Ample Group Ltd

Monitoring Programme Annual Report 2023/24

Technical Report 2024-50

Taranaki Regional Council

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Monitoring Programme
Annual Report
2023/24
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Taranaki Regional Council
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Stratford

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Executive summary

Ample Group Ltd (the Company) operates an abattoir on Mountain Road, Stratford in the Kahouri Stream Catchment. The Company slaughters and processes cattle into a range of products. Effluent from the stockyards and wastewater from the abattoir building is diverted into a three-pond treatment system and preferentially irrigated to land, or to the Kahouri Stream during high flow conditions. Activities on the site including the stockyards, irrigation to land, and disposal of paunch to land have the potential to cause nuisance odour effects on surrounding properties. In the past the Company also operated a rendering plant which further processed products however, this was decommissioned several years ago.

This report is for the period July 2023 to June 2024 and details the compliance monitoring programme implemented by Taranaki Regional Council (the Council) to monitor and assess the Company's environmental performance and compliance with its resource consents during the period under review.

During the monitoring period the Company's environmental performance was rated as 'improvement required', but it received a 'high' rating for administrative performance, resulting in an overall rating of 'improvement required'.

The Company holds five resource consents which include a suite of conditions setting out the requirements that the Company must comply with to minimise adverse effects to the environment. The Company holds one consent to allow it to take and use stream water, two consents to discharge treated wastewater and stormwater into the Kahouri Stream, one consent to discharge treated wastewater to land, and one consent to discharge contaminants into the air.

During the first three months of this monitoring year the Company was unable to comply with the effluent application depth consent limit at all times but following the construction of the new pond the results were seldom more than half the limit. This year the Company ensured that nitrogen loading of the paddocks complied with consent limits, despite a significant reduction in available irrigation area, and therefore nutrients such as nitrogen and phosphorous were likely assimilated into the soil more readily rather than leaching into waterways.

This year the Company received two infringement notices. The first was for the discharge of contaminants to air from an outdoor fire which contained prohibited material and which is prohibited by the Taranaki Regional Air Quality Plan. The second was for the discharge of wastewater in a manner which did not comply with the wastewater irrigation resource consent and which caused adverse effects beyond the boundary of the property. The effects of both incidents were minor and localised, and addressed promptly by the Company.

The Council's monitoring programme for the year under review included three site inspections, six water quality surveys and two biomonitoring surveys.

During the inspections the monitoring officer found the site to be fully compliant with the conditions of the consent, and overall the site was tidy and well managed.

The results of the water quality surveys concluded that effluent discharge into the Kahouri Stream and the associated effects complied with the limits in the resource consents. Most of the parameters were substantially lower than the respective limit. The biomonitoring surveys concluded that point source and diffuse discharges of wastewater had not caused a significant adverse effect on the macroinvertebrate community in the Kahouri Stream. During the spring survey the macroinvertebrate community found at the monitoring sites was rated as good, very good or excellent. Similarly, the summer survey found that the communities were good or very good.

The report prepared for the 2022/23 monitoring year recommended that the Company implement self-monitoring of the nitrogen and sodium absorption ratio parameters in the irrigation water to better manage

the nitrogen loading and application depth. The Company has not yet adopted this practice. Currently the Council collects samples and provides the data to the Company. Improved self-monitoring by the Company will likely improve adaptive management of wastewater disposal in a manner that may ensure compliance with the nitrogen loading and application depth limits.

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 the 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 continues to require improvement.

Table of contents

List of tables

List of figures

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 2021 to June 2022 by Taranaki Regional Council (the Council) on the monitoring programme associated with resource consents held by Ample Group Ltd (the Company). The Company operates an abattoir situated on Mountain Road (SH3) at Stratford, in the Kahouri Stream Catchment.

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 of water within the Kahouri Stream Catchment, and the air discharge permit which authorises emissions to air.

In accordance with the *Resource Management Act 1991* (RMA) environmental management should be integrated across the water air and land domains so that a consent holder's use of these resources can be considered from a single comprehensive environmental perspective. Accordingly, the Council generally implements integrated environmental monitoring programmes and reports the results of the programmes jointly.

This report discusses the environmental effects of the Company's use of water, land and air, and is the ninth annual report by the Council for the Company. Previously, a single report was produced for Gold International Meat Processors Ltd (for the period 2014/15) and Taranaki Abattoirs Ltd (for the period 2010-2014). Before 2010 monitoring of the site was reported in a Kahouri Stream Catchment report, which included a number of industries. References for all previous reports are included in the bibliography and references section at the end of this report.

1.1.2 Structure of this report

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

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

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 holder, this report assigns a rating to the 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 the 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 Location and process description

The Company operates an abattoir situated beside State Highway 3 at the Kahouri Stream Bridge, approximately one kilometre north of Stratford. The facility generally operates Monday to Friday. Cattle are received and held in the stockyards before being slaughtered and processed inside the abattoir building.

Water supply for the site comes from two sources. Water for stock and yard washing used to be drawn at a small weir on a tributary of the Kahouri Stream, but a consent variation in 2008 allowed the point of take to be from the Kahouri Stream, approximately 200m upstream of the abattoir. Water for abattoir and process areas comes from the Stratford municipal supply.

Wastewater is generated in the abattoir and stockyards. Abattoir wastewater passes through a screening system that removes gross solids and then flows by gravity to the anaerobic pond. Drainage from the

[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

partially covered stockyards is also gravity-fed to the treatment system. Boiler condensate is disposed of in a soak hole.

The wastewater treatment system is a conventional three-pond system similar too but a larger scale version of those used to treat farm dairy wastes. It consists of an anaerobic pond of approximately 2,000m^3 in volume, followed by an aerobic pond about of 3,200m^3 in area. During this monitoring year work began on the construction of a new treatment pond (unknown volume). The treated wastewater is preferentially irrigated to land when conditions allow or discharged to the Kahouri Stream during high flow conditions provided for by a resource consent. Irrigation to land has always occurred on cut and carry paddocks owned by the Company but from 2013 to 2024 grazing paddocks on the other side of Mountain Road were being leased for additional irrigation area (Figure 1).

The Company disposes of paunch (stomach contents) onto land next to the wastewater treatment system in an area referred to as the worm farm. The leachate from the worm farm contains a high concentration of organic content and microorganisms and the Company is required to minimise discharge into the wastewater treatment system.

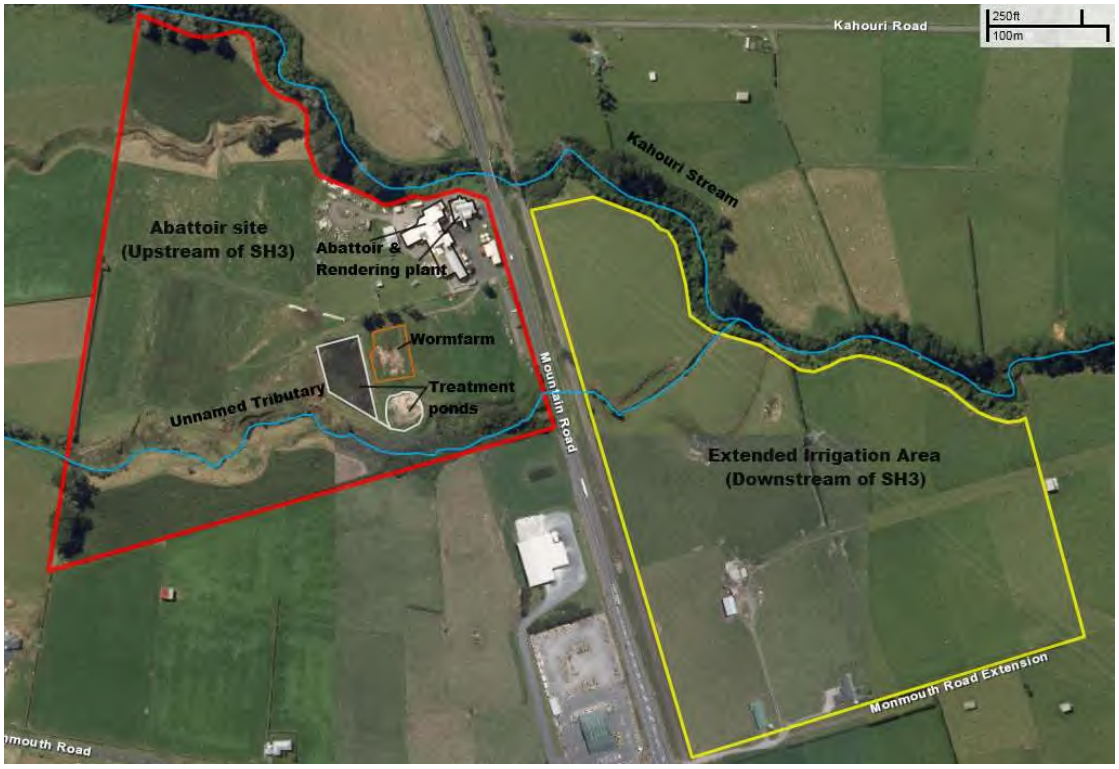

Figure 1 Ample site including irrigation areas

1.3 Resource consents

The Company holds five resource consents, the details of which are summarised in the table below. Summaries of the conditions for 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.

Table 1 Summary of the consents held by the Company

Consent number	Purpose	Granted	Next Review	Expires
Water abstraction permits				
5176-2	To take water from the Kahouri Stream for stock and yard washing purposes	7 July 2016	June 2025	1 June 2034
Water discharge permits				
7662-1	To discharge treated wastewater directly into the Kahouri Stream	7 November 2011	June 2024	1 June 2028
7660-1	To discharge uncontaminated stormwater to land	7 November 2011	N/A	1 June 2028
Air discharge permit				
4055-3	To discharge emissions to air, in association with meat processing, rendering and associated activities	7 November 2011	June 2024	1 June 2028
Discharges of waste to land				
5221-2	To discharge treated wastewater from a treatment system onto and into land in the vicinity of an unnamed tributary of the Kahouri Stream	7 November 2011	June 2024	1 June 2028

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 Company's abattoir site consisted of four components as set out in sections below.

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

Three compliance monitoring inspections of the site were conducted during the 2023/24 monitoring year. The site inspections involved discussions with the Company about consent related matters and observations of the yard area, stormwater drains, irrigation paddocks, worm beds and the wastewater ponds. Air inspections were limited to observing any detectable odour or visible dust during the site inspection. The

inspection reports can be found in section 2.1 below. The reporting data collected by the Company was provided during the monitoring year and assessed as it was submitted. Three of the four scheduled hydrological inspections were undertaken to gauge the flow rate and stream stage and, if required, to download flow data from the data logger. The data is used to maintain a rating curve for the staff gauge located at the Mountain Road Bridge which informs when discharges to the stream may occur within the parameters of the consent conditions.

1.4.4 Chemical sampling

The monitoring programme includes collecting water samples from the effluent irrigation pipe, and from the tributary and stream, and analysing them for a range of contaminants and parameters. The consent includes limits for the quality of water irrigated to land and to the stream. On two occasions this year samples were collected from the treated wastewater line during irrigation to the paddocks. There were also two sampling surveys while treated effluent was being discharged into the Kahouri Stream

A synoptic survey collects samples from the Kahouri Stream and tributary at the same time to measure water quality in both waterways at a single point in time. The results of the downstream samples are compared to the upstream samples, and the difference between the two is assumed to be the overall impact of the Site's point source and diffuse discharges.

Water samples are analysed for a suite of parameters and contaminants depending on the type of survey. A full list of analytes can be found below.

- calcium
- conductivity
- potassium
- potassium adsorption ratio
- magnesium
- sodium
- ammoniacal nitrogen
- ammonia
- turbidity
- electrical conductivity
- Total suspended solids
- chloride
- nitrate-nitrite
- total kjeldahl nitrogen
- dissolved reactive phosphorous
- Total phosphorous
- biochemical oxygen demand
- nitrates
- pH
- sodium adsorption ratio (SAR)
- temperature
- total nitrogen
- total phosphorous

1.4.5 Biomonitoring surveys

Biannual biological monitoring surveys of Kahouri Stream are undertaken each year to measure the impact of the site's point source wastewater discharges on the in-stream macroinvertebrate community. Condition 13(g) of Consent 7662-1 includes a condition which prohibits significant adverse effects on aquatic life in the stream. This is determined by comparing the health of the upstream macroinvertebrate community with the downstream community using three indices.

