Osflo Fertiliser Limited
Monitoring Programme
Annual Report
2019-2020

Technical Report 2020-70

ISSN: 1178-1467 (Online)
Document: 2572212 (Word)
Document: 2576983 (Pdf)

Taranaki Regional Council
Private Bag 713
STRATFORD

October 2020

Executive summary

Osflo Fertiliser Limited (the Company) operates a poultry litter storage, blending and distribution facility. This is located at 1319 Mountain Road, Inglewood, in the Waiongana catchment. The poultry litter is collected from farms around the Taranaki region and is sold as a registered fertiliser.

This report for the period July 2019 to June 2020 describes the monitoring programme implemented by the Taranaki Regional Council (the Council) to assess the Company's environmental and consent compliance performance during the period under review. The report also details the results of the monitoring undertaken and assesses the environmental effects of the Company's activities.

The Company holds three resource consents, which include a total of 17 conditions setting out the requirements that the Company must satisfy. The Company holds one consent to discharge effluent to land via soakage. One consent to discharge stormwater to land via soakage where it may enter an unnamed tributary of the Waiongana Stream, and one consent to discharge emissions into the air at this site.

During the monitoring period, the Company demonstrated an overall high level of environmental performance.

The Council's monitoring programme for the year under review included four inspections, including odour surveys and five water samples collected for physicochemical analysis.

The water samples indicated that the Company were in compliance with consent defined conditions on the four occasions they were collected. No objectionable odours were found beyond the boundary of the site during the inspections. One odour complaint was received about the Company during this monitoring period, which was unsubstantiated.

There were no unauthorised incidents recording non-compliance in respect of this consent holder during the period under review.

During the year, the Company demonstrated a high level of environmental and administrative performance with the resource consents.

For reference, in the 2019-2020 year, consent holders were found to achieve a high level of environmental performance and compliance for 81% of the consents monitored through the Taranaki tailored monitoring programmes, while for another 17% of the consents, a good level of environmental performance and compliance was achieved.

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

This report includes recommendations for the 2020-2021 year.

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 2019 to June 2020 by the Taranaki Regional Council (the Council) on the monitoring programme associated with resource consents held by Osflo Fertiliser Ltd (the Company). The Company operates a chicken litter storage and distribution facility which is situated at 1319 Mountain Road, Inglewood in the Waiongana 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 discharges of water within the Waiongana catchment, and the air discharge permit held by the Company to cover emissions to air from the site.

One of the intents of the *Resource Management Act 1991* (RMA) is that environmental management should be integrated across all media, so that a consent holder's use of water, air, and land should be considered from a single comprehensive environmental perspective. Accordingly, the Council generally implements integrated environmental monitoring programmes and reports the results of the programmes jointly. This report discusses the environmental effects of the Company's use of water, land and air, and is the 26th combined annual report by the Council for the Company.

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 Waiongana 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 2020-2021 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' inasmuch as is appropriate for each activity. Monitoring programmes are not only based on existing permit conditions, but also on the obligations of the RMA to assess the effects of the exercise of consents. In accordance with Section 35 of the RMA, the Council undertakes compliance monitoring for consents and rules in regional plans, and maintains an overview of the performance of resource users and consent holders. Compliance monitoring, including both activity and impact monitoring, enables the Council to continually re-evaluate its approach and that of consent holders to resource management and, ultimately, through the refinement of methods and considered responsible resource utilisation, to move closer to achieving sustainable development of the region's resources.

1.1.4 Evaluation of environmental and administrative performance

Besides discussing the various details of the performance and extent of compliance by the Company, this report also assigns them a rating for their environmental and administrative performance during the period under review.

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.

For reference, in the 2019-2020 year, consent holders were found to achieve a high level of environmental performance and compliance for 81% of the consents monitored through the Taranaki tailored monitoring programmes, while for another 17% of the consents, a good level of environmental performance and compliance was achieved.[1]

[1] The Council has used these compliance grading criteria for 15 years. They align closely with the 4 compliance grades in the MfE Best Practice Guidelines for Compliance, Monitoring and Enforcement, 2018

1.2 Process description

The Company operates a storage, blending and distribution facility for agricultural fertiliser. This is based on poultry litter, located at 1319 Mountain Road, Inglewood. The site is a purpose built facility, the active site land area is just over three hectares. However the overall site area is much larger at 46 hectares.

