 1.264 m^3/day of washdown wastewater from wharves, equipment and surrounding area into the Tasman Sea	-	Expired June 2020 s.124 protection

Consent holder	Consent number	Purpose	Review	Expires
Methanex New Zealand Ltd	**0811-2**	To discharge stormwater and associated contaminants into the Tasman Sea at Port Taranaki from a methanol storage tank bunded area	-	1 June 2026
Liquigas Ltd	**4524-2**	To discharge from an LPG storage site: a) Process water from LPG storage tank de-watering; b) Water used to decommission and recommission LPG storage tanks; c) LPG pipeline flushing water over a two-day period during emergency repairs; and d) Stormwater; into the Hongihongi Stream	-	1 June 2026
Downer New Zealand Ltd	**4674-2**	To discharge stormwater from a bitumen industry emulsion manufacture, storage and load out site, into the Tasman Sea	-	1 June 2026
Technix Bitumen Technologies Ltd	**4712-2**	To discharge stormwater from a bitumen industry emulsion manufacture, storage and load out site, into the existing Port Taranaki stormwater system and into the Tasman Sea	-	1 June 2026
Downer New Zealand Ltd	**4715-3**	To discharge emissions into the air from bitumen blowing operations and associated processes	-	1 June 2026
Technix Bitumen Technologies Ltd	**10582-1**	To discharge emissions into the air from bitumen operations and associated processes	June 2026	1 June 2032
Port Taranaki Ltd	**6882-1 (CoC)**	To discharge emissions to air associated with the import, storage, and export of coal through Port Taranaki generally	N/A	N/A

1.4 Monitoring programme

1.4.1 Introduction

Section 35 of the RMA sets obligations upon the Council to gather information, monitor and conduct research on the exercise of resource consents within the Taranaki region. The Council is also required to assess the effects arising from the exercising of these consents and report upon them.

The Council may therefore make and record measurements of physical and chemical parameters, take samples for analysis, carry out surveys and inspections, conduct investigations and seek information from consent holders.

The monitoring programme for the various companies in and around Port Taranaki consisted of three primary components.

1.4.2 Programme liaison and management

There is generally a significant investment of time and resources by the Council in:

- ongoing liaison with resource consent holders over consent conditions and their interpretation and application;
- in discussion over monitoring requirements;

- preparation for any consent reviews, renewals or new consent applications;
- advice on the Council's environmental management strategies and content of regional plans; and
- consultation on associated matters.

1.4.3 Site inspections and sampling

The Port was inspected on four occasions in relation to the consents held by Port Taranaki, with provisional stormwater samples collected on two of those occasions. Downer and Technix were inspected three times. Liquigas and Methanex were inspected several times from the boundary of the site during the year.

Two, dedicated stormwater surveys were also carried out in order to monitor stormwater discharges from Port Taranaki log yards, as well as the Downer, Technix and Liquigas sites. Seawater samples were also collected during these surveys.

With regard to consents for the discharge to water, the main points of interest were plant processes with potential or actual discharges to receiving watercourses, including contaminated stormwater and process wastewaters. Air inspections focused on plant processes with associated actual and potential emission sources and characteristics, including potential odour, dust, noxious or offensive emissions. Sources of data being collected by the companies were identified and accessed, so that performance in respect of operation, internal monitoring, and supervision could be reviewed by the Council. The neighbourhood was surveyed for environmental effects.

1.4.4 Consent holder data and information requirements

A number of consent holders also undertake their own stormwater monitoring and supply the data to Council; these results are reviewed and reported on here. Some consents require the consent holders to submit plans and provide information. This information is reviewed by Council staff.

2 Results

2.1 Inspections

2.1.1 Port Taranaki

Port Taranaki was inspected four times during the year on 19 October 2022, and 30 March, 6 June and 21 June 2023. The inspection findings are summarised here, and the sample results are covered in Section 2.2.

Most of the inspections found that the Port was tidy and well maintained. The ropes around the log yards were in place to retain the larger debris from entering the stormwater system. The inspections were conducted on non-rainy days so no stormwater discharge was observed. The activities on site appeared to be complying with the resource consent conditions at the time of the inspections.

2.1.2 Downer

The Downer site was inspected three times during the 2022-2023 monitoring year, on 19 October 2022, 8 May and 6 of June 2023.

The site was mostly tidy and well maintained. No visual non-compliance was noted. Empty IBCs were stored above ground in un-bunded areas with no drainage to sumps or other appropriate recovery systems. No stormwater discharge was observed. The odour surveys were completed. When a bitumen odour was detected beyond the site boundary, it was not deemed as objectionable or offensive. The site was found compliant at the time of the inspections.

2.1.3 Technix

The Technix site was inspected three times during the 2022-2023 monitoring year, on 19 October 2022, 8 May and 9 June 2023.

During the inspections, the site appeared tidy and well maintained. In October, it was observed that the new stormwater system was completed. During the first two inspections, there was no stormwater discharge, and the site appeared to be operating within the resource consent conditions. In June, the stormwater was pooling and ready to be discharged. No hydrocarbon or bitumen was observed at the surface of it. It was noted that the area at the back of the plant was not bunded and so no hazardous substance should be stored above the ground in that area. The IBCs stored there contained non-hazardous substances.

2.1.4 Methanex

The Methanex site was inspected once during the 2022-2023 monitoring year. Other inspections were conducted from the site boundary, without entering the site.

The site was found to be tidy and well maintained during the year. The receiving environment was visually clear. Overall, the site appeared to be compliant with consent conditions during the year under review.

2.1.5 Liquigas

The Liquigas site was inspected several times from the site boundary during the 2022-2023 monitoring year.

The site was found tidy and well maintained during the year. No evidence of spills or potential sources of stormwater contamination were discovered during the inspections. Overall, the site appeared to be operating within consent conditions during the year under review.

2.2 Discharge monitoring

Additionally, stormwater samples were collected during two wet weather surveys in relation to discharge consents held by Port Taranaki, Downer, Technix, Liquigas and Methanex. The stormwater discharge sampling surveys were conducted on 11 January and 26 June 2023. The sampling locations are described in Table 2 and shown in Figure 4. A summary of sample results with associated consent limits is presented in Table 3. A complete record of all sample results from 2022-2023 is provided in Appendix II.

Table 2 Port Taranaki industries 2022-2023 compliance monitoring sampling sites

Site code	Sample type	Description
STW002036	Stormwater	Methanex storage tank bund water
STW001088	Stormwater	PTL outlet 11; M and W log yards
STW001089	Stormwater	PTL outlet 12; B log yard and railway
SEA902066	Seawater	Basin between NKTT and Moturoa Wharf
STW001159	Stormwater	PTL outlet 30; Downer, Technix, GrainCorp, Bridger Lane and Hutchen Place
STW001135	Stormwater	PTL outlet 32; CT log yard/debarking area, container wash and railway
STW001104	Stormwater	Liquigas site stormwater (discharges to piped Hongihongi Stream)
SEA902066	Seawater	Temporary shoreline monitoring site adjacent to STW001157 (NZTM: 1689812 / 5676323)
STW001157	Stormwater	PTL outlet 41; R log yard and Blyde Road
STW001090	Stormwater	PTL outlet 45; Dry store area and bank between dry store and railway
STW001092	Stormwater	Manhole above PTL outlet 49; Bulk animal feed storage facility and road network

Figure 4 Port Taranaki industries compliance monitoring sampling sites

Table 3 Port Taranaki industries 2022-2023 compliance monitoring sample results

Date	Site	Time (NZST)	pH	TSS (g/m^3)	Total hydrocarbons (g/m^3)	Methanol (g/m^3)
10 Jan 2023	STW002036	13:30	6.7	32	< 0.7	< 2
11 Jan 2023	STW001088	07:15	6.8	24	< 0.7	-
	STW001089	07:28	6.8	20	< 0.7	-
	SEA902066	07:49	7.9	21	< 0.7	-
	STW001104	08:38	6.8	5	< 0.7	-
	STW001159	08:00	6.7	5	< 0.7	-
	STW001135	08:19	*6.4**	*270**	*< 0.7**	-
	STW001157	08:45	6.6	70	< 0.7	-
	SEA902064	08:52	8.1	10	< 0.7	-
	STW001090	09:11	7.0	43	< 0.7	-
	STW001092	09:30	6.6	57	< 0.7	-
26 Jun 2023	STW001088	15:10	6.2	**240**	< 0.7	-
	STW001089	15:17	6.1	**111**	< 0.7	-
	STW001159	15:34	**5.9**	80	< 0.7	-
	STW001157	15:58	6.0	84	< 0.7	-
	SEA902064	16:01	8.0	17	< 0.7	-
	STW001090	16:17	7.3	42	< 0.7	-
	STW001092	16:25	6.8	**130**	< 0.7	-
27 Jun 2023	SEA902066	13:00	7.9	7	< 0.7	-
	STW001104	12:45	6.8	87	< 0.7	-
	STW001135	12:15	*6.2**	*640**	*< 0.7**	-
	STW002036	13:26	7.1	< 3	< 0.7	< 2
Consent limits			6.0 – 9.0	100	15	20

**discharge limits do not apply to samples STW001135 as they were collected in the vortex separator*

Both samples STW001135 collected in January and June 2023 were taken from the vortex separator and not from the discharge outlet after the sand filter, which is a supplementary treatment step at this location. The monitoring surveys were designed to sample the discharges. However, on both occasions the discharge was visited, there was not enough flow to take a sample due to the light rain. The decision was made to collect the samples from the vortex separator. Consent limits do not apply to these samples as they are not representative of the discharge water quality. The results from STW001135 will not be discussed further in this report.

The stormwater sampling survey carried out on 11 January 2023 was conducted between 07:15 and 09:30 a.m. The tide was low at 07:14 a.m. at 0.7 m. The sea was calm and the weather was overcast with intermittent light rain at the beginning of the survey and heavier rain later in the morning. The survey was preceded by moderate rainfall 24 hours prior sampling (13.5 mm) at Brooklands Zoo rain gauge. There was a light mist/intermittent drizzle during sampling. Over the last seven days prior sampling 66 mm of rain was measured at Brooklands Zoo rain gauge. Samples collected were also assessed for odour.

Out of the 11 samples collected, one had a distinctive odour, described as earthy/woody, coming from STW001157, which suggests the presence of log yard contaminants. Four outlets presented slightly turbid discharges, two were turbid, and three were clear. There was no obvious discolouration of the receiving environment. The discharge samples were compliant with resource consent conditions.

