Beach Energy Resources (NZ) Kupe Ltd
Kupe Production Station
Monitoring Programme
Annual Report
2023/24
Technical Report 2024-76

Taranaki
Regional Council

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Taranaki Regional Council
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ISSN: 1178-1467 (Online)
Document: TRCID-176456519-171 (Word)
Document: TRCID-1188382587-447 (Pdf)
February 2025

Executive summary

Beach Energy Resources NZ (Kupe) Ltd (the Company) operates a hydrocarbon production station located on Inaha Road at Manaia, in the Inaha and Kapuni catchments. The Kupe Production Station processes oil and gas from the offshore Kupe wells.

This report for the period July 2023 to June 2024 describes the monitoring programme implemented by Taranaki Regional Council (the Council) to assess the Company's environmental and consent compliance performance during the period under review. The report also details the results of the monitoring undertaken and assesses the environmental effects of the Company's activities.

During the monitoring period, Beach Energy Resources NZ (Kupe) Ltd demonstrated a high level of environmental performance and high level of administrative performance.

The Company holds 12 resource consents in relation to the Kupe facilities, which include a total of 134 conditions setting out the requirements that the Company must satisfy. The Company holds one consent to allow it to take and use groundwater, one consent to discharge stormwater into the Kapuni Stream, one consent to install groundwater bores, two consents to discharge emissions into the air from the production station, four coastal consents relating to the offshore facilities, and five consents which covered activities during the development phase of the Kupe project.

The Council's monitoring programme for the year under review included four inspections, eight samples collected for physicochemical analysis, two biomonitoring surveys of receiving waters, and two ambient air quality surveys. The consent holder provided data on flaring, water abstraction and stormwater discharges.

Site inspections found that the stormwater systems were constructed and maintained in accordance with consent conditions and were operating effectively.

Sampling of discharges and receiving waters, and biomonitoring of the receiving waters, did not indicate that the stormwater discharges from the Kupe Production Station had caused adverse effects on the water quality of the Kapuni Stream.

There were no adverse effects on the environment resulting from the exercise of the air discharge consents. The ambient air quality monitoring at the site showed that levels of carbon monoxide, particulate matter and nitrogen oxides were below levels of concern at the time of sampling. No offensive or objectionable odours were detected beyond the boundary during inspections and there were no complaints in relation to air emissions from the site.

For reference, in the 2023/24 year, consent holders were found to achieve a high level of environmental performance and compliance for 864 (89%) of a total of 967 consents monitored through the Taranaki tailored monitoring programmes, while for another 75 (8%) of the consents a good level of environmental performance and compliance was achieved. A further 26 (3%) of consents monitored required improvement in their performance, while the remaining two (<1%) achieved a rating of poor.

In terms of overall environmental and compliance performance by the consent holder over the last several years, this report shows that the consent holder's performance remains at a high level.

This report includes recommendations for the 2024/25 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 is for the period July 2023 to June 2024 by Taranaki Regional Council (the Council) on the monitoring programme associated with resource consents held by Beach Energy Resources NZ (Kupe) Ltd (the Company). The Company operates a hydrocarbon production station situated on Inaha Road at Manaia, in the Inaha and Kapuni catchments.

The report includes the results and findings of the monitoring programme implemented by the Council in respect of the consents held by the Company that relate to abstractions and discharges to water within the Inaha and Kapuni catchments, and the air discharge permit held by the Company to cover emissions to air from the site. This report is the 15th annual report to be prepared by the Council to cover the Company's air, land and water discharges and their effects.

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 *Resource Management Act 1991* (RMA) and the Council's obligations;
- the Council's approach to monitoring sites though annual programmes;
- the resource consents held by the Company in the Inaha and Kapuni catchments;
- the nature of the monitoring programme in place for the period under review; and
- a description of the activities and operations conducted at the Kupe Production Station.

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 2024/25 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 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 2023/24 year, consent holders were found to achieve a high level of environmental performance and compliance for 864 (89%) of a total of 967 consents monitored through the Taranaki tailored monitoring programmes, while for another 75 (8%) of the consents a good level of environmental performance and compliance was achieved. A further 26 (3%) of consents monitored required improvement in their performance, while the remaining two (<1%) achieved a rating of poor. [1]

1.2 Process description

Development of the Kupe Production Station (Photo 1), offshore pipelines and offshore platform began in mid-2006. Natural gas and light oil are extracted from the Kupe Field which is located offshore, approximately 30km south of Ohawe Beach on the South Taranaki coast. Raw gas and light oil extracted from the field offshore are transported to shore via pipeline and processed at an onshore production station. The location of the Kupe Field and the production station is shown in Figure 1.

The offshore platform is situated in approximately 35m deep water and comprises a topside deck supported by four legs fixed to the seabed. Installation of the offshore platform commenced in early 2007. The offshore platform and production wells are outside of the 12 nautical mile coastal marine area (CMA) boundary and therefore outside the jurisdiction of this Council.

The single subsea pipeline enables delivery of the raw natural gas and light oil to the onshore production station. Parallel to the subsea pipeline, utility lines transfer chemicals, power and fibre optic links from the shore to the offshore platform (Figure 2). Horizontal directional drilling (HDD) was used to install the pipelines under the 40m high sea cliffs at the end of Inaha Road in order to link the offshore and onshore components and to avoid disturbance of the foreshore and shoreline seabed. The HDD entry point is 500m inland of the coastline and the exit point emerges 1,800m offshore.

[1] The Council has used these compliance grading criteria for more than 20 years. They align closely with the 4 compliance grades in the MfE Best Practice Guidelines for Compliance, Monitoring and Enforcement, 2018

Photo 1 Kupe Production Station

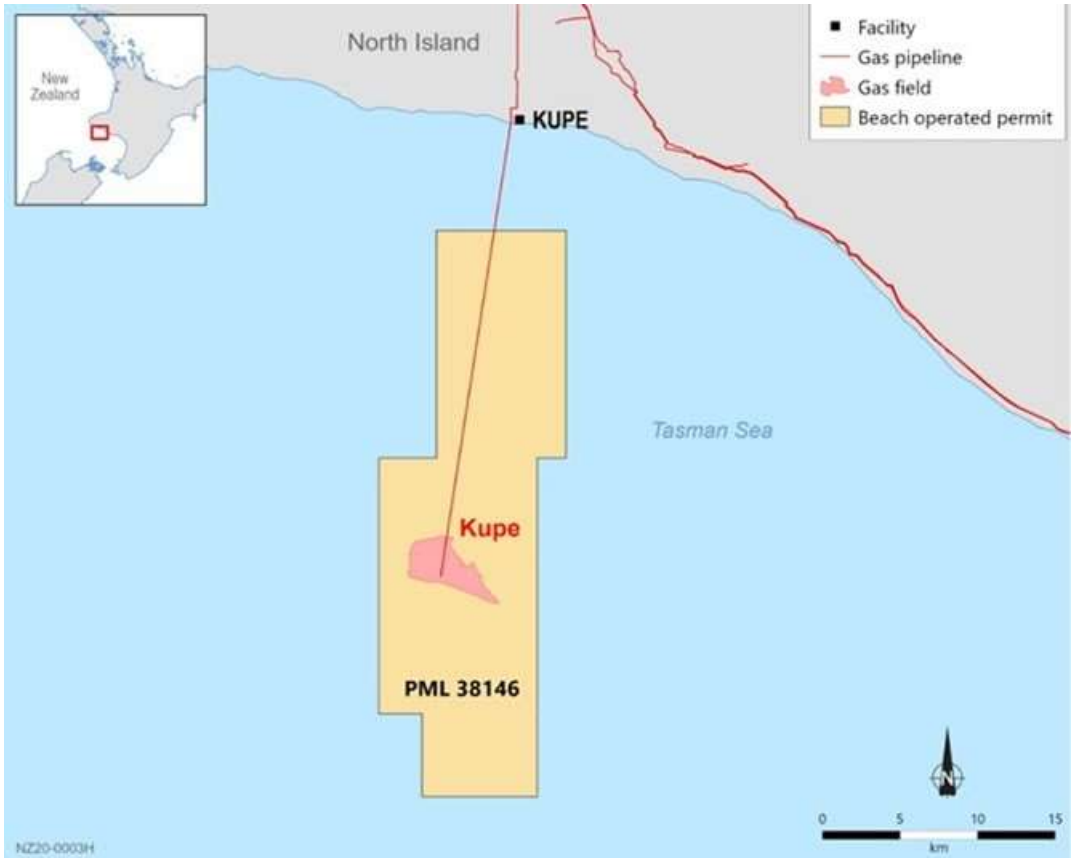

Figure 1 Location of Kupe Gas Project

Note: Figure 1 sourced from: http://www.beachenergy.com.au/new-zealand/

The production station is located at the southern end of Inaha Road, occupying roughly 19ha of land. It includes storage and truck loading facilities for LPG and condensate export. The KPS flare systems consists of a high-pressure elevated emergency flare and a low pressure ground level operational flare system. The

emergency and operational flare systems provide a means of safely disposing hydrocarbon gases which are released either by:

- Process operations during start-up or shutdown;
- Pressure relief during plant upset or emergency conditions;
- Emergency depressuring;
- Maintenance operations.

A series of ponds provide a natural cleaning system for stormwater before discharging from the site. Commissioning of the production station began in early 2009, with commercial production commencing in November 2009.

Onshore pipelines have been installed to enable the transfer of raw gas from the HDD shore crossing to the production station, and to transfer the sales gas from the production station to the Kapuni Gas Treatment Plant.

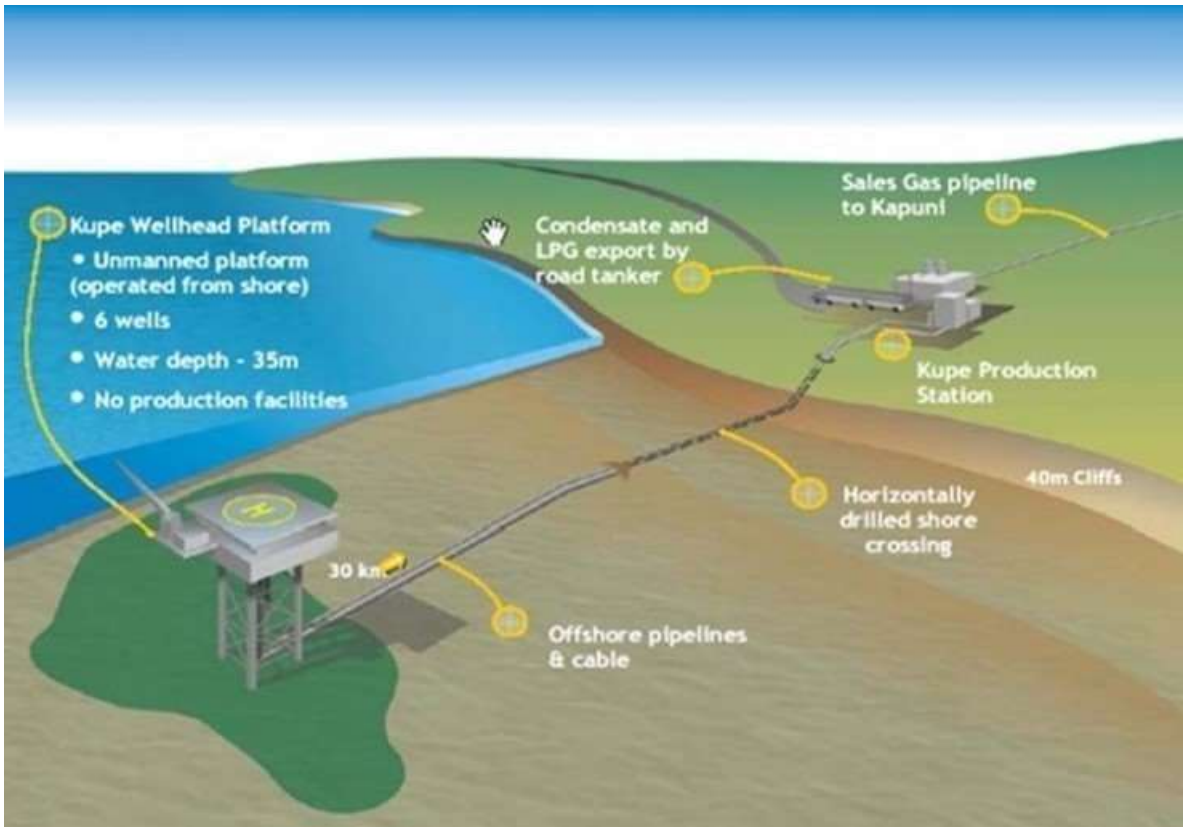

Figure 2 Components of the Kupe Gas Project
Note: Figure 2 sourced from: http://www.originenergy.com.au/1222/Kupe-Gas-Project

1.3 Resource consents

The Company holds 12 resource consents the details of which are summarised in the table below. Summaries of the conditions attached to each consent are set out in Section 3 of this report.