The site is located within its own valley in close proximity to an unnamed tributary of the Waiongana Stream. It is situated on the eastern side of Mountain Road. The site is surrounded by grazing farm land. The nearest neighbour is located some 400 m to the west of the facility. The predominant wind direction is from the south east and the lesser from the south west.

The poultry litter is collected from farms around the Taranaki region, and sold as a registered fertiliser which is spread on pasture. The site is the administration center for collection and distribution of the used litter, with the majority of the product being taken directly from the poultry farm to the general farming customer. A total of 17 persons are employed in the operation, utilising seven trucks.

Litter is stored at the depot when conditions are unsuitable for spreading on land, and to accumulate a reserve for periods of peak demand. Additives, such as lime, sulphur, chelated cobalt, and or selenium may be blended into the litter according to customer requirements, and are stored in a separate building.

Up to about 35,000 tonnes per annum of litter is generated on farms within the Inglewood/Okato/Waitara area, mostly near Lepperton and Bell Block. Peak seasonal activity is in spring, for cropping, and in autumn, for dairy farming.

Figure 1 Company site layout 1319 Mountain Road

The litter is comprised of poultry manure and wood shavings. Upon storage the litter undergoes decomposition by microbial organisms, a natural process which generates gases and heat. The majority of the gas is carbon dioxide and methane, which are odourless. Some odorous gases, both organic (aldehydes, ketones, organic acids, amines and organic sulphur compounds) and inorganic (ammonia, nitrogen oxides and hydrogen sulphide), are produced. The rate of heat generation depends on the amount of moisture and oxygen available, and may lead to spontaneous combustion of the wood shavings and generation of smoke if not controlled.

Odour control

The covered storage depot comprises two large stockpiling areas (Figure 2, note that this photograph was taken when the facility was being constructed and now the front has been closed in). The fresh litter is deposited on one side of the storage depot, where it is composted in this area with sawdust. Older more mature litter is stockpiled on the other side. In this area the more mature litter can be mixed with additional components as required, prior to being loaded for customers.

Odours at the facility are controlled with good air flow through the specially designed roof of the facility (Figure 2), this actively dries the material. During the planning stage of this establishment, a separate odour assessment of the project was undertaken by the consultant's Golder Associates. This added confidence to the proposal prior to the granting of the consents.

Figure 2 Osflo facility during construction both sides of the depot visible

Wastewater/stormwater

Wastewater from the facility is strictly limited to the truck washdown area. This is a purpose built wash down bay which is partially enclosed to prevent spray drift. The wastewater from the bay is treated in a series of soakage ponds which discharge to land.

Clean stormwater from the roof of the storage facility and the associated workshop and office area is collected in onsite storage tanks and reused on site when required. Once these have been filled, the system discharges the remaining stormwater to land, via a cut stormwater channel, in extreme weather events this may discharge (STW002100) into an unnamed tributary of the Waiongana Stream. This discharge point, after a set mixing zone, is where the main surface water monitoring location (WGA000210) site is located.

1.3 Resource consents

The Company holds three resource consents and a certificate of compliance, the details of which are summarised in the table below. Summaries of the conditions attached to each permit are set out in Section 3 of this report.

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

Table 1 Resource consents held by the Company

Consent number	Purpose	Granted	Review	Expires
Air discharge permit				
10578-1.0	To discharge emissions to air from the storage, blending and distribution of fertiliser.	August 2018	June 2020	June 2032
Discharges of waste to land				
10579-1.0	To discharge washwater from truck wash facilities into land via soakage pits.	August 2018	June 2020	June 2032
10580-1.0	To discharge stormwater from a fertiliser storage facility and associated yard to land where it may enter an unnamed tributary of the Waiongana Stream.	August 2018	June 2020	June 2032
Certificate of compliance				
7463-0	To spread various organic and inorganic fertiliser onto and into land at various locations throughout the Taranaki region.	Transferred at Stratford January 2012		

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 site consisted of three primary components.