The second stormwater survey was conducted over two days, on 26 and 27 June 2023, as some sites were not accessible (STW001104 and STW002036 after working hours) or some samples were mismatched on the 26 June 2023 so they were re-sampled on the 27 June 2023 (SEA902066 and STW001135).

On 26 June 2023, the survey was conducted between 03:10 and 04:25 p.m. The high tide was at 04:19 p.m. at 2.76 m. The survey started as soon as it started to rain, with 10.4 mm measured in the first hour at Brooklands Zoo gauge. The weather was overcast with rain (13.6 mm measured between 03:00 and 05:00 p.m.). The survey was preceded by 24 hours of no rainfall. Over the last seven days prior sampling 12.2 mm of rain was measured at Brooklands Zoo rain gauge.

Out of the six samples collected on that day, four were slightly turbid and two were turbid. The colour of the discharge samples varied from slightly brown to brown. A slightly woody odour was detected from sample STW001088. No effect of the discharge on the receiving environment was observed.

On 27 June 2023, the remaining three samples were taken. The survey was carried out between 12:15 and 01:26 p.m. The low tide was at 10:10 a.m. at 1.17 m. The survey was preceded by moderate rainfall with 31.4 mm measured at Brooklands Zoo gauge 24 hour prior sampling. The sample STW001104 was of a brown colour and turbid.

From the June 2023 surveys, three discharge samples (STW001088, STW001089, and STW001092) had the suspended solids concentration exceeding the consent limit. The compliance implications of these sample results are discussed further in Section 3.1.1.

2.3 Consent holder data

2.3.1 Downer

Downer collects water samples from the final chambers of the site's four interceptor systems in order to assess stormwater treatment efficiency. Samples were collected during the 2022-2023 monitoring period (Table 4). The sample results were compliant with the consent limits.

Table 4 Final water quality data from the Downer site stormwater interceptors at Port Taranaki

Parameter		pH	TSS (g/m^3)	TPH (g/m^3)
DG Yard Interceptor	8-Mar-23	7.4	13	< 0.7
Factory Slops Interceptor		7.3	5	< 0.7
Yard B Interceptor		6.7	48	< 0.7
Loadout Yard Interceptor		6.7	54	< 0.7
DG Yard Interceptor	29-May-23	7.0	< 3	< 4
Factory Slops Interceptor		6.7	3	< 4
Yard B Interceptor		6.6	< 3	< 4
Loadout Yard Interceptor		7.4	23	< 4
*Discharge limit**		*6.0 – 9.0*	*100*	*15*

* Note these samples are not discharge samples, but are indicative of water quality following treatment, prior to discharge

2.3.2 Methanex

Methanex test stormwater samples from tank bunds and sumps prior to discharge. Occasionally, test parameters may be outside of the allowable consent limits; in which case the water is not discharged. All sample results are summarised below in Table 5, Table 6, and Table 7.

All stormwater contaminants were below, or within the associated consent limits prior to discharge during the year under review. The pH was higher than 9.0 on three occasions but within the 5% error margin.

Table 5 Summary of stormwater sample results from Pump Area Sump at the Port Taranaki Methanex site

Parameter	pH	Methanol (mg/L)	Visual Check Hydrocarbons (Pass/Fail)
Minimum	6.6	< 2	Pass
Median	7.2	< 2	Pass
Maximum	8.8	1	Pass
*Consent limits**	*6.0 – 9.0*	*20*	-

Number of samples = 24

* Note: These samples are not discharge samples, but are used to check stormwater compliance prior to discharge

Table 6 Summary of stormwater sample results from Bund A at the Port Taranaki Methanex site

Parameter	pH	Methanol (mg/L)	Visual Check Hydrocarbons (Pass/Fail)
Minimum	6.8	< 2	Pass
Median	7.4	< 2	Pass
Maximum	9.4	< 2	Pass
*Consent limits**	*6.0 – 9.0*	*20*	-

Number of samples = 25

Table 7 Summary of stormwater sample results from Bund B at the Port Taranaki Methanex site

Parameter	pH	Methanol (mg/L)	Visual Check Hydrocarbons (Pass/Fail)
Minimum	6.9	< 2	Pass
Median	7.5	< 2	Pass
Maximum	9.4	< 2	Pass
*Consent limits**	*6.0 – 9.0*	*20*	-

Number of samples = 24

* Note: These samples are not discharge samples, but are used to check stormwater compliance prior to discharge

2.3.3 Liquigas

Storage vessels and pipelines are filled with water as part of maintenance and recertification processes. Water samples are collected from upper, middle and lower sample points on the storage vessels prior to discharge. All three discharge events that occurred during 2022-2023 were compliant with consent requirements. A summary of these events is provided below in Table 8.

Table 8 Liquigas storage tank and pipeline water discharge summary 2022-2023

Date	Description	Sample results
18 Aug 2022	Discharge of water following work on vessel V0508 (work notification not found but water analysis results provided)	Compliant
28 Nov 2022	Vessel V0514 was decommissioned for 10-year statutory internal inspection 220 m^3 of water discharged on 30 November and 1 December 2022	Compliant
15 Feb 2023	Vessel V0514 was recommissioned after its 10-year statutory internal inspection 220 m^3 of water discharged on 15 and 16 February 2023	Compliant

2.4 Investigations, interventions, and incidents

The monitoring programme for the year was based on what was considered to be an appropriate level of monitoring, review of data, and liaison with the consent holders. During the year matters may arise which require additional activity by the Council, for example provision of advice and information, or investigation of potential or actual causes of non-compliance or failure to maintain good practices. A pro-active approach that in the first instance avoids issues occurring is favoured.

The Council operates and maintains a register of all complaints or reported and discovered excursions from acceptable limits and practices, including non-compliance with consents, which may damage the environment. The incident register includes events where the Company concerned has itself notified the Council. The register contains details of any investigation and corrective action taken.

Complaints may be alleged to be associated with a particular site. If there is potentially an issue of legal liability, the Council must be able to prove by investigation that the identified company is indeed the source of the incident (or that the allegation cannot be proven).

Table 9 below sets out details of any incidents recorded, additional investigations, or interventions required by the Council in relation to the companies activities during the 2022-2023 period. This table presents details of all events that required further investigation or intervention regardless of whether these were found to be compliant or not. The incidents presented here are not limited to those specifically relating to the resource consents in this monitoring programme. They may also relate to rules in Regional Plans, and may have occurred at sites within Port Taranaki that are not routinely monitored as part of this programme.

Table 9 Incidents, investigations, and interventions summary table

Date	Company	Details	Compliant	Enforcement Action Taken?	Outcome
28/07/2022	Port Taranaki Limited ISO Limited	Discharge of dust during the unloading of Tapioca from a ship at Port Taranaki	Yes	No	Investigation found that the dust was not blowing beyond the boundary of the property at the time of inspection
29/07/2022	Port Taranaki Limited ISO Limited	Dust at a property on Whiteley Street, Motoroa	Yes	No	Investigation was unable to ascertain exactly where the dust came from
02/11/2022	Port Taranaki Limited	Dust complaint on Port View crescent	Yes	No	No dust was observed beyond the port operational boundary
03/11/2022	Port Taranaki Limited	Dust complaint	Yes	No	Investigation found no dust leaving boundary at time of inspection

Date	Company	Details	Compliant	Enforcement Action Taken?	Outcome
16/01/2023	Port Taranaki Limited	Dust complaint on Findlay Street	Yes	No	Urea was being unloaded from a vessel on to Blyde Wharf. While some dust was being generated, no dust was witness beyond the port operational boundary
09/03/2023	DOF Subsea	Self-notification was received concerning a minor discharge of hydrocarbons from a hydraulic fluid line on the oil support vessel Skandi Emerald, into the Tasman Sea, at Port Taranaki			Investigation found that a hydraulic hose contained within the crane on the vessel had failed resulting in hydraulic oil discharging onto the adjacent wharf and into the Tasman Sea. The majority of the hydrocarbons was contained on the wharf and 1 to 2 L discharged into the sea. Port Taranaki staff undertook cleanup and recovery operations in accordance with the Companies Tier 1 Marine Oil Spill Contingency Plan

3 Discussion

3.1 Discussion of site performance

3.1.1 Port Taranaki Ltd

Most visits showed that the port was operating in a tidy manner. Port Taranaki was compliant in January 2023, and was non-compliant at numerous outlets in June 2023. During the week preceding the June discharge sampling, a deep clean of the log yard occurred as the yards were almost empty. When the Council conducted the discharge sampling, the Port was confident that it was going to be compliant. However, the Council started the sampling/survey 30 minutes after the first rainfall, hence capture the first flush of the yards, resulting in high suspended solids and contaminants. The first outlet was sampled by the Port 10 minutes after TRC, and the results showed a drop of suspended solids from 240 to 140 g/m^3.

The Port is actively solving the non-compliance issues by upgrading the stormwater treatment system. As the Downstream Defender (DD) vortex separators were not performing satisfactorily, all but one of them were replaced with Continuous Deflection Separation (CDS) units. A CDS unit was supplemented to the one DD remaining. In total, there are 17 small CDS (P0508) units in the main port area and there is also an additional one at the power station site. There are three larger CDS (P0708) units that service larger catchments. Further improvements are planned for the next year.

To ensure that the different companies and parties operating on the port are adopting the best practicable option to limit the discharge of contaminants, the Port granted a license to operate to the log marshalling companies and the stevedoring companies (C3, ISO, SSA and ETL). These companies can discharge stormwater from their operational area into the Port Operational Waters, under PTL consent. They could reasonably be expected to have a spill of cargo, fuel, lubricants, wastewater of chemicals from time to time. PTL required them to provide an Environmental Management Plan. There are regular operational performance review meetings with log marshals and stevedores that have been granted operating licenses.

Since the 2021-2022 monitoring year, PTL has set some standards for cleaning operators to operate. Photographs of what is expected when log yards, drains and vortex separators are cleaned are provided. Log yards are cleaned on a schedule, and when a safe access to the log yards is granted by the PCBU in charge, follow up routine inspections also occur. The log marshalling companies are required by PTL to undertake regular inspections of log yards and liaise directly with the cleaning operators to provide safe access to various parts during breaks in log yard activity. After loading a ship, they clean their operational area before handing the wharf back to PTL.

PTL undertakes regular and frequent inspections of roads, sumps and CDS units and orders cleaning services as required. The cleaning contractor is required to respond within 30 minutes when a service is required urgently due to an event that could breach the consent limits. PTL monitors weather events and sends alerts reminding that extra cleaning vigilance is required when heavy rainfall is expected. Port Taranaki also undertakes internal environmental auditing. During this financial/monitoring year environmental audits were conducted four times, three audits were undertaken in 2023, and two are scheduled for the 2024 financial/monitoring year.