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

1.3.1 Kupe Production Station

Table 1 Summary of resource consents held by Beach Energy for the Kupe Production Station

Consent number	Purpose	Granted	Review	Expires
	Water abstraction permit			
7010-1	To take and use up to 3,500m^3/day groundwater at a maximum rate of 40L/s as a combined total from up to seven water bores in a bore field for the purpose of horizontal directional drilling, pipeline hydro-testing, production station operation at the Kupe production station and operations at the Manutahi-D, Manutahi-C, and Kauri-F wellsites	November 2006	June 2029	June 2039
	Water discharge permit			
6543-1	To discharge pipeline hydrotesting water and treated stormwater from the Kupe Production Station via a stormwater/firewater storage pond system, and to discharge stormwater from the 'Dangerous Goods Storage' stormwater system into the Kapuni Stream	June 2005	June 2029	June 2039
	Air discharge permits			
6545-1	To discharge emissions to air from combustion involving the flaring of petroleum products incidental to the treatment of gas at the Kupe Production Station	June 2005	June 2029	June 2039
6546-1	To discharge emissions to air as products of combustion from the Kupe Production Station involving equipment burning natural gas as fuel where the maximum heat release is in excess of 10 megawatts, together with miscellaneous emissions	June 2005	June 2029	June 2039
	Land use permit			
6979-1	To install, construct and maintain up to seven water bores for horizontal directional drilling, pipeline hydro-testing, and production station operation purposes	November 2006	June 2029	June 2039
	Coastal permits			
6531-1	To disturb the seabed and foreshore of the coastal marine area by the process of erection, placement, use, alteration, extension, maintenance or removal of up to six pipelines and one power/fibre optic cable connecting an offshore wellhead/platform to the foreshore at mean high water spring	December 2005	June 2029	June 2039
6532-1	To erect, place, use, reconstruct, alter, extend and maintain within the coastal marine area up to six pipelines connecting an offshore wellhead/platform to the foreshore at mean high water spring, with structures situated under the seabed from approximately 1,200m offshore to mean high water spring, and the related occupation of the seabed	December 2005	June 2029	June 2039
6533-1	To occupy the coastal marine area for a distance of 250m either side of the centreline of a 100m wide pipeline corridor, from the outer limit of the territorial sea of New Zealand to mean high water spring, in a manner that will restrict public access	December 2005	June 2029	June 2039
6629-1	To erect, place, use, reconstruct, alter, extend and maintain within the coastal marine area one power/fibre optic cable connecting an offshore wellhead/platform to the foreshore at mean high water spring, with structures situated under the seabed from approximately 1200m offshore to mean high water spring, and the related occupation of the seabed	October 2005	June 2029	June 2039

1.3.2 Related consents

The Company also holds a number of consents relating to the development phase of the Kupe facilities which did not require active monitoring during the period under review. A summary of these consents is provided in Table 2. Copies of these consents are available from the Council upon request.

Table 2 Consents related to the development phase of the Kupe facilities

Consent number	Purpose	Granted	Review	Expiry
6534-1	To discharge up to 1000m^3 of contaminants (up to 600m^3 of drilling muds, drilling cuttings and aquifer water and up to 400m^{3}of gauge run water) from two horizontal directional drilling exit points through the seabed approximately 1200m from mean high water spring within the coastal marine area	October 2005	June 2029	June 2039
6535-1	To divert water from aquifers in the coastal marine area likely to be encountered during activities associated with horizontal directional drilling of two drill lines	October 2005	June 2029	June 2039
6537-2	To discharge treated stormwater from a horizontal directional drilling site onto and into land	March 2023	June 2027	June 2037

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 Kupe Production Station consisted of four 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;
- 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

The Kupe Production Station was visited four times during the monitoring period. With regard to consents for the abstraction of or 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 Company 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 Chemical sampling

The Council undertook sampling of both the discharges from the site and the water quality upstream and downstream of the discharge point and mixing zone.

The production station discharges were sampled twice, and the samples analysed for chlorides, conductivity, hydrocarbons, pH, suspended solids and turbidity. The Kapuni Stream was sampled concurrently, with the samples analysed for the same constituents.

The Council undertook sampling of the ambient air quality outside the boundary of the site. A multi-gas meter was deployed on one occasion in the vicinity of the plant, with monitoring consisting of continuous measurements of gas concentrations for the gases of interest (carbon monoxide and combustible gases). A PM_{10} particulate monitor was deployed concurrently with the multi-gas meter. Two nitrogen oxide measuring devices were also deployed in the vicinity of the plant on one occasion during the year under review.

1.4.5 Biomonitoring surveys

Biological surveys were performed on two occasions in the Kapuni Stream to determine whether or not the discharge of treated stormwater and uncontaminated site and process effluent from the site has had a detrimental effect upon the communities of the stream.

2. Results

2.1 Water

2.1.1 Inspections

Four inspections were carried out at the Kupe Production Station in the 2023/24 year. These were on 12 September and 19 October 2023, and 14 May and 26 June 2024.

In general, the site was tidy and clean with good bunding practices observed. Good systems were in place to capture and contain dust/sand/garnet/paint discharge from sandblasting activities.

During the inspection undertaken on 12 September the Inspecting Officer noted that the waste drum bund behind the central store/warehouse required attention as a black paint drum had fallen off the bund, spilling paint. Oil was noted to be staining the metal around where carbon had been stored. These areas needed to be cleaned with the material removed. This had been resolved prior to the following inspection.

A small pilot flare was noted with no smoke or odour detected.

2.1.2 Results of discharge monitoring

Figure 3 Kupe Production Station sampling and biomonitoring sites

Water quality sampling of the discharge to the Kapuni Stream was undertaken twice during the 2023/24 period. Table 3 presents the results of this sampling. Monitoring sites in relation to Kupe Production Station are shown in Figure 3. To differentiate any effects on the water quality of the discharge resulting from combination with the Siggs Road stormwater, which shares the same outlet at STW002086, a sample is also taken on site at the outlet of the production station ponds system (STW002096).

Table 3 Monitoring results for STW002086 and STW002096

Parameter	Units	STW002086		STW002096		Consent 6543-1 limits
		10 June 2024	18 June 2024	10 June 2024	18 June 2024	
Chloride	g/m^3	63	60	62	63	230
Conductivity	g/m^3	40.6	36.8	39.9	38.0	-
Hydrocarbons	g/m^3	<0.7	<0.7	<0.7	<0.7	15
pH	g/m^3	8.0	7.9	8.2	7.8	6.0 - 9.0
Suspended solids	g/m^3	20	19	20	16	100
Turbidity	NTU	20	15	21	17	-

The results are indicative of an uncontaminated discharge, with chloride, hydrocarbons, pH and suspended solids all complying with consent conditions.

The Company records the volume of each discharge which is pumped from the site to the outlet structure adjacent to the Kapuni Stream. A summary of the total volume of stormwater discharged each month is provided in Figure 4. The total discharge to the stream was approximately one third of previous years. This reduction was attributed to a decrease in rainfall (the recorder at Kaupokonui at Glenn Road recorded 788mm compared with 1,364mm in the 2022/23 year). There was also a slight change in the firewater pond operating procedures.

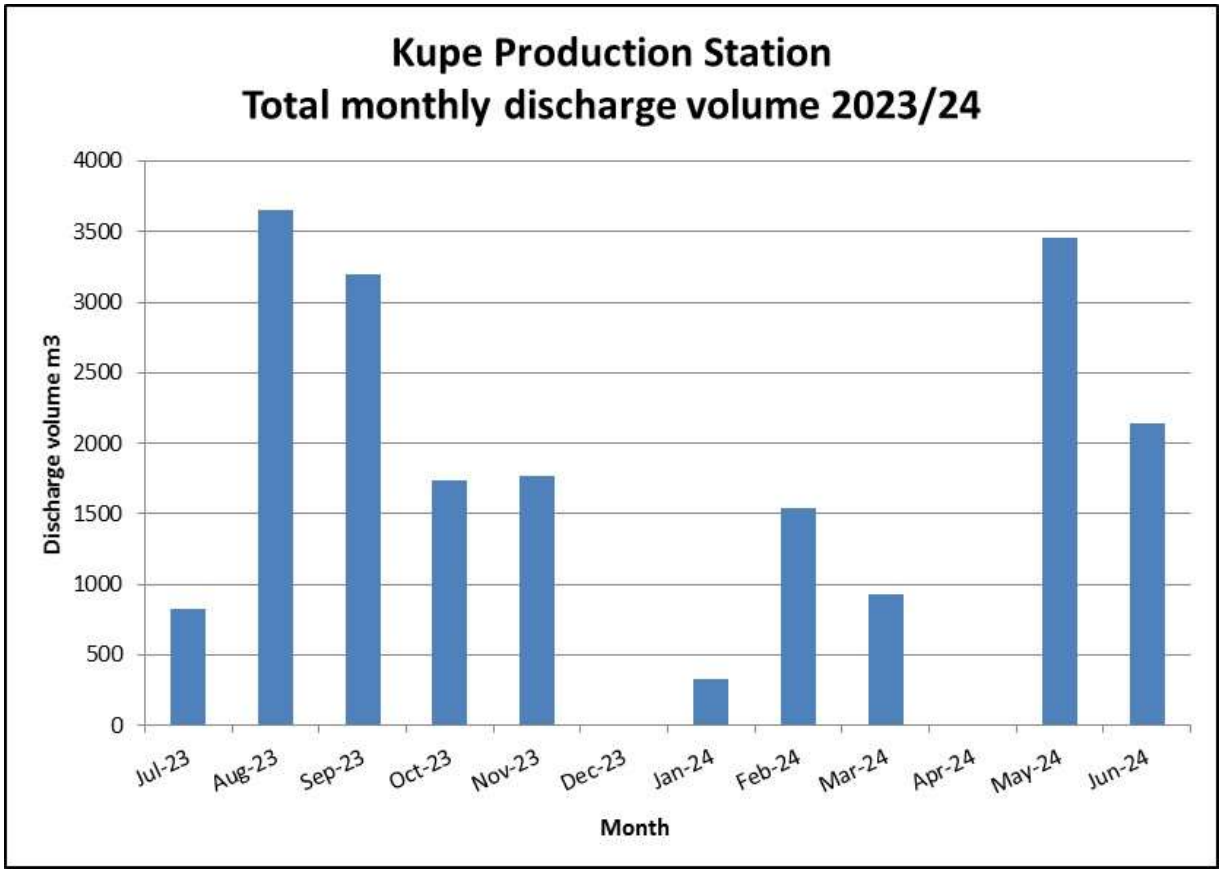

Figure 4 Stormwater discharge volumes for Kupe Production Station

2.1.3 Results of receiving environment monitoring

2.1.3.1 Chemical

Table 4 Receiving environment results for the Kapuni Stream

Parameter	Units	10 June 2024		18 June 2024		Consent 6543-1 conditions
		Upstream KPN000488	Downstream KPN000492	Upstream KPN000488	Downstream KPN000492	
Chloride	g/m³	7	8	13	15	-
Conductivity	g/m³	6.5	7.0	11.6	13.6	-
Hydrocarbons	g/m³	<0.7	<0.7	<0.7	<0.7	No conspicuous oil, films or foams
pH	g/m³	7.0	7.1	7.5	7.6	-
Suspended solids	g/m³	22	25	<3	4	No conspicuous change
Temperature	°C	12.5	12.5	10.9	11.0	No conspicuous change
Turbidity	NTU	11	16	0.53	1.9	-

Water quality sampling of the Kapuni Stream was undertaken in conjunction with stormwater discharge sampling. The results are presented in Table 4. The sampling sites are shown in Figure 3 and include upstream and downstream points.

The results showed slight increases for most parameters between upstream and downstream sites. There was no conspicuous change in the colour or clarity of the stream between the upstream and downstream sites.

2.1.3.2 Biomonitoring

The Council's 'kick-sampling' technique was used at three sites on 24 October 2023 and 23 February 2024 to collect streambed macroinvertebrates from the Kapuni Stream in relation to the stormwater discharge from the Kupe Production Station (Table 5, Figure 3). The surveys provided data to assess any potential impacts the discharge has had on the macroinvertebrate communities of the stream. Samples were processed to provide number of taxa (richness), Macroinvertebrate Community Index (MCI), and Semi-quantitative Macroinvertebrate Community Index (SQMCI) scores for each site.

Table 5 Location of biomonitoring sites in the Kapuni Stream

Site No.	Site code	Location
1	KPN000488	Upstream of Production Station stormwater discharge
2	KPN000490	50m downstream of Production Station stormwater discharge
3	KPN000492	200m downstream of Production Station stormwater discharge

Taxa richness is the most robust metric when ascertaining whether a macroinvertebrate community has been exposed to toxic discharges. When exposed to toxic discharges, macroinvertebrates may die and be swept downstream or deliberately drift downstream as an avoidance mechanism (catastrophic drift). The MCI is a measure of the overall sensitivity of the macroinvertebrate community to the effects of organic pollution in stony streams. It is based on the presence/absence of taxa with differing sensitivity to organic pollution. The SQMCI is similar to the MCI, but accounts for relative abundances of the taxa found as well as sensitivity to pollution. Significant differences in taxa richness, MCI or SQMCI between sites may indicate the degree of adverse effects (if any) of the discharges being monitored.

Spring survey, October 2023

Taxa richness was moderate and ranged from 15-17 taxa. Taxa richness at all three sites were slightly below the respective site medians. The most abundant taxa found throughout the survey was one 'highly sensitive' mayfly taxon (*Deleatidium*) and the 'moderately sensitive' beetle taxon (Elmidae), which were both present at all three sites.

The MCI scores of 113 units, 102 units, and 101 units were recorded for sites 1, 2, and 3, respectively, and categorised all sites as having 'good macroinvertebrate community health. There was a significant deterioration in MCI scores in a downstream direction, with the 'control' site 1 recording significantly more than both sites 2 and 3 (by 11 and 12 units, respectively). All sites recorded similarly to their respective site medians. All three sites scored an MCI score more than that previously recorded, with site 1 recording a significant 15 units more than the previous survey.

SQMCI scores were 6.8 units, 7.4 units, and 7.6 units at sites 1 to 3, respectively. This categorised site 1 as having 'very good' macroinvertebrate community health, while sites 2 and 3 had 'excellent' health. There were no significant differences in SQMCI scores between sites, although there was an increase in SQMCI scores in a downstream direction.