1.4.2 Programme liaison and management

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

- ongoing liaison with resource consent holders over consent conditions and their interpretation and application;
- discussion over monitoring requirements;
- preparation for any consent reviews, renewals or new consent applications;
- advice on the Council's environmental management strategies and content of regional plans; and
- consultation on associated matters.

1.4.3 Site inspections

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

1.4.4 Chemical sampling

The Council undertook sampling of the stormwater discharge (STW002100) from the site, and the surface water of the unnamed tributary of the Waiongana Stream, downstream of the discharge point, post the mixing zone (WGA000210). The stormwater only discharges during periods of extreme rainfall, accordingly, one sample was collected from this source this period.

The stormwater discharge (STW002100) was analysed for the following parameters:

- Carbonaceous biochemical oxygen demand
- Dissolved reactive phosphorous
- Electrical conductivity
- Oil and grease
- pH
- Temperature and
- Suspended solids

Four surface water monitoring rounds were undertaken on the unnamed tributary of the Waiongana Stream, just below the mixing zone. As per the discharge consent 10580-1.0, the surface water monitoring location (WGA000210) is required some 25 m downstream of the discharge. This location is monitored for the following parameters:

- Ammoniacal nitrogen
- Un-ionised ammonia
- Turbidity
- pH
- Temperature
- Dissolved carbonaceous bio-chemical oxygen demand
- E-coli
- Conductivity

2 Results

2.1 Inspections

12 August 2019

An inspection was undertaken of the Osflo fertiliser facility, located at 1319 Mountain Road, North of Inglewood. The weather was overcast with intermittent heavy rain and strong North Westerly winds. The inspection was undertaken with the Osflo site manager whom escorted the officer for the duration of the inspection. This was the first inspection of the 2019-2020 monitoring period. The site area, including the site office; truck wash down facility; weighbridge and outside of the main storage depot had been surfaced with compacted gravel.

Prior to the inspection and over the weekend prior, the site had experienced heavy rainfall, as had much of the region. The site area however, appeared tidy and well managed on inspection. The north facing wall of the storage had been installed since the previous inspection. The site manager remarked that additional work was still required at the facility. These include the sealing of the north facing wall to the ground as well as chasing some slight leaks from roof/ wall join. This was because some surficial ponding of rainwater was noted on the floor in close proximity to the side entrances (note this remains open for truck movements on either side) which were close to the mineral bins. A discussion was held with respect to keeping the surficial ponding away from the mineral storage areas, as these minerals (selenium, sulphur, cobalt and lime) may become entrained in the stormwater. The site manager was aware of the potential and was looking into options to stop wind driven water from entering the dry storage area.

The level of odour on site was minimal to non-noticeable. Within the main storage depot, which was described as full, the odour was noticeable, however not objectionable. The fuel storage area was then observed, the bowser sits within its own self-contained bunded area and appeared secure. The stormwater channels (from the roof of the depot) were conveying stormwater to the land soakage area. As a result of the recent and prolonged period of heavy rain, the washdown facility appeared very clean and the associated wastewater land soakage area, of which there are three ponds, were quite full and brown in colour.

Samples of stormwater and of the unnamed tributary of the Waiongana Stream were collected.

At the time of the inspection the facility was operating with its consent conditions, pending sample results.

The sample results were found to be compliant.

24 February 2020

An inspection was undertaken at Osflo's fertiliser facility, located at 1319 Mountain Road, North Street, Inglewood. This was conducted during fine and warm weather conditions, with no cloud cover and a light southerly wind. Prior to entering the facility an odour survey was undertaken by the road side entrance. No discernible odour was noted. The facility was then entered and another odour survey was conducted by the site offices. Noticeable odour was detected in this location, though it was not objectionable. An inspection of the site was then undertaken with the Osflo site manager, the operations manager and also the new environmental representative.

Discussions were held with respect to any odour related issues which the facility may have encountered during normal operations and also if there had been any issues communicated by the surrounding neighbours. It was noted that communication was on-going across all parties, with a previous complaint concerned with visual impacts of the main facility roof rather than anything directly odour related. It is also further noted that the company is in the process of developing vegetative environmental barriers (VEBs) in certain locations of the site to mitigate any potential odours which may occur through normal operations.

This is also proposed to block any direct line of sight between the neighbours and the site to negate any noise potential.