With regards to dust emissions, five complaints were received during the year under review. Inspections found that dust was not observed beyond the Port's property on any occasions. No enforcement action was undertaken as the Port was found compliant.

The Port has done considerable improvements of the stormwater system and environmental management of the site over the past three years. The Port applied for a resource consent renewal in 2020, which should get finalised in the 2023-2024 monitoring year. The conditions at the discharge will be more permissive, with higher suspended solids limit among others, than the current ones and will be reflecting the current

Port log activity. In regards to the new resource consent conditions and the improvements of the stormwater system, the Port should be found compliant in the future.

3.1.2 Downer New Zealand Ltd

The Downer site was found to be maintained to a satisfactory standard during routine compliance inspections in the year under review. No non-compliances were recorded with regard to stormwater, odour or particulate emissions in the 2022-2023 period. However, it was noted that not all the hazardous substance stored above the ground were within a bunded area.

During some of the compliance monitoring inspections a bitumen/emulsion type odour was detected in the vicinity of the Downer site. However, it was deemed intermittent and remained within the Port operational boundary area.

3.1.3 Technix Bitumen Technologies Ltd

The Technix site was found to be maintained to a satisfactory standard during routine compliance inspections in the year under review. No non-compliances were recorded with regard to stormwater, odour or particulate emissions in the 2022-2023 period.

3.1.4 Methanex New Zealand Ltd

The Methanex site was found to be maintained to a satisfactory standard during the year under review. No compliance issues with stormwater were identified during the 2022-2023 period.

3.1.5 Liquigas Ltd

The Liquigas site was found to be maintained to a satisfactory standard during the year under review. No compliance issues with stormwater or process water discharges were identified during the 2022-2023 period.

3.2 Environmental effects of exercise of consents

3.2.1 Port Taranaki Ltd

There were no visual impacts discovered in the receiving waters at the port during routine compliance monitoring inspections.

Where there were associated seawater samples collected, these results also indicated that the extent of the effects was limited. It should be noted that because the stormwater sampling surveys often coincide with rough sea conditions, the associated sediment resuspension can mask the visual influence of individual discharges. The Hongihongi Stream also has a similar masking effect during flood conditions. However, even when there are no conspicuous visual effects, the discharges may still have an impact on the receiving environment due to the effects of sedimentation and other contaminants. A new regulatory and monitoring framework will likely be established through Port Taranaki's stormwater consent renewal process, which should enable a more comprehensive approach to monitoring potential effects in the receiving environment.

The monitoring period under review was the third year that water samples were tested for a wider range of parameters than had been previously included in this monitoring programme (see Appendix III). Although these additional parameters do not currently have prescribed consent limits, they were all associated with stormwater contaminants that are now generated at the port. The additional tests included turbidity, tannins, chemical oxygen demand (COD), nutrients and metals. The results did not reveal any significant adverse environmental effects at the time the samples were collected, however, the concentrations of some of these contaminants, such as copper and zinc, reaffirmed the need for ongoing monitoring. Acceptable

concentrations and allowable mixing zones for these contaminants will be determined through the consent renewal process.

3.2.2 Downer New Zealand Ltd

There was no adverse environmental effect observed as a result of resource consents 4674-2 and 4715-3 being exercised at the Downer site.

3.2.3 Technix Bitumen Technologies Ltd

There was no further adverse environmental effect observed as a result of resource consent 4712-2 being exercised at the Technix site.

3.2.4 Methanex New Zealand Ltd

There was no adverse environmental effect observed as a result of resource consent 0811-2 being exercised at the Methanex site.

3.2.5 Liquigas Ltd

There was no adverse environmental effect observed as a result of resource consent 4524-2 being exercised at the Liquigas site.

3.3 Evaluation of performance

A summary of the compliance record for the period under review is set out from Table 10 to Table 17.

Table 10 Summary of performance for consent 0197-2.1 held by Port Taranaki Ltd

Purpose: *To discharge treated stormwater and washdown water into Tasman Sea from Port Taranaki*		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
1. Stormwater discharges are to adhere with consent conditions as well as stipulated documentation and plans	General monitoring	Yes
2. Best practicable option to remove contaminants before washdown	Site inspections	Yes
3. Limits on pH, hydrocarbons and suspended solids	Sampling	**No** TSS exceedances
4. After mixing, discharge not to effect receiving water	Site inspections and sampling	Yes
5. Consent holder to prepare Stormwater Management Plan, review and update as stipulated	An updated Stormwater Management Plan was supplied to Council on 12 April 2022 A new Stormwater Management Plan is being drafted for the consent renewal process	Yes
6. Adequate training provided to port staff	Inspections and company records	Yes
7. Maintain contingency plan and update annually	An updated Tier 1 Spill Response Plan was supplied to Council on 14 April 2022	Yes

Purpose: *To discharge treated stormwater and washdown water into Tasman Sea from Port Taranaki*		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
Overall assessment of consent compliance and environmental performance in respect of this consent		**Good**
Overall assessment of administrative performance in respect of this consent		**High**

Table 11 Summary of performance for consent 0198-2 held by Port Taranaki Ltd

Purpose: *To discharge washdown wastewater from Port Taranaki wharves, equipment and surrounding area into Tasman Sea*		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
1. Adopt best practicable option to remove contaminants	Site inspections	Yes
2. Limits on pH, hydrocarbons and suspended solids	No wash down samples collected during monitoring period	N/A
3. After mixing, discharge not to effect receiving water	No wash down activities observed during the year	N/A
4. Consent holder to prepare Stormwater Management Plan, review and update 2 yearly	An updated Stormwater Management Plan was supplied to Council on 14 October 2022	Yes
5. Adequate training provided to port staff	Inspections	Yes
6. Maintain contingency plan and update annually	An updated Tier 1 Spill Response Plan was supplied to Council on 14 October 2022	Yes
7. Option for Council to review consent conditions	Consent expired June 2020	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		**High**
Overall assessment of administrative performance in respect of this consent		**High**

Table 12 Summary of performance for consent 0811-2 held by Methanex New Zealand Ltd

Purpose: *To discharge stormwater and associated contaminants into the Tasman Sea at Port Taranaki from a methanol storage tank bunded area*		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
1. Adopt best practicable option	Inspections of site	Yes
2. Consent to be exercised in accordance with documentation submitted	Liaison with consent holder	Yes
3. Concentration limits	Self-monitoring	Yes
4. Mixing zone effects	Visual inspections	Yes

Purpose: *To discharge stormwater and associated contaminants into the Tasman Sea at Port Taranaki from a methanol storage tank bunded area*		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
5. Maintenance of a contingency plan	Spill contingency plan (April 2022) - supplied to Council on 11 October 2022	Yes
6. Review provision	No further reviews	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		**High**
Overall assessment of administrative performance in respect of this consent		**High**

Table 13 Summary of performance for consent 4524-2 held by Liquigas Ltd

Purpose: *To discharge from an LPG storage site: (a) process water; (b) water used to decommission and re-commission the LPG storage tanks; (c) LPG pipeline flushing water over a two-day period during emergency repairs; (d) stormwater into the Hongihongi Stream*		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
1. Adopt best practicable option	Inspections of site and sampling	Yes
2. Stormwater catchment area limit	Inspections of site	Yes
3. Process water discharge not to exceed 30 L/day	Inspections of site and records	Yes
4. Maintenance of a contingency plan	Current as of April 2022	Yes
5. Keep records of discharges during decommissioning/ recommissioning	Liaison with consent holder	Yes
6. Notify the Council 24 hours prior to discharge of process, test, or flushing water	Notifications received	Yes
7. Provide results of any analysis carried out water used during commissioning	Liaison with consent holder – results received	Yes
8. Concentration limits in discharge	Sampling	Yes
9. Review provision	No further option for review prior to expiry in 2026	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		**High**
Overall assessment of administrative performance in respect of this consent		**High**

Table 14 Summary of performance for consent 4674-2 held by Downer New Zealand Ltd

Purpose: *To discharge stormwater from a bitumen emulsion manufacture, storage and load out site into the Tasman Sea*		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
1. Best practicable option to prevent or minimise adverse environmental effects	Site inspections	Yes
2. Catchment not to exceed 8,000 m^3	Site inspections	Yes
3. Stormwater to be directed for treatment	Site inspections	Yes
4. Hazardous substance storage areas to be bunded	Site inspections	Yes Noting that empty IBC's were being stored in an un-bunded area
5. Limits on pH, hydrocarbons and suspended solids	Sampling	Yes
6. Maintenance of Contingency Plan	Plan v11 issued 13 September 2022 (supplied to Council on 1 December 2022)	Yes
7. Maintenance of Stormwater Management Plan	Plan v11 issued 13 September 2022 (supplied to Council on 1 December 2022)	Yes
8. Notification re changes to processes or operations	Notification received, site inspections	Yes
9. Option for the Council to review consent conditions	No further reviews	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		**High**
Overall assessment of administrative performance in respect of this consent		**High**

Table 15 Summary of performance for consent 4712-2 held by Technix Bitumen Technologies Ltd

Purpose: *To discharge stormwater from a bitumen emulsion manufacture, storage and load out site into the Tasman Sea*		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
1. Best practicable option to prevent or minimise adverse environmental effects	Site inspections	Yes
2. Catchment not to exceed 8,000 m^3	Site inspections	Yes
3. Stormwater to be directed for treatment	Site inspections	Yes

Purpose: *To discharge stormwater from a bitumen emulsion manufacture, storage and load out site into the Tasman Sea*		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
4. Hazardous substance storage areas to be bunded	Site inspections	Yes Noting that non hazardous substances were being stored in an un-bunded area
5. Limits on pH, hydrocarbons and suspended solids	Samples collected	Yes
6. Maintenance of Contingency Plan	Stormwater and spill contingency plan (v6, November 2022) - supplied to Council	Yes
7. Maintenance of Stormwater Management Plan	Details included in Contingency Plan	Yes
8. Notification re changes to processes or operations	No notifications during period under review	Yes
9. Option for the Council to review consent conditions	No further reviews	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		**High**
Overall assessment of administrative performance in respect of this consent		**High**

Table 16 Summary of performance for consent 4715-3 held by Downer New Zealand Ltd

Purpose: *To discharge emissions into air from bitumen operations*		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
1. Adopt best practicable option to prevent or minimise adverse effects	Site inspections	Yes
2. Annual maintenance of burner	Maintenance inspection undertaken June 2021	Yes
3. Notify Council prior to making changes to processes or operations	Inspections, no notifications received	N/A
4. Particulate material not to exceed 125 mg/m^3 of air	Not monitored during period under review	N/A
5. Control emissions to air from the site	Not monitored during period under review	N/A
6. Maintenance/operation of equipment	Site inspections	Yes
7. Discharge not to give rise to odour at or beyond the boundary	Site inspections	Yes
8. Review provision	No further reviews available	N/A

Purpose: *To discharge emissions into air from bitumen operations*		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
Overall assessment of consent compliance and environmental performance in respect of this consent		**High**
Overall assessment of administrative performance in respect of this consent		**High**

Table 17 Summary of performance for consent 10582-1 held by Technix Bitumen Technologies Ltd

Purpose: *To discharge emissions into the air from bitumen operations and associated processes*		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
1. Adopt best practicable option to prevent or minimise adverse effects	Site inspections	Yes
2. Discharge not to give rise to odour at or beyond the boundary	Site inspections	Yes
3. Emissions not to cause hazardous, noxious, dangerous, offensive or objectionable effect at or beyond boundary	Site inspections	Yes
4. Notify Council prior to making changes to processes or operations	Inspections, no notifications received	N/A
5. Lapse clause	Consent exercised	N/A
6. Review provision	Next optional review scheduled in 2026	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		**High**
Overall assessment of administrative performance in respect of this consent		**High**

During the year, Port Taranaki demonstrated a good level of environmental performance. Downer, Technix, Methanex and Liquigas all demonstrated a high level of environmental performance. With regards to administrative performance, Port Taranaki, Methanex, Technix, Downer and Liquigas demonstrated a high level of administrative performance. Ratings are as defined in Appendix II.