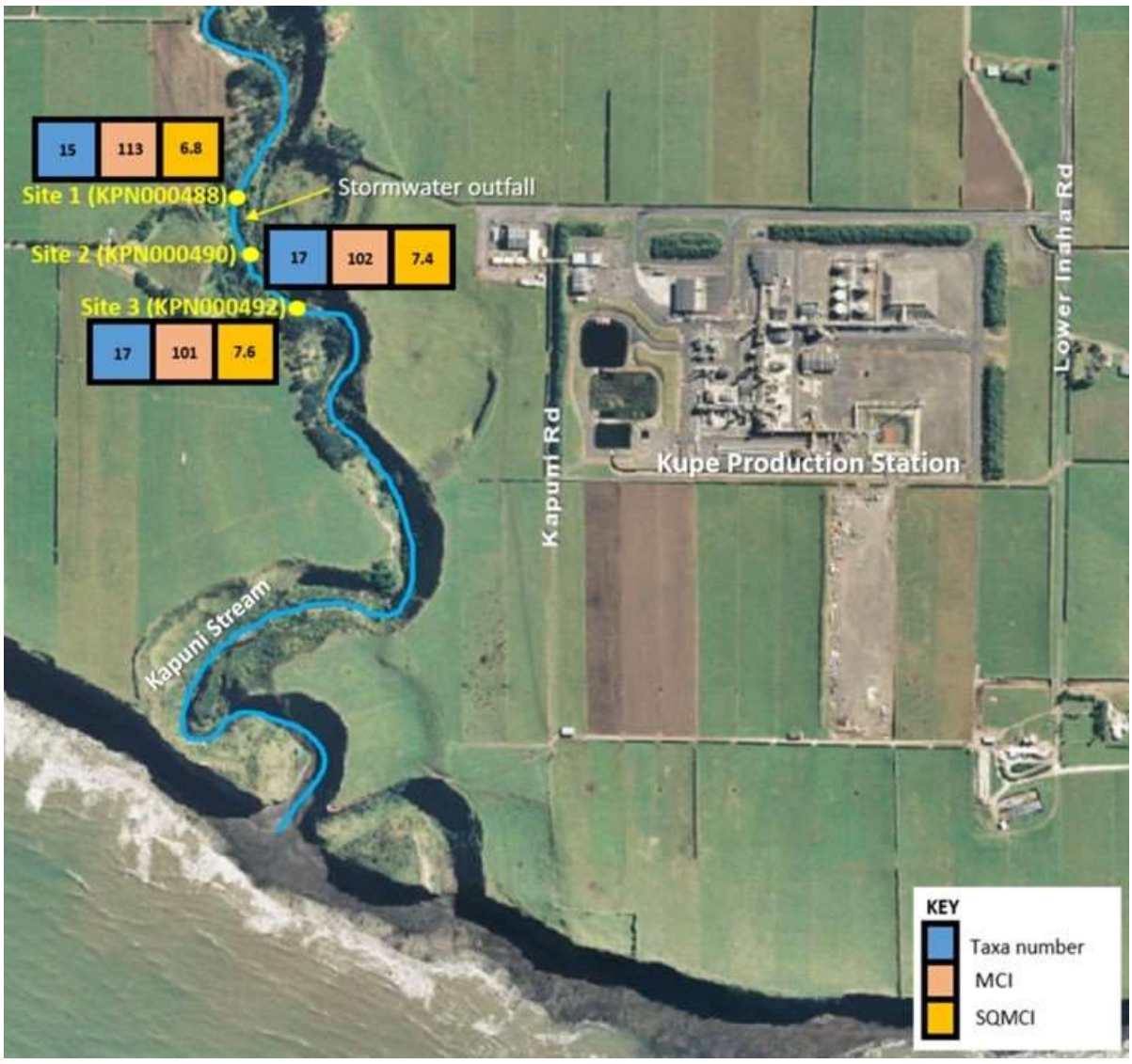

Figure 5 Biomonitoring sites in the Kapuni Stream, with results for each site, spring 2023

Summer survey, February 2024

Taxa richness was low and ranged from 11 to 13 taxa. Taxa richness at all three sites were below the respective historical site medians, as well as that recorded in the previous survey. MCI scores of 109 units, 122 units, and 107 units were recorded for sites 1, 2, and 3, respectively. This categorised sites 1 and 3 as having 'good' macroinvertebrate community health, while site 2 had 'very good' health. There was a significant increase in MCI scores between sites 1 and 2 however, scores then significantly decreased again between sites 2 and 3. When compared to the previous survey, site 1 recorded a lower MCI score, while site 3 scored a higher MCI score and site 2 significantly so. All sites recorded higher than the historical medians, significantly so at site 2.

SQMCI scores were 5.5 units, 5.8 units, and 4.8 units at sites 1, 2 and 3, respectively. This categorised sites 1 and 2 as having 'good' macroinvertebrate community health, while site 3 had 'fair' health. Sites 1 and 2 scored similarly to each other, while there was a significant decrease in SQMCI scores between sites 2 and 3. When compared to the previous survey all sites recorded SQMCI scores significantly less than that previously recorded. When compared to the historical medians, again all sites recorded less, with significant differences at sites 1 and 3.

Overall, these macroinvertebrate metrics provided no evidence that stormwater discharges from the Kupe Production Station had caused any significant adverse effects on the macroinvertebrate communities of the Kapuni Stream.

Copies of biomonitoring reports for this site are available from the Council upon request.

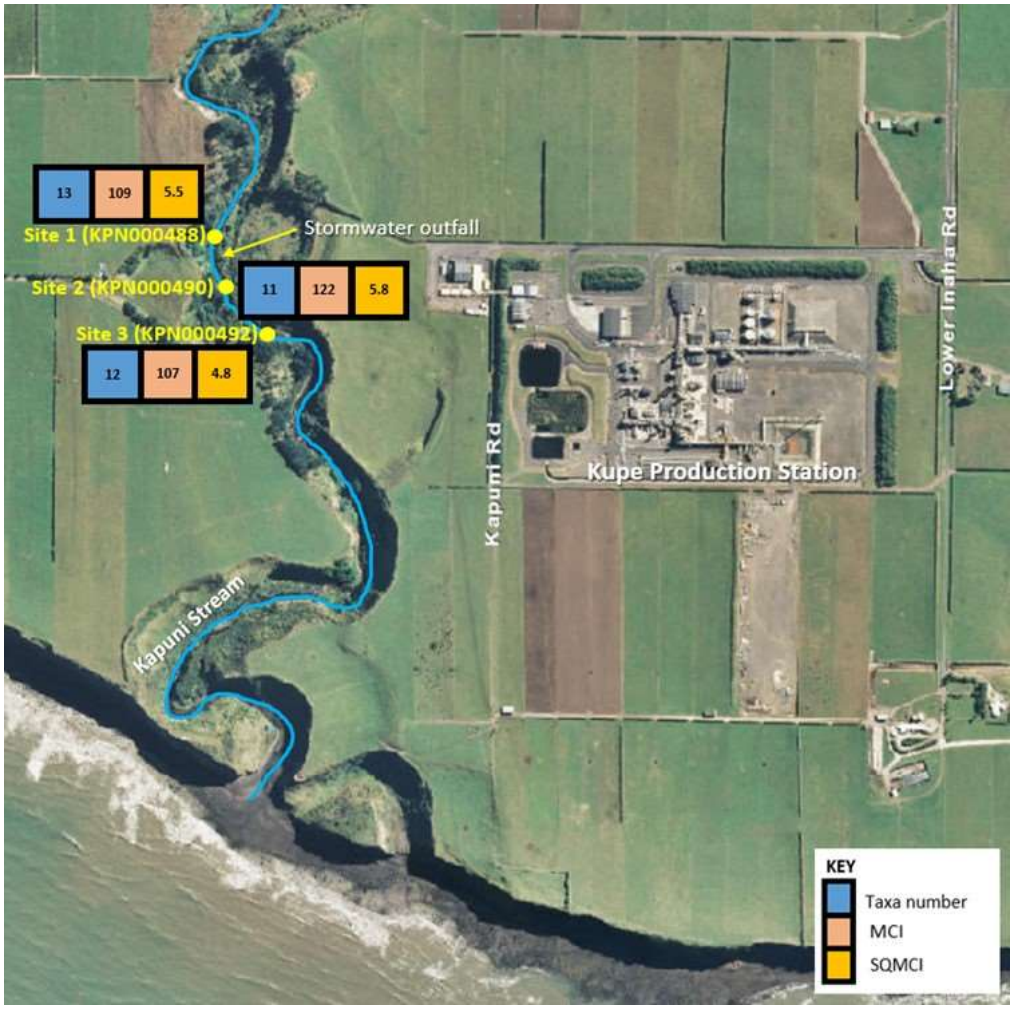

Figure 6 Biomonitoring sites in the Kapuni Stream with results for each site, summer 2024

2.1.4 Summary of water abstractions reported by Beach Energy

Figure 7 provides a summary of the total daily abstraction volumes for the consented groundwater take from the Kupe bore field for operational purposes at the Kupe Production Station. On days where abstraction occurred the volumes were generally around 50 to 110m^3/day, well below the 3,500m^3/day allowed by condition 4 of Consent 7010-1. A maximum take volume of 259m^3/day was recorded in June 2024. The maximum rate of take recorded was 12L/s, well below the 40L/s allowed by the consent. The total groundwater take for the year was 22,330m^3, this was similar to the previous year. The majority of the abstraction occurred via the DT-1 bore at (approximately 85%).

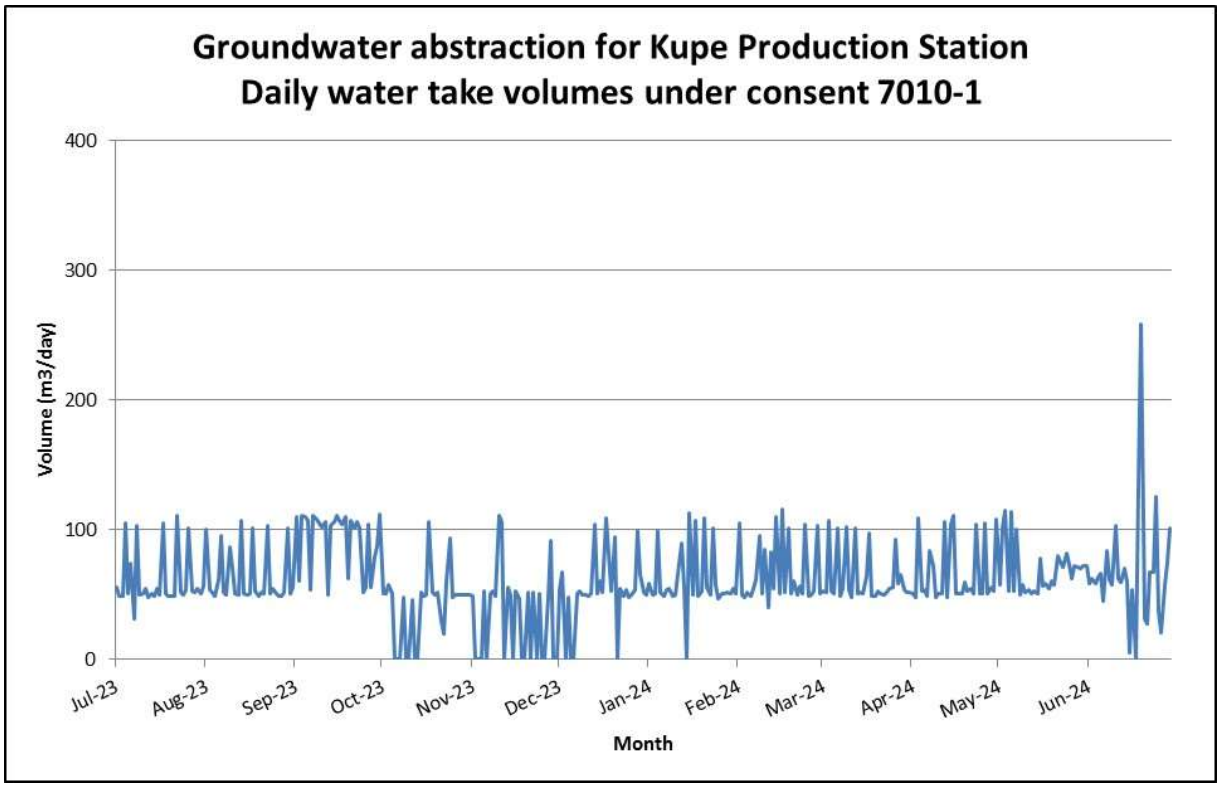

Figure 7 Daily water abstraction volumes for Kupe Production Station under Consent 7010-1

2.2 Air

2.2.1 Inspections

Air inspections were carried out in conjunction with site inspections as discussed in section 2.1.1 above. No issues regarding air quality were noted during the monitoring year.

2.2.2 Results of receiving environment monitoring

Council undertakes annual air quality monitoring at the region's hydrocarbon production stations to measure concentrations of hazardous air pollutants (HAPs) in ambient air at the boundary. During the 2023/24 survey instrumental monitoring was undertaken for nitrogen oxides (NO_x), fine particulate (PM_{10} and $PM_{2.5}$), carbon monoxide (CO) and the lower explosive limit (LEL) for gases.

Monitoring of CO and LEL is undertaken using a Rae Systems MultiRae gas monitor which continuously measures gas levels in ambient air. The monitor was located at the eastern boundary of the site (Figure 1) and recorded maximum, mean, and minimum CO levels, and the percentage of the LEL. The instrument was deployed on 29 January 2024 and recovered on 31 January 2024 and recorded data for 47 hours.

The concentration of PM_{10} and $PM_{2.5}$ in ambient air was measured using a TSI DustTrak aerosol monitor which can simultaneously measures particle mass and size fraction. It was co-located with the MultiRae (Figure 1) during the deployment and recorded data for 47 hours.

Passive sampling devices were deployed at both monitoring locations (Figure 1) from 18 January to 8 February 2024 to measure NOx. The samplers absorb NOx over the duration of the deployment and are sent for laboratory analysis. The laboratory results are used to calculate 1- and 24-hr time weighted averages (TWA).

The results of the monitoring are presented below and compared against the following human health-based assessment criteria;

- Ambient Air Quality Standards (AAQS, Ministry of the Environment (MfE, 2004)
- The Ambient Air Quality Guidelines (AAQG, MfE, 2002)
- New Zealand Workplace Exposure Standards (WES)
- World Health Organisation Guidelines (WHO), and
- The limits set out in air discharge Consent 4052-4.

Figure 8 Air monitoring sites at Kupe production station

2.2.2.1 Carbon monoxide and lower explosive limit

Exposure to low levels of CO can cause nausea, dizziness, and disorientation. Higher levels of CO can cause coma, collapse and loss of consciousness. The AAQS for exposure to CO is 10mg/m^3 averaged over an 8-hr period.

The data retrieved from the instrument did not exceed zero at any time during the deployment. The cause is unknown and may be due to equipment malfunction, absence of discharges from the site during the deployment, or unfavourable wind directions. Given the rural location of the site there are not likely to be other notable sources of these HAPs.

Due to the uncertainty of the data for this monitoring year, this report has adopted a qualitative approach to assess compliance with the consent, and uses historical data to infer potential effects. Since monitoring began in 2015 the concentration of CO measured at the monitoring locations has never exceeded or approached the AAQS limit. During the most recent monitoring (2021/2022) the maximum CO concentration reported was 0.3mg/m^3, significantly lower than the AAQS limit of 10mg/m^3.