There are biological monitoring locations in the Kahouri Stream, one site at the upstream boundary and two downstream of the treated wastewater discharge pipe so that any change in the macroinvertebrate community can be quantified, and effects of the discharges assessed. There are no in-stream monitoring locations on the leased property. The details of the monitoring sites are summarised in Table 2 and the locations shown on the map in Figure 2.

Two biological monitoring surveys were conducted, in spring and summer, at three sites in the Kahouri Stream. The results can be found in section 2.6 below.

Table 2 Monitoring site details

Sample source	Site	Site code	Site Description
Discharge to Kahouri Stream	D1	IND003002	Wastewater discharge pumped to Kahouri Stream
Irrigated wastewater	I1	IND004008	Wastewater irrigated to land
Kahouri Stream	K1	KHI000295	Upstream property boundary
	K2	KHI000300	Downstream property boundary and approx. 90m downstream of wastewater discharge (SH3)
	K3	KHI000305	65m downstream of KHI000300
Unnamed tributary	T1	KHI000294	Upstream property boundary
	T2	KHI000302	Approx. 50m downstream of previous wastewater discharge

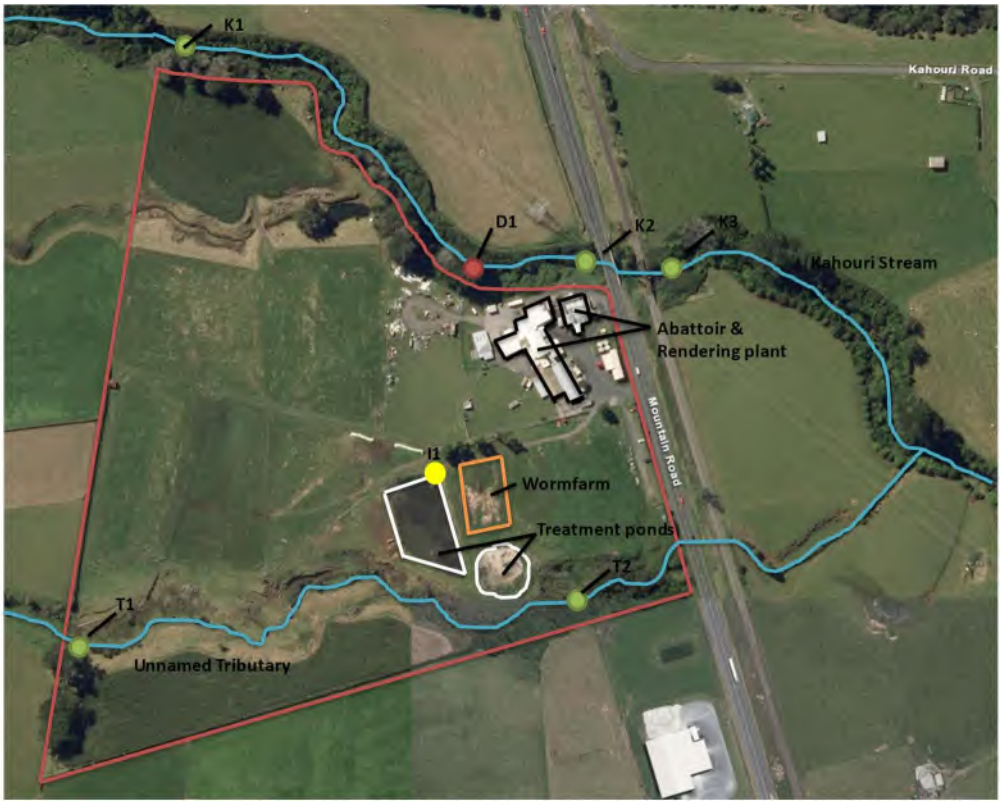

Figure 2 Sites monitored for discharge or receiving environment water quality and macroinvertebrate community

2. Results

2.1 Inspections

1 August 2023

The visit was a combined site inspection and sampling run. Overall, the site was operating in accordance with the contingency plan. The worm beds had been temporarily decommissioned to enable the new treatment pond to be constructed. A small pile of paunch was observed on the southern boundary but this was not causing a significant odour. The irrigator was operating a suitable distance from the boundary. There was ponding in the paddock but the irrigator was turned off toward the end of the inspection. There was no direct discharge of wastewater under Consent 5221-2 to the Kahouri Stream. The odour onsite was weak to distinct, and typical of meat processing plants. There was no odour observed onsite which could have resulted in offensive or objectionable effects at any sensitive receptor beyond the boundary.

2 November 2023

This site inspection included an update on site developments. The presence of dwellings in the area will increase the sensitivity to odour and irrigation practices. Overall, the site was tidy, the waste material which had been stored behind the plant is progressively being removed by a waste disposal company. The cut and carry pasture was scheduled to be cut. During the inspection there was little apparent odour except from stock trucks arriving onsite. Recent odour issued were due to the filling of the new treatment pond and this was being rectified. No irrigation occurred during the inspection.

20 February 2024

The site visit included a meeting and the site inspection. There was some odour from the cattle in the stockyard but not likely to be offensive or objectionable beyond the boundary. The inspection included the cattle reception area, paunch piles and treatment ponds. A new cool room is planned for behind the processing building. Overall, the site was tidy.

2.2 Abstraction data

Consent 5176-2 authorises the Company to abstract water from the Kahouri Stream for stock and yard washing purposes. The company is required to maintain a verified flow meter and data logger at the point of abstraction and make these records available to the Council. The data logger records data at 15-minute intervals and provides data on abstraction volume and flow rate. Telemetry was installed by the Company to ensure compliance with Consent 5176-2, and continuous data has been available since 28 February 2022.

The rate of abstraction is restricted to 3.25L/s continuous flow, and the abstraction volume restricted to 178m^3/day. Abstraction is not permitted when the Kahouri Stream flow is less than 55L/s immediately downstream of the intake point. The rate of abstraction during this monitoring year was maintained below the consent limit and, with one exception, remained below 1.55L/s (Figure 3), or less than 50% of the allocated rate.

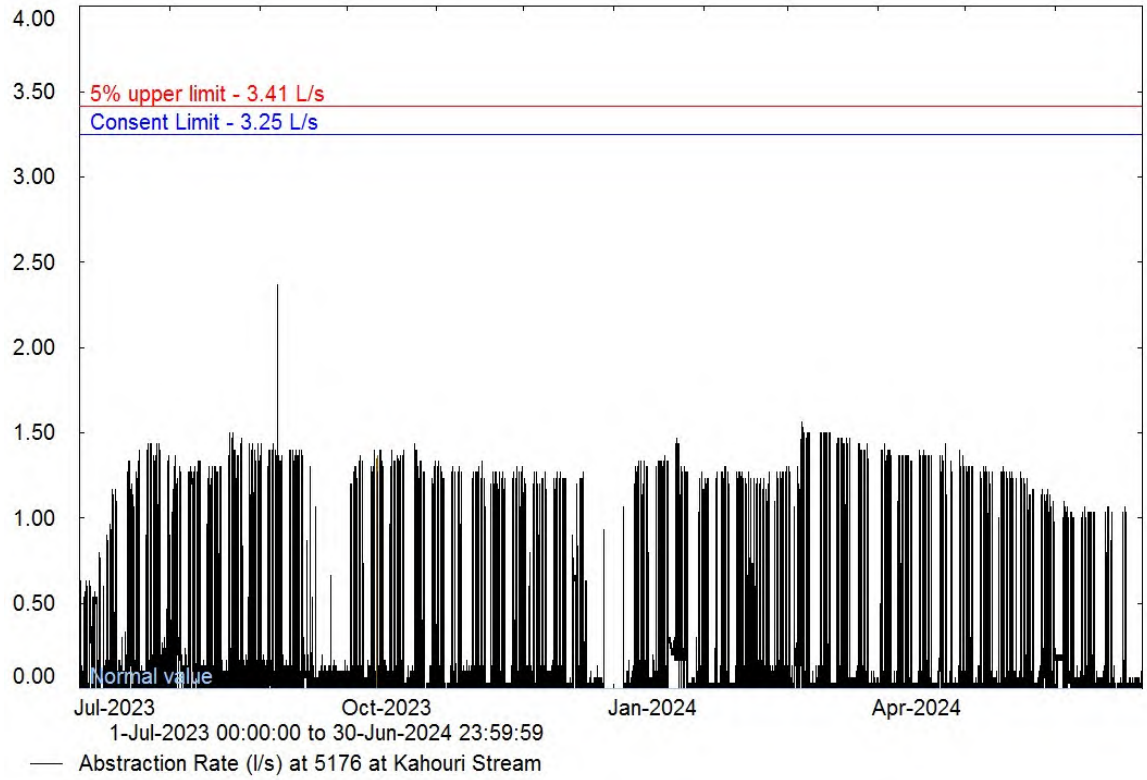

Figure 3 Rate of abstraction from the Kahouri Stream 2023/24

Similarly, the volume of water abstracted from the stream each day of the monitoring period was less than the consent limit. The greatest volume of water abstracted in a single day was 52m³ in August 2023 (Figure 4). Otherwise, the daily volume rarely exceeded 45m³ which is 25% of the consent limit.

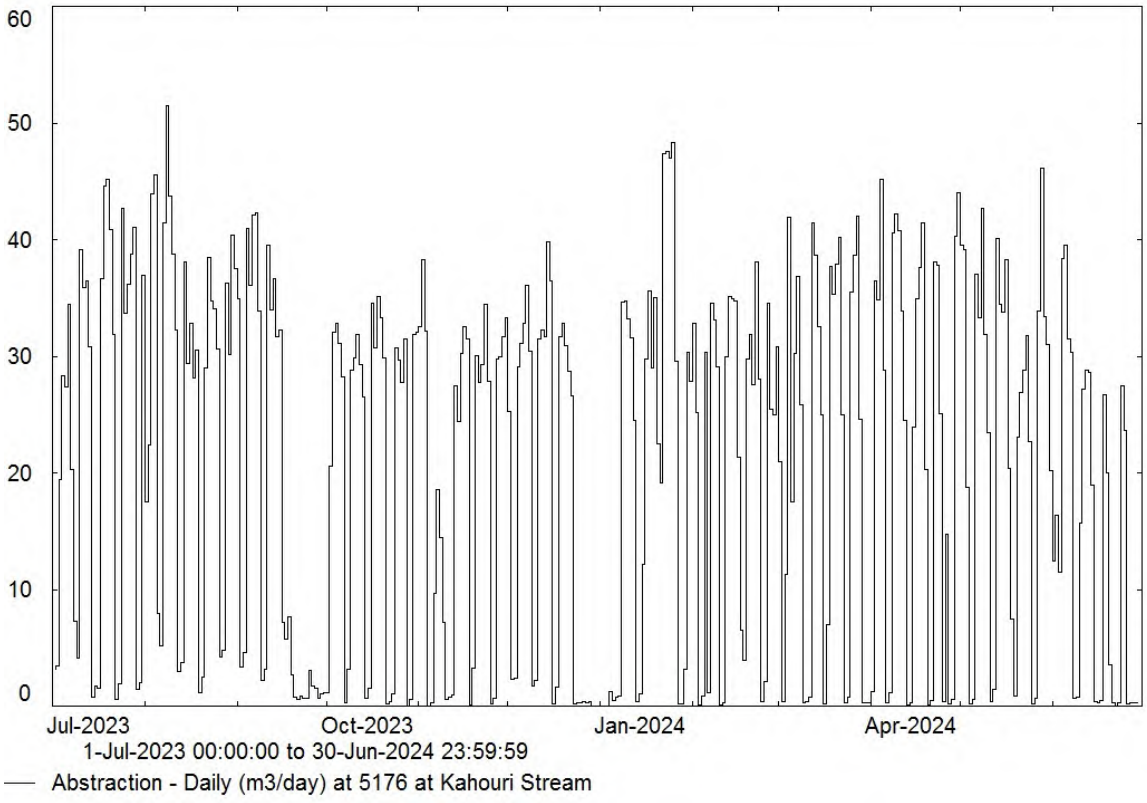

Figure 4 Volume of abstraction from the Kahouri Stream 2023/24

2.3 Irrigation discharge

This year wastewater from the final treatment pond was irrigated to the land surrounding the plant which is owned by the Company (paddocks 3-9, Figure 5). In the past the Company has also irrigated to land leased from a neighbouring farm on the eastern side of State Highway 3 however, this was unavailable for the 2023/24 monitoring year The paddocks are used as cut and carry only and in the absence of stock the nitrogen loading rate limit in Consent 5221-2 is 600kg/ha/year.