3.4 Recommendations from the 2021-2022 Annual Report

In the 2021-2022 Annual Report, it was recommended:

1. THAT monitoring of consented activities within Port Taranaki in the 2022-2023 year continue at the same level as 2021-2022.
2. THAT should there be issues with environmental or administrative performance in 2022-2023, monitoring may be adjusted to reflect any additional investigation or intervention as found necessary.

All of these recommendations were implemented during the year under review.

3.5 Alterations to monitoring programmes for 2022-2023

In designing and implementing the monitoring programmes for air/water discharges in the region, the Council has taken into account:

- the extent of information already made available through monitoring or other means to date;
- its relevance under the RMA;
- the Council's obligations to monitor consented activities and their effects under the RMA;
- the record of administrative and environmental performances of the consent holder; and
- reporting to the regional community.

The Council also takes into account the scope of assessments required at the time of renewal of permits, and the need to maintain a sound understanding of industrial processes within Taranaki exercising resource consents.

It is proposed that for 2023-2024 the monitoring programme remains the same.

It should be noted that the proposed programme represents a reasonable and risk-based level of monitoring for the sites in question. The Council reserves the right to subsequently adjust the programme from that initially prepared, should the need arise if potential or actual non-compliance is determined at any time during 2023-2024.

4 Recommendations

1. THAT in the first instance, monitoring of consented activities within Port Taranaki in the 2023-2024 year continue at the same level as 2022-2023.
2. THAT should there be issues with environmental or administrative performance in 2023-2024, monitoring may be adjusted to reflect any additional investigation or intervention as found necessary.

Glossary of common terms and abbreviations

The following abbreviations and terms may be used within this report:

Bund	A wall around a tank to contain its contents in the case of a leak.
Conductivity	An indication of the level of dissolved salts in a sample, usually measured at 25°C and expressed in µS/cm.
DO	Dissolved oxygen.
g/m^3	Grams per cubic metre, and equivalent to milligrams per litre (mg/L). In water, this is also equivalent to parts per million (ppm), but the same does not apply to gaseous mixtures.
Incident	An event that is alleged or is found to have occurred that may have actual or potential environmental consequences or may involve non-compliance with a consent or rule in a regional plan. Registration of an incident by the Council does not automatically mean such an outcome had actually occurred.
Intervention	Action/s taken by Council to instruct or direct actions be taken to avoid or reduce the likelihood of an incident occurring.
Investigation	Action taken by Council to establish what were the circumstances/events surrounding an incident including any allegations of an incident.
Incident Register	The Incident Register contains a list of events recorded by the Council on the basis that they may have the potential or actual environmental consequences that may represent a breach of a consent or provision in a Regional Plan.
L/s	Litres per second.
m^2	Square Metres.
µS/cm	Microsiemens per centimetre.
Mixing zone	The zone below a discharge point where the discharge is not fully mixed with the receiving environment. For a stream, conventionally taken as a length equivalent to 7 times the width of the stream at the discharge point.
NTU	Nephelometric Turbidity Unit, a measure of the turbidity of water.
pH	A numerical system for measuring acidity in solutions, with 7 as neutral. Numbers lower than 7 are increasingly acidic and higher than 7 are increasingly alkaline. The scale is logarithmic i.e. a change of 1 represents a ten-fold change in strength. For example, a pH of 4 is ten times more acidic than a pH of 5.
Physicochemical	Measurement of both physical properties (e.g. temperature, clarity, density) and chemical determinants (e.g. metals and nutrients) to characterise the state of an environment.
PM_{10}, $PM_{2.5}$, $PM_{1.0}$	Relatively fine airborne particles (less than 10 or 2.5 or 1.0 micrometre diameter, respectively).
Resource consent	Refer Section 87 of the RMA. Resource consents include land use consents (refer Sections 9 and 13 of the RMA), coastal permits (Sections 12, 14 and 15), water permits (Section 14) and discharge permits (Section 15).
RMA	*Resource Management Act 1991* and including all subsequent amendments.
TPH	Total Petroleum Hydrocarbons
TSS	Total Suspended solids.
Temp	Temperature, measured in °C (degrees Celsius).
Turb	Turbidity, expressed in NTU.

UI	Unauthorised Incident.

For further information on analytical methods, contact an Environment Quality Manager.

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Appendix I

Resource consents held by relevant companies

(For a copy of the signed resource consent
please contact the TRC Consents department)

Water discharge permits

Section 15(1)(a) of the RMA stipulates that no person may discharge any contaminant into water, unless the activity is expressly allowed for by a resource consent or a rule in a regional plan, or by national regulations. Permits authorising discharges to water are issued by the Council under Section 87(e) of the RMA.

Air discharge permits

Section 15(1)(c) of the RMA stipulates that no person may discharge any contaminant from any industrial or trade premises into air, unless the activity is expressly allowed for by a resource consent, a rule in a regional plan, or by national regulations. Permits authorising discharges to air are issued by the Council under Section 87(e) of the RMA.

Coastal Permit

**Pursuant to the Resource Management Act 1991
a resource consent is hereby granted by the
Taranaki Regional Council**

Name of Consent Holder:	Westgate Transport Limited P O Box 348 NEW PLYMOUTH
Consent Granted Date:	13 October 1999

Conditions of Consent

Consent Granted:	To discharge up to 4622 litres/second of stormwater, including from a coal storage area, and 1.235 cubic metres/day of treated washdown water from Port Taranaki and environs into the Tasman Sea at or about GR: P19:989-382 to 011-377 to 013-383 to 001-391 to 989-382
Expiry Date:	1 June 2020
Review Date(s):	June 2001, June 2003, June 2009, June 2015
Site Location:	Port Taranaki, New Plymouth
Legal Description:	Various
Catchment:	Tasman Sea

*For General, Standard and Special Conditions
pertaining to this consent please see reverse side of this document*

General conditions

(a) That on receipt of a request from the General Manager, Taranaki Regional Council, (hereinafter the General Manager), the consent holder shall, within the time specified in the requirement, supply the information required relating to the exercise of this consent.

(b) That unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent shall be at the consent holder's own expense.

(c) That the consent holder shall pay to the Council all required administrative charges fixed by the Council pursuant to section 36 in relation to:

i) the administration, monitoring and supervision of this consent;
ii) charges authorised by regulations.

Special conditions

1. THAT the best practicable option, as defined in the Resource Management Act 1991, shall be adopted by the consent holder to ensure that any contaminants on the wharf surface are removed as far as reasonably practicable, before washdown on the wharf commences, including the following measures:

(a) the use of front end loaders, shovels and brooms as appropriate; and
(b) the use of suction sweepers on wharf facilities.

2. THAT the discharge shall not exceed the following limits at all times:

Component	Concentration
pH [range]	6 – 9
Total recoverable hydrocarbons	15 gm^{-3}
Suspended solids	100 gm^{-3}

This condition shall apply prior to the entry of the discharge into the receiving water at a designated sampling point(s) approved by the General Manager, Taranaki Regional Council.

3. THAT after allowing for reasonable mixing, the discharge shall not give rise to any of the following effects in the receiving waters:

(a) the production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials;
(b) any conspicuous change in colour or visual clarity;
(c) any emission of objectionable odour;
(d) significant adverse effects on aquatic life.

4. THAT:

(a) the consent holder shall prepare a Stormwater and Washdown Water Management Plan addressing proposed operation, management and monitoring at the port for the purpose of demonstrating among other things the means by which compliance with the conditions set in this consent shall be achieved, such a Management Plan is to be prepared to the reasonable satisfaction of the General Manager, Taranaki Regional Council within five months of the granting of this consent;

(b) the Management Plan shall be reviewed and updated at not greater than 2 yearly intervals, in consultation with the General Manager, Taranaki Regional Council;

(c) the Management Plan shall be reviewed and updated if coal stockpiles greater than 10,000 tonnes are to be made, and the Plan prepared as per condition 4(a) prior to the stockpiling;

(d) the consent holder shall adhere to and comply with the procedures, requirements, obligations and all other matters specified in the Management Plan; and

(e) in case of any contradiction between the Management Plan and the conditions of this resource consent, the conditions of this resource consent shall prevail.

5. THAT the consent holder shall at all times ensure that port staff are adequately and appropriately trained to ensure that the conditions of this consent can be met.

6. THAT the consent holder shall maintain a contingency plan, outlining measures and procedures to be undertaken to prevent spillage or accidental discharge of contaminants not licensed by this consent, and measures to avoid, remedy or mitigate the environmental effects of such a spillage or discharge. This contingency plan shall be updated on an annual basis.

7. THAT the Taranaki Regional Council may review any or all of the conditions of this consent by giving notice of review during the month of June 2001 and/or June 2003 and/or June 2009 and/or June 2015, for the purpose of ensuring that the conditions are adequate to deal with any significant adverse effects on the environment arising from the exercise of this consent, which were either not foreseen at the time the application was considered or which it was not appropriate to deal with at the time.