Lower Explosive Limit (LEL) is the concentration of flammable gas, vapour, or mist in ambient air, below which an explosive gas atmosphere will not be formed. In past years methane has been used as a proxy for LEL and is measured using the MultiRae. During the most recent monitoring (2021/2022) the instrument recorded methane at 0.1% of the LEL. This low result is to be expected given that methane will likely readily disperse over the distance between the source and the instrument.

Given that there have not been any significant changes to activities on-site or to the scale of production it is unlikely that the concentration of CO and percentage LEL at the monitoring site during this monitoring year would be significantly different than last year.

2.2.2.2 Fine particulate matter

Fine particulate less than 10µm in diameter (PM_{10}) and less than 2.5µm ($PM_{2.5}$) can enter deep into the lungs significantly reducing the exchange of gases across the lung walls. At high concentrations these can cause health impacts ranging from increased susceptibility to asthma and respiratory illness through to increased risk of premature death. PM_{10} and $PM_{2.5}$ come from multiple natural and anthropogenic sources including sea spray, crustal matter, and in particular, the combustion of fossil fuels. Emissions from the Kupe Production Station are primarily from the combustion of hydrocarbons in the flare and from vehicle engines.

The maximum concentrations of PM_{10} and $PM_{2.5}$ recorded during monitoring at Kupe Production Station were both 23µg/m³ and 21µg/m³ respectively, while 99th percentile of results was 22µg/m³ for PM_{10} and 20µg/m³ for $PM_{2.5}$ (Table 6). The results demonstrate that the majority of fine particulate was in the $PM_{2.5}$ size fraction which is expected for emissions from the combustion of natural gas.

Table 6 Results of fine particulate monitoring at Kupe PS.

Pollutant	Maximum (µg/m³)	99%ile (µg/m³)	Maximum 24-hr average (µg/m³)
PM10	23.0	22.0	16.0
PM2.5	21.0	20.0	15.0

During the deployment the maximum 24-hr average concentration of PM_{10} was 16.0µg/m³ which is significantly lower than the AAQS limit of 50µg/m³ (24-hr average). During the 2021/22 monitoring year the 24-hr average PM_{10} concentration was reported to be 13.4µg/m³ (day 1) and 12.9µg/m³ (day 2).The maximum 24-hr average concentration of $PM_{2.5}$ reported was 15µg/m³ which is lower than the WHO guideline value of 25µg/m³.

The Kupe production station is located in a rural area and the level of background PM_{10} is likely to be a result of vehicle emissions from Lower Inaha Rd to the east, dust from unsealed roads, and other rural activities such as fertiliser application. On this basis the background concentration of PM_{10} and $PM_{2.5}$ in the area is likely to be low and therefore discharges of HAPs from the combustion of natural gas at the Kupe site are not likely to cause ambient concentrations to approach the AAQS limit at any time.

2.2.2.3 Nitrogen dioxide

A portion of total NO_x includes nitrogen dioxide (NO_2) which can cause adverse health impacts as a result of short and long-term exposure durations. Short-term exposure to high concentrations can result in the inflammation of airways which may exacerbate asthma and other pre-existing respiratory problems. Long-term exposure to NO_2 may adversely impact lung development in children, and may lead to the development of asthma. The risk of developing certain forms of cancer and premature death also increases with long-term exposure to NO_2.

As a conservative approach the raw NO_x data are used as a proxy for NO_2 and the calculated TWAs are compared to the relevant health-based assessment criteria for NO_2 in Table 2 below.

Table 7 Raw data and calculated TWAs

Monitoring site	NOx result (µg)	NOx 1-hr average (µg/m³)	NOx 24-hr average (µg/m³)
AIR007827	<0.3	1.04	0.55
AIR007830	0.5	1.74	0.92
NO_2 Assessment criteria		**200 (AAQS)**	**100 (AAQG)**

As shown in Table 7 the calculated 1-hr average concentration of NO_x at the both monitoring sites was reported as <0.3µg/m³ and 0.5µg/m³ which are equivalent to 1-hr TWA of 1.04µg/m³ and 1.74µg/m³. The results are substantially lower than the NO_2 AAQS limit of 200µg/m, and among the lowest since monitoring began in 2016.

Similarly, the 24-hr average concentration at each of the monitoring locations was comparatively low with the concentrations calculated to be between 0.55µg/m³ and 0.92µg/m³ (Table 2). These results are significantly lower than the NO_2 AAQG of 100µg/m³.

Only a portion of NO_X is NO_2 and therefore the actual concentration of NO_2 at the monitoring locations will be less than reported. The 1-hr and 24-hr results are likely to be largely representative of background concentrations in rural areas.

2.2.3 Summary of flaring volumes reported by Beach Energy

A summary of gas flaring and fuel use at Kupe Production Station under Consents 6545-1 and 6546-1 is provided in Figure 9.

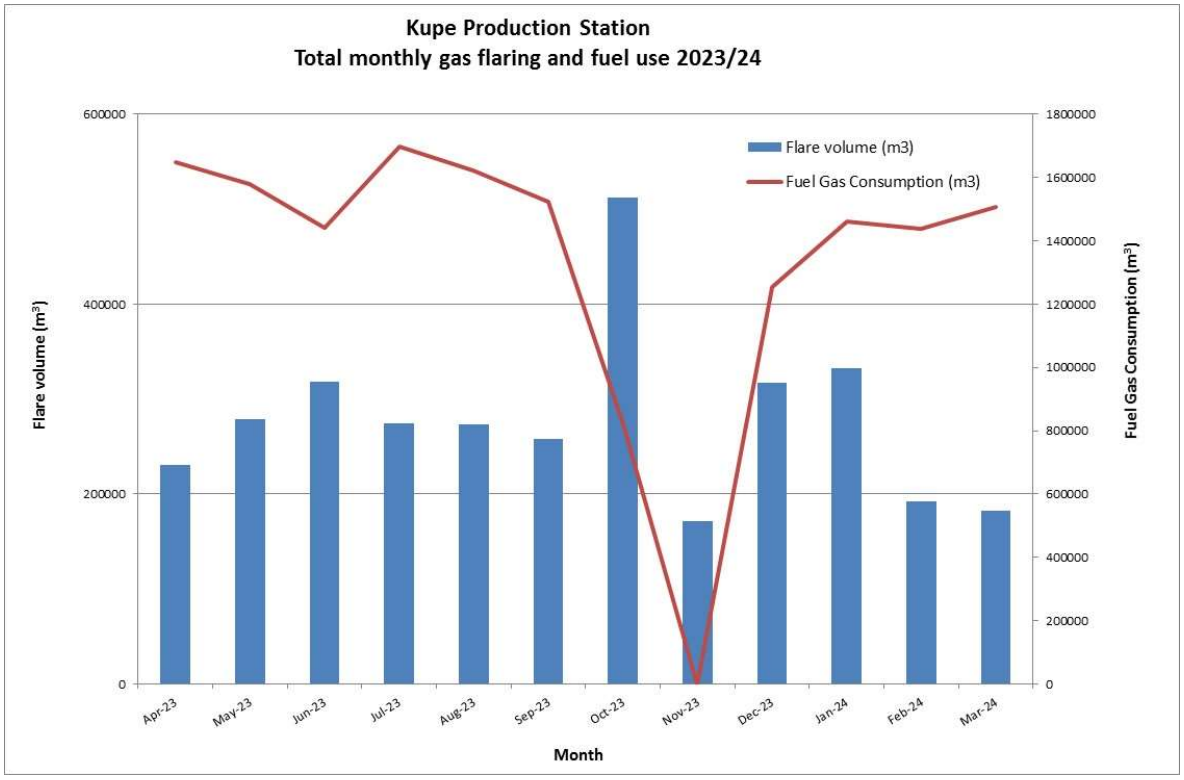

Figure 9 Monthly gas flaring and fuel use for Kupe Production Station

The total volume flared over the period (April 2023-March 2024) was 3,342,532m³, an increase compared with the previous 12 months (2,699,672m³). The Company attributes the overall decline in flaring over the previous five monitoring years to improvements in plant reliability and operational practice enhancements. The quantities flared each month vary and most flaring is related to process incidents, for example:

compressor trips, compressor maintenance activities, weather events affecting power supply, and when gas flows are off-specification.

During the current monitoring period there was an increase in flaring in October 2023 due to the KS-9 offshore drilling campaign, while in November 2023 there was a reduction in fuel gas usage due to the Kapuni Production Station four-yearly shutdown.

No visible smoke events were recorded and no complaints regarding flaring or other air emissions at the production station were received by the Company or the Council during the 2023/24 period.

2.3 Incidents, investigations, and interventions

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 Company. 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.

For all significant compliance issues, as well as complaints from the public, the Council maintains a database record. The record includes events where the individual/organisation concerned has itself notified the Council. Details of any investigation and corrective action taken are recorded for non-compliant events.

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 individual/organisation is indeed the source of the incident (or that the allegation cannot be proven).

In the 2023/24 period, the Council was not required to undertake significant additional investigations and interventions, or record incidents, in association with the Company's conditions in resource consents or provisions in Regional Plans.

3. Discussion

3.1 Discussion of site performance

Monitoring of the Kupe Production Station during the 2023/24 year found that the site was well managed. All consent conditions relating to site operations and management were complied with.

3.2 Environmental effects of exercise of consents

Site inspections found that the stormwater systems were constructed and maintained in accordance with consent conditions and operating effectively.

Sampling and biomonitoring did not indicate that the stormwater discharges from the Kupe Production Station had caused adverse effects on the water quality of the Kapuni Stream.

There were no adverse effects on the environment resulting from the exercise of the air discharge consents. The ambient air quality monitoring at the site showed that levels of carbon monoxide, fine particulate matter and nitrogen oxides were below levels of concern at the time of sampling. No offensive or objectionable odours were detected beyond the boundary during inspections and there were no complaints in relation to air emissions from the site.

Air quality monitoring has been undertaken at the site on an annual basis for a number of years now, with no exceedances of relevant standards or consent conditions. As a result of this it is recommended that monitoring of carbon monoxide and fine particulate matter be reduced to biennially in future. It is recommended that monitoring of nitrogen oxides is discontinued as there is no longer a provider for analysis of this monitoring in New Zealand and the results have all been well below applicable limits.

3.3 Evaluation of performance

A tabular summary of the consent holder's compliance record for the year under review is set out in Tables 8-16.

Table 8 Summary of performance for Consent 6531-1

Purpose: To disturb the seabed and foreshore of the coastal marine area by the process of erection, placement, use, alteration, extension, maintenance or removal of up to six pipelines and one power/fibre optic cable connecting an offshore wellhead/platform to the foreshore at mean high water spring		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
1. Exercise of consent in accordance with application	Inspection and liaison with consent holder	Yes
2. Pipe laying management plan to be provided	Provided February 2007	Yes
3. Programme of installation to be provided	Provided February 2007	Yes
4. Notification prior to maintenance work	Notification received	Yes
5. Contingency plan to be provided	Latest update received December 2021	Yes
6. Best practicable option to prevent or minimise adverse effects	Inspection and liaison with consent holder	Yes
7. Seabed disturbance to be minimised	Liaison with consent holder, work proposal submitted	Yes
8. Disturbance to be within a 100m corridor	Liaison with consent holder, work proposal submitted	Yes

Purpose: To disturb the seabed and foreshore of the coastal marine area by the process of erection, placement, use, alteration, extension, maintenance or removal of up to six pipelines and one power/fibre optic cable connecting an offshore wellhead/platform to the foreshore at mean high water spring		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
9. Disturbance to comply with noise standards	Liaison with consent holder, work proposal submitted	Yes
10. Work to cease on discovery of archaeological remains	No remains discovered	N/A
11. Consent holder to undertake pre and post lay monitoring surveys	Surveys complete	Yes
12. Lapse of consent	Consent exercised	N/A
13. Optional review provision re environmental effects	Next option for review in June 2029	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent Overall assessment of administrative performance in respect of this consent		**High** **High**

N/A = not applicable

Table 9 Summary of performance for Consent 6532-1

Purpose: To erect, place, use, reconstruct, alter, extend and maintain within the coastal marine area up to six pipelines connecting an offshore wellhead/platform to the foreshore at mean high water spring, with structures situated under the seabed from approximately 1,200m offshore to mean high water spring, and the related occupation of the seabed		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
1. Exercise of consent in accordance with application	Inspection and liaison with consent holder	Yes
2. Pipe laying management plan to be provided	Provided February 2007	Yes
3. Programme of installation to be provided	Provided February 2007	Yes
4. Notification prior to maintenance work	No maintenance during period under review	N/A
5. Contingency plan to be provided	Latest update received December 2021	Yes
6. Best practicable option to prevent or minimise adverse effects	No maintenance during period under review	N/A
7. Disturbance to comply with noise standards	No maintenance during period under review	N/A
8. Survey and map of position of pipeline to be provided	Provided by consent holder	Yes
9. Consent holder to undertake pre and post lay monitoring surveys	Surveys complete	Yes
10. Structures to be removed and area reinstated if and when no longer required	Structures still in use	N/A
11. Lapse of consent	Consent exercised	N/A
12. Optional review provision re environmental effects	Next option for review June 2029	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent Overall assessment of administrative performance in respect of this consent		**High** **High**

N/A = not applicable

Table 10 Summary of performance for Consent 6533-1

Purpose: To occupy the coastal marine area for a distance of 250m either side of the centre-line of a 100m wide pipeline corridor, from the outer limit of the territorial sea of New Zealand to mean high water spring, in a manner that will restrict public access		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
1. Exercise of consent in accordance with application	Inspection and liaison with consent holder	Yes
2. Public access to be maintained	Inspection and liaison with consent holder	Yes
3. Notification prior to works involving restriction of public access	No works requiring restriction carried out during period	N/A
4. Consent holder to survey and map position of the structure	Provided by consent holder	Yes
5. Lapse of consent	Consent exercised	N/A
6. Optional review provision re environmental effects	Next option for review June 2029	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent Overall assessment of administrative performance in respect of this consent		**High** **High**