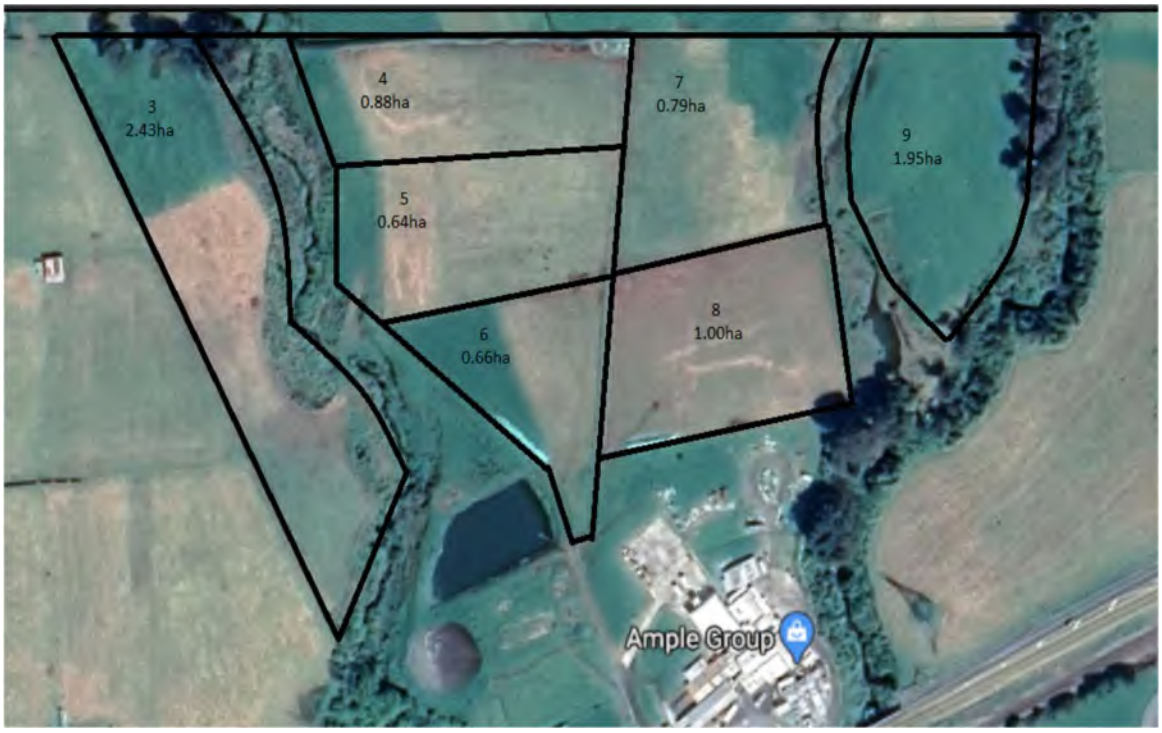

Figure 5 The irrigation areas, showing the cut and carry paddocks as presented in the Wastewater Management Plan 2020

Table 3 presents both the volume of wastewater and estimated rate of total nitrogen applied to land in the 2023/24 period. Based on submitted data a total of 12,987.1m³ of wastewater was irrigated to six paddocks. Last year 67,433m³ of wastewater was irrigated to 13 paddocks.

Paddock 7 received the highest volume of treated wastewater at 3947m³ which equates to 582kg N/h for the 2023/24 year, which is also the highest annual nitrogen loading rate of all paddocks. The result is less than the consent limit of 600kg/ha. The nitrogen loading results in the remaining paddocks was between 55 and 173kg/ha.

Table 3 Volume of treated wastewater and rate of total nitrogen/ha applied to each paddock 2023/24

Parameter	Paddock number						
	3	4	5	6	7	8	9
Total volume (m^3)	1867	3022	-	552	3947	932	2668
Total N (kg/ha)	56	173	-	55	582	103	150

Table 4 presents the laboratory results of samples collected from the final effluent treatment pond on 1 August 2023 and 22 January 2024 while effluent was being irrigated to land. The only limit placed on the wastewater quality is for the sodium absorption ratio (SAR) which is restricted to a maximum of 15mmol/L. The SAR results for this year were 5.2 and 4.2mmol/L which are less than the consent limit.

Table 4 Irrigated wastewater water quality parameters

Parameter	Unit	1 August 2023	22 January 2024	5yr range
pH Units		7.9	7.7	7.5-8.2
Electrical Conductivity	mS/m	146.0	112.6	47.4-146
Total Calcium	g/m^3	18.9	13.9	12.3-18.9
Total Magnesium	g/m^3	5.0	3.8	2.4-5
Total Potassium	g/m^3	42	32	14-42
Total Sodium	g/m^3	99	68	29-99
Potassium Absorption Ratio	(mmol/L)	1.3	1.1	0.6-1.4
Sodium Absorption Ratio	(mmol/L)	5.2	4.2	1.9-5.2
Total Nitrogen	g/m^3	125	94	35-125
Total Ammoniacal-N	g/m^3	115	94	25-115
Nitrate-N + Nitrite-N	g/m^3	<0.10	0.08	0.05-1.17
Total Kjeldahl Nitrogen	g/m^3	125	94	34-125
Total Phosphorus	g/m^3	19.3	19.1	4.6-19.3

The SAR result from the August survey is the highest reported in the last five years (range = 1.5 – 4.7mmol/L), and most other parameters were also the highest reported in that period. These include electrical conductivity, all metals and most nitrogen species.

Condition 12 of Resource Consent 5221-2 restricts the irrigation of wastewater to 24mm over any 15-day period. Table 5 presents a summary of the number of days which application depth exceeded the consent limit for each paddock. Six of the seven cut and carry paddocks exceeded the 15-day application rate consent limit based on the preceding 15 days. The number of exceedance days for the monitoring year ranged between 1 and 59 which is a lower and narrower range than the previous year which was between 29 and 185 days.

All the exceedances occurred between July and September 2023, and there were no exceedances after 26 September 2023. This coincides with the construction of the additional effluent storage pond.

Table 5 Number of days each paddock exceeded the 15-day application depth limit 2023/24

Paddock number	3	4	5	6	7	8	9
No. days	15	26	-	1	59	15	30

Excessive application can result in surface ponding, runoff into waterways, leaching to groundwater, and pasture damage (Regional Fresh Water Plan for Taranaki, appendix VIIA). Despite these loading rates the August inspection of the irrigation area did not note any runoff, nor was there any excessive ponding or pasture damage.

In accordance with the consent, irrigating treated wastewater to land is to be prioritised over discharging it to the Kahouri Stream because nitrogen and other contaminants can be assimilated in the soil to a greater extent than in waterways. Figure 6 shows a comparison of the volumes discharged to land and the stream each year since the 2011/12 monitoring year. This year 14,941m^3 of wastewater was either irrigated or discharged to the stream which represents a significant decrease compared to previous two years. This year 87% of the wastewater was irrigated to land which is the equal highest percentage since 2011/12 and aligns with the requirement to maximise wastewater discharge to land instead of to the stream. As can be seen in Figure 6 the total volume discharged to the stream has generally decreased over time.

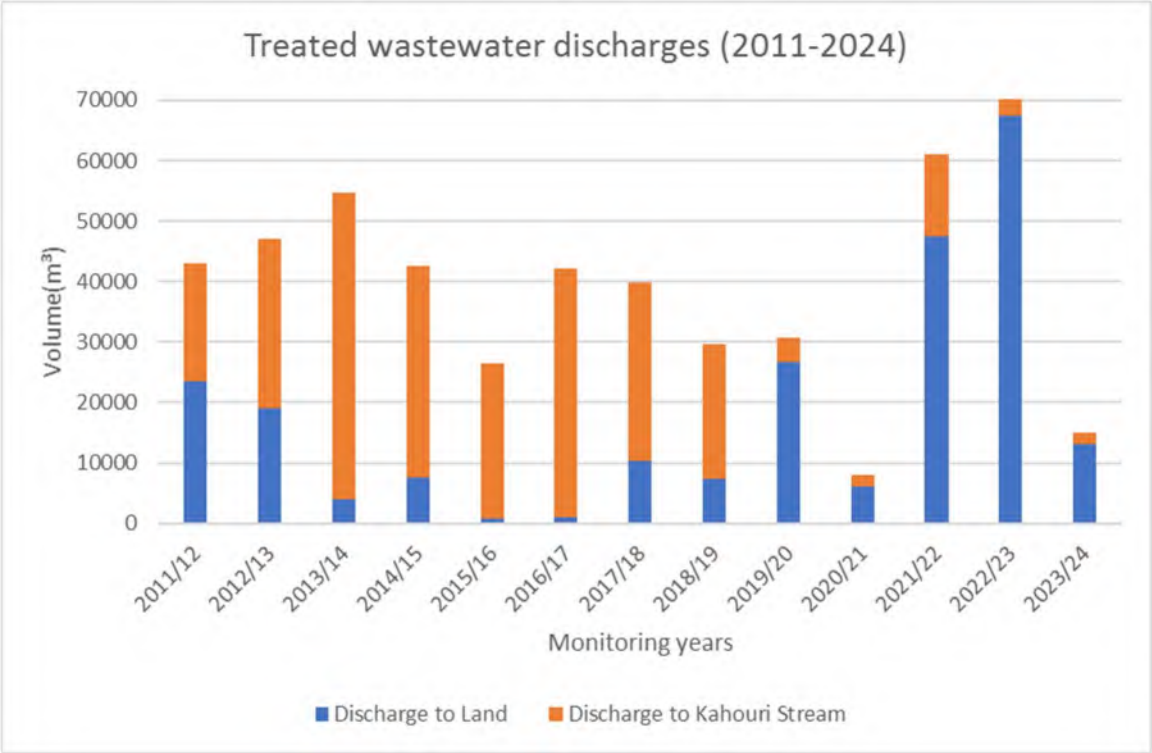

Figure 6 Volume of wastewater discharged to land and water since 2011/2012

2.4 Kahouri Stream discharge

Under certain stream flow conditions the Company may discharge contents from the wastewater treatment pond directly into the Kahouri Stream in circumstances where irrigation cannot maintain the pond level. During this monitoring year two sampling surveys were conducted during such a discharge to ensure the in-stream effects complied with the consent limits, and to monitor impacts on water quality. The survey occurred on 20 November 2023 and samples were collected from the discharge and two locations in the Kahouri Steam, one upstream and one downstream. The results are presented in Table 10 below.

The concentration of carbonaceous biochemical oxygen demand (CBOD) in the discharge is limited to $110gO_2/m^3$ by condition 20 of Consent 7662-1. The consent also imposes limits on the effects on the quality of the Kahouri Stream. During the 2023/24 year the Company discharged treated effluent to the Kahouri Stream on 19 days for a total of 197 hours, for between three and 18 hours per day.

Table 6 Results of treated wastewater discharge sample 20 November 2023

Parameter	Unit	20 November 2023		
		Discharge	Upstream	Downstream
Temp	°C	15.3	12.6	12.7
pH		7.6	7.2	7.3
Electrical Conductivity	mS/m	91.0	5.9	6.7
Carbonaceous Biochemical Oxygen Demand	gO2/m³	75	-	-
Dissolved C-Biochemical Oxygen Demand	gO2/m³	24	2	< 2
Free Ammonia	g/m³	0.75	0.00036	0.0024
Dissolved Reactive Phosphorus	g/m³	8.3	0.028	0.074
Turbidity	NTU	121	10.7	10.5
Total Suspended Solids	g/m³	62	19	19
Total Nitrogen	g/m³	86	0.99	1.55
Total Ammoniacal-N	g/m³	68	0.108	0.58
Nitrate-N + Nitrite-N	g/m³	< 0.10	0.43	0.41
Total Kjeldahl Nitrogen	g/m³	86	0.56	0.14
Total Phosphorus	g/m³	12.4	0.143	0.21

Note: downstream increase highlighted

The concentration of CBOD in the sample from the discharge was 75gO_2/m³ which is less than the consent limit of 110gO_2/m³.

The results of the upstream and downstream samples show that the discharge of wastewater into the Kahouri Stream complied with the consent conditions at the time of the sampling. The concentration of filtered (dissolved) carbonaceous biochemical oxygen demand (DCBOD) in the discharge was 24 gO_2/m³ but did not exceed 2gO_2/m³ in the downstream sample. The concentration of unionised (or free) ammonia in the downstream sample was 0.0024g/m³, significantly higher than the sample taken from the upstream site, however, both results was still substantially lower than the consent limit of 0.025g/m³. Further, the suspended solids concentration in the discharge sample was 62g/m³ but there was no difference between both stream samples which were each 19g/m³. The consent requires a change no greater than 5g/m³.