Signed at Stratford on 13 October 1999

For and on behalf of
Taranaki Regional Council

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Chief Executive

Coastal Permit

Pursuant to the Resource Management Act 1991
a resource consent is hereby granted by the
Taranaki Regional Council

Name of Consent Holder:	Port Taranaki Limited PO Box 348 New Plymouth 4340	
Decision Date (Change):	22 December 2015	
Commencement Date (Change):	22 December 2015	(Granted Date: 13 October 1999)

Conditions of Consent

Consent Granted:	To discharge treated stormwater and washdown water from the Port Taranaki facility and environs into the Tasman Sea
Expiry Date:	1 June 2020
Site Location:	Port Taranaki, New Plymouth
Legal Description:	Lot 1 DP 17775 Lot 3 DP 460681 Lot 1 DP 17440 Lot 1 DP 7383 Lot 1 DP 420841 Lot 2 DP 420841 Lot 2 DP 17441 (Discharge source & site)
Grid Reference (NZTM)	1689650E-5676520N
Catchment:	Tasman Sea

For General, Standard and Special conditions
pertaining to this consent please see reverse side of this document

General conditions

a. On receipt of a requirement form the Chief Executive, Taranaki Regional Council, the consent holder shall, within the time specified in the requirement, supply the information required relating to the exercise of this consent.

b. Unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent must be at the consent holders' expense.

c. The consent holder shall pay to the Taranaki Regional Council all required administration charges fixed by the Taranaki Regional Council pursuant to section 36 in relation to:

   i. the administration, monitoring and supervision of this consent; and
   ii. charges authorised by regulations.

Special conditions

1. This consent authorises the stormwater discharge from approximately 53.78 ha of land belonging to Port Taranaki Limited, in accordance with following documentation and plans:
   - The Assessment of Environmental Effects – Port Taranaki Stormwater Consent Variation document prepared by Opus International Consultants Limited, Referenced 5–N8170.00 and dated 19th November 2015;
   - Port Taranaki Stormwater Management Plan document prepared by Port Taranaki Limited and dated 17 November 2015;
   - Port Taranaki Stormwater Management Plan, prepared by Port Taranaki Limited, Sheet Titled: *Port Land Use Plan,* Referenced 2774, Sheet P02, Revision A and dated November 2015; and
   - Port Taranaki Stormwater Management Plan, Port Taranaki Limited, Sheet Titled: *Piped Discharged into Harbour As At May 2015*, Referenced 2774, Sheet P01, Revision G and dated 05/2015.

   In the case of any contradiction between the documentation and the conditions of this consent, the conditions of this consent shall prevail.

2. That the best practicable option, as defined in the Resource Management Act 1991, shall be adopted by the consent holder to ensure that any contaminants on the wharf surface are removed as far as reasonably practicable, before washdown on the wharf commences, including the following measures:

   (a) the use of front end loaders, shovels and brooms as appropriate; and
   (b) the use of suction sweepers on wharf facilities.

3. That the discharge shall not exceed the following limits at all times:

Constituent	Standard
pH	Within the range 6.0 to 9.0
suspended solids	Concentration not greater than 100 gm^{-3}
total recoverable hydrocarbons	Concentration not greater than 15 gm^{-3} (as determined by infrared spectroscopic technique)

This condition shall apply prior to the entry of the discharge into the receiving water at a designated sampling point(s) approved by the Chief Executive, Taranaki Regional Council.

4. That after allowing for reasonable mixing, the discharge shall not give rise to any of the following effects in the receiving waters:

   (a) the production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials;
   (b) any conspicuous change in colour or visual clarity;
   (c) any emission of objectionable odour;
   (d) significant adverse effects on aquatic life.

5. That:

   (a) the consent holder shall prepare a Stormwater and Washdown Water Management Plan addressing proposed operation, management and monitoring at the port for the purpose of demonstrating among other things the means by which compliance with the conditions set in this consent shall be achieved, such a Management Plan is to be prepared to the reasonable satisfaction of the Chief Executive, Taranaki Regional Council within a month of the granting of this consent;

   (b) the Management Plan shall be reviewed and updated as often as the land-uses change, in consultation with the Chief Executive, Taranaki Regional Council, and the updated plan provided to the Council;

   (c) the consent holder shall adhere to and comply with the procedures, requirements, obligations and all other matters specified in the Management Plan; and

   (d) in case of any contradiction between the Management Plan and the conditions of this resource consent, the conditions of this resource consent shall prevail.

6. That the consent holder shall at all times ensure that port staff are adequately and appropriately trained to ensure that the conditions of this consent can be met.

7. That the consent holder shall maintain a contingency plan, outlining measures and procedures to be undertaken to prevent spillage or accidental discharge of contaminants not licensed by this consent, and measures to avoid, remedy or mitigate the environmental effects of such a spillage or discharge. This contingency plan shall be updated on an annual basis.

Signed at Stratford on 22 December 2015

For and on behalf of
Taranaki Regional Council

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A D McLay
Director - Resource Management

Coastal Permit

**Pursuant to the Resource Management Act 1991
a resource consent is hereby granted by the
Taranaki Regional Council**

Name of Consent Holder:	Westgate Transport Limited P O Box 348 NEW PLYMOUTH
Consent Granted Date:	13 October 1999

Conditions of Consent

Consent Granted:	To discharge up to 1.264 cubic metres/day of washdown wastewater from wharves, equipment and surrounding area into the Tasman Sea at or about GR: P19:989-382 to 011-377 to 013-383 to 001-391 to 989-382
Expiry Date:	1 June 2020
Review Date(s):	June 2001, June 2003, June 2009, June 2015
Site Location:	Wharf Area, Breakwater Road, Port Taranaki, New Plymouth
Legal Description:	Various
Catchment:	Tasman Sea

*For General, Standard and Special Conditions
pertaining to this consent please see reverse side of this document*

General conditions

(a) That on receipt of a request from the General Manager, Taranaki Regional Council, (hereinafter the General Manager), the consent holder shall, within the time specified in the requirement, supply the information required relating to the exercise of this consent.

(b) That unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent shall be at the consent holder's own expense.

(c) That the consent holder shall pay to the Council all required administrative charges fixed by the Council pursuant to section 36 in relation to:
i) the administration, monitoring and supervision of this consent;
ii) charges authorised by regulations.

Special conditions

1. THAT the best practicable option, as defined in the Resource Management Act 1991, shall be adopted by the consent holder to ensure that any contaminants on the wharf surface are removed as far as reasonably practicable, before washdown on the wharf commences, including the following measures:

   (a) the use of front end loaders, shovels and brooms as appropriate; and
   (b) the use of suction sweepers on wharf facilities.

2. THAT the discharge shall not exceed the following limits at all times:

Component	Concentration
pH [range]	6 – 9
Total recoverable hydrocarbons	15 gm^{-3}
Suspended solids	100 gm^{-3}

   This condition shall apply prior to the entry of the discharge into the receiving water at a designated sampling point(s) approved by the General Manager, Taranaki Regional Council.

3. THAT after allowing for reasonable mixing, the discharge shall not give rise to any of the following effects in the receiving waters:

   (a) the production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials;

   (b) any conspicuous change in colour or visual clarity;

   (c) any emission of objectionable odour;

   (d) significant adverse effects on aquatic life.

4. THAT:

   (a) the consent holder shall prepare a Washdown Wastewater Management Plan addressing proposed operation, management and monitoring at the port for the purpose of demonstrating among other things the means by which compliance with the conditions set in this consent shall be achieved, such a Management Plan is to be prepared to the reasonable satisfaction of the General Manager, Taranaki Regional Council within five months of the granting of this consent;

   (b) the Management Plan shall be reviewed and updated at not greater than 2 yearly intervals, in consultation with the General Manager, Taranaki Regional Council;

(c) the Management Plan shall be reviewed and updated if coal stockpiles greater than 10,000 tonnes are to be made, and the Plan prepared as per condition 4(a) prior to the stockpiling;

(d) the consent holder shall adhere to and comply with the procedures, requirements, obligations and all other matters specified in the Management Plan; and

(e) in case of any contradiction between the Management Plan and the conditions of this resource consent, the conditions of this resource consent shall prevail.

5. THAT the consent holder shall at all times ensure that port staff are adequately and appropriately trained to ensure that the conditions of this consent can be met.

6. THAT the consent holder shall maintain a contingency plan, outlining measures and procedures to be undertaken to prevent spillage or accidental discharge of contaminants not licensed by this consent, and measures to avoid, remedy or mitigate the environmental effects of such a spillage or discharge. This contingency plan shall be updated on an annual basis.

7. THAT the Taranaki Regional Council may review any or all of the conditions of this consent by giving notice of review during the month of June 2001 and/or June 2003 and/or June 2009 and/or June 2015, for the purpose of ensuring that the conditions are adequate to deal with any significant adverse effects on the environment arising from the exercise of this consent, which was either not foreseen at the time the application was considered or which it was not appropriate to deal with at the time.

Signed at Stratford on 13 October 1999

For and on behalf of
Taranaki Regional Council

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General Manager

Coastal Permit

Pursuant to the Resource Management Act 1991
a resource consent is hereby granted by the
Taranaki Regional Council

Name of Consent Holder:	Port Taranaki Limited P O Box 348 NEW PLYMOUTH
Consent Granted Date:	13 October 1999

Conditions of Consent

Consent Granted:	To discharge up to 1.264 cubic metres/day of washdown wastewater from wharves, equipment and surrounding area into the Tasman Sea [P19:989-382 to 011-377 to 013-383 to 001-391 to 989-382] at or about GR: P19:997-382
Expiry Date:	1 June 2020
Review Date(s):	June 2001, June 2003, June 2009, June 2015
Site Location:	Wharf Area, Breakwater Road, Port Taranaki, New Plymouth
Legal Description:	Various
Catchment:	Tasman Sea

For General, Standard and Special conditions
pertaining to this consent please see reverse side of this document

General conditions

a) On receipt of a requirement from the Chief Executive, Taranaki Regional Council the consent holder shall, within the time specified in the requirement, supply the information required relating to the exercise of this consent.

b) Unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent must be at the consent holder's own expense.

c) The consent holder shall pay to the Council all required administrative charges fixed by the Council pursuant to section 36 in relation to:

i) the administration, monitoring and supervision of this consent; and
ii) charges authorised by regulations.

Special conditions

1. That the best practicable option, as defined in the Resource Management Act 1991, shall be adopted by the consent holder to ensure that any contaminants on the wharf surface are removed as far as reasonably practicable, before washdown on the wharf commences, including the following measures:

a) the use of front end loaders, shovels and brooms as appropriate; and
b) the use of suction sweepers on wharf facilities.