N/A = not applicable

Table 11 Summary of performance for Consent 6543-1

Purpose: To discharge pipeline hydrotesting water and treated stormwater from the Kupe Production Station via a stormwater/firewater storage pond system, and to discharge stormwater from the Dangerous Goods Storage stormwater system into the Kapuni Stream		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
1. Exercise of consent in accordance with application	Inspection and liaison with consent holder	Yes
2. Plans of stormwater catchment and drainage pathways to be provided on completion of site	Plans received on completion	Yes
3. Notification prior to exercise of consent	Notifications received	Yes
4. Consent holder to review contingency plan for the site to include Dangerous Goods Store (DGS)	Review undertaken	Yes
5. Consent holder to adopt best practicable option	Inspection and liaison with consent holder	Yes
6. All discharges to be treated through stormwater treatment system (excluding DGS)	Inspection	Yes
7. All hazardous substance storage areas to be bunded	Inspection	Yes
8. Limits on contaminants in discharge	Sampling	Yes
9. Effects in receiving water	Inspections, sampling and biomonitoring	Yes
10. Lapse of consent	Consent exercised	N/A
11. Optional review provision re environmental effects	Next option for review June 2029	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent Overall assessment of administrative performance in respect of this consent		**High** **High**

N/A = not applicable

Table 12 Summary of performance for Consent 6545-1

Purpose: To discharge emissions to air from combustion involving the flaring of petroleum products incidental to the treatment of gas at the Kupe Production Station		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
1. Exercise of consent in accordance with application	Inspection and liaison with consent holder	Yes
2. Consent holder to adopt best practicable option	Inspection and liaison with consent holder	Yes
3. Most appropriate process equipment to minimise emissions	Inspection and liaison with consent holder	Yes
4. Consent holder to provide analysis of typical gas stream on request	Not requested during period under review	N/A
5. Consent holder to supply Council with report in May each year	Report received	Yes
6. Consent holder to consult with Council prior to significantly altering equipment or processes	Inspection and liaison with consent holder	Yes
7. Consent holder to provide a final site layout prior to commencement of production	Plans received	Yes
8. Notification to neighbours prior to commissioning	Letter sent by Origin Energy in October 2009	Yes
9. Notification of incidents	No incidents reported	Yes
10. Consent holder to supply record of all smoke emitting incidents upon request	Flaring report received	Yes
1. Consent holder to maintain a log of all continuous flaring incidents	Flaring report received	Yes
2. All practicable steps undertaken to minimise flaring	Measures discussed in flaring report	Yes
3. Prevention of dense black smoke from being discharged from flare	Inspection and liaison with consent holder	Yes
4. Consent holder to notify Council of continuous flaring	Notifications received	Yes
5. Discharge not to give rise to odour, dust or smoke beyond the boundary	Inspection	Yes
6. Discharge not to give rise to hazardous, toxic or noxious contaminant beyond the boundary	Inspection	Yes
7. Limits on carbon monoxide in the discharge	Air monitoring	Yes
8. Limits on nitrogen dioxide in discharge	Air monitoring	Yes
9. Limits on other contaminants	Not assessed during period under review	N/A
10. Lapse of consent	Consent exercised	N/A
11. Optional review of consent	Next option for review June 2029	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent Overall assessment of administrative performance in respect of this consent		**High** **High**

N/A = not applicable

Table 13 Summary of performance for Consent 6546-1

Purpose: To discharge emissions to air as products of combustion from the Kupe Production Station involving equipment burning natural gas as fuel where the maximum heat release is in excess of 10 megawatts, together with miscellaneous emissions		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
1. Exercise of consent in accordance with application	Inspection and liaison with consent holder	Yes
2. Consent holder to adopt best practicable option	Inspection and liaison with consent holder	Yes
3. Most appropriate process equipment to minimise emissions	Inspection and liaison with consent holder	Yes
4. Consent holder to provide analysis of typical gas stream on request	Not requested during period under review	N/A
5. Consent holder to supply Council with report in May each year	Report received	Yes
6. Consent holder to consult with Council prior to significantly altering equipment or processes	Inspection and liaison with consent holder	Yes
7. Consent holder to provide a final site layout prior to commencement of production	Plans received	Yes
8. Notification of incidents	No incidents reported	Yes
9. Consent holder to supply record of all smoke emitting incidents upon request	Flaring report received	Yes
10. Discharge not to give rise to dangerous levels of contaminants at or beyond boundary	Not assessed during period under review	N/A
11. Discharge not to give rise to odour, dust or smoke beyond the boundary	Inspection	Yes
12. Discharge not to give rise to hazardous, toxic or noxious contaminant beyond the boundary	Not assessed during period under review	N/A
13. Limits on carbon monoxide in the discharge	Air monitoring	Yes
14. Limits on nitrogen dioxide in discharge	Air monitoring	Yes
15. Limits on other contaminants	Not assessed during period under review	N/A
16. Lapse of consent	Consent exercised	N/A
17. Optional review of consent	Next option for review June 2029	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent Overall assessment of administrative performance in respect of this consent		**High** **High**

N/A = not applicable

Table 14 Summary of performance for Consent 6629-1

Purpose: To erect, place, use, reconstruct, alter, extend and maintain within the coastal marine area one power/fibre optic cable connecting an offshore wellhead/platform to the foreshore at mean high water spring, with structures situated under the seabed from approximately 1,200m offshore to mean high water spring, and the related occupation of the seabed		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
1. Exercise of consent in accordance with application	Inspection and liaison with consent holder	Yes

Purpose: To erect, place, use, reconstruct, alter, extend and maintain within the coastal marine area one power/fibre optic cable connecting an offshore wellhead/platform to the foreshore at mean high water spring, with structures situated under the seabed from approximately 1,200m offshore to mean high water spring, and the related occupation of the seabed		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
2. Pipe laying management plan to be provided	Provided in 2007	Yes
3. Programme of installation to be provided	Provided in 2007	Yes
4. Notification prior to maintenance work	No maintenance during period under review	Yes
5. Contingency plan to be provided	Latest update received December 2021	Yes
6. Best practicable option to prevent or minimise adverse effects	Inspection and liaison with consent holder	Yes
7. Works to comply with noise standards	Inspection and liaison with consent holder	Yes
8. Consent holder to survey and map position of structures	Plans received	Yes
9. Pre-lay and post-lay monitoring surveys of pipeline corridor	Surveys completed	Yes
10. Structures removed and area reinstated when no longer required	Structures still in use	N/A
11. Lapse of consent	Consent exercised	N/A
12. Review of consent	Next option for review June 2029	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent Overall assessment of administrative performance in respect of this consent		**High** **High**

N/A = not applicable

Table 15 Summary of performance for Consent 6979-1

Purpose: To install, construct and maintain up to seven water bores for horizontal directional drilling, pipeline hydro-testing, and production station operation purposes		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
1. Exercise of consent in accordance with application	Inspection and liaison with consent holder	Yes
2. Consent holder to supply bore completion log	Provided in 2007	Yes
3. Bores to be cased and sealed	Inspection and bore logs	Yes
4. Consent holder to mitigate any adverse environmental effects	Inspection and liaison with consent holder	Yes
5. Consent holder to decommission bores when no longer required	Bores still in use	N/A
6. Written notification of decommission	Bores still in use	N/A
7. Lapse of consent	Consent exercised	N/A
8. Review of consent	Next option for review June 2029	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent Overall assessment of administrative performance in respect of this consent		**High** **High**

N/A = not applicable

Table 16 Summary of performance for Consent 7010-1

Purpose: To take and use up to 3,500m^3/day groundwater at a maximum rate of 40L/s as a combined total from up to seven water bores in a bore field for the purpose of horizontal directional drilling, pipeline hydro-testing, production station operation and operations at the Manutahi-D, Manutahi-C, and Kauri-F wellsites		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
1. Exercise of consent in accordance with application	Review of abstraction data	Yes
2. Notification prior to exercise of consent	Notification received in October 2006	Yes
3. Results of pump test to be provided	Provided in March 2007	Yes
4. Volume of abstraction not to exceed 3500m^3 day and 40L/s	Review of abstraction data	Yes
5. Abstraction not to cause more than 10% lowering of static water level	Not monitored during period under review	N/A
6. Abstraction not to cause the intrusion of saltwater	Review of abstraction data	Yes
7. Consent holder to maintain daily records of abstraction	Records supplied electronically, on a daily basis, as per Resource Management (Measurement and Reporting of Water Takes) Regulations 2020.	Yes
8. Consent holder to install groundwater monitoring piezometers	Piezometers installed into groundwater bores only extracting from an unconfined aquifer. Piezometers not required for the two bores installed into the confined aquifer.	Yes
9. Consent holder to install and maintain a water meter	Installed in 2007. Meter verified in September 2019, next verification due 2024	Yes
10. Consent subject to monitoring by Council	Records reviewed and meter inspected	Yes
11. Lapse of consent	Consent exercised	N/A
12. Review of consent	Next option for review June 2029	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent Overall assessment of administrative performance in respect of this consent		**High** **High**

N/A = not applicable

Table 17 Evaluation of environmental performance over time

Year	Consent numbers	High	Good	Improvement req	Poor
2019/20	6531-1, 6532-1, 6533-1, 6543-1, 6545-1, 6546-1, 6629-1, 6979-1, 7010-1	9	-	-	-
2020/21	6531-1, 6532-1, 6533-1, 6543-1, 6545-1, 6546-1, 6629-1, 6979-1, 7010-1	9	-	-	-
2021/22	6531-1, 6532-1, 6533-1, 6543-1, 6545-1, 6546-1, 6629-1, 6979-1, 7010-1	9	-	-	-
2022/23	6531-1, 6532-1, 6533-1, 6543-1, 6545-1, 6546-1, 6629-1, 6979-1, 7010-1	9	-	-	-
2023/24	6531-1, 6532-1, 6533-1, 6543-1, 6545-1, 6546-1, 6629-1, 6979-1, 7010-1	9	-	-	-

During the year, the Company demonstrated a high level of both environmental and administrative performance with the resource consents as defined in Appendix II.

3.4 Recommendations from the 2022/23 Annual Report

In the 2022/23 Annual Report, it was recommended:

1. THAT in the first instance, monitoring of consented activities at the Kupe Production Station in the 2023/24 year continue at the same level as in 2022/23.

2. THAT should there be issues with environmental or administrative performance in 2023/24, monitoring may be adjusted to reflect any additional investigation or intervention as found necessary.

Recommendations one and three were implemented, while additional monitoring was not considered necessary as per recommendation two.

3.5 Alterations to monitoring programmes for 2024/25

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.

Planned changes for 2024/25 monitoring programme consist of reducing air quality monitoring (carbon monoxide and fine particulate matter) to biannually, this will next be undertaken in the 2025/26 monitoring period. Nitrogen dioxide monitoring will be discontinued.

It should be noted that the proposed programme represents a reasonable and risk-based level of monitoring for the site 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 2024/25.

4. Recommendations

1. THAT in the first instance, monitoring of consented activities at the Kupe Production Station in the 2024/25 year continue at a similar level as in 2023/24, with the reduction of some aspects of air quality monitoring to biennially and nitrogen dioxide monitoring discontinued.
2. THAT should there be issues with environmental or administrative performance in 2024/25, 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:

Biomonitoring	Assessing the health of the environment using aquatic organisms.
Bund	A wall around a tank to contain its contents in the case of a leak.
Conductivity	Conductivity is an indication of the level of dissolved salts in a sample, usually measured at 25°C and expressed in mS/m.
Fresh	Elevated flow in a stream, such as after heavy rainfall.
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.
IBC	Intermediate bulk container; reusable, multi-use industrial-grade containers engineered for the mass handling, transport and storage of liquids, semi-solids, pastes, or solids.
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.
MCI	Macroinvertebrate community index: a numerical indication of the state of biological life in a stream that takes into account the sensitivity of the taxa present to organic pollution in stony habitats.
MfE	Ministry for the Environment.
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.
mS/m	Millisiemens per metre.
NTU	Nephelometric Turbidity Unit, a measure of the turbidity of water.
O&G	Oil and grease, defined as anything that will dissolve into a particular organic solvent (e.g. hexane). May include both animal material (fats) and mineral matter (hydrocarbons).
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}	Relatively fine airborne particles (less than 10 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.
Sm^3	Standard cubic metre.
SS	Suspended solids.
SQMCI	Semi quantitative macroinvertebrate community index.
Temp	Temperature, measured in °C (degrees Celsius).
Turb	Turbidity, expressed in NTU and FNU.
UI	Unauthorised Incident.

For further information on analytical methods, contact a manager within the Environment Quality Department.

Bibliography and references

Ministry for the Environment. 2018. *Best Practice Guidelines for Compliance, Monitoring and Enforcement under the Resource Management Act 1991*. Wellington: Ministry for the Environment.

Taranaki Regional Council (October 2024): *Biomonitoring of the Kapuni Stream in relation to stormwater discharges from the Kupe Production Station, February 2024* (FK036).

Taranaki Regional Council (October 2024): *Biomonitoring of the Kapuni Stream in relation to stormwater discharges from the Kupe Production Station, October 2023* (FK036).

Taranaki Regional Council (2024): *Kupe Air Quality Monitoring 2023/24.* Internal memorandum.

Taranaki Regional Council (2023): *Beach Energy Resources (Kupe) Ltd Kupe Production Station Monitoring Programme Annual Report 2022-2023*. Technical Report 2023-59

Taranaki Regional Council (2022): *Beach Energy Resources (Kupe) Ltd Kupe Production Station Monitoring Programme Annual Report 2021-2022*. Technical Report 2022-64.

Taranaki Regional Council (2021): *Beach Energy Resources (Kupe) Ltd Kupe Production Station Monitoring Programme Annual Report 2020-2021*. Technical Report 2021-34.

Taranaki Regional Council (2020): *Beach Energy Resources (Kupe) Ltd Kupe Production Station Monitoring Programme Annual Report 2019-2020*. Technical Report 2020-73.

Taranaki Regional Council (2019): *Beach Energy Resources (Kupe) Ltd Kupe Production Station Monitoring Programme Annual Report 2018-2019*. Technical Report 2019-43.

Taranaki Regional Council (2019): *Beach Energy Resources (Kupe) Ltd Kupe Production Station Monitoring Programme Annual Report 2017-2018*. Technical Report 2018-75.

Taranaki Regional Council (2018): *Origin Energy Resources (Kupe) Ltd Kupe Production Station Monitoring Programme Annual Report 2016-2017*. Technical Report 2017-51.

Taranaki Regional Council (2016): *Origin Energy Resources (Kupe) Ltd Kupe Production Station Monitoring Programme Annual Report 2015-2016*. Technical Report 2016-21.