The site was then inspected. The washdown area was observed, this area is where the contaminated wash water is collected in a sump, post the wash down of trucks, and then transferred by piping to the first of three soakage areas. It was communicated that the sump is regularly cleaned out of solids. The area looked clean on inspection. The main storage area was then observed. The north facing wall had been completed. The wall had an entrance way cut in to the middle of the wall to enable personnel access. This was also a safety feature. The level of odour within this main storage area was described as noticeable, not objectionable. It was communicated that within the storage area was a combined estimated load of 4- 5 thousand tonnes of chicken litter. The mineral storage bins were then observed and found to be in good order.

During this time a truck was observed delivering material from a chicken shed and the corresponding odour did not change within the storage area. Noticeable was the light wind flow within this area. This is proposed to keep the composting chicken litter dry.

The main truck yard was then observed with trucks drying out their empty and cleaned trays in the sun. The fuel bowser was then observed and found to be in good order with no tracking of fuel noticeable about the bowser. The clean stormwater channel and land soakage area was then observed and found to have re-grassed nicely, with no apparent stormwater discharges present in the dry grassed channel.

A sample of the unnamed tributary was collected. No discharge sample was collected as the discharge was not occurring.

In other developments the facility has increased their rainwater capacity through two new holding tanks at the rear of the main storage shed. There are plans to assess whether the final land soakage pond for the wastewater discharge to land may be utilised for grey water, for use in the wash-down system, thus recycling the water in the facility. The Company are currently exploring filter options.

The Company are also looking to apply for accreditation in respect of product stewardship for their core business.

At the time of inspection the facility was operating with its consent conditions.

18 May 2020

An inspection was undertaken of Osflo's fertiliser facility located at 1319 Mountain Road, Inglewood. At the time of inspection the weather was fine, clear and warm with a light south east breeze. An odour survey was conducted at the site entrance on arrival. No discernible odour was noted.

An odour survey was also conducted at the site office, whereby no odour was noted. The Council Officer was met by Osflo managers; Dave Geraghty and Rob Facer, whom escorted the Council Officer for the duration of the site walk over.

The site walk over took in the rear of the main storage barns, whereby the perimeter ring drain was observed and found to be good condition. The Company are considering cutting the grass in this area or leaving it to capture any wind borne particulates from the stored dry chicken litter within the storage barns.

The main storage barns were then observed and found to be in good order, as were the distinct mineral storage areas. Some tracking of fine material was observed on the storage barn floor, though this is regularly swept up by site staff throughout the day. At the time the facility appeared to be close to a quarter full. The odour within the storage barns was described as noticeable, though not objectionable.

A discussion was held about the potential for tracking of fine particulates out of the storage barn floor, onto the gravel outside the barn and whether this may have the potential to enter into the stormwater system.

The Company discussed that the regular cleaning of the floor should prevent this occurrence and in the longer term the company is looking into sealing the gravel covered operational areas with tarmac.

The fuel system was then observed, one fuel containing bowser was un-bunded and it would be in the Company's interest to arrange for some bunding of this bowser moving forward in terms of BPO. If it were to leak it could reach the stormwater system. Some ground staining was noted in the vicinity of the bunded diesel storage system.

The land soakage area was then observed and appeared in good condition. All three ponds contained water. Noted that the Company is developing a greywater system for use on the final soakage pond, with the primary use for this greywater to aid in the wash down of work trucks. The Company is currently exploring the best filter medium for use in this proposed system. This area had been fenced off by electric fence. Management discussed that the ponds were due a clean out in due course.

The area of land to the North of the site office had been re-worked, contoured and seeded with good grass strike across the whole area.

No issues were reported with the truck washdown area, where the main discharge of contaminated water originates from, prior to land soakage.

Previous inspection surface waters results were discussed with the managers, whereby no adverse effects were found from the previous round. E-coli levels were slightly elevated, however considering the surrounding farm land, this was to be expected.

No discharge from stormwater monitoring location STW002100 was occurring at the time of the inspection though a surface water sample from WGA000210 was collected.

Sample results were found to be compliant.