Notable downstream increases were found for dissolved reactive phosphorous (DRP), total nitrogen, total ammoniacal nitrogen and total phosphorous. These contaminants are expected from point source effluent discharges.

Table 7 Results of treated wastewater discharge sample 31 July 2024

Parameter	Unit	31 July 2024		
		Discharge	Upstream	Downstream
Temp	℃	9.7	9.1	9.1
pH		7.9	7.0	7.1
Electrical Conductivity	mS/m	74.9	6.6	7.1
Carbonaceous Biochemical Oxygen Demand	gO_2/m^3	18	-	-
Dissolved C-Biochemical Oxygen Demand	gO_2/m^3	9	<2	<2
Free Ammonia	g/m^3	0.81	0.000141	0.00148
Dissolved Reactive Phosphorus	g/m^3	6.9	0.020	0.087
Turbidity	NTU	28.0	7.5	9.0
Total Suspended Solids	g/m^3	28	10	14
Total Nitrogen	g/m^3	63	0.96	1.80
Total Ammoniacal-N	g/m^3	62	0.079	0.68
Nitrate-N + Nitrite-N	g/m^3	0.73	0.55	0.55
Total Kjeldahl Nitrogen	g/m^3	62	0.4	1.25
Total Phosphorus	g/m^3	8.2	0.085	0.21

Note: downstream increase highlighted

The concentration of CBOD in the sample from the discharge was $18gO_2/m^3$ which is less than the consent limit of $110gO_2/m^3$.

The results of the upstream and downstream samples show that the discharge of treated wastewater into the Kahouri Stream complied with the consent conditions at the time of the sampling. The concentration of DCBOD was $9gO_2/m^3$ in the discharge sample but did not exceed the consent limit of $2gO_2/m^3$ in the downstream sample. The concentration of unionised (or free) ammonia in the downstream sample was $0.00148g/m^3$, significantly higher than the sample taken from the upstream site however, the downstream result was still substantially lower than the consent limit of $0.025g/m^3$. Further, the suspended solids in the discharge sample was $28g/m^3$ and the sample collected from the downstream site was $14g/m^3$; only $4g/m^3$ higher than the upstream sample and less than the consent limit.

As with the first survey, there were notable downstream increases found for DRP, total nitrogen, total ammoniacal nitrogen and total phosphorous. These contaminants are expected from point source effluent discharges.

2.5 Synoptic survey

Synoptic surveys were carried out on the 15 August 2023 and on 22 January 2024 to quantify various parameters in the Kahouri Stream and tributary at a single point in time. The survey is conducted when there is no discharge of treated effluent occurring and so the differences between the upstream and downstream results indicate the likely impact of diffuse discharges from the site. Any contaminants present in the stream are most likely from groundwater flows contaminated by the treated wastewater irrigated to land, or to a lesser extent from the historical burial pits used to dispose of dead farm stock. There has been no burial of waste product for some time but decomposition of organic matter may take years to complete.

Samples were collected from two locations in the Kahouri Stream, K1 and K2, and two locations in the tributary, T1 and T2 (Table 2 and Figure 2). The results of the laboratory analyses of the samples are presented in Table 8.

Table 8 Water quality sample results from the Kahouri Stream and Tributary 2023/24

Parameter	Unit	15 August 2023				22 January 2024			
		Kahouri Stream		Tributary		Kahouri Stream		Tributary	
		U/S	D/S	U/S	D/S	U/S	D/S	U/S	D/S
Unionised Ammonia	(g/m^3)	0.00015	0.00020	0.00015	0.00025	0.00007	0.00012	0.00035	0.00076
Turbidity	(NTU)	1.33	1.15	1.65	1.88	1.75	1.69	1.95	1.83
pH		7.6	7.6	7.4	7.4	7.5	7.5	7.7	7.4
Electrical Conductivity	(mS/m)	10.4	9.9	10.7	10.7	10.3	10.2	11.9	12.0
Total Suspended Solids	(g/m^3)	3	< 3	5	3	< 3	5	<3	<3
Temperature	(°C)	13.1	12.9	8.1	8.3	12.9	12.9	18.4	17.8
Total Nitrogen	(g/m^3)	1.17	1.03	1.21	1.29	1.05	1.04	0.88	1.01
Total Ammoniacal Nitrogen	(g/m^3	0.017	0.022	0.021	0.065	0.011	0.016	0.021	0.095
Nitrate-N + Nitrite-N	(g/m^3)	1.13	0.94	1.08	1.12	0.94	0.93	0.73	0.76
Total Kjeldahl Nitrogen	(g/m^3)	< 0.10	< 0.10	0.13	0.17	0.11	0.11	0.14	0.25
Dissolved Reactive Phosphorus	(g/m^3)	0.006	0.011	0.006	<0.004	<0.004	0.019	0.012	0.008
Escherichia coli	(MPN / 100mL)	260	326	219	210	488	727	816	980

Note: downstream increases highlighted

Samples collected from the downstream boundary monitoring site of the Kahouri Stream during both monitoring surveys reported similar results to the upstream monitoring location, with the exception of unionised ammonia, total ammoniacal nitrogen, dissolved reactive phosphorous and *E. coli*. These compounds were present at higher concentrations than those at the upstream boundary and indicate that diffuse discharges from the paddocks are impacting the stream water quality. These compounds are commonly associated with effluent and organic-rich wastewater discharges.

The remaining results showed either a decrease or no significant change in concentration. Those parameters showing a decrease include turbidity, total nitrogen and nitrate-N+nitrite-N. The decreases are likely due to dilution of these compounds with distance downstream, and in the case of the nitrogen species, biological uptake or chemical conversion onto other compounds.

Some of the reported results of the samples taken from the downstream monitoring site in the tributary were also higher than those at the upstream site. As with the Kahouri Stream results, the concentrations of unionised ammonia, total ammoniacal nitrogen, dissolved reactive phosphorous and *E. coli* were generally higher than the upstream levels. Additionally, total nitrogen and total Kjeldahl nitrogen results were higher downstream.

2.6 Biological monitoring

Spring survey – 1 November 2023

The Council collected streambed macroinvertebrates from three sites in the Kahouri Stream on 29 November 2023 to investigate the effects of the Ample Group Ltd abattoir discharge on macroinvertebrate health. Macroinvertebrates were identified, the number of different types of taxa counted (taxa richness), and MCI and SQMCI scores were calculated for each site.

A moderate taxa richness of 19, 25, and 19 was recorded at sites 1, 2, and 3 respectively. Taxa richness was slightly higher at site 2 immediately after the discharge. The 'control' site 1 and the most downstream site 3 recorded the same taxa richness. All sites recorded a taxa richness higher than their respective site medians. Sites 1 and 2 recorded a taxa richness higher than that previously recorded, while site 3 recorded slightly less. MCI scores were 119 units, 122 units, and 129 units at sites 1, 2, and 3 respectively. These scores were reflective of 'good' health at site 1, and 'very good' health at sites 2 and 3. All sites recorded an MCI score more than that recorded previously, although not significantly. Additionally, all sites recorded an MCI score more that their respective medians, with site 3 scoring a significant 14 units more.

SQMCI scores were 7.0 units, 7.1 units, and 7.3 units at sites 1, 2, and 3 respectively. These scores were reflective of 'excellent' macroinvertebrate community health at all three sites. SQMCI values for all sites were higher than both that previously recorded and the respective site medians, but not significantly. SQMCI values were not significantly different between sites, and showed an overall 0.3 unit increase in a downstream direction. The slight increase in SQMCI scores could be due to two 'highly sensitive' taxa (*Deleatidium* and *Beraeoptera*) increasing in abundance categories between upstream and downstream sites.

The lack of sewage fungus at any of the sites also indicates no significant enrichment downstream of the discharge.

Overall, the survey indicates that it is unlikely that the wastewater discharge from the Ample Group Ltd site is having an adverse effect on the macroinvertebrate communities in the Kahouri Stream.

Summer survey – 27 February 2024

The Council collected streambed macroinvertebrates from three sites in the Kahouri Stream on 27 February 2024 to investigate the effects of the Ample Group Ltd meat works discharge on macroinvertebrate health. Macroinvertebrates were identified and the number of different types of taxa counted (taxa richness), and MCI and SQMCI scores were calculated for each site.

Taxa richness was moderate with 16, 21 and 19 taxa recorded at sites 1, 2 and 3, respectively. Compared to the previous survey results, taxa richness at sites 1 and 2 decreased by three and four taxa, respectively, but remained unchanged at site 3. When comparing current results to the historical medians, taxa richness at sites 1 and 3 was less than the respective medians, but the same at site 2. Further, EPT taxa comprise the pollution sensitive Ephemeroptera (mayfly), Plecoptera (stonefly) and Trichoptera (caddisfly) insect groups. The number of EPT taxa increased in a downstream direction, with sites 1, 2 and 3 having eight, ten and eleven taxa, respectively. The percentage of EPT taxa at these sites was 50%, 48% and 58%, respectively.

MCI scores were 120 units, 119 units and 128 units at sites 1, 2 and 3, respectively. These scores categorised site 2 as having 'good' macroinvertebrate community health, while sites 1 and 3 was reflective of 'very good' health. Despite this difference in grading, there was no significant difference in MCI scores amongst sampled sites. The current MCI scores of all sites were similar to that previously recorded. Compared to historical medians, current MCI scores increased by four and a significant 13 units at site 1 and 3, but remained unchanged at site 2. Upon closer examination of the macroinvertebrate fauna results, site 3 had the highest MCI score amongst the sampled sites, likely due to the absence of the 'tolerant' *Polypedilum* and *Austrosimulium* taxa. Further, site 3 had the highest number of ETP taxa present amongst sampled sites, with the 'highly sensitive' *Ichthybotus* being unique to site 3.

SQMCI scores were 6.1 units, 6.1 units and 6.5 at sites 1, 2 and 3, respectively. There was no significant difference in SQMCI scores amongst sites, which were all reflective of 'very good' macroinvertebrate community health. Compared to the previous survey, all sites recorded less than that previously recorded, with sites 1 and 2 recording significantly less (by 0.9 units and 1.0 units, respectively). When compared to the historical medians, all sites recorded less than the respective site median, with site 2 recording significantly less. Site 3 recorded the highest SQMCI score across all sampled sites due to the 'highly

sensitive' *Nesameletus* mayfly being recorded as 'abundant' at this site, while only being recorded as 'rare' at site 1, and 'common' at site 2.

Overall, there was no evidence that the Ample Group Ltd meat works discharges had significant negative effects on the macroinvertebrate health in the Kahouri Stream.

2.7 Provision of management/contingency plans

Consents held by the Company include requirements for the preparation and implementation of a contingency plan and a management plan. These plans are required to be revised every few years and updated as needed. The Company submitted a combined management and contingency plan on 20 August 2024, and it is currently being reviewed by Te Papa Atawhai/Department of Conservation and Fish and Game New Zealand as required by the consent.

2.8 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 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).

Table 9 below sets out details of any incidents recorded, additional investigations, or interventions required by the Council in relation to the Company's activities during the 2023/24 period. This table summarises all events that required further investigation or intervention regardless of whether these were found to be compliant or not.

On 20 September 2023 a complaint was received concerning smoke from the property and the investigating officers found prohibited items such as tyres, plastic, fencing posts and fencing wire had been burnt. This was in contravention of rule 30 the Regional Air Quality Plan (RAQP) for Taranaki which prohibits outdoor burning of waste on industrial properties. An infringement fine was issued to the Company.

Two odour complaints were received in November 2023. A Council officer attended on each occasion but the odour had dissipated and was either not apparent or was not considered offensive or objectionable at the time of inspection. The company had constructed a new effluent treatment pond on site which was completed by October 2023. Following the complaints the Company investigated the new pond and was advised that suitable microbiological conditions had not yet developed in the pond which had led to an anaerobic state. In this condition the biological degradation of the effluent can result in hydrogen sulphide gas which has a pungent and unpleasant odour. The pond was dosed with effluent from another treatment pond to help develop a community of microorganisms to help create aerobic conditions which are less odorous. No further complaints have been received in relation to this matter.

In February 2024 a complaint was received regarding the irrigation of effluent to paddock 3 and associated unpleasant odour. Condition 15 c) of Resource Consent 5221-2 specifies that the effluent spray zone must be at least 150m from any residential dwelling. The inspecting officer determined that the irrigator was

within that distance and deemed that the discharge had not complied with the condition. An infringement fine was issued to the Company.