Taranaki Regional Council (2016): *Origin Energy Resources (Kupe) Ltd Kupe Production Station Monitoring Programme Annual Report 2014-2015*. Technical Report 2015-98.

Taranaki Regional Council (2015*): Origin Energy Resources (Kupe) Ltd Kupe Production Station Monitoring Programme Annual Report 2013-2014*. Technical Report 2014-125.

Taranaki Regional Council (2013): *Origin Energy Resources (Kupe) Ltd Kupe Production Station Monitoring Programme Annual Report 2012-2013*. Technical Report 2013-26.

Taranaki Regional Council (2012): *Origin Energy Resources (Kupe) Ltd Kupe Production Station Monitoring Programme Annual Report 2011-2012*. Technical Report 2012-24.

Taranaki Regional Council (2011): *Origin Energy Resources (Kupe) Ltd Kupe Production Station Monitoring Programme Annual Report 2010-2011*. Technical Report 2011-19.

Taranaki Regional Council (2010): *Origin Energy Resources (Kupe) Ltd Kupe Production Station Monitoring Programme Annual Report 2009-2010*. Technical Report 2010-27.

Taranaki Regional Council (2010): *Origin Energy Resources (Kupe) Ltd Kupe Gas Project Monitoring Programme Report (Development Phase) 2006-2009*. Technical Report 2009-09.

Appendix I

Resource consents held by Beach Energy Resources (Kupe) Ltd

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

Water abstraction permits

Section 14 of the RMA stipulates that no person may take, use, dam or divert any water, unless the activity is expressly allowed for by a resource consent or a rule in a regional plan, or it falls within some particular categories set out in Section 14. Permits authorising the abstraction of water are issued by the Council under Section 87(d) of the RMA.

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.

Discharges of wastes to land

Sections 15(1)(b) and (d) of the RMA stipulate that no person may discharge any contaminant onto land if it may then enter water, or from any industrial or trade premises onto land under any circumstances, unless the activity is expressly allowed for by a resource consent, a rule in a regional plan, or by national regulations. Permits authorising the discharge of wastes to land are issued by the Council under Section 87(e) of the RMA.

Land use permits

Section 13(1)(a) of the RMA stipulates that no person may in relation to the bed of any lake or river use, erect, reconstruct, place, alter, extend, remove, or demolish any structure or part of any structure in, on, under, or over the bed, unless the activity is expressly allowed for by a resource consent, a rule in a regional plan, or by national regulations. Land use permits are issued by the Council under Section 87(a) of the RMA.

Coastal permits

Section 12(1)(b) of the RMA stipulates that no person may erect, reconstruct, place, alter, extend, remove, or demolish any structure that is fixed in, on, under, or over any foreshore or seabed, unless the activity is expressly allowed for by a resource consent, a rule in a regional plan, or by national regulations. Coastal permits are issued by the Council under Section 87(c) 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:	Beach Energy Resources NZ (Kupe) Limited Private Bag 2022 New Plymouth 4342
Decision Date (Change):	7 March 2012
Commencement Date (Change):	7 March 2012 (Granted Date: 9 December 2005)

Conditions of Consent

Consent Granted:	To disturb the seabed and foreshore of the coastal marine area by the process of erection, placement, use, alteration, extension, maintenance or removal of up to six pipelines and one power/fibre optic cable connecting an offshore wellhead/platform to the foreshore at mean high water spring
Expiry Date:	1 June 2039
Review Date(s):	June 2023, June 2029, June 2034
Site Location:	Kupe Production Station, Kupe Project, offshore pipelines, from mean high water spring directly south of Inaha Road, Inaha, Manaia, to the coastal marine area boundary 22 km further south
Grid Reference (NZTM)	1699850E-5617662N
Catchment:	Tasman Sea

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

General condition

a. The consent holder shall pay to the Taranaki Regional Council all the administration, monitoring and supervision costs of this consent, fixed in accordance with section 36 of the Resource Management Act 1991.

Special conditions

1. The exercise of this consent shall be undertaken generally in accordance with the documentation submitted in support of applications 3501 and 6970, and special condition 2. In the case of any contradiction between the documentation submitted in support of applications 3501 and 6970, and the conditions of this consent, the conditions of this consent shall prevail.

2. At least one month prior to the exercise of this consent the consent holder shall provide, to the written satisfaction of the Chief Executive, Taranaki Regional Council, detailed plans of the activity to confirm that the proposal is generally in accordance with the application and supporting documentation and will comply with all of the conditions of this consent.

3. At least 10 working days prior to the commencement of works the consent holder shall provide the Taranaki Regional Council with a programme for the disturbance associated with installation/construction (or removal) of the pipeline(s) including: a schedule of proposed start dates and an estimation of the duration of the works, and details of the contractor including contact information for the project manager.

4. The consent holder shall notify the Chief Executive, Taranaki Regional Council, in writing at least 48 hours prior to commencement and upon completion of any subsequent maintenance works which would involve disturbance of, or deposition or discharge to, the coastal marine area.

5. Prior to the exercise of this consent the consent holder shall provide to the satisfaction of the Chief Executive, Taranaki Regional Council, a written contingency plan outlining measures to be undertaken in the event of a spill as a result of works authorised by this consent.

6. The consent holder shall at all times adopt the best practicable option, as defined in section 2 of the Resource Management Act 1991, to avoid or minimise the discharge of silt, sediments or any other contaminants into coastal water or onto the foreshore or seabed and to avoid or minimise the disturbance of the foreshore or seabed and any adverse effects on coastal water quality or ecosystems.

7. The consent holder shall ensure that the duration, area and volume of seabed disturbance shall, so far as is practicable, be minimised to the satisfaction of the Chief Executive, Taranaki Regional Council.

8. The consent holder shall ensure that all disturbance, including the placement of displaced boulders, shall be contained within a 100 metre wide disturbance corridor. Outside of the 100 metre wide disturbance corridor the exercise of this consent shall not give rise to any significant adverse ecological effects including effects to kaimoana.

9. The disturbance authorised by this consent shall comply with the noise standards as outlined within section 4.4.3 of the Regional Coastal Plan for Taranaki.

10. In the event that any archaeological remains are discovered as a result of works authorised by this consent, the works shall cease immediately at the affected site and tangata whenua and the Chief Executive, Taranaki Regional Council, shall be notified within one working day. Works may recommence at the affected area when advised to do so by the Chief Executive, Taranaki Regional Council. Such advice shall be given after the Chief Executive has considered: tangata whenua interest and values, the consent holder's interests, the interests of the public generally, and any archaeological or scientific evidence. The New Zealand Police, Coroner, and Historic Places Trust shall also be contacted as appropriate, and the work shall not recommence in the affected area until any necessary statutory authorisations or consent have been obtained.

11. The consent holder shall undertake pre-lay and post-lay monitoring surveys of the pipeline corridor, to the satisfaction of the Chief Executive, Taranaki Regional Council. The monitoring shall include one survey prior to disturbance, one survey immediately following laying of the pipelines, and one survey approximately 1 year following laying of the pipelines. The results of the monitoring shall be provided to the Chief Executive, Taranaki Regional Council, upon request.

12. This consent shall lapse on the expiry of five (5) years after the date of commencement of this consent, unless the consent is given effect to before the end of that period or the Taranaki Regional Council fixes a longer period pursuant to section 125(1)(b) of the Resource Management Act 1991.

13. 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 2011 and/or June 2017 and/or June 2023 and/or June 2029 and/or June 2034, 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 17 April 2018

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:	Beach Energy Resources NZ (Kupe) Limited Private Bag 2022 New Plymouth 4342
Decision Date (Change):	7 March 2012
Commencement Date (Change):	7 March 2012 (Granted Date: 9 December 2005)

Conditions of Consent

Consent Granted:	To erect, place, use, reconstruct, alter, extend and maintain within the coastal marine area up to six pipelines connecting an offshore wellhead/platform to the foreshore at mean high water spring, with structures situated under the seabed from approximately 1200 metres offshore to mean high water spring, and the related occupation of the seabed
Expiry Date:	1 June 2039
Review Date(s):	June 2023, June 2029, June 2034
Site Location:	Kupe Project, offshore pipelines, from mean high water spring directly south of Inaha Road, Inaha, Manaia, to the coastal marine area boundary 22 km further south
Grid Reference (NZTM)	1699850E-5617662N
Catchment:	Tasman Sea

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

General condition

a. The consent holder shall pay to the Taranaki Regional Council all the administration, monitoring and supervision costs of this consent, fixed in accordance with section 36 of the Resource Management Act 1991.

Special conditions

1. The exercise of this consent shall be undertaken generally in accordance with the documentation submitted in support of applications 3502 and 6971, and special condition 2. In the case of any contradiction between the documentation submitted in support of applications 3502 and 6971, and the conditions of this consent, the conditions of this consent shall prevail.

2. At least one month prior to the exercise of this consent the consent holder shall provide, to the written satisfaction of the Chief Executive, detailed plans of the activity to confirm that the proposal is generally in accordance with the application and supporting documentation and will comply with all of the conditions of this consent.

3. At least 10 working days prior to the commencement of works the consent holder shall provide the Taranaki Regional Council with a programme for the installation/construction of the pipeline(s), including: a schedule of proposed start dates and an estimation of the duration of the works, and details of the contractor including contact information for the project manager.

4. The consent holder shall notify the Chief Executive, Taranaki Regional Council, in writing at least 48 hours prior to commencement and upon completion of any subsequent maintenance works which would involve disturbance of, or deposition, or discharge to, the coastal marine area.

5. Prior to the exercise of this consent the consent holder shall provide, to the satisfaction of the Chief Executive, Taranaki Regional Council, a written construction contingency plan, outlining measures to be undertaken in the event of a spill as a result of works authorised by this consent. Further, prior to the exercise of this consent the consent holder shall provide to the Chief Executive, Taranaki Regional Council, written confirmation of the acceptance by the Maritime Safety Authority of a New Zealand Offshore Installation Site Marine Oil Spill Contingency Plan.

6. The consent holder shall at all times adopt the best practicable option, as defined in section 2 of the Resource Management Act 1991, to avoid or minimise the discharge of any contaminants into coastal water or onto the foreshore or seabed and to avoid or minimise any adverse effects on coastal water quality or ecosystems.

7. The construction, use, maintenance and removal of the structure(s) authorised by this consent shall comply with the noise standards as outlined within section 4.4.3 of the Regional Coastal Plan for Taranaki.

8. The consent holder shall survey and map the position of the pipeline(s), (including details of the pipeline(s) position in relation to the seabed), within 90 days of the completion of their construction, and shall provide a copy of the plan showing the precise location (to within plus or minus 5 metres) of the structure(s) on/in the seabed, to the Taranaki Regional Council, the Hydrographic Office, Royal New Zealand Navy, and the Maritime Safety Authority.

9. The consent holder shall undertake pre-lay and post-lay monitoring surveys of the pipeline corridor, to the satisfaction of the Chief Executive, Taranaki Regional Council. The monitoring shall include one survey prior to disturbance, one survey immediately following laying of the pipelines, and one survey approximately 1 year following laying of the pipelines. The results of the monitoring shall be provided to the Chief Executive, Taranaki Regional Council, upon request.

10. Except with the written agreement of the Chief Executive, Taranaki Regional Council, all structures authorised by this consent shall be removed and the area(s) reinstated, if and when the structure(s) are no longer required. The consent holder shall notify the Chief Executive, Taranaki Regional Council in writing at least 1 month prior to any structure(s) removal. Reinstatement shall be to the satisfaction of the Chief Executive, Taranaki Regional Council.

11. This consent shall lapse on the expiry of five (5) years after the date of commencement of this consent, unless the consent is given effect to before the end of that period or the Taranaki Regional Council fixes a longer period pursuant to section 125(1)(b) of the Resource Management Act 1991.

12. 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 2011 and/or June 2017 and/or June 2023 and/or June 2029 and/or June 2034, 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 17 April 2018

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:	Beach Energy Resources NZ (Kupe) Limited Private Bag 2022 New Plymouth 4342
Decision Date:	9 December 2005
Commencement Date:	9 December 2005

Conditions of Consent

Consent Granted:	To occupy the coastal marine area for a distance of 250 metres either side of the centre-line of a 100 metre wide pipeline corridor, from the outer limit of the territorial sea of New Zealand to mean high water spring, in a manner that will restrict public access
Expiry Date:	1 June 2039
Review Date(s):	June 2023, June 2029, June 2034
Site Location:	Kupe Project, offshore pipelines, from mean high water spring directly south of Inaha Road, Inaha, Manaia, to the coastal marine area boundary 22 km further south
Grid Reference (NZTM)	1699850E-5617660N
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 requirement from the Chief Executive, Taranaki Regional Council (hereinafter the Chief Executive), 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 must 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; and
   ii) charges authorised by regulations.

Special conditions

1. The exercise of this consent shall be undertaken generally in accordance with the documentation submitted in support of application 3503. In the case of any contradiction between the documentation submitted in support of application 3503 and the conditions of this consent, the conditions of this consent shall prevail.

2. With the exception of the area required for safety purposes during: construction, inspection, maintenance or removal, of the structure(s) licensed by coastal permit 6532 and 6629; or the disturbance licensed by coastal permit 6531, the exercise of this consent shall not prevent the free passage of any member of the public through the coastal marine area (subject however to any restrictions imposed under the Submarine Cables and Pipelines Protection Act 1996 in relation to fishing operations).

3. The consent holder shall notify the Chief Executive, Taranaki Regional Council in writing at least 48 hours prior to commencement and upon completion of any subsequent maintenance works which would involve restriction of public access within the coastal marine area.

4. The consent holder shall survey and map the position of the structure(s) within 90 days of the completion of their construction, and shall provide a copy of the plan showing the precise location (to within plus or minus 5 metres) of the structure(s) on the seabed, and the location of the occupied areas to the Taranaki Regional Council, the Hydrographic Office, Royal New Zealand Navy, and the Maritime Safety Authority.

5. This consent shall lapse on the expiry of five (5) years after the date of commencement of this consent, unless the consent is given effect to before the end of that period or the Taranaki Regional Council fixes a longer period pursuant to section 125(1)(b) of the Resource Management Act 1991.