2. That the discharge shall not exceed the following limits at all times:

Component	Concentration
pH [range]	6 – 9
Total recoverable hydrocarbons	15 gm^{-3}
Suspended solids	100 gm^{-3}

This condition shall apply prior to the entry of the discharge into the receiving water at a designated sampling point(s) approved by the Chief Executive, Taranaki Regional Council.

3. That after allowing for reasonable mixing, the discharge shall not give rise to any of the following effects in the receiving waters:

a) the production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials;

b) any conspicuous change in colour or visual clarity;

c) any emission of objectionable odour;

d) significant adverse effects on aquatic life.

4. That:

a) the consent holder shall prepare a Washdown Wastewater Management Plan addressing proposed operation, management and monitoring at the port for the purpose of demonstrating among other things the means by which compliance with the conditions set in this consent shall be achieved, such a Management Plan is to be

prepared to the reasonable satisfaction of the Chief Executive, Taranaki Regional Council within five months of the granting of this consent;

b) the Management Plan shall be reviewed and updated at not greater than 2 yearly intervals, in consultation with the Chief Executive, Taranaki Regional Council;

c) the Management Plan shall be reviewed and updated if coal stockpiles greater than 10,000 tonnes are to be made, and the Plan prepared as per condition 4(a) prior to the stockpiling;

d) the consent holder shall adhere to and comply with the procedures, requirements, obligations and all other matters specified in the Management Plan; and

e) in case of any contradiction between the Management Plan and the conditions of this resource consent, the conditions of this resource consent shall prevail.

5. That the consent holder shall at all times ensure that port staff are adequately and appropriately trained to ensure that the conditions of this consent can be met.

6. That the consent holder shall maintain a contingency plan, outlining measures and procedures to be undertaken to prevent spillage or accidental discharge of contaminants not licensed by this consent, and measures to avoid, remedy or mitigate the environmental effects of such a spillage or discharge. This contingency plan shall be updated on an annual basis.

7. That the Taranaki Regional Council may review any or all of the conditions of this consent by giving notice of review during the month of June 2001 and/or June 2003 and/or June 2009 and/or June 2015, for the purpose of ensuring that the conditions are adequate to deal with any significant adverse effects on the environment arising from the exercise of this consent, which was either not foreseen at the time the application was considered or which it was not appropriate to deal with at the time.

Transferred at Stratford on 11 October 2005

For and on behalf of
Taranaki Regional Council

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Director-Resource Management

Coastal Permit

Pursuant to the Resource Management Act 1991
a resource consent is hereby granted by the
Taranaki Regional Council

Name of Consent Holder:	Methanex Motunui Limited Private Bag 2011 NEW PLYMOUTH
Consent Granted Date:	6 May 2008

Conditions of Consent

Consent Granted:	To discharge stormwater and associated contaminants into the Tasman Sea at Port Taranaki from a methanol storage tank bunded area at or about 2599253E-6238317N
Expiry Date:	1 June 2026
Review Date(s):	June 2014, June 2020
Site Location:	Port Taranaki
Legal Description:	Lot 1 DP 14572
Catchment:	Tasman Sea
Tributary:	Hongihongi

For General, Standard and Special conditions
pertaining to this consent please see reverse side of this document

General conditions

a) On receipt of a requirement from the Chief Executive, Taranaki Regional Council the consent holder shall, within the time specified in the requirement, supply the information required relating to the exercise of this consent.

b) Unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent must be at the consent holder's own expense.

c) The consent holder shall pay to the Council all required administrative charges fixed by the Council pursuant to section 36 in relation to:

i) the administration, monitoring and supervision of this consent; and
ii) charges authorised by regulations.

Special conditions

1. The consent holder shall at all times adopt the best practicable option, as defined in section 2 of the Resource Management Act 1991, to prevent or minimise any adverse effects on the environment from the exercise of this consent.

2. The exercise of this consent shall be undertaken substantially in accordance with the documentation submitted in support of application 4965. In the case of any contradiction between the documentation submitted in support of application 4965 and the conditions of this consent, the conditions of this consent shall prevail.

3. Concentrations of the following components shall not be exceeded in the discharge:

Component	**Concentration**
pH (range)	6.0 – 9.0
methanol	20 gm^{-3}
total recoverable hydrocarbons	15 gm^{-3}

This condition shall apply prior to the entry of the stormwater into the coastal marine area, at a designated sampling point approved by the Chief Executive, Taranaki Regional Council.

4. After allowing for a mixing zone of 50 metres from the point of discharge, the discharge shall not give rise to any of the following effects in the receiving water:

a) the production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials;
b) any conspicuous change in the colour or visual clarity;
c) any emission of objectionable odour;
d) any significant adverse effects on aquatic life.

5. The consent holder shall prepare and maintain, to the satisfaction of the Chief Executive, Taranaki Regional Council, a contingency plan, outlining measures and procedures to be undertaken to prevent spillage or accidental discharge of contaminants, and measures to avoid, remedy or mitigate the environment effects of such a spillage or discharge.

6. In accordance with section 128 and section 129 of the Resource Management Act 1991, the Taranaki Regional Council may serve notice of its intention to review, amend, delete or add to the conditions of this resource consent by giving notice of review during the month of June 2014 and/or June 2020, for the purpose of ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, which were either not foreseen at the time the application was considered or which it was not appropriate to deal with at the time.

Signed at Stratford on 6 May 2008

For and on behalf of
Taranaki Regional Council

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Director-Resource Management

Discharge Permit

Pursuant to the Resource Management Act 1991
a resource consent is hereby granted by the
Taranaki Regional Council

Name of Consent Holder:	Liquigas Limited P O Box 450 NEW PLYMOUTH 4340
Consent Granted Date:	3 December 2007

Conditions of Consent

Consent Granted:	To discharge from an LPG storage site: (a) process water from LPG storage tank de-watering; (b) water used to decommission and recommission LPG storage tanks; (c) LPG pipeline flushing water over a two-day period during emergency repairs; and (d) stormwater; into the Hongihongi Stream at or about 2599612E-6237879N
Expiry Date:	1 June 2026
Review Date(s):	June 2014, June 2020
Site Location:	Hutchens Place, New Plymouth
Legal Description:	Lot 1 DP 20289 Sec 221 Fitzroy Dist Lot 2 DP 4961 Lot 1 DP 7383 Lot 1 DP 16190 Lot 1 DP 17440 Lot 2 DP 17441 Lot 1 DP 18065 Lot 1 DP 19494 Lot 1 DP 19698 Lot 1 DP 19917 Sec 1 SO 13626
Catchment:	Hongihongi

For General, Standard and Special conditions
pertaining to this consent please see reverse side of this document

General conditions

a) On receipt of a requirement from the Chief Executive, Taranaki Regional Council the consent holder shall, within the time specified in the requirement, supply the information required relating to the exercise of this consent.

b) Unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent must be at the consent holder's own expense.

c) The consent holder shall pay to the Council all required administrative charges fixed by the Council pursuant to section 36 in relation to:

i) the administration, monitoring and supervision of this consent; and
ii) charges authorised by regulations.

Special conditions

1. The consent holder shall at all times adopt the best practicable option, as defined in section 2 of the Resource Management Act 1991, to prevent or minimise any adverse effects on the environment from the exercise of this consent.

2. The stormwater discharged shall be collected from a catchment area of no more than 20,000 m^2.

3. The volume of process water discharged from LPG storage tank de-watering shall not exceed 30 litres per day.

4. The consent holder shall maintain a contingency plan, approved by the Chief Executive, Taranaki Regional Council, detailing measures and procedures to be undertaken to prevent spillage or accidental discharge of contaminants not licensed by this consent, and measures to avoid, remedy or mitigate the environmental effects of such a discharge.

5. For the pipe flushing water and the water used to decommission and recommission the LPG storage tanks, the consent holder shall keep records of the date and time that the discharges to the Hongihongi Stream begin and end, and the volume of water discharged. These records shall be made available to the Chief Executive, Taranaki Regional Council, upon request.

6. The consent holder shall notify the Chief Executive, Taranaki Regional Council, in writing at least 24 hours prior to discharging either pipe flushing water or the water used to decommission or recommission the LPG storage tanks. Notification shall include the consent number and a brief description of the activity consented and be emailed to worknotification@trc.govt.nz. Notification by fax or post is acceptable only if the consent holder does not have access to email.

7. The consent holder shall provide to the Chief Executive, Taranaki Regional Council, the results of any physicochemical analysis carried out on water which is discharged to the Hongihongi Stream.

8. Concentrations of the following components shall not be exceeded in the discharge:

Component	**Concentration**
pH (range)	6.0 – 9.0
suspended solids	100 gm^{-3}
total recoverable hydrocarbons [infrared spectroscopic technique]	15 gm^{-3}

This condition shall apply prior to the entry of the stormwater and process water into the Hongihongi Stream, at a designated sampling point approved by the Chief Executive, Taranaki Regional Council.

9. In accordance with section 128 and section 129 of the Resource Management Act 1991, the Taranaki Regional Council may serve notice of its intention to review, amend, delete or add to the conditions of this resource consent by giving notice of review during the month of June 2014 and/or June 2020, for the purpose of ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, which were either not foreseen at the time the application was considered or which it was not appropriate to deal with at the time.

Signed at Stratford on 3 December 2007

For and on behalf of
Taranaki Regional Council

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Director-Resource Management

Coastal Permit

Pursuant to the Resource Management Act 1991
a resource consent is hereby granted by the
Taranaki Regional Council

Name of Consent Holder:	Downer New Zealand Limited P O Box 2344 TAURANGA 3140
Decision Date:	12 November 2008
Commencement Date:	12 November 2008

Conditions of Consent

Consent Granted:	To discharge stormwater from a bitumen industry emulsion manufacture, storage and load out site, into the existing Port Taranaki stormwater system and into the Tasman Sea at or about (NZTM) 1689316E-5676302N
Expiry Date:	1 June 2026
Review Date(s):	June 2014, June 2020
Site Location:	Bridger Lane, Port Taranaki
Legal Description:	Lot 1 DP 17440
Catchment:	Tasman Sea
Tributary:	Hongihongi

For General, Standard and Special conditions
pertaining to this consent please see reverse side of this document

General conditions

a) On receipt of a requirement from the Chief Executive, Taranaki Regional Council the consent holder shall, within the time specified in the requirement, supply the information required relating to the exercise of this consent.

b) Unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent must be at the consent holder's own expense.

c) The consent holder shall pay to the Council all required administrative charges fixed by the Council pursuant to section 36 in relation to:

i) the administration, monitoring and supervision of this consent; and
ii) charges authorised by regulations.