Table 9 Incidents, investigations, and interventions summary table

Date	Details	Compliant (Y/N)	Enforcement Action Taken	Outcome
20 September 2023	A complaint was received concerning smoke and investigation found that unauthorised burning was occurring on site.	No	Yes	Infringement notice issued
27 November 2023	A complaint was received concerning odour emanating from the site. Investigation found no objectionable or offensive odour beyond the boundary of the site.	Yes	No	N/A
30 November 2023	A complaint was received concerning odour emanating from the site. Investigation found no objectionable or offensive odour beyond the boundary of the site.	Yes	No	N/A
23 February 2024	A complaint was received concerning the discharge of effluent and odour from the discharge. Investigation found that the irrigation of effluent was occurring too close to residence in contravention of resource consent conditions.	No	Yes	Infringement notice issued

3. Discussion

Inspections of the site found that, in general, the yards, ponds and irrigation areas were in tidy and well managed. The stormwater drains were clear of debris and any other material, such as blood or animal product which might result in elevated levels of organic contaminants. The final treatment pond was maintained according to the consent conditions and the irrigation fields were generally free of ponding during the inspections. The worm beds were removed during the construction of the new effluent treatment pond but have since been replaced. These sometimes caused a distinct odour onsite but are not thought to be causing significant odour effects at neighbouring properties.

During this monitoring year the Company was issued one infringement notice related to the discharge of treated effluent in a manner which breached a consent condition. The Company no longer uses this paddock for irrigation.

The previous monitoring report found that the irrigation of treated wastewater to land had resulted in several paddocks exceeding the consented limit for nitrogen loading. This year the irrigation was managed well and the nitrogen loading remained below the consent limit. This likely enabled the pasture to assimilate a greater amount contaminants such as nitrogen and phosphorous, and consequently reduced levels in the Kahouri Stream and its tributary.

The results of the stream monitoring indicate that wastewater discharges are having an effect on water quality. Downstream concentrations of unionised ammonia, total ammoniacal nitrogen, dissolved reactive phosphorous, and *E. coli* were higher than upstream levels during the surveys. These compounds are commonly associated with effluent and organic-rich wastewater discharges. However, the results were less than the limits in the relevant consent conditions, and therefore the effects were within that provided for by the consent.

The biological surveys conducted to infer the ecological impact of wastewater discharges into the stream found that the in-stream biological community was good, very good, or excellent at the time of the surveys. The surveys concluded that the discharges had not had a significant ecological adverse effect during the monitoring year.

There were four air quality-related complaints during this monitoring year. The causes of the odour complaints were identified and resolved, and good ongoing management of the ponds and irrigation will reduce the risk of complaints reoccurring. The Company advised that they will ensure no further outdoor burning will occur.

3.1 Evaluation of performance

A tabular summary of the consent holder's compliance record for the period under review is set out in Table 10 to Table 14.

Table 10 Summary of performance for Consent 7662-1

Purpose: To discharge treated wastewater directly into the Kahouri Stream		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
1. Best practicable option	Inspections	Yes
2. Notification prior to any changes to processes	Council notified	Yes
3. Prohibits the consent to be exercised while Consent 0108-4 is current	Consent expired	Yes
4. Install flow meter	Inspections	Yes

Purpose: To discharge treated wastewater directly into the Kahouri Stream		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
5. Meter verification documentation submitted	Liaison with consent holder	Yes
6. Install staff gauge in Kahouri Stream	Inspections	Yes
7. Maintain staff gauge rating curve	Inspections	Yes
8. Minimise clean water entering treatment system	Review of records, inspections	Yes
9. Manage worm bed to minimise discharge to treatment system	Inspections	Yes
10. Prohibits the operation of aerators and stirrer while discharge occurs	Inspections	Yes
11. Discharge shall only occur when flow rates are 330L/s or greater	Review of records, inspections	Yes
12. Minimum dilution ratio of 1 part wastewater to 100 parts receiving water	Review of records, water quality sampling	Yes
13. Effects on receiving water beyond the 50m mixing zone	Water quality sampling, inspections	Yes
14. Suspended solids and turbidity limits	Water quality sampling	Yes
15. Safe site access	Inspections	Yes
16. At least 200mm of freeboard available at end of working day	Inspections	N/A
17. Install and maintain a permanent marker within the aerobic pond	Inspections	Yes
18. Preference given to discharge to land	Inspections, review of records	Yes
19. Manage wastewater treatment system to maximise quality	Inspections	Yes
20. Total BOD limit	Discharge quality sampling	Yes
21. Install and maintain a tap on the wastewater line	Inspections	Yes
22. Monitor and record the discharge	Review of records	Yes
23. Riparian management plan	Liaison with consent holder, inspections	Yes
24. Notification of environmental incidents	Liaison with consent holder, inspections	N/A
25. Lapse of consent	Consent exercised within lapse period	N/A
26. Optional review of consent	Not exercised	N/A
Overall assessment of consent compliance and environmental performance Overall assessment of administrative performance		**High** **High**

N/A = not applicable

Table 11 Summary of performance for Consent 5221-2

Purpose: To discharge treated wastewater from a treatment system onto and into land in the vicinity of an unnamed tributary of the Kahouri Stream		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
1. Best practicable option	Inspections	Yes
2. Notification prior to any changes to processes	Council notified	Yes
3. Install flow meter	Inspections	Yes

Purpose: To discharge treated wastewater from a treatment system onto and into land in the vicinity of an unnamed tributary of the Kahouri Stream		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
4. Meter verification documentation submitted	Liaising with consent holder	Yes
5. Follow wastewater irrigation management plan	Inspections	Yes
6. Update wastewater irrigation management plan	Liaising with consent holder	Yes
7. Review wastewater irrigation management plan	Liaising with consent holder	Yes
8. Designate a person to manage the irrigation system	Liaising with consent holder, inspections	Yes
9. Operation of aerator and stirrer	Inspections	Yes
10. Restrictions on nitrogen levels	Liaising with consent holder, inspections	Yes
11. Wastewater irrigation management plan submitted prior to nitrogen loading	Liaising with consent holder, inspections	Yes
12. Wastewater application must not exceed 24mm	Review of records	No
13. Sodium absorption ratio shall not exceed 15	wastewater sampling	Yes
14. Prohibits discharge to water from irrigation	Inspections	**No**
15. Restrictions on the wastewater discharge spray zone	Inspections	**No**
16. Prohibits discharge beyond the boundary of the property	Inspections	**No**
17. Preference given to discharge to land	Inspections, review of records	Yes
18. Application of pond solids to avoid discharge to water	Inspections	Yes
19. Daily discharge records	Review of records	Yes
20. Notification of any environmental incidents	Liaising with consent holder, inspections	Yes
21. Notification information	Liaising with consent holder, inspections	Yes
22. Optional review of consent	Not exercised	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		**Improvement required** **High**

Table 12 Summary of performance for Consent 7660-1

Purpose: To discharge uncontaminated stormwater to land, in association with meat processing, rendering and associated activities		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
1. Best practicable option	Inspections	Yes
2. Prevent discharge from contamination	Inspections	Yes
3. Constituents of the discharge	Inspections, water quality sampling	Yes
4. Optional review of consent	Not exercised	N/A
Overall assessment of consent compliance and environmental performance Overall assessment of administrative performance		**High** **High**

Table 13 Summary of performance for Consent 4055-3

Purpose: To discharge emissions to air, in association with meat processing, rendering and associated activities		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
1. Best practicable option	Inspections	Yes
2. Consent holder to maintain a contingency plan	Inspections	Yes
3. Submit contingency plan	Liaising with consent holder	Yes
4. Notification of any changes to plant processes	Liaising with consent holder	Yes
5. Prohibits fish being received or processed onsite	Inspections	Yes
6. Only offal from purpose killed animals shall be received and processed onsite	Inspections	Yes
7. Prohibits putrescible materials to be stored onsite	Inspections	Yes
8. Emissions must be extracted to the biofilter	Inspections	N/A
9. Discharge temperature must not exceed 35°C	Data review	N/A
10. Calibration of the temperature detector	Liaising with consent holder	N/A
11. Record the non-condensable gas line	Liaising with consent holder, inspections	N/A
12. Minimise emissions	Inspections	Yes
13. Prohibits objectionable or offensive odour beyond the boundary of the site to the extent where this odour causes an adverse effect	Inspections	Yes
14. Prohibits objectionable or offensive dust beyond the boundary of the site	Inspections	Yes
15. Consent holder to notify Council of any adverse environmental incidents.	Liaising with consent holder, inspections	Yes
16. Optional review of consent	Not exercised	N/A
Overall assessment of consent compliance and environmental performance Overall assessment of administrative performance		**High** **High**

Table 14 Summary of performance for Consent 5176-2

Purpose: To take water from the Kahouri Stream for stock and yard washing purposes		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
1. Best practicable option	Data review	Yes
2. Abstraction rates	Data review	Yes
3. Water meter and data logger installed and maintained	Council notified, inspections	Yes
4. Documentation from a suitably qualified person certifying water measuring and recording equipment	Council notified	Yes
5. Advise Council of broken down or non-operational equipment	Council notified, inspections	Yes
6. Accessible and retrievable records	Inspections	Yes
7. Abstraction records	Data review	Yes

Purpose: To take water from the Kahouri Stream for stock and yard washing purposes		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
8. Minimum flow in Kahouri Stream	Data review	Yes
9. Intake screened	Inspections	Yes
10. Staff gauge	Inspection	Yes
11. Consent given effect	Council notified, data review	Yes
12. Optional review of consent	Not exercised	N/A
Overall assessment of consent compliance and environmental performance Overall assessment of administrative performance		**High** **High**

Table 15 below summarises the environmental performance ratings since 2019/20.

Table 15 Evaluation of environmental performance over time

Year	Consent numbers	High	Good	Improvement req	Poor
2019/20	4055-3, 5176-2, 5221-2, 6570-1, 7660-1, 7662-1	2	1	-	3
2020/21	4055-3, 5176-2, 5221-2, 6570-1, 7660-1, 7662-1	2	1	-	3
2021/22	4055-3, 5176-2, 5221-2, 6570-1, 7660-1, 7662-1	3	2	-	-
2022/23	4055-3, 5176-2, 5221-2, 7660-1, 7662-1	4	-	1	-
2023/24	4055-3, 5176-2, 5221-2, 7660-1, 7662-1	4	-	1	-

During the year, the Company demonstrated a level of administrative performance that was high, but environmental performance requires improvement, as defined in Appendix II. During the year under review there were two non-compliant incidents recorded that related to the Company's activities although these did not result in any demonstrable significant adverse effects. The resource consents require that the site minimise adverse effects as far as practicable. This can be achieved by improved administrative processes such as closer monitoring of nitrogen loading to paddocks. The previous monitoring report indicated that the consent holder needed to give a higher priority to administrative performance and consent compliance.

3.2 Recommendations from the 2022/23 Annual Report

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

1. THAT the monitoring of consented activities at Ample Group Ltd in the 2023/24 year shall 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.
3. THAT the Company in the 2023/24 monitoring year shall prioritise administrative performance, particularly in regard to recording wastewater discharge data.
4. THAT the company should undertake their own nitrogen monitoring to inform their wastewater irrigation management. The Council will continue to collect samples to validate the company's results.

The monitoring programme was completed in full this year. Minor non-compliances occurred but these were not sufficiently serious to amend the monitoring programme. The Company has not commenced self-monitoring of wastewater parameters and continues to rely on results from samples collected by Council.

3.3 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.

The proposed programme represents a reasonable and risk-based level of monitoring for the site. 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 the monitoring of consented activities at Ample Group Ltd in the 2024/25 year shall continue at the same level as in 2023/24.
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.
3. THAT the company should undertake their own nitrogen and sodium absorption ratio monitoring to inform their wastewater irrigation management. The Council will continue to collect samples.