2.1.1 Results of abstraction and discharge monitoring

Four surface water samples and one discharge sample were collected from the Company facility this monitoring period. As previously discussed, the facilities' only discharge to surface water is stormwater which is composed of the roof surfaces only at the facility. The only wastewater discharge is through ground soakage as defined in the following Figure 3.

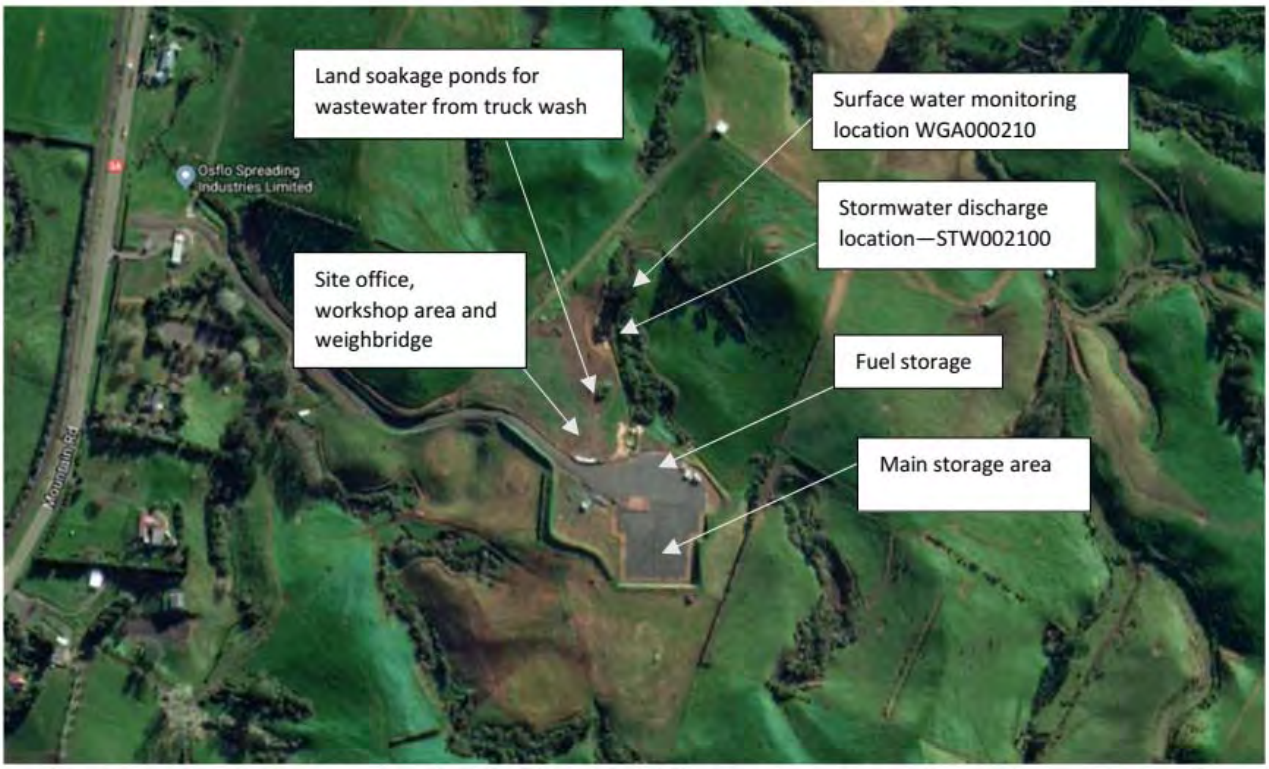

Figure 3 Aerial view of Osflo with associated labelling

The discharge of stormwater is a consented activity. Specifically, the discharge quality must meet the criteria defined by condition 3 of consent 10580-1.0. This stipulates the discharge must be within the following standards:

- pH within the range of 6.0-9.0
- Total recoverable oil and grease no greater than 15 g/m^3.
- Carbonaceous biochemical oxygen demand no greater than 10 g/m^3.
- Dissolved reactive phosphorous no greater than 5 g/m^3.
- Suspended solids no greater than 100 g/m^3.
- Ammoniacal nitrogen no greater than 5 g/m^3.

Further to condition 3, post the discharge and a mixing zone of 25 m within the Waiongana Stream is condition 4. This details the following effects which should not occur as process of the discharge on the receiving waters.