Special conditions

1. Notwithstanding any other condition of this consent, the consent holder shall at all times adopt the best practicable option, as defined in section 2 of the Resource Management Act 1991, to prevent or minimise any adverse effects on the environment from the exercise of this consent.

2. The stormwater discharged shall be from a catchment area not exceeding 8000 m^2.

3. All stormwater shall be directed for treatment through the stormwater treatment system for discharge in accordance with the special conditions of this permit.

4. Any above ground hazardous substances storage areas shall be bunded with drainage to sumps, or other appropriate recovery systems, and not directly to the stormwater catchment.

5. Constituents of the discharge shall meet the standards shown in the following table.

Constituent	Standard
pH	Within the range 6.0 to 9.0
suspended solids	Concentration not greater than 100 gm^{-3}
total recoverable hydrocarbons	Concentration not greater than 15 gm^{-3} [as determined by infrared spectroscopic technique]

This condition shall apply prior to the entry of the treated stormwater into the receiving waters at a designated sampling point approved by the Chief Executive, Taranaki Regional Council.

6. The consent holder shall maintain a contingency plan. The contingency plan shall be adhered to in the event of a spill or emergency and shall, to the satisfaction of the Chief Executive, Taranaki Regional Council, detail measures and procedures to be undertaken to prevent spillage or accidental discharge of contaminants not authorised by this consent and measures to avoid, remedy or mitigate the environmental effects of such a spillage or discharge.

7. The consent holder shall maintain a stormwater management plan. This plan shall be adhered to at all times and shall, to the satisfaction of the Chief Executive, Taranaki Regional Council document how the site is to be managed in order to minimise the contaminants that become entrained in the stormwater.
The plan shall include but not necessarily be limited to:

   a) the loading and unloading of materials;
   b) maintenance of conveyance systems;
   c) general housekeeping; and
   d) management of the interceptor system.

8. The consent holder shall notify the Chief Executive, Taranaki Regional Council, prior to making any changes to the processes or operations undertaken at the site, or the chemicals used or stored on site, which could alter the nature of the discharge. Any such change shall then only occur following receipt of any necessary approval under the Resource Management Act. Notification shall include the consent number, a brief description of the activity consented and an assessment of the environmental effects of any changes, and be emailed to worknotification@trc.govt.nz. Notification by fax or post is acceptable if the consent holder does not have access to email.

9. In accordance with section 128 and section 129 of the Resource Management Act 1991, the Taranaki Regional Council may serve notice of its intention to review, amend, delete or add to the conditions of this resource consent by giving notice of review:

   a) during the month of June 2014 and/or June 2020 ; and/or
   b) within 3 months of receiving a notification under special condition 8 above;

   for the purpose of ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, which were either not foreseen at the time the application was considered or which it was not appropriate to deal with at the time.

Transferred at Stratford on 10 August 2011

For and on behalf of
Taranaki Regional Council

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Director-Resource Management

Coastal Permit

Pursuant to the Resource Management Act 1991
a resource consent is hereby granted by the
Taranaki Regional Council

Name of Consent Holder:	Technix Bitumen Technologies Limited Private Bag 2222 New Plymouth 4340
Decision Date	12 November 2008
Commencement Date	12 November 2008

Conditions of Consent

Consent Granted:	To discharge stormwater from a bitumen industry emulsion manufacture, storage and load out site, into the existing Port Taranaki stormwater system and into the Tasman Sea
Expiry Date:	1 June 2026
Review Date(s):	June 2020 and/or within 3 months of receiving a notification under special condition 8
Site Location:	Bridger Lane, Port Taranaki
Grid Reference (NZTM)	1689316E-5676302N
Catchment:	Tasman Sea Hongihongi

For General, Standard and Special conditions
pertaining to this consent please see reverse side of this document

General conditions

a) On receipt of a requirement from the Chief Executive, Taranaki Regional Council the consent holder shall, within the time specified in the requirement, supply the information required relating to the exercise of this consent.

b) Unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent must be at the consent holder's own expense.

c) The consent holder shall pay to the Council all required administrative charges fixed by the Council pursuant to section 36 in relation to:

i) the administration, monitoring and supervision of this consent; and
ii) charges authorised by regulations.

Special conditions

1. Notwithstanding any other condition of this consent, the consent holder shall at all times adopt the best practicable option, as defined in section 2 of the Resource Management Act 1991, to prevent or minimise any adverse effects on the environment from the exercise of this consent.

2. The stormwater discharged shall be from a catchment area not exceeding 8000 m^2.

3. All stormwater shall be directed for treatment through the stormwater treatment system for discharge in accordance with the special conditions of this permit.

4. Any above ground hazardous substances storage areas shall be bunded with drainage to sumps, or other appropriate recovery systems, and not directly to the stormwater catchment.

5. Constituents of the discharge shall meet the standards shown in the following table.

Constituent	Standard
pH	Within the range 6.0 to 9.0
suspended solids	Concentration not greater than 100 gm^{-3}
total recoverable hydrocarbons	Concentration not greater than 15 gm^{-3} [as determined by infrared spectroscopic technique]

This condition shall apply prior to the entry of the treated stormwater into the receiving waters at a designated sampling point approved by the Chief Executive, Taranaki Regional Council.

6. The consent holder shall maintain a contingency plan. The contingency plan shall be adhered to in the event of a spill or emergency and shall, to the satisfaction of the Chief Executive, Taranaki Regional Council, detail measures and procedures to be undertaken to prevent spillage or accidental discharge of contaminants not authorised by this consent and measures to avoid, remedy or mitigate the environmental effects of such a spillage or discharge.

7. The consent holder shall maintain a stormwater management plan. This plan shall be adhered to at all times and shall, to the satisfaction of the Chief Executive, Taranaki Regional Council document how the site is to be managed in order to minimise the contaminants that become entrained in the stormwater. The plan shall include but not necessarily be limited to:

   a) the loading and unloading of materials;
   b) maintenance of conveyance systems;
   c) general housekeeping; and
   d) management of the interceptor system.

8. The consent holder shall notify the Chief Executive, Taranaki Regional Council, prior to making any changes to the processes or operations undertaken at the site, or the chemicals used or stored on site, which could alter the nature of the discharge. Any such change shall then only occur following receipt of any necessary approval under the Resource Management Act. Notification shall include the consent number, a brief description of the activity consented and an assessment of the environmental effects of any changes, and be emailed to worknotification@trc.govt.nz. Notification by fax or post is acceptable if the consent holder does not have access to email.

9. In accordance with section 128 and section 129 of the Resource Management Act 1991, the Taranaki Regional Council may serve notice of its intention to review, amend, delete or add to the conditions of this resource consent by giving notice of review:

   a) during the month of June 2014 and/or June 2020; and/or
   b) within 3 months of receiving a notification under special condition 8 above;

   for the purpose of ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, which were either not foreseen at the time the application was considered or which it was not appropriate to deal with at the time.

Transferred at Stratford on 21 March 2019

For and on behalf of
Taranaki Regional Council

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A D McLay
Director - Resource Management

Discharge Permit

Pursuant to the Resource Management Act 1991
a resource consent is hereby granted by the
Taranaki Regional Council

Name of Consent Holder:	Downer New Zealand Limited P O Box 2344 TAURANGA 3140
Decision Date:	29 May 2008
Commencement Date:	29 May 2008

Conditions of Consent

Consent Granted:	To discharge emissions into the air from bitumen blowing operations and associated processes at or about (NZTM) 1689316E-5676302N
Expiry Date:	1 June 2026
Review Date(s):	June 2014, June 2020
Site Location:	Bridger Lane, Port Taranaki
Legal Description:	Lot 1 DP 17440

For General, Standard and Special conditions
pertaining to this consent please see reverse side of this document

General conditions

a) On receipt of a requirement from the Chief Executive, Taranaki Regional Council the consent holder shall, within the time specified in the requirement, supply the information required relating to the exercise of this consent.

b) Unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent must be at the consent holder's own expense.

c) The consent holder shall pay to the Council all required administrative charges fixed by the Council pursuant to section 36 in relation to:
   i) the administration, monitoring and supervision of this consent; and
   ii) charges authorised by regulations.

Special conditions

1. The consent holder shall at all times adopt the best practicable option, as defined in section 2 of the Resource Management Act 1991, to prevent or minimise any adverse effects on the environment from the exercise of this consent.

2. The burner shall be maintained to the satisfaction of the Chief Executive, Taranaki Regional Council, by a trained service person at least every twelve months to optimise combustion efficiency and to reduce noxious emissions to air.

3. The consent holder shall notify the Chief Executive, Taranaki Regional Council, prior to making any changes to the processes or operations undertaken at the site, or the chemicals used or stored on site, which could alter the nature of the discharge. Any such change shall then only occur following receipt of any necessary approval under the Resource Management Act. Notification shall include the consent number, a brief description of the activity consented and an assessment of the environmental effects of any changes, and be emailed to worknotification@trc.govt.nz. Notification by fax or post is acceptable if the consent holder does not have access to email.

4. The discharge of particulate material from any vent, duct or chimney, shall not exceed 125 milligrams per cubic metre of air corrected to 0 degrees Celsius, 1 atmosphere pressure, and a dry gas basis.

5. The consent holder shall control all emissions to the atmosphere from the site so that the maximum ground level concentration for any particular contaminant arising from the exercise of this consent measured at or beyond the boundary of the site shall not exceed:

   a) 1/30th of the relevant Occupational Threshold Value Time Weighted Average as defined by the Department of Labour Workplace Exposure Standards and Biological Exposure Indices for New Zealand; or
   b) by more than the Short Term Exposure Limit as defined in the Department of Labour Workplace Exposure Standards and Biological Exposure Indices for New Zealand;
   c) or if no Short Term Exposure Limit is set, more than three times the Time Weighted Average at any time.

6. That all equipment used to avoid, remedy, or mitigate any effect on the environment from the discharge of emissions into the air shall be maintained in optimum condition and shall be operated within optimum design parameters at all times the plant is in operation.

7. That the discharges authorised by this consent shall not give rise to any odour at or beyond the site boundary which, in the opinion of an enforcement officer of the Taranaki Regional Council, is offensive of obnoxious or objectionable.

8. In accordance with section 128 and section 129 of the Resource Management Act 1991, the Taranaki Regional Council may serve notice of its intention to review, amend, delete or add to the conditions of this resource consent by giving notice of review during the month of June 2014 and/or June 2020, for the purpose of ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, which were either not foreseen at the time the application was considered or which it was not appropriate to deal with at the time.