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.
BOD	Biochemical oxygen demand. A measure of the presence of degradable organic matter, taking into account the biological conversion of ammonia to nitrate.
BODF	Biochemical oxygen demand of a filtered sample.
Bund	A wall around a tank to contain its contents in the case of a leak.
CBOD	Carbonaceous biochemical oxygen demand. A measure of the presence of degradable organic matter, excluding the biological conversion of ammonia to nitrate.
COD	Chemical oxygen demand. A measure of the oxygen required to oxidise all matter in a sample by chemical reaction.
Conductivity	Conductivity, an indication of the level of dissolved salts in a sample, usually measured at 25°C and expressed in µS/cm.
Cumec	A volumetric measure of flow- 1 cubic metre per second ($1m^3s^{-1}$).
DO	Dissolved oxygen.
DRP	Dissolved reactive phosphorus.
E. coli	*Escherichia coli*, an indicator of the possible presence of faecal material and pathological micro-organisms. Usually expressed as colony forming units per 100 millilitre sample.
Ent	Enterococci, an indicator of the possible presence of faecal material and pathological micro-organisms. Usually expressed as colony forming units per 100 millilitre of sample.
FC	Faecal coliforms, an indicator of the possible presence of faecal material and pathological micro-organisms. Usually expressed as colony forming units per 100 millilitre sample.
Fresh	Elevated flow in a stream, such as after heavy rainfall.
$g/m^2/day$	grams/metre^2/day.
g/m^3	Grams per cubic metre, and equivalent to milligrams per litre (mg/L). In water, this is also equivalent to parts per million (ppm), but the same does not apply to gaseous mixtures.
Incident	An event that is alleged or is found to have occurred that may have actual or potential environmental consequences or may involve non-compliance with a consent or rule in a regional plan. Registration of an incident by the Council does not automatically mean such an outcome had actually occurred.
Intervention	Action/s taken by Council to instruct or direct actions be taken to avoid or reduce the likelihood of an incident occurring.
Investigation	Action taken by Council to establish what were the circumstances/events surrounding an incident including any allegations of an incident.
Incident Register	The Incident Register contains a list of events recorded by the Council on the basis that they may have the potential or actual environmental consequences that may represent a breach of a consent or provision in a Regional Plan.
L/s	Litres per second.
m^2	Square Metres.

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.
mS/m	Millisiemens per metre.
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.
NH_4	Ammonium, normally expressed in terms of the mass of nitrogen (N).
NH_3	Unionised ammonia, normally expressed in terms of the mass of nitrogen (N).
NO_3	Nitrate, normally expressed in terms of the mass of nitrogen (N).
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.
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.
SS	Suspended solids.
SQMCI	Semi quantitative macroinvertebrate community index.
Temp	Temperature, measured in °C (degrees Celsius).
Turb	Turbidity, expressed in NTU.
UI	Unauthorised Incident.

*an abbreviation for a metal or other analyte may be followed by the letters 'As', to denote the amount of metal recoverable in acidic conditions. This is taken as indicating the total amount of metal that might be solubilised under extreme environmental conditions. The abbreviation may alternatively be followed by the letter 'D', denoting the amount of the metal present in dissolved form rather than in particulate or solid form.

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 Kahouri Stream in relation to Ample Group Ltd meat processors, February 2024*. Technical Report AB042.

Taranaki Regional Council (October 2024): *Biomonitoring of the Kahouri Stream in relation to Ample Group Ltd meat processors, November 2023*. Technical Report FK034.

Taranaki Regional Council (2024): Ample Group Ltd Monitoring Programme Report 2022/23. Technical Report 2023-85.

Taranaki Regional Council (2023): Ample Group Ltd Monitoring Programme Report 2021-2022. Technical Report 2022-73.

Taranaki Regional Council (2021): Ample Group Ltd Monitoring Programme Report 2020-2021. Technical Report 2021-47.

Taranaki Regional Council (2020): Ample Group Ltd Monitoring Programme Report 2019-2020. Technical Report 2020-69.

Taranaki Regional Council (2019): Ample Group Ltd Monitoring Programme Report 2018-2019. Technical Report 2019-37.

Taranaki Regional Council (2018): Ample Group Ltd Monitoring Programme Report 2017-2018. Technical Report 2018-40.

Taranaki Regional Council (2017): Ample Group Ltd Monitoring Programme Report 2016-2017. Technical Report 2017-71.

Taranaki Regional Council (2016): Ample Group Ltd Monitoring Programme Report 2015-2016. Technical Report 2016-116.

Taranaki Regional Council (2015): Gold International Meat Processors Ltd Monitoring Programme Report 2014-2015. Technical Report 2015-22.

Taranaki Regional Council (2014): Taranaki Abattoirs Ltd Monitoring Programme Report 2010-2014. Technical Report 2014-57.

Taranaki Regional Council (2011): Kahouri Stream Monitoring Programme Annual Report 2009-2010. Technical Report 10-99.

Taranaki Regional Council (2010): Kahouri Stream Monitoring Programme Annual Report 2008-2009. Technical Report 09-99.

Taranaki Regional Council (2009b): Kahouri Stream Monitoring Programme Annual Report 2007-2008. Technical Report 08-93.

Taranaki Regional Council (2009a): Kahouri Stream Monitoring Programme Annual Report 2006-2007. Technical Report 07-118.

Taranaki Regional Council (2006a): Kahouri Stream Monitoring Programme Annual Report 2005-2006. Technical Report 06-69.

Taranaki Regional Council (2005): Kahouri Stream Monitoring Programme Annual Report 2004-2005. Technical Report 05-73.

Taranaki Regional Council (2004): Kahouri Stream Monitoring Programme Annual Report 2003-2004. Technical Report 04-66.

Taranaki Regional Council (2003): Kahouri Stream Monitoring Programme Annual Report 2002-2003. Technical Report 03-26.

Taranaki Regional Council (2002): Kahouri Stream Monitoring Programme Annual Report 2001-2002. Technical Report 02-27.

Taranaki Regional Council (2001): Kahouri Stream Discharge Permits Annual Monitoring Report 2000-2001. Technical Report 01-20.

Taranaki Regional Council (2000): Kahouri Stream Discharge Permits Annual Monitoring Report 1999-2000. Technical Report 00-39.

Taranaki Regional Council (1999): Kahouri Stream Discharge Permits Annual Monitoring Report 1998-99. Technical Report 99-60.

Taranaki Regional Council (1998): Kahouri Stream Discharge Permits Annual Monitoring Report 1997-98. Technical Report 98-89.

Taranaki Regional Council (1997): Kahouri Stream Discharge Permits Annual Monitoring Report 1996-97. Technical Report 97-42.

Taranaki Regional Council (1996): Kahouri Stream Discharge Permits Annual Monitoring Report 1995-96. Technical Report 96-37.

Taranaki Regional Council (1995): Kahouri Stream Discharge Permits Annual Monitoring Report 1994-95. Technical Report 95-75.

Taranaki Regional Council (1994): Kahouri Stream Discharge Permits Annual Monitoring Report 1993-94. Technical Report 94-48.

Taranaki Regional Council (1993): Kahouri Stream Discharge Permits Annual Monitoring Report 1993-94. Technical Report 93-17.

Appendix I

Resource consents held by Ample Group 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.

Discharge Permit

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

Name of Consent Holder:	Ample Group Limited 3396 Mountain Road RD 24 Stratford 4394
Decision Date:	7 November 2011
Commencement Date:	7 November 2011

Conditions of Consent

Consent Granted:	To discharge emissions to air, namely odour and dust, in association with meat processing, rendering and associated activities including waste treatment and disposal activities
Expiry Date:	1 June 2028
Review Date(s):	June of any year
Site Location:	3326 Mountain Road and 17 Monmouth Extension, Stratford
Legal Description:	Sec 62 Manganui Dist Blk XIII Huiroa SD, Pt Sec 12 Blk XIII Huiroa SD and Pt Sec 2-4 Blk I Ngaere SD
Grid Reference (NZTM)	1709506E-5647939, 1709815E-5647783N, 1709874E-5647570N, 1709423E-5647438N and between 1709871E-5647776N, 1710911E-5647381N, 1710905E-5647127N, 1710301E-5647038N, 1710241E-5647326N, 1710019E-5647280N

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

General conditions

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

2. On-site operations shall be undertaken in accordance with the *Contingency Plan for Taranaki Abattoir Co. (1992) Ltd and Stratford By Products Ltd*, submitted with the application (which details the management procedures to be undertaken on site to mitigate adverse odour effects), or any subsequent reviews.

   Note: Where there may be inconsistencies between the information provided within the Plan and conditions of this consent, the conditions apply.

3. The consent holder shall update and submit to the Taranaki Regional Council, the *Contingency Plan for Taranaki Abattoir Co. (1992) Ltd and Stratford By Products Ltd* every two years so that, to the satisfaction of the Chief Executive of the Taranaki Regional Council, the Plan details how discharges to air from the site will be managed to ensure compliance with conditions 13 and 14 of this consent. The Plan shall include but not necessarily be limited to:

   a) A description of the environmental effects being managed;

   b) The identification of key personnel responsible for managing and implementing the management system for mitigating adverse effects;

   c) A description of the activities on site and describe the main potential sources of odour emissions;

   d) A description of storage and treatment procedures(including specification of storage times and preservative dosing concentrations) for ensuring that only high quality raw material is processed;

   e) The identification and description of the odour and dust mitigation measures in place;

   f) The identification and description of relevant operating procedures and parameters that need to be controlled to minimise emissions;

   g) A description of contingency procedures for addressing emergency situations at the plant (such as equipment failure or spillage of raw material or chemicals) which could result in a discharge to air of odorous emissions that are offensive and objectionable beyond the boundary of the plant;

   h) A description of monitoring and maintenance procedures for managing the odour mitigation measures including record keeping of control parameters and maintenance checks; and

   i) Details of staff training proposed to enable staff to appropriately manage the odour mitigation measures.

4. The consent holder shall notify the Chief Executive, Taranaki Regional Council, prior to undertaking any alterations to the plant, operations or processes which may significantly change the nature or quantity of contaminants discharged to air from the site. Any such change shall then only occur following receipt of any necessary approvals under the Resource Management Act 1991.

Process control

5. No fish or fish parts shall be received or processed on site.

6. Only offal derived from purpose killed animals shall be received and processed on site.

7. No putrescible materials shall be stored or left in any manner on site which causes them to putrefy and create an odour nuisance.

8. Emissions produced during and on the release of all rendering cooks shall be extracted to the biofilter for treatment prior to discharge.

9. The inlet temperature of the extracted air at the duct ahead of the biofilter shall not exceed 35^{o}C for more than 15 minutes continuously at any one time.

10. The consent holder shall calibrate the temperature detector and recorder on the non-condensable gas line on a yearly basis. The calibration results shall be provided to the Chief Executive, Taranaki Regional Council.

11. The consent holder shall maintain the temperature detector and recorder on the non-condensable gas line so that it is in effective working order at all times.

12. The consent holder shall minimise the emissions and impacts of contaminants discharged into air from the site by the proper and effective operation, supervision, maintenance and control of all equipment and processes.

Odour

13. There shall be no objectionable or offensive odour to the extent that it causes an adverse effect at or beyond the boundary of the site.

    Notes: For the purposes of this condition:

    - The site is defined as Sec 62 Manganui Dist Blk XIII Huiroa SD (Consent holder's site), and Pt Sec 12 Blk XIII Huiroa SD and Pt Secs 2-4 Blk I Ngaere SD (Gilbert Farms' site); and
    - Assessment under this condition shall be in accordance with the *Good Practice Guide for Assessing and Managing Odour in New Zealand, Air Quality Report 36, Ministry for the Environment, 2003.*

Dust

14. The discharges authorised by this consent shall not give rise to suspended or deposited dust at or beyond the boundary of the site that, in the opinion of at least one enforcement officer of the Taranaki Regional Council, is offensive or objectionable. For the purpose of this condition, discharges in excess of the following limits are deemed to be offensive or objectionable:

    a) dust deposition rate of 0.13 $g/m^2/day$; and/or

    b) suspended dust level of 3 mg/m^3.

    Note: For the purposes of this condition the site is defined as Sec 62 Manganui Dist Blk XIII Huiroa SD

Incident notification

15. Any incident related to this consent that results, or could result, in an adverse effect on the environment shall be notified to the Taranaki Regional Council as soon as practicable, together with the reasons for the incident, and measures taken to mitigate the effects of the incident and prevent a recurrence.

    Note: For notification purposes, at the grant date of this consent, the Taranaki Regional Council's phone number is 0800 736 222 (24 hour service).

Review

16. 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 in any year for any of the following purposes:

    a) Ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, and in particular to address any more than minor adverse effects relating to odour discharges from the site; and

    b) To determine any measures that may be appropriate to comply with condition 1 of this consent, and which are necessary to address any adverse effects of odour from the site.

Transferred at Stratford on 18 January 2016

For and on behalf of
Taranaki Regional Council

_____

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:	Ample Group Limited PO Box 193 Stratford 4352
Decision Date:	7 July 2016
Commencement Date:	7 July 2016

Conditions of Consent

Consent Granted:	To take water from the Kahouri Stream for stock and yard washing purposes
Expiry Date:	1 June 2034
Review Date(s):	June 2019 and every 3 years thereafter
Site Location:	3396 Mountain Road, Stratford
Grid Reference (NZTM)	1709640E-5647873N
Catchment:	Patea
Tributary:	Kahouri

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. At all times the consent holder shall adopt the best practicable option to prevent or minimise any actual or likely adverse effect on the environment associated with the abstraction of water from the Kahouri Stream, including, but not limited to, the efficient and conservative use of water.