- The production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials;
- Any conspicuous change in the colour or visual clarity;
- Any emission of objectionable odour;
- The rendering of fresh water unsuitable for consumption by farm animals;
- Any significant adverse effects on aquatic life;

- A rise in dissolved carbonaceous biochemical oxygen of greater than 2.0 g/m^3; and
- Un-ionised ammonia exceeding 0.025 g/m^3.

In order to assess these conditions the Council collected one sample from the discharge[2] (STW002100) and four surface water samples from the receiving waters of the unnamed tributary of the Waiongana Stream (WGA000210). The results are provided in the following Table.

Table 2 Osflo monitoring results 2019-2020

Osflo monitoring	Site	Consent limit 10580-1.0 Conditions 3 & 4	STW002100	WGA000210	WGA000210	WGA000210	WGA000210
2019-2020	Collected		12 Aug 2019	12 Aug 2019	25 Feb 2020	18 May 2020	07 Jul 2020
Parameter	Time		10:15	10:30	13:34	11:45	09:10
Carbonaceous Biochemical Oxygen Demand (cBOD5)	g O2/m^3	≤10	< 2	NR	NR	NR	NR
Dissolved C-Biochemical Oxygen Demand (CBOD5)	g O2/m^3	≤2.0	NR	<1.0	< 1.0	1	< 1.0
Dissolved Reactive Phosphorus	g/m^3	≤5.0	< 0.004	<0.004	< 0.004	< 0.004	< 0.004
Electrical Conductivity (EC)	µS/cm	-	91	113	115	131	116
	mS/m	-	9.1	13	11.5	13.1	11.6
Escherichia coli	MPN / 100mL	-	NR	193	1,414	124	340
Free Ammonia	g/m^3	≤0.025	NR	0.000118	0.00034	0.00029	0.00029
Oil and Grease	g/m^3	15	< 4	NR	NR	NR	NR
pH	pH Units	6.0-9.0	6.8	6.6	6.8	6.5	6.8
Sample Temperature	°C	-	10.6	12.3	15.6	12.9	11.9
Total Ammoniacal-N	g/m^3	-	< 0.010	0.1	0.161	0.34	0.178
Total Suspended Solids	g/m^3	≤100	< 3	NR	NR	NR	NR
Turbidity - ISO 7027 Method	FNU	-	NR	1.91	6.5	4	4.5
NR= no result							

- The singular sample from the discharge (STW002100) was compliant with condition 3 of consent 10580-1.0.
- The four samples of the receiving waters (WGA000210) were compliant with condition 4 of consent 10580-1.0.

2.2 Incidents, investigations, and interventions

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

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

[2] This source only discharges under significant rainfall

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 3 below sets out details of any incidents recorded, additional investigations, or interventions required by the Council in relation to the Company activities during the 2019-2020 period. This table presents details of all events that required further investigation or intervention regardless of whether these were found to be compliant or not.

Table 3 Incidents, investigations, and interventions summary table

Date	Details	Compliant (Y/N)	Enforcement Action Taken?	Outcome
22/05/2020	A complaint was received concerning an odour emanating from the Osflo site on Mountain Road.	Y	No	The inspection found that there was no offensive or objectionable odour emanating offsite. A slight fertiliser odour could be detected onsite.

3 Discussion

3.1 Discussion of site performance

The Company facility at 1319 Mountain Road completed its first full monitoring period. This site became operational in February 2019. Since that date the Company have been focussed on finalising the construction. This encompassed the final North facing wall, additional safety doors within the wall, gravel standing of the operational areas outside of the storage barn and a holding area for additional road gravel.

A smaller barn has also been erected to the west of the main storage barn. This serves to keep machinery utilised on site, away from the elements when not in use.

The stormwater system has been functioning as planned. Some leaks within the roof structure have been identified and resolved.

The washdown pad has now been semi-enclosed to prevent any spray drift from occurring, with the discharge from this pad soaked to land, via a three pond system. The pond system is continually monitored to prevent any overflow, with the facility assessing means of filtering this, for utilisation as a grey water source, proposed to wash down trucks, rather than utilising fresh water.

The facility appeared well managed during inspections, with good housekeeping prevalent across the site. The Company has also appointed an environmental representative.