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 2011 and/or June 2017 and/or June 2023 and/or June 2029 and/or June 2034, 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 17 April 2018

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:	Beach Energy Resources NZ (Kupe) Limited	
Decision Date (Change):	3 September 2021	
Commencement Date (Change):	3 September 2021	(Granted Date: 8 December 2016)

Conditions of Consent

Consent Granted:	To discharge pipeline hydrotesting water, cooling water and treated stormwater from the Kupe Production Station via a stormwater/firewater storage pond system, and to discharge stormwater from the Dangerous Goods Storage stormwater system into the Kapuni Stream
Expiry Date:	1 June 2039
Review Date(s):	June 2023, June 2029, June 2034
Site Location:	Kupe Production Station, 192 Lower Inaha Road, Inaha
Grid Reference (NZTM)	1699150E-5618660N
Catchment:	Kapuni

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

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Please quote our document number in your reply

General condition

a. The consent holder shall pay to the Taranaki Regional Council all the administration, monitoring and supervision costs of this consent, fixed in accordance with section 36 of the Resource Management Act 1991.

Special conditions

1. The exercise of this consent shall be undertaken in general accordance with the information provided in support of the original application for this consent and with any subsequent application to change consent conditions and special condition 2. In the case of any contradiction between applications the later application shall prevail, and where there is conflict between an application and the conditions of this consent, the conditions of this consent shall prevail.

2. Within one month of the completion of the development of the site the consent holder shall provide, to the written satisfaction of the Chief Executive, Taranaki Regional Council, detailed plans of stormwater catchment and drainage pathways, including clean areas, potentially contaminated areas, and bunded areas, and the containment, treatment and discharge systems put into place.

3. The consent holder shall notify the Chief Executive, Taranaki Regional Council, in writing at least seven days prior to the exercise of this consent.

4. The consent holder shall review the contingency plan for the site and include, if necessary, the new Dangerous Goods Store. The consent holder shall provide the plan for the written approval of the Chief Executive, Taranaki Regional Council. The plan shall include site specific details relating to contingency planning for the site.

5. 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 of the discharge on any water body.

6. All stormwater, cooling and hydrotest water to be discharged under this permit shall be directed for treatment through the stormwater treatment system for discharge, excluding the stormwater discharge from the Dangerous Goods Storage stormwater system, which shall be discharged into the Kapuni Stream, in accordance with the special conditions of this consent.

7. The only contaminant allowed in the cooling water that is included in the discharge is the corrosion/scale inhibitor, 3D TRASAR 3DT465, or another similar product that has no greater potential to cause adverse effects in the receiving environment. The consent holder shall advise the Chief Executive, Taranaki Regional Council if the specific corrosion/scale inhibitor in the discharge changes.

8. 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.

9. The following concentrations 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}
chloride	230 gm^{-3}

This condition shall apply prior to the entry of the treated stormwater into the Kapuni Stream at a designated sampling point(s) approved by the Chief Executive, Taranaki Regional Council.

10. After allowing for reasonable mixing, within a mixing zone extending 50 metres downstream of the discharge point, the discharge shall not give rise to any of the following effects in the receiving waters of the Kapuni Stream the production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials;

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) the rendering of fresh water unsuitable for consumption by farm animals;
e) any significant adverse effects on aquatic life.

11. 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 2023 and/or June 2029 and/or June 2034, 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 September 2021

For and on behalf of
Taranaki Regional Council

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:	Beach Energy Resources NZ (Kupe) Limited Private Bag 2022 New Plymouth 4342
Decision Date (Change):	2 April 2007
Commencement Date (Change):	2 April 2007 (Granted Date: 21 June 2005)

Conditions of Consent

Consent Granted:	To discharge emissions to air from combustion involving the flaring of petroleum products incidental to the treatment of gas at the Kupe Production Station
Expiry Date:	1 June 2039
Review Date(s):	June 2023, June 2029, June 2034
Site Location:	Kupe Project, west of Inaha Road, east of Kapuni Road (being a paper road) and south of Siggs Road (being a paper road), Inaha, Manaia (Production Station)
Grid Reference (NZTM)	1699750E-5618461N

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

Condition 1 – changed

1. The exercise of this consent shall be undertaken in general accordance with the documentation submitted in support of applications 3515 and 4498. In the case of any contradiction between the documentation submitted in support of application 3515 and 4498 and the conditions of this consent, the conditions of this consent shall prevail.

Conditions 2 to 5 – unchanged

2. 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 actual or likely adverse effects on the environment associated with the discharge of contaminants into the environment arising from the emissions to air from the flare.

3. The consent holder shall minimise the emissions and impacts of air contaminants discharged from the flare by the selection of the most appropriate process equipment, process control equipment, emission control equipment, methods of control, supervision and operation, and the proper and effective operation, supervision, control and maintenance of all equipment and processes.

4. The consent holder shall make available to the Chief Executive upon request an analysis of a typical gas and/or condensate stream from the Kupe field, covering sulphur compound content and the content of compounds containing six or more carbon atoms in their molecular structure.

5. The consent holder shall provide to the Taranaki Regional Council during May of each year, for the duration of this consent, a report:

   a) detailing gas combustion at the production station flares, including but not restricted to routine operational flaring and flaring logged as per condition 11;
   b) detailing any measures that have been undertaken by the consent holder to improve the energy efficiency of the production station;
   c) detailing any measures to reduce smoke emissions;
   d) detailing any measures to reduce flaring,
   e) addressing any other issue relevant to the minimisation or mitigation of emissions from the production station flare; and
   f) detailing any complaints received and any measures undertaken to address complaints.

Condition 6 – changed

6. Prior to undertaking any alterations to the plant equipment, processes or operations, which may substantially alter the nature or quantity of flare emissions other than as notified in consent applications 3515 and 4498, the consent holder shall first consult with the Chief Executive, Taranaki Regional Council, and shall obtain any necessary approvals under the Resource Management Act 1991.

Conditions 7 to 21 – unchanged

7. Prior to the commencement of production, the consent holder shall supply to the Chief Executive, Taranaki Regional Council, a final site lay-out plan, demonstrating configuration of the facilities and equipment so as to avoid or mitigate the potential effects of air emissions.

8. At least 3 days before the commissioning of the plant, the consent holder shall undertake all practicable measures to notify owners or occupiers of properties within 1 kilometre of the boundary of the property on which the production station flare is located, of the possibility of flaring and smoke emissions. The consent holder shall include in the notification a 24-hour contact telephone number for a representative of the consent holder.

9. Any incident having an environmental effect or potential effect which has caused or is liable to cause substantiated complaint or a hazardous situation beyond the boundary of the property on which the production station flare is located, shall be notified to the Taranaki Regional Council, as soon as possible, followed by a written report to the Chief Executive, Taranaki Regional Council, within one week of the incident, with comment about the measures taken to minimise the impact of the incident and to prevent re-occurrence.

10. The consent holder shall keep and make available to the Chief Executive, Taranaki Regional Council, upon request, a record of all smoke emitting incidents, noting time, duration and cause. The consent holder shall also keep, and make available to the Chief Executive, upon request, a record of all complaints received as a result of the exercise of this consent.

11. The consent holder shall keep and maintain a log of all continuous flaring incidents longer than 5 minutes and any intermittent flaring lasting for an aggregate of 10 minutes or longer in any 60-minute period. Such a log shall contain the date, the start and finish times, the quantity and type of material flared, and the reason for flaring. This log shall be made available to the Chief Executive, Taranaki Regional Council, upon request, and summarised annually in the report required under condition 5. Flaring, under normal operation in the low pressure flare, of rich mono-ethylene glycol degasser vapour, condensate tank vapours, non-condensibles from tri-ethylene glycol/mono-ethylene glycol regeneration and purge gas shall be excluded from this requirement.

12. All practicable steps shall be taken to minimise flaring.

13. Other than in emergencies, the rate of depressurisation of the plant, or sections of the plant, shall be managed to prevent dense black smoke from being discharged from the flare.

14. The consent holder shall, whenever practicable, notify the Chief Executive, Taranaki Regional Council, whenever the continuous flaring of hydrocarbons (other than the flaring of rich mono-ethylene glycol degasser vapour, condensate tank vapours, non-condensibles from tri-ethylene glycol/mono-ethylene glycol regeneration and purge gas) is expected to occur for more than five minutes in duration.

15. The discharges authorised by this consent shall not, whether alone or in conjunction with any other emissions from the site arising through the exercise of any other consent, give rise to any levels of odour or dust or smoke that are offensive or obnoxious or objectionable at or beyond the site boundary in the opinion of an enforcement officer of the Taranaki Regional Council.

16. The consent holder shall not discharge any contaminant to air from the site at a rate or a quantity such that the contaminant, whether alone or in combination with other contaminants, is or is liable to be hazardous or toxic or noxious at or beyond the boundary of the property where the production station is located, or at any dwellinghouse.

17. The consent holder shall control all discharges of carbon monoxide to the atmosphere from the flare, whether alone or in conjunction with any other emissions from the site arising through the exercise of any other consent, in order that the maximum ground level concentration of carbon monoxide arising from the exercise of this consent measured under ambient conditions does not exceed 10 milligrams per cubic metre (eight-hour average exposure), or 30 milligrams per cubic metre (one-hour average exposure) at or beyond the boundary of the property on which the production station flare is located.

18. The consent holder shall control all discharges of nitrogen dioxide or its precursors to the atmosphere from the flare, whether alone or in conjunction with any other discharges to the atmosphere from the site arising through the exercise of any other consent, in order that the maximum ground level concentration of nitrogen dioxide arising from the exercise of this consent measured under ambient conditions does not exceed 200 micrograms per cubic metre (one hour average exposure), or 100 micrograms per cubic metre (twenty-four hour average exposure), at or beyond the boundary of the property on which the production station flare is located.

19. The consent holder shall control discharges to the atmosphere from the flare of contaminants other than carbon dioxide, carbon monoxide, and nitrogen oxides, whether alone or in conjunction with any other emissions from the site arising through the exercise of any other consent, in order 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 property on which the production station flare is located, is not increased above background levels:

    a) by more than 1/30th of the relevant Workplace Exposure Standard-Time Weighted Average (exposure averaged over a duration as specified for the Workplace Exposure Standard-Time Weighted Average), or by more than 1/10th of the Workplace Exposure Standard-Short Term Exposure Limit over any short period of time (all terms as defined in Workplace Exposure Standards, 2002, Department of Labour); or
    b) if no Short Term Exposure Limit is set, by more than the General Excursion Limit at any time (all terms as defined in Workplace Exposure Standards, 2002, Department of Labour).

20. This consent shall lapse on the expiry of five (5) years after the date of commencement of this consent, unless the consent is given effect to before the end of that period or the Taranaki Regional Council fixes a longer period pursuant to section 125(1)(b) of the Resource Management Act 1991.

21. 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 within six months of receiving a report prepared by the consent holder pursuant to condition 5 of this consent, or by giving notice of review during the month of June 2007 and/or June 2009 and/or June 2011 and/or June 2017 and/or June 2023 and/or June 2029 and/or June 2034, for the purposes of:

    a) dealing with any significant adverse effect on the environment arising from the exercise of the consent which was not foreseen at the time the application was considered or which it was not appropriate to deal with at the time; and/or
    b) requiring the consent holder to adopt the best practicable option to remove or reduce any adverse effect on the environment caused by the discharge; and/or
    c) to alter, add or delete limits on mass discharge quantities or discharge or ambient concentrations of any contaminant or contaminants; and/or
    d) taking into account any Act of Parliament, regulation, national policy statement or national environmental standard which relates to limiting, recording, or mitigating emissions of carbon dioxide and/or nitrogen dioxide, and which is relevant to the air discharge from the Kupe Production Station.

Transferred at Stratford on 17 April 2018

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:	Beach Energy Resources NZ (Kupe) Limited Private Bag 2022 New Plymouth 4342
Decision Date:	21 June 2005
Commencement Date:	21 June 2005

Conditions of Consent

Consent Granted:	To discharge emissions to air as products of combustion from the Kupe Production Station involving equipment burning natural gas as fuel where the maximum heat release is in excess of 10 megawatts, together with miscellaneous emissions
Expiry Date:	1 June 2039
Review Date(s):	June 2023, June 2029, June 2034
Site Location:	Kupe Production Station, west of Inaha Road, east of Kapuni Road (being a paper road) and south of Siggs Road (being a paper road), Inaha, Manaia
Grid Reference (NZTM)	1699750E-5618461N

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 exercise of this consent shall be undertaken generally in accordance with the documentation submitted in support of application 3516. In the case of any contradiction between the documentation submitted in support of application 3516 and the conditions of this consent, the conditions of this consent shall prevail.

2. 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 actual or likely adverse effects on the environment associated with the discharge of contaminants into the environment arising from the emissions to air from the site.

3. The consent holder shall minimise the emissions and impacts of air contaminants discharged from the site by the selection of the most appropriate process equipment, process control equipment, emission control equipment, methods of control, supervision and operation, and the proper and effective operation, supervision, control and maintenance of all equipment and processes.

4. The consent holder shall make available to the Chief Executive, Taranaki Regional Council, upon request an analysis of a typical gas and/or condensate stream from the Kupe field, covering sulphur compound content and the content of compounds containing six or more carbon atoms in their molecular structure.

5. The consent holder shall provide to the Taranaki Regional Council during May of each year, for the duration of this consent, a report:

   a) detailing gas combustion at the production station;
   b) detailing any measures that have been undertaken by the consent holder to improve the energy efficiency of the production station;
   c) detailing any measures to reduce smoke emissions;
   d) detailing any measures to reduce flaring;
   e) addressing any other issue relevant to the minimisation or mitigation of emissions from the production station; and
   f) detailing any complaints received and any measures undertaken to address complaints.

6. Prior to undertaking any alterations to the plant, processes or operations, which may significantly change the nature or quantity of contaminants emitted to air from the site, the consent holder shall first consult with the Chief Executive, Taranaki Regional Council, and shall obtain any necessary approvals under the Resource Management Act 1991.

7. Prior to the commencement of production, the consent holder shall supply to the Chief Executive, Taranaki Regional Council, a final site lay-out plan, demonstrating configuration of the facilities and equipment so as to avoid or mitigate the potential effects of air emissions.

8. Any incident having an environmental impact or potential environmental impact which has caused or is liable to cause substantiated complaint or a hazardous situation beyond the boundary of the property on which the production station is located, shall be notified to the Taranaki Regional Council, as soon as possible, followed by a written report to the Chief Executive, Taranaki Regional Council, within one week of the incident, with comment about the measures taken to minimise the impact of the incident and to prevent re-occurrence.