Transferred at Stratford on 10 August 2011

For and on behalf of
Taranaki Regional Council

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Director-Resource Management

Appendix II

Categories used to evaluate environmental and administrative performance

Categories used to evaluate environmental and administrative performance

Environmental performance is concerned with actual or likely effects on the receiving environment from the activities during the monitoring year. Administrative performance is concerned with the Company's approach to demonstrating consent compliance in site operations and management including the timely provision of information to Council (such as contingency plans and water take data) in accordance with consent conditions.

Events that were beyond the control of the consent holder and unforeseeable (that is a defence under the provisions of the RMA can be established) may be excluded with regard to the performance rating applied. For example loss of data due to a flood destroying deployed field equipment.

The categories used by the Council for this monitoring period, and their interpretation, are as follows:

Environmental Performance

High: No or inconsequential (short-term duration, less than minor in severity) breaches of consent or regional plan parameters resulting from the activity; no adverse effects of significance noted or likely in the receiving environment. The Council did not record any verified unauthorised incidents involving environmental impacts and was not obliged to issue any abatement notices or infringement notices in relation to such impacts.

Good: Likely or actual adverse effects of activities on the receiving environment were negligible or minor at most. There were some such issues noted during monitoring, from self-reports, or during investigations of incidents reported to the Council by a third party but these items were not critical, and follow-up inspections showed they have been dealt with. These minor issues were resolved positively, co-operatively, and quickly. The Council was not obliged to issue any abatement notices or infringement notices in relation to the minor non-compliant effects; however abatement notices may have been issued to mitigate an identified potential for an environmental effect to occur.

For example:

- High suspended solid values recorded in discharge samples, however the discharge was to land or to receiving waters that were in high flow at the time;
- Strong odour beyond boundary but no residential properties or other recipient nearby.

Improvement required: Likely or actual adverse effects of activities on the receiving environment were more than minor, but not substantial. There were some issues noted during monitoring, from self-reports, or during investigations of incidents reported to the Council by a third party. Cumulative adverse effects of a persistent minor non-compliant activity could elevate a minor issue to this level. Abatement notices and infringement notices may have been issued in respect of effects.

Poor: Likely or actual adverse effects of activities on the receiving environment were significant. There were some items noted during monitoring, from self-reports, or during investigations of incidents reported to the Council by a third party. Cumulative adverse effects of a persistent moderate non-compliant activity could elevate an 'improvement required' issue to this level. Typically there were grounds for either a prosecution or an infringement notice in respect of effects.

Administrative performance

High: The administrative requirements of the resource consents were met, or any failure to do this had trivial consequences and were addressed promptly and co-operatively.

Good: Perhaps some administrative requirements of the resource consents were not met at a particular time, however this was addressed without repeated interventions from the Council staff. Alternatively adequate reason was provided for matters such as the no or late provision of information, interpretation of 'best practical option' for avoiding potential effects, etc.

Improvement required: Repeated interventions to meet the administrative requirements of the resource consents were made by Council staff. These matters took some time to resolve, or remained unresolved at the end of the period under review. The Council may have issued an abatement notice to attain compliance.

Poor: Material failings to meet the administrative requirements of the resource consents. Significant intervention by the Council was required. Typically there were grounds for an infringement notice.

Appendix III

Water sample results 2022-2023

Port Industries stormwater discharge monitoring results from 10 January 2023 survey

Site	Time	Temp	COD	Electrical Conductivity	Enterococci.	Escherichia coli	Nitrate + Nitrite	pH	Tannin	Total hydrocarbons (C_7 - C_{36})	TKN	Total Nitrogen	Total Phosphorus	TSS	Turbidity
		°C	g O_2/m^3	mS/m	MPN / 100mL	MPN / 100mL	g/m^3	pH Units	g/m^3	g/m^3	g/m^3	g/m^3	g/m^3	g/m^3	FNU
STW002036	13:30	21.0	-	9.4	-	-	-	6.7	-	< 0.7	-	-	-	32	-
STW001088	07:15	17.9	78	11.0	-	-	< 0.002	6.8	6.8	< 0.7	0.61	0.61	0.193	24	19.7
STW001089	07:28	17.8	29	11.7	-	-	0.61	6.8	1.9	< 0.7	0.67	1.29	0.32	20	20
SEA902066	07:49	18.2	181	4900	-	-	0.0160	7.9	2.6	< 0.7	< 0.2	0.2	0.059	21	-
STW001159	08:00	18.2	19	5.4	-	-	0.23	6.7	-	< 0.7	0.47	0.70	0.119	5	-
STW001135	08:19	19.4	77	8.6	-	-	0.44	6.4	4.8	< 0.7	0.69	1.12	0.47	270	98
STW001104	08:38	17.9	-	1.7	-	-	-	6.8	-	< 0.7	-	-	-	5	-
STW001157	08:45	16.9	-	7.2	-	-	< 0.002	6.6	14.6	< 0.7	1.01	1.01	0.60	70	86
SEA000000	08:52	19.0	240	5050	-	-	0.044	8.1	< 5	< 0.7	< 0.2	< 0.3	0.025	10	-
STW001090	09:11	17.6	-	27.4	-	-	-	7.0	-	< 0.7	-	-	-	43	-
STW001092	09:30	17.9	72	1.7	> 2420	> 2420	0.032	6.6	-	< 0.7	1.21	1.24	0.59	57	-

* *With COD for Chemical Oxygen demand, TKN for Total Kieldahl Nitrogen*

Port Industries stormwater discharge monitoring results of metals from 10 January 2023 survey

Site	Total Arsenic	Total Cadmium	Total Chromium	Total Copper	Total Lead	Total Nickel	Total Zinc
	g/m³	g/m³	g/m³	g/m³	g/m³	g/m³	g/m³
STW002036	< 0.0011	< 0.000053	< 0.00053	0.0042	0.00052	< 0.00053	0.176
STW001088	< 0.0011	< 0.000053	0.00120	0.0044	0.00083	0.00082	0.031
STW001089	< 0.0011	0.000055	< 0.00053	0.0045	0.00077	0.00065	0.051
SEA902066	< 0.0042	< 0.00021	< 0.0011	0.0019	< 0.0011	< 0.0070	0.0097
STW001159	< 0.0011	< 0.000053	0.00074	0.0055	0.00059	0.00146	0.35
STW001135	0.0016	0.000148	0.0031	0.0197	0.0026	0.0031	0.087
STW001104	< 0.0011	< 0.000053	< 0.00053	0.0039	0.00028	< 0.00053	0.032
STW001157	0.0014	< 0.000053	0.0028	0.0067	0.00164	0.0030	0.045
SEA000000	< 0.0042	< 0.00021	< 0.0011	< 0.0011	< 0.0011	< 0.0070	< 0.0042
STW001090	< 0.0011	< 0.000053	0.00122	0.0075	0.0026	0.00080	0.093
STW001092	< 0.0011	< 0.000053	< 0.00053	0.00184	0.00035	< 0.00053	0.064

Port Industries stormwater discharge monitoring results from 26 June 2023 survey (with STW001104, STW001135, SEA902066 and STW002036 sampled on 27 June 20203)

Site	Time	Temp	COD	Electrical Conductivity	Enterococci	Escherichia coli	Nitrate + Nitrite	pH	Tannin	Total hydrocarbons (C7 - C36)	TKN	Total Nitrogen	Total Phosphorus	TSS	Turbidity
		°C	g O_2/m^3	mS/m	MPN / 100mL	MPN / 100mL	g/m^3	pH Units	g/m^3	g/m^3	g/m^3	g/m^3	g/m^3	g/m^3	FNU
STW001088	15:10	12.5	300	6.7	-	-	< 0.002	6.2	35	< 0.7	1.44	1.44	0.51	240	161
STW001089	15:17	12.0	-	4.5	-	-	< 0.002	6.1	8.6	< 0.7	0.60	0.60	1.03	111	49
STW001159	15:34	12.2	-	3.5	-	-	0.081	5.9	-	< 0.7	0.42	0.50	0.194	80	-
STW001157	15:58	11.5	310	7.4	-	-	0.002	6.0	36	< 0.7	1.61	1.61	0.60	84	69
SEA902064	16:01	13.9	-	4730	-	-	0.0050	8.0	2.6	< 0.7	< 0.10	< 0.11	0.050	17	-
STW001090	16:17	12.3	-	17.5	-	-	-	7.3	-	< 0.7	-	-	-	42	-
STW001092	16:25	11.4	-	5.5	> 2420	> 2420	0.163	6.8	-	< 0.7	6.2	6.3	1.50	130	-
STW001135	12:15	12.7	91	12.1	-	-	0.003	6.2	148	< 0.7	4.1	4.1	6.1	640	760
STW001104	12:45	16.7	-	3.7	-	-	-	6.8	-	< 0.7	-	-	-	87	-
SEA902066	13:00	14.3	189	5070	-	-	0.027	7.9	3.0	< 0.7	< 0.2	< 0.3	0.018	7	-
STW002036	13:26	15.1	-	4.9	-	-	-	7.1	-	< 0.7	-	-	-	< 3	-

* *With COD for Chemical Oxygen demand, TKN for Total Kieldahl Nitrogen*

ort Industries stormwater discharge monitoring results of metals from 26 June 2023 survey (with STW001104, STW001135, SEA902066 and STW002036 sampled on 27 June 20203)

Site	Total Arsenic	Total Cadmium	Total Chromium	Total Copper	Total Lead	Total Nickel	Total Zinc
	g/m³	g/m³	g/m³	g/m³	g/m³	g/m³	g/m³
STW001088	0.0015	0.000053	0.0035	0.0107	0.0037	0.0028	0.093
STW001089	0.0016	0.00021	0.0035	0.0181	0.0101	0.00156	0.189
STW001159	0.0011	< 0.000053	0.0027	0.0101	0.0039	0.0024	0.82
STW001157	< 0.0011	< 0.000053	0.0022	0.0068	0.00144	0.0025	0.050
SEA902064	< 0.0042	< 0.00021	0.0013	0.0025	< 0.0011	< 0.0070	0.0178
STW001090	< 0.0011	< 0.000053	0.00099	0.0064	0.0031	0.00071	0.046
STW001092	0.0013	< 0.000053	0.00173	0.0102	0.0024	0.00097	0.185
STW001135	0.0051	0.00194	0.0164	0.186	0.020	0.0127	0.39
STW001104	< 0.0011	0.000094	0.0040	0.0062	0.0021	0.00130	0.148
SEA902066	< 0.0042	< 0.00021	< 0.0011	< 0.0011	< 0.0011	< 0.0070	0.0100
STW002036	< 0.0011	< 0.000053	< 0.00053	0.0021	< 0.00011	< 0.00053	0.053