In terms of consents held:

To discharge emissions to air from the storage, blending and distribution of fertiliser, consent **10578-1.0**.

There were no process changes undertaken by the Company during the monitoring period. The odour risk management pan was revised and supplied to the Council in July 2019. The continued adherence to this plan is required.

To discharge wash water from truck wash facilities to land via soakage, consent **10579-1.0**.

This system appeared to be functioning as planned, in accordance with the submitted application. There were no visible signs of the ponds overflowing and these are observed constantly by site staff. As discussed, the Company is assessing whether they may be able to filter this wash water for recycling through the truck wash over time. Regular cleaning out and desludging occurs periodically.

To discharge stormwater from a fertiliser storage facility and associated yard where it may enter an unnamed tributary of the Waiongana Stream, consent **10580-1.0**.

The stormwater discharge to the unnamed tributary for the Waiongana Stream only occurs under significant heavy rainfall. This discharge is for stormwater only due to the site setup, which has separated clean stormwater from contaminated process waters. In this monitoring period only one sample of this source was collected and this will be discussed in more detail in the following section. The consent required contingency and management plans which were received in December 2019.

3.2 Environmental effects of exercise of consents

Environmental effects associated with the exercise of consents will be discussed by consent.

To discharge emissions to air from the storage, blending and distribution of fertiliser, consent **10578-1.0**.

The storage of chicken litter can be an odorous exercise. The facility counters the odours associated with this material by allowing for good wind flow through their facility, which effectively dries the litter. The facility functions on the mantra that dry chicken litter is not odorous.

Odour surveys conducted throughout the monitoring period have observed noticeable odour in the close proximity to the main storage barn. Within the storage barn the intensity of the odour increases to objectionable at times. This occurs, on occasion, during loading and unloading exercises when the material is agitated, or fresh from the supplier.

No offsite odour has been recorded and this is regularly assessed through the inspections at the entrance to the site, at the state highway. In this monitoring period the Regional Council received one complaint in relation to odour. A follow up inspection noted no objectionable odour beyond the site boundary, and only a slight chicken litter odour was detected on the site.

The facility has a functional odour risk management plan which they refer to when required. This also requires the Company to assess the odour potential of incoming fresh product and to divert it, if possible, if it is found to be vastly odorous.

To discharge wash water from truck wash facilities to land via soakage, consent **10579-1.0**.

Minimal effects were noted as a process of the exercise of this consent. No overflow has been observed. There is an odour noted in close proximity to these ponds, however this odour reduces quickly. Grey water filtering has been proposed.

To discharge stormwater from a fertiliser storage facility and associated yard where it may enter an unnamed tributary of the Waiongana Stream, consent **10580-1.0**.

As previously discussed, the discharge to the unnamed tributary only occurs under significant rainfall. In this monitoring period one sample of the discharge was obtained (Table 2, STW002100). The results of which were found to be compliant with consent defined conditions. The unnamed tributary of the Waiongana Stream was sampled on four separate occasions this monitoring period. The results were found to be compliant with consent conditions on all four occasions.

3.3 Evaluation of performance

A tabular summary of the consent holder's compliance record for the year under review is set out in Tables 4-6.

Table 4 Summary of performance for consent 10578-1.0

Purpose: ***To discharge emissions to air from the storage, blending and distribution of fertiliser***		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
1. Display best practicable option to minimise adverse effects on the environment	Inspections.	Site practices developing at new site. Yes.
2. The discharges authorised by this consent shall not give rise to any odour that is offensive or objectionable at or beyond the boundary of the site	Inspections and odour surveys.	One odour complaint was received, though not substantiated. Yes.