2. The rate of taking shall not exceed 3.25 litres per second, and the volume taken in any 24 hour period ending at midnight (New Zealand Standard Time) shall not exceed 178 cubic metres.

3. Before 1 September 2016 the consent holder shall install, and thereafter maintain a water meter and a datalogger at the site of taking (or a nearby site in accordance with Regulation 10 of the *Resource Management (Measurement and Reporting of Water Takes) Regulations 2010*. The water meter and datalogger shall be tamper-proof and shall measure and record the rate and volume of water taken to an accuracy of ± 5%. Records of the date, the time and the rate and volume of water taken at intervals not exceeding 15 minutes, shall be made available to the Chief Executive, Taranaki Regional Council at all reasonable times.

   Note: Water meters and dataloggers must be installed, and regularly maintained, in accordance with manufacturer's specifications in order to ensure that they meet the required accuracy. Even with proper maintenance water meters and dataloggers have a limited lifespan.

4. The consent holder shall provide the Chief Executive, Taranaki Regional Council with a document from a suitably qualified person certifying that water measuring and recording equipment required by the conditions of this consent ('the equipment'):

   a. has been installed and/or maintained in accordance with the manufacturer's specifications; and/or

   b. has been tested and shown to be operating to an accuracy of ± 5%.

   The documentation shall be provided:

   a) within 30 days of the installation of a water meter or datalogger;

   b) at other times when reasonable notice is given and the Chief Executive, Taranaki Regional Council has reasonable evidence that the equipment may not be functioning as required by this consent; and

   c) no less frequently than once every five years.

5. If any measuring or recording equipment breaks down, or for any reason is not operational, the consent holder shall advise the Chief Executive, Taranaki Regional Council immediately. Any repairs or maintenance to this equipment must be undertaken by a suitably qualified person and a maintenance report provided to the Chief Executive, Taranaki Regional Council within 30 days of the work occurring.

6. Any water meter or datalogger shall be accessible to Taranaki Regional Council officers at all reasonable times for inspection and/or data retrieval. In addition the data logger shall be designed and installed so that Taranaki Regional Council officers can readily verify that it is accurately recording the required information.

7. The records of water taken:

   a. be in a format that, in the opinion of the Chief Executive, Taranaki Regional Council, is suitable for auditing;

   b. specifically record the water taken as 'zero' when no water is taken; and

   c. for each 12-month period ending on 30 June, be provided to the Chief Executive, Taranaki Regional Council within one month after end of that period.

8. No taking shall occur when the flow in the Kahouri Stream immediately downstream of the intake point is less than 55 litres per second.

9. The consent holder shall ensure that the intake is screened to avoid fish (in all stages of their life-cycle) entering the intake or being trapped against the screen.

10. A staff gauge shall be installed and a low flow rating curve established and maintained that determines the flow in the Kahouri Stream immediately downstream of the take site. The cost of the installation, and the establishment and maintenance of the rating shall be met by the consent holder.

11. This consent shall lapse on 30 September 2021, 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 2019 and at 3 yearly intervals thereafter for the purposes of:

   a. 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; and/or

   b. requiring continuous measuring and recording of the flow immediately downstream of the take site; and/or

   c. requiring any data collected in accordance with the conditions of this consent to be transmitted directly to the Taranaki Regional Council's computer system, in a format suitable for providing a 'real time' record over the internet.

Signed at Stratford on 7 July 2016

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:	Ample Group Limited 3396 Mountain Road RD 24 Stratford 4394
Decision Date:	7 November 2011
Commencement Date:	7 November 2011

Conditions of Consent

Consent Granted:	To discharge treated wastewater, pond solids from a wastewater treatment system, vermicast and blood onto and into land
Expiry Date:	1 June 2028
Review Date(s):	June of any year
Site Location:	3326 Mountain Road and 17 Monmouth Road Extension, Stratford
Legal Description:	Sec 62 Manganui Dist Blk XIII Huiroa SD, Pt Sec 12 Blk XIII Huiroa SD and pt Sec 2-4 Blk I Ngaere SD
Grid Reference (NZTM)	Between 1709506E-5647939, 1709815E-5647783N, 1709874E-5647570N, 1709423E-5647438N and between 1709871E-5647776N, 1710911E-5647381N, 1710905E-5647127N, 1710301E-5647038N, 1710241E-5647326N, 1710019E-5647280N
Catchment:	Patea
Tributary:	Kahouri

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

General conditions

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

2. The consent holder shall notify the Chief Executive, Taranaki Regional Council, prior to making any changes to the processes or operations undertaken at the site, or chemicals used or stored on site that could alter the nature of the discharge. Any such change shall then only occur following receipt of any necessary approvals under the Resource Management Act 1991.

Pre-activity requirements

3. Before exercising this consent the consent holder shall install, and thereafter maintain, a flow meter. The flow meter shall measure the volume of the discharge to land to an accuracy of ± 5%.

   Notes: Flow meters must be installed, and regularly maintained, in accordance with the manufacturer's specifications in order to ensure that they meet the required accuracy. Even with proper maintenance flow meters have a limited lifespan.

   A single flow meter may be installed for the purposes of meeting this condition and condition 4 of consent 7662-1 provided that the records submitted in accordance with condition 19 of this consent and condition 22 of consent 7662-1 clearly differentiate between the two receiving environments.

Flow meter certification

4. The consent holder shall provide the Chief Executive, Taranaki Regional Council with documentation from a suitably qualified person certifying that the flow meter:

   a) has been installed and/or maintained in accordance with the manufacturers' specifications; and/or

   b) has been tested and shown to be operating to an accuracy of ± 5%.

   The documentation shall be provided:

   (i) within 30 days of the installation of a flow meter;

   (ii) at other times when reasonable notice is given and the Chief Executive, Taranaki Regional Council has reasonable evidence that the flow meter may not be functioning as required by this consent; and

   (iii) no less frequently than once every five years.

Management plan

5. The consent shall be exercised in accordance with the procedures set out in the Wastewater Irrigation Management Plan (submitted as further information to the application). In the case of any contradiction between the Plan and the conditions of this resource consent, the conditions of this resource consent shall prevail.

6. Within one month of the grant date of this consent, the consent holder shall amend and re-submit the Wastewater Irrigation Management Plan described in condition 5 of this consent so that, to the satisfaction of the Chief Executive, Taranaki Regional Council, the Plan details how the discharge will be managed to ensure that the conditions of this consent will be met. The Plan shall be amended to include, but not necessarily be limited to, the following details:

    a) how the irrigation areas will be identified [e.g. paddock numbering system or large land areas broken down into 1 ha lots and numbered] and a plan/drawing showing the location and extent of each identified area. This system shall be used for record keeping purposes under condition 19;
    b) the surface area of each irrigation area identified under clause a) above;
    c) identification of the location and extent of irrigation main lines and hydrant locations on an aerial plan/drawing; and
    d) the surface area of land required for a range of wastewater discharge volume scenarios, or a calculation which shows how the required land area will be worked out each time irrigation is initiated, to ensure that condition 10 will be met.

7. The Wastewater Irrigation Management Plan described in condition 5 of this consent shall be subject to review by the consent holder every two years from the commencement of consent, or upon two months notice by either the consent holder or the Taranaki Regional Council so that, to the satisfaction of the Chief Executive Taranaki Regional Council, the Plan details how discharges to land will be managed to ensure that the conditions of this consent are complied with. The Plan shall include but not necessarily be limited to:

    a) the results of investigating the practicalities of increasing the land area available for irrigation and/or increasing wastewater application loading rates through implementing cut and carry areas, including the provision of supporting evidence for the outcome of the investigation;
    b) designated application areas and buffer zones for streams and the property boundaries;
    c) selection of appropriate irrigation methods for different types of terrain;
    d) application rate and duration;
    e) application frequency and nitrogen loading rate;
    f) farm management and operator training;
    g) soil and herbage management;
    h) prevention of runoff and ponding;
    i) minimisation and control of offsite odour and spray drift effects;
    j) operational control and maintenance of the spray irrigation system;
    k) monitoring of the effluent [physicochemical];
    l) monitoring of soils and herbage [physicochemical];
    m) monitoring of groundwater beneath and beyond the irrigated area [physicochemical] (if required in accordance with condition 11 of this consent);
    n) monitoring of local water supplies and remediation;
    o) mitigation measures, including riparian planting and fencing;

p) reporting monitoring data;
q) monitoring of the tributaries draining the property;
r) procedures for responding to complaints;
s) notification to the council of non-compliance with the conditions of this consent;
t) procedures for recording maintenance and repairs;
u) procedures for draining and flushing the irrigation mainlines and laterals to prevent anaerobic conditions.

The objective of the plan shall be to minimise discharges to the Kahouri Stream under consent 7662-1 and maximise discharges to land.

A copy of the reviewed Plan shall be provided to the Department of Conservation and Fish and Game New Zealand (Taranaki Region), and the Taranaki Regional Council will take into account any comments received (within a two week timeframe from when the Plan was provided).

Note: For ease of assessment, the consent holder shall highlight the areas of the reviewed Plan where changes have been made from the previous Plan.

8. The consent holder shall designate a person with the necessary qualifications and/or experience to manage the wastewater irrigation system. This person shall be regularly trained on the content and implementation of the Wastewater Irrigation Management Plan, and shall be advised immediately of any revision or additions to the wastewater irrigation management plan.

Application restrictions

9. The aerator and stirrer shall be operated within the final pond of the wastewater treatment system while wastewater is being irrigated to land.

10. Over any 12 month period the Total Nitrogen applied to any hectare of land as a result of the wastewater, pond solids, blood and/or vermicast discharges and any other nitrogen inputs [e.g. urea] shall be no more than:

    a) 200 kg for areas used for grazing; and

    b) 600 kg for areas used for cut and carry, subject to condition 11 below.

11. Prior to applying a Total Nitrogen loading that exceeds 200 kg/ha/year in accordance with condition 10 (b) above, the consent holder shall amend and re-submit the Wastewater Irrigation Management Plan described in condition 5 so that, to the satisfaction of the Chief Executive, Taranaki Regional Council, the Plan details how the discharge will be managed to ensure that the conditions of this consent will be met. The Plan shall be amended to include, but not necessarily be limited to, procedures for monitoring and reporting on soil and groundwater quality.

12. The wastewater application depth within any area of irrigation shall not exceed 24 mm over any 15 day period.

13. The sodium absorption ratio [SAR] of the wastewater shall not exceed 15.

14. There shall be no discharge to water as a result of irrigating wastewater to land. In order to ensure there is no such discharge:

    a) no irrigation shall occur closer than 25 m to any surface water body;
    b) the discharge shall not result in surface ponding that remains for more than three hours after the discharge has ceased;
    c) the discharge shall not occur on land with a slope that is likely to result in runoff; and
    d) notwithstanding condition 12, the discharge shall not occur at a rate at which it cannot be assimilated by the soil/pasture system.

15. The extent of the wastewater discharge spray zone shall be at least:

    a) 25 metres away from the bank of any surface waterbody;
    b) 50 metres away from any bore, well or spring used for water supply;
    c) 150 metres away from any dwellinghouse situated off the site, unless the written approval of the owner/occupier has been obtained to allow the discharge at a closer distance; and
    d) 15 metres from State Highway 3.

16. No discharges, including spray drift, shall occur at or beyond the boundary of any property on which the discharge is occurring.

17. As far as practicable, discharges to the Kahouri Stream shall be minimised and discharges to land under consent 5221-2 maximised. This means that even at times when 1:100 dilution can be achieved in the Kahouri Stream, discharges shall be irrigated to land unless the land is saturated and consequently is incapable of accepting the discharge.

18. The application of pond solids, vermicast and/or blood to land shall be undertaken in a manner which avoids a discharge to surface water.

Records

19. The consent holder shall record the following information on a daily basis in association with irrigating the wastewater to land:

    a) the date and pumping hours;
    b) the volume of discharge [as measured in association with the flow meter required under condition 3];
    c) the surface area of land irrigated;
    d) the location[s] irrigated, using the system identified and approved under the Wastewater Irrigation Management Plan;
    e) the application depth over the location[s] irrigated; and
    f) the volume of Total Nitrogen applied over the location[s] irrigated [kg/ha] on any day, and a running total for each irrigation location for each calendar year.