9. The consent holder shall keep and make available to the Chief Executive, Taranaki Regional Council, upon request, a record of all smoke emitting incidents and all relief valve releases, noting time, duration and cause. The consent holder shall also keep, and make available to the Chief Executive, upon request, a record of all complaints received as a result of the exercise of this consent.

10. The discharges authorised by this consent shall not, whether alone or in conjunction with any other emissions from the site arising through the exercise of any other consent, give rise to any dangerous levels of airborne contaminants at or beyond the boundary of the property including but not limited to any risk of fire or explosion.

11. The discharges authorised by this consent shall not, whether alone or in conjunction with any other emissions from the site arising through the exercise of any other consent, give rise to any levels of odour or dust or smoke that are offensive or obnoxious or objectionable at or beyond the boundary of the property on which the production station is located in the opinion of an enforcement officer of the Taranaki Regional Council.

12. The consent holder shall not discharge any contaminant to air from the site at a rate or a quantity such that the contaminant, whether alone or in conjunction with any other emissions from the site arising through the exercise of any other consent, is or is liable to be hazardous or toxic or noxious at or beyond the boundary of the property where the production station is located, or at any dwellinghouse.

13. The consent holder shall control all discharges of carbon monoxide to the atmosphere from the site, whether alone or in conjunction with any other emissions from the site arising through the exercise of any other consent, in order that the maximum ground level concentration of carbon monoxide arising from the exercise of this consent measured under ambient conditions does not exceed 10 milligrams per cubic metre (eight-hour average exposure), or 30 milligrams per cubic metre (one-hour average exposure) at or beyond the boundary of the property on which the production station is located.

14. The consent holder shall control all discharges of nitrogen dioxide or its precursors to the atmosphere from the site, whether alone or in conjunction with any other discharges to the atmosphere from the site arising through the exercise of any other consent, in order that the maximum ground level concentration of nitrogen dioxide arising from the exercise of this consent measured under ambient conditions does not exceed 200 micrograms per cubic metre (one hour average exposure), or 100 micrograms per cubic metre (twenty-four hour average exposure), at or beyond the boundary of the property on which the production station is located.

15. The consent holder shall control discharges to the atmosphere from the site of contaminants other than carbon dioxide, carbon monoxide, and nitrogen oxides, whether alone or in conjunction with any other emissions from the site arising through the exercise of any other consent, in order 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 property on which the production station is located, is not increased above background levels:

    a) by more than 1/30th of the relevant Workplace Exposure Standard-Time Weighted Average (exposure averaged over a duration as specified for the Workplace Exposure Standard-Time Weighted Average), or by more than 1/10th of the Workplace Exposure Standard-Short Term Exposure Limit over any short period of time (all terms as defined in Workplace Exposure Standards, 2002, Department of Labour); or

    b) if no Short Term Exposure Limit is set, by more than the General Excursion Limit at any time (all terms as defined in Workplace Exposure Standards, 2002, Department of Labour).

16. This consent shall lapse on the expiry of five (5) years after the date of commencement of this consent, unless the consent is given effect to before the end of that period or the Taranaki Regional Council fixes a longer period pursuant to section 125(1)(b) of the Resource Management Act 1991.

17. 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 within six months of receiving a report prepared by the consent holder pursuant to condition 5 of this consent, or by giving notice of review during the month of June 2007 and/or June 2009 and/or June 2011 and/or June 2017 and/or June 2023 and/or June 2029 and/or June 2034, for the purposes of:

    a) dealing with any significant adverse effect on the environment arising from the exercise of the consent which was not foreseen at the time the application was considered or which it was not appropriate to deal with at the time; and/or
    b) requiring the consent holder to adopt the best practicable option to remove or reduce any adverse effect on the environment caused by the discharge; and/or
    c) to alter, add or delete limits on mass discharge quantities or discharge or ambient concentrations of any contaminant or contaminants; and/or
    d) taking into account any Act of Parliament, regulation, national policy statement or national environmental standard which relates to limiting, recording, or mitigating emissions of carbon dioxide and/or nitrogen dioxide, and which is relevant to the air discharge from the Kupe Production Station.

Transferred at Stratford on 17 April 2018

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:	Beach Energy Resources NZ (Kupe) Limited Private Bag 2022 New Plymouth 4342
Decision Date:	28 October 2005
Commencement Date:	28 October 2005

Conditions of Consent

Consent Granted:	To erect, place, use, reconstruct, alter, extend and maintain within the coastal marine area one power/fibre optic cable connecting an offshore wellhead/platform to the foreshore at mean high water spring, with structures situated under the seabed from approximately 1200 metres offshore to mean high water spring, and the related occupation of the seabed
Expiry Date:	1 June 2039
Review Date(s):	June 2023, June 2029, June 2034
Site Location:	Kupe Project, offshore pipelines, from mean high water spring directly south of Inaha Road, Inaha, Manaia, to the coastal marine area boundary 22 km further south
Grid Reference (NZTM)	1699850E-5617660N
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 requirement from the Chief Executive, Taranaki Regional Council (hereinafter the Chief Executive), 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 must 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; and
ii) charges authorised by regulations.

Special conditions

1. The exercise of this consent shall be undertaken generally in accordance with the documentation submitted in support of application 3502, and special condition 2. In the case of any contradiction between the documentation submitted in support of application 3502 and the conditions of this consent, the conditions of this consent shall prevail.

2. At least one month prior to the exercise of this consent the consent holder shall provide, to the written satisfaction of the Chief Executive, Taranaki Regional Council, a detailed pipe laying management plan. The purpose of the management plan is to set out the investigations to be undertaken and the procedure to be adopted to minimise the disturbance to the seabed as a result of laying the pipelines. The management plan shall include, as a minimum:

   a) a description of the results of the investigations undertaken by remotely operated vehicle to determine the optimum pipeline route;
   b) a description of the method to be used to remove boulders from the pipeline route;
   c) the timeframe over which the boulder clearing will be undertaken;
   d) confirmation that the proposed activity is generally in accordance with the application and supporting documentation, and will comply with all the conditions of this consent; and
   e) an outline of the measures to be used to ensure that consent conditions will be met.

   The management plan shall be prepared in consultation with interested submitters to the application. However, the consent holder shall not be in breach of this condition if any party choses not to comment on the draft management plan. Nor is the consent holder under any obligation to incorporate any particular suggestions or proposals advanced by any party.

3. At least 10 working days prior to the commencement of works the consent holder shall provide the Taranaki Regional Council with a programme for the installation/construction of the structure[s], including: a schedule of proposed start dates and an estimation of the duration of the works, and details of the contractor including contact information for the project manager.

4. The consent holder shall notify the Chief Executive, Taranaki Regional Council, in writing at least 48 hours prior to commencement and upon completion of any subsequent maintenance works which would involve disturbance of, or deposition, or discharge to, the coastal marine area.

5. Prior to the exercise of this consent the consent holder shall provide, to the satisfaction of the Chief Executive, Taranaki Regional Council, a written construction contingency plan, outlining measures to be undertaken in the event of a spill as a result of works authorised by this consent. Further, prior to the exercise of this consent the consent holder shall provide to the Chief Executive, Taranaki Regional Council, written confirmation of the acceptance by the Maritime Safety Authority of a New Zealand Offshore Installation Site Marine Oil Spill Contingency Plan.

6. The consent holder shall at all times adopt the best practicable option, as defined in section 2 of the Resource Management Act 1991, to avoid or minimise the discharge of any contaminants into coastal water or onto the foreshore or seabed and to avoid or minimise any adverse effects on coastal water quality or ecosystems.

7. The construction, use, maintenance and removal of the structure[s] authorised by this consent shall comply with the noise standards as outlined within section 4.4.3 of the Regional Coastal Plan for Taranaki.

8. The consent holder shall survey and map the position of the structure[s], [including details of the structure[s] position in relation to the seabed], within 90 days of the completion of their construction, and shall provide a copy of the plan showing the precise location [to within plus or minus 5 metres] of the structure[s] on/in the seabed, to the Taranaki Regional Council, the Hydrographic Office, Royal New Zealand Navy, and the Maritime Safety Authority.

9. The consent holder shall undertake pre-lay and post-lay monitoring surveys of the pipeline corridor, to the satisfaction of the Chief Executive, Taranaki Regional Council. The monitoring shall include one survey prior to disturbance, one survey immediately following laying of the pipelines, and one survey approximately 1 year following laying of the pipelines. The results of the monitoring shall be provided to the Chief Executive, Taranaki Regional Council, upon request.

10. Except with the written agreement of the Chief Executive, Taranaki Regional Council, all structures authorised by this consent shall be removed and the area[s] reinstated, if and when the structure[s] are no longer required. The consent holder shall notify the Chief Executive, Taranaki Regional Council in writing at least 1 month prior to any structure[s] removal. Reinstatement shall be to the satisfaction of the Chief Executive, Taranaki Regional Council.

11. This consent shall lapse on the expiry of five [5] years after the date of commencement of this consent, unless the consent is given effect to before the end of that period or the Taranaki Regional Council fixes a longer period pursuant to section 125(1)(b) of the Resource Management Act 1991.

12. 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 2011 and/or June 2017 and/or June 2023 and/or June 2029 and/or June 2034, 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 17 April 2018

For and on behalf of
Taranaki Regional Council

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A D McLay
Director - Resource Management

Land Use Consent

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

Name of Consent Holder:	Beach Energy Resources NZ (Kupe) Limited Private Bag 2022 New Plymouth 4342
Decision Date:	1 November 2006
Commencement Date:	1 November 2006

Conditions of Consent

Consent Granted:	To install, construct and maintain up to seven water bores for horizontal directional drilling, pipeline hydro-testing, and production station operation purposes
Expiry Date:	1 June 2039
Review Date(s):	June 2023, June 2029, June 2034
Site Location:	Lower Inaha Road, Inaha
Grid Reference (NZTM)	1699850E-5618461N
Catchment:	Inaha

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 exercise of this consent shall be undertaken in general accordance with the documentation submitted in support of application 4392. In the case of any contradiction between the documentation submitted in support of application 4392 and the conditions of this consent, the conditions of this consent shall prevail.

2. The consent holder shall, within 28 days of the completion of each bore, provide a bore completion log to the satisfaction of the Chief Executive, Taranaki Regional Council.

3. The bores shall be cased and sealed to prevent the potential for aquifer cross-contamination and/or leakage from the surface.

4. The consent holder shall take all reasonable steps to mitigate any adverse environmental effects that may be caused by structural failure in any of the bores.

5. The consent holder shall properly decommission any bore no longer required.

6. The consent holder shall provide written notification to the Chief Executive, Taranaki Regional Council following the decommissioning of any bore, within 28 days of completion.

7. This consent shall lapse on the expiry of five years after the date of commencement of this consent, unless the consent is given effect to before the end of that period or the Taranaki Regional Council fixes a longer period pursuant to section 125(1)(b) of the Resource Management Act 1991.

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 2011 and/or June 2017 and/or 2023 and/or 2029 and/or 2034 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 17 April 2018

For and on behalf of
Taranaki Regional Council

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A D McLay
Director - Resource Management

Water Permit

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

Name of Consent Holder:	Beach Energy Resources NZ (Kupe) Limited Private Bag 2022 New Plymouth 4342
Decision Date (Change):	13 October 2011
Commencement Date (Change):	13 October 2011 (Granted Date: 2 November 2006)

Conditions of Consent

Consent Granted:	To take and use up to 3,500 m^3/day groundwater at a maximum rate of 40 l/s as a combined total from up to seven water bores in a bore field for the purpose of horizontal directional drilling, pipeline hydro-testing, production station operation and operations at the Manutahi-D, Manutahi-C, and Kauri-F wellsites
Expiry Date:	1 June 2039
Review Date(s):	June 2023, June 2029, June 2034
Site Location:	Lower Inaha Road, Inaha (Kupe Production Station/Manutahi-D/Manutahi-C/Kauri-F)
Grid Reference (NZTM)	1699935E-5618466N
Catchment:	Inaha

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 exercise of this consent shall be undertaken in general accordance with the documentation submitted in support of applications 4430, 4585 and 6908 and shall ensure the efficient and effective use of water. In the case of any contradiction between the documentation submitted in support of applications 4430, 4585, and 6908 and the conditions of this consent, the conditions of this consent shall prevail.

2. The consent holder shall notify the Chief Executive, Taranaki Regional Council, in writing at least seven days prior to the exercise of this consent.

3. Prior to the exercise of this consent, the consent holder shall provide a report to Chief Executive, Taranaki Regional Council, detailing the results of pump testing (24-hour constant discharge at 40 l/s and recovery tests) of the bores used for water supply to show (1) that the abstraction is sustainable, and (2) the effects of the abstraction on flows in the Inaha Stream and the Kapuni Stream.

4. The volume of groundwater abstracted shall not exceed 3,500 cubic metres per day at a rate not exceeding 40 litres per second as a combined total from the bores in the bore field.

5. The abstraction shall not cause more than a 10% lowering of the static water level by interference in any adjacent registered bore located beyond the boundary of the bore field.

6. The abstraction shall not cause the intrusion of saltwater into any freshwater aquifer.

7. The consent holder shall maintain daily records of the abstraction from each bore including date, abstraction rate and daily volume, and pumping hours, and make these records available to the Chief Executive, Taranaki Regional Council, no later than 31 July of each year, or upon request.

8. Prior to the exercise of this consent for any groundwater bore extracting water from an unconfined aquifer, the consent holder shall install groundwater monitoring piezometers between the Kapuni Stream and Inaha Stream and the bore for the purposes of monitoring groundwater levels.

9. The consent holder shall install and maintain a water meter approved by the Chief Executive, Taranaki Regional Council, on each bore for the purposes of accurately recording the abstraction of water.

10. This consent shall be subject to monitoring by the Taranaki Regional Council and the consent holder shall meet all reasonable costs associated with the monitoring.

11. This consent shall lapse on the expiry of five years after the date of commencement of this consent, unless the consent is given effect to before the end of that period or the Taranaki Regional Council fixes a longer period pursuant to section 125(1)(b) of the Resource Management Act 1991.

12. 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 2011 and/or June 2017 and/or 2023 and/or 2029 and/or 2034, 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 17 April 2018

For and on behalf of
Taranaki Regional Council

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A D McLay
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.