Purpose: *To discharge emissions to air from the storage, blending and distribution of fertiliser*		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
3. The consent holder shall advise the Chief Executive, Taranaki Regional Council, prior to making any change in the processes undertaken at the site, which could alter the nature of the discharge	Inspections of treatment system and discharge point.	N/A
4. The site shall be operated in accordance with an 'Odour Management Plan' (OMP).	Provided.	Receipt of draft received 07 June 2019 and revised 08 July 2019 Yes
5. Optional review provision re environmental effects	Not scheduled for consideration during year under review. Next consideration June 2022.	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent Overall assessment of administrative performance in respect of this consent		**High** **High**

Table 5 Summary of performance for consent 10579-1.0

Purpose: *To discharge washwater from truck wash facilities into land via soakage*		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
1. The exercise of this consent shall be undertaken in general accordance with the information provided in support of the application for this consent.	Inspections.	Yes
2. The consent holder shall at all times adopt the best practicable option.	Inspections.	Yes
3. This consent shall lapse on 30 September 2023, unless the consent is given effect to before the end of that period.	Effect given.	Yes
4. 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		**High** **High**

Table 6 Summary of performance for consent 10580-1.0

Purpose: *To discharge stormwater from a fertiliser storage facility and associated yard to land where it may enter an unnamed tributary of the Waiongana Stream*		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
1. The consent holder shall at all times adopt the best practicable option.	Inspections.	Yes
2. The stormwater discharged shall only be from the area shown on the plan attached as 'Appendix 2'.	Inspections.	Yes
3. Constituents of any discharges to the unnamed tributary of the Waiongana Stream that arise as a result of the exercise of this consent shall meet the standards: - pH (6-9) - Oil and grease (<15 g/m^3) - CBOD (10 g/m^3) - DRP (5 g/m^3) - Suspended solids (100 g/m^3) - Ammoniacal nitrogen (5 g/m^3)	Sampling of discharge when possible.	Discharge occurring during singular sampling round. Yes.
4. The discharge post a 25 m mixing zone shall not cause the following effects in surface water	Inspection and sampling.	Yes
5. Within 3 months of the consent being granted the consent holder shall submit and regularly update a 'Contingency Plan' that details measures and procedures that will be undertaken to prevent, and to avoid environmental effects from, a spillage or any discharge of contaminants not authorised by this consent.	Plan received 9 December 2019.	Yes

Purpose: *To discharge stormwater from a fertiliser storage facility and associated yard to land where it may enter an unnamed tributary of the Waiongana Stream*		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
6. Within 3 months of the consent being granted the site shall be operated in accordance with a 'Management Plan' prepared by the consent holder and approved by the Chief Executive, Taranaki Regional Council, acting in a certification capacity.	Plan received 9 December 2019.	Yes
7. The consent holder shall notify the Chief Executive, Taranaki Regional Council, prior to making any changes to the processes or operations undertaken at the site, or the chemicals used or stored on site that could alter the nature of the discharge.	Council notifications.	N/A
8. Optional review of consent	No review sought by Council.	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent Overall assessment of administrative performance in respect of this consent		**High** **High**

N/A= not applicable

Table 7 Evaluation of environmental performance over time

Year	Consent no	High	Good	Improvement req	Poor
2004-2005	4333-2	-	1	-	-
	5918-1	-	1	-	-
2005-2006	4333-2	-	1	-	-
	5918-1	-	1	-	-
2006-2007	4333-2	-	1	-	-
	5918-1	-	1	-	-
2007-2008	4333-2	1	-	-	-
	5918-1	1	-	-	-
2008-2009	4333-2	1	-	-	-
	5918-1	1	-	-	-
2009-2010	4333-2	1	-	-	-
	5918-1	1	-	-	-

Year	Consent no	High	Good	Improvement req	Poor
2010-2013	4333-2	1	-	-	-
	5918-1	-	1	-	-
2013-2015	4333-2/3	1	-	-	-
	5918-1	-	-	-	1
2015-2016	4333-3	1	-	-	-
	5918-2	-	1	-	-
2016-2017	4333-3	1	-	-	-
	5918-2	-	1	-	-
2017-2018	4333-3	1	-	-	-
	5918-2	-	-	1	-
2018-2019	4333-3	1	-	-	-
	5918-2	1	-	-	-
	10578-1	1	-	-	-
	10579-1	1	-	-	-
	10580-1	1	-	-	-
Totals		16	9	1	1

During the year, the Company demonstrated a high level of environmental and high level of administrative performance with the resource consents as defined in Section 1.1.4. Ratings are as defined in Section 1.1.4

3.4 Recommendations from the 2018-2019 Annual Report

In the 2018-2019 Annual Report, it was recommended:

1. THAT in the