    This record shall be in an electronic format and submitted to the Taranaki Regional Council. The record format and frequency that the records are to be submitted is to be undertaken as advised by the Chief Executive, Taranaki Regional Council.

    In addition, the consent holder will record the date, time and volume of other materials discharged to the irrigation area, including pond solids, blood and/or vermicast discharges and any other nitrogen inputs [e.g. urea], and will provide such records to the Chief Executive, Taranaki Regional Council, by 1 June of each year.

Incident notification

20. Any incident related to this consent that results, or could result, in an adverse effect on the environment shall be notified to the Taranaki Regional Council as soon as practicable, together with the reasons for the incident, and measures taken to mitigate the effects of the incident and prevent a recurrence.

21. Note: For notification purposes, at the grant date of this consent, the Taranaki Regional Council's phone number is 0800 736 222 [24 hour service].

Review

22. 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 in any year for any of the following purposes:

    a) Ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, and in particular to address any more than minor adverse effects relating to water quality issues; and

    b) To determine any measures that may be appropriate to comply with condition 1 of this consent, and which are necessary to address any adverse effects relating to the wastewater discharges from the site.

Transferred at Stratford on 18 January 2016

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:	Ample Group Limited 3396 Mountain Road RD 24 Stratford 4394
Decision Date:	7 November 2011
Commencement Date:	7 November 2011

Conditions of Consent

Consent Granted:	To discharge uncontaminated stormwater from a site used for meat processing and rendering onto and into land in a manner where it may enter the Kahouri Stream
Expiry Date:	1 June 2028
Review Date(s):	June 2016, June 2022
Site Location:	3326 Mountain Road, Stratford
Legal Description:	Sec 62 Manganui Dist Blk XIII Huiroa SD
Grid Reference (NZTM)	Between 1709729E-5647762N, 1709817E-5647767N, 1709834E-5647703N and 1709781E-5647688N
Catchment:	Patea
Tributary:	Kahouri

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

General condition

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

Water quality

2. Stormwater discharged under this consent shall be prevented from becoming contaminated from onsite processes, including by ensuring that contaminants from the rendering and/or abattoir processes do not enter the 'clean' areas of the site [being areas which do not discharge to the wastewater treatment system].

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

Constituent	Standard
pH	Within the range of 6.0 to 9.0
Suspended solids	Concentration not greater than 100 gm^{-3}
Total recoverable oil and grease	Concentration not greater than 15 gm^{-3}

This condition shall apply before entry of the uncontaminated stormwater into a stormwater pipe and/or into or onto land at a designated sampling point[s] approved by the Chief Executive, Taranaki Regional Council.

Review dates

4. 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 2016 and/or 2022 for any of the following purposes:

   a) Ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, and in particular to address any more than minor adverse effects relating to water quality issues; and

   b) To determine any measures that may be appropriate to comply with condition 1 of this consent, and which are necessary to address any adverse effects relating to the wastewater discharges from the site.

Transferred at Stratford on 18 January 2016

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:	Ample Group Limited 3396 Mountain Road RD 24 Stratford 4394
Decision Date:	7 November 2011
Commencement Date:	7 November 2011

Conditions of Consent

Consent Granted:	To discharge treated wastewater directly into the Kahouri Stream
Expiry Date:	1 June 2028
Review Date(s):	June of any year
Site Location:	3326 Mountain Road, Stratford
Legal Description:	Sec 62 Manganui Dist Blk XIII Huiroa SD
Grid Reference (NZTM)	1709705E-5647806N
Catchment:	Patea
Tributary:	Kahouri

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

General conditions

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

2. The consent holder shall notify the Chief Executive, Taranaki Regional Council, prior to making any changes to the processes or operations undertaken at the site, or chemicals used or stored on site that could alter the nature of the discharge. Any such change shall then only occur following receipt of any necessary approvals under the Resource Management Act 1991.

Pre-activity requirements

3. This consent shall not be exercised while consent 0108-4 (which authorises the discharge of wastewater to an unnamed tributary of the Kahouri Stream) is still current.

   Note: this condition does not apply during the testing phase of commissioning the system that will be used for discharging under this consent.

4. Before exercising this consent the consent holder shall install, and thereafter maintain, a flow meter. The flow meter shall measure the volume of the discharge to the Kahouri Stream to an accuracy of ± 5%.

   Notes: Flow meters must be installed, and regularly maintained, in accordance with the manufacturer's specifications in order to ensure that they meet the required accuracy. Even with proper maintenance flow meters have a limited lifespan.

   A single flow meter may be installed for the purposes of meeting this condition and condition 3 of consent 5221-2 provided that the records submitted in accordance with condition 22 of this consent and condition 19 of consent 5221-2 clearly differentiate between the two receiving environments.

Flow meter certification

5. The consent holder shall provide the Chief Executive, Taranaki Regional Council with documentation from a suitably qualified person certifying that the flow meter :

   a) has been installed and/or maintained in accordance with the manufacturers' specifications; and/or

   b) has been tested and shown to be operating to an accuracy of ± 5%.

The documentation shall be provided:

(i) within 30 days of the installation of a flow meter;

(ii) at other times when reasonable notice is given and the Chief Executive, Taranaki Regional Council has reasonable evidence that the flow meter may not be functioning as required by this consent; and

(iii) no less frequently than once every five years.

Staff gauge installation and flow curve establishment

6. The consent holder shall ensure that a staff gauge is installed and maintained to effectively display the water level in the Kahouri Stream at or around the point of discharge to an accuracy of 0.005 m.

7. The consent holder shall, as soon as practicable, ensure that sufficient stream flow measurements are undertaken to maintain a 'rating curve' that accurately translates the water level, as displayed on the staff gauge referenced in condition 6, to stream flow at or around the point of discharge.

Note: Work required by conditions 6 and 7 will be undertaken by the Taranaki Regional Council and all reasonable costs will be recovered from the consent holder through the annual compliance monitoring programme that is in place for the activity.

Minimisation of wastewater

8. All uncontaminated stormwater shall be prevented from entering the wastewater treatment ponds as far as practicable.

9. The worm bed area shall be managed to minimise leachate discharges to the pond treatment system as far as practicable (e.g. by covering the worm beds and/or vegetating land surfaces between worm bed rows) to the satisfaction of the Chief Executive, Taranaki Regional Council.

Discharges to the Kahouri Stream (at all times)

10. The aerator and stirrer shall not be operated within the wastewater treatment system while discharging to the Kahouri Stream.

11. Notwithstanding conditions 12 and 18 below, discharges to the Kahouri Stream shall only occur when stream flows are 330 L/s or greater.

12. A minimum dilution ratio of 1 part wastewater to 100 parts receiving water shall be maintained at all times in the receiving waters of the Kahouri Stream at the point of discharge.

13. Discharges into the Kahouri Stream shall not give rise to the following effects in the Kahouri Stream, beyond a mixing zone of 50 m:

    a) a level of filtered carbonaceous BOD_5 of more than 2.00 gm^{-3};
    b) a level of unionised ammonia of greater than 0.025 gm^{-3};
    c) the production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials;
    d) any conspicuous change in the colour or visual clarity;
    e) any emission of objectionable odour;
    f) the rendering of fresh water unsuitable for consumption by farm animals;
    g) any significant adverse effects on aquatic life; and
    h) the generation of undesirable heterotrophic growths (sewage fungus).

    Note: The difference in macroinvertebrate community between the upstream control site and the potential impact site immediately below the mixing zone will be examined in order to determine if the discharge has resulted in a 'significant adverse effect on aquatic life'. This will include examining any change in the Semi-Quantitative Macroinvertebrate Community Index (SQMCI), overall composition of the community (including %EPT) and Macroinvertebrate Community Index (MCI) . Should this examination identify a significant adverse effect caused by the discharge, this will constitute a breach of this condition.

14. After allowing for reasonable mixing, within a mixing zone extending 50 m downstream of the discharge point, the discharge shall not give rise to either of the following effects in the receiving waters of the Kahouri Stream:

    a) an increase in suspended solids concentration in excess of 5 gm^{-3}, when the stream turbidity as measured upstream of the discharge point is equal or less than 5 NTU (nephelometric turbidity units); or

    b) an increase in turbidity of more than 50% when the stream turbidity as measured upstream of the discharge point is greater than 5 NTU (nephelometric turbidity units).

15. The consent holder shall establish and maintain a safe access way to the Kahouri Stream to enable water quality samples to be taken at the compliance point stated in conditions 13 and 14 above, and at a suitable control site upstream, the location of which is to be advised by the Chief Executive, Taranaki Regional Council.

Discharges to the Kahouri Stream after hours

16. At least 200 mm (426 m^3) of freeboard must be made available within the aerobic pond at 5 pm of each working/operational day.

17. The consent holder shall install and maintain a permanent marker within the aerobic pond to show the level where the wastewater should be at or below in order to achieve the required freeboard stated under condition 16 above.

Restrictions on times of discharge

18. As far as practicable, discharges to the Kahouri Stream shall be minimised and discharges to land under consent 5221-2 maximised. This means that even at times when 1:100 dilution can be achieved in the Kahouri Stream, discharges shall be irrigated to land unless the land is saturated and consequently is incapable of accepting the discharge.

    Note: This condition to minimise discharges to water does not apply to discharges outside of operational hours. Notwithstanding this, a 1:100 dilution must be met at all times, including outside of operational hours, in accordance with condition 12.

Treated wastewater quality

19. The wastewater treatment system shall be managed to maximise the quality of the wastewater discharged to the Kahouri Stream.

20. After treatment in the wastewater treatment system, the discharge shall not have a concentration of total carbonaceous BOD5 greater than 110 gm-3.

    This condition shall apply before the discharge enters the Kahouri Stream at a designated sampling point(s) approved by the Chief Executive, Taranaki Regional Council.

21. The consent holder shall install a tap on the wastewater line, between the aerobic pond and the discharge point, to allow for the taking of samples in association with condition 20 above.

Records

22. The consent holder shall monitor and record the following information on a daily basis in association with discharging wastewater to the Kahouri Stream:

    a) the date, the time, pumping hours and the rate of discharge for when discharges are manually initiated and halted, or the date or dates (when over a weekend) and the rate of discharge for automated discharges after hours;

    b) the volume of discharge (as measured in association with the flow meter required under condition 4); and

    c) the staff gauge reading, stream flow rate and dilution ratio (wastewater : receiving water) for when discharges are manually initiated and halted (i.e. not including automated discharges after hours). The stream flow rate shall be based on the rating curve established under condition 7.

    This record shall be in an electronic format and submitted to the Taranaki Regional Council. The record format and frequency that the records are to be submitted is to be undertaken as advised by the Chief Executive, Taranaki Regional Council.

    Note: if the discharge rate is varied on any day, then the records shall record the above information for each discharge event.

Mitigation

23. For the mitigation purposes of this consent and consent 0108-4, the consent holder shall undertake the following:

    a) ensure that Taranaki Regional Council riparian management plan LM10/73 is reviewed by a Taranaki Regional Council Land Management Officer within one month of the grant date of this consent;

    b) complete riparian planting and fencing on both sides of all watercourses on the site in accordance with the riparian management plan reviewed under clause (a) above by 30 September 2013; and

    c) maintain the areas of riparian planting and fencing undertaken in accordance with clause (b) above for the duration of this consent, by ensuring the ongoing replacement of plants which do not survive, the eradication of weeds until the plants are well established, and the exclusion of stock from the planted areas.

Incident notification

24. Any incident related to this consent that results, or could result, in an adverse effect on the environment shall be notified to the Taranaki Regional Council as soon as practicable, together with the reasons for the incident, and measures taken to mitigate the effects of the incident and prevent a recurrence.

    Note: For notification purposes, at the grant date of this consent, the Taranaki Regional Council's phone number is 0800 736 222 (24 hour service).

Lapse and review dates

25. This consent shall lapse on 7 November 2016, unless the consent is given effect to before the end of that period.

26. 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 in any year for any of the following purposes:

    a) Ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, and in particular to address any more than minor adverse effects relating to water quality issues;

    b) to take into account any Act of Parliament, regulation, national policy statement (including the National Policy Statement for Freshwater Management 2011), regional policy statement or regional rule which relates to limiting, recording, mitigating, setting or amending any limits or other criteria relating to nutrients, ecological health or other water quality parameters; and

c) To determine any measures that may be appropriate to comply with condition 1 of this consent, and which are necessary to address any adverse effects relating to the wastewater discharges from the site.

In considering whether to initiate a review, the Taranaki Regional Council will take into account any views received from the Department of Conservation and Fish and Game New Zealand (Taranaki Region).

Transferred at Stratford on 18 January 2016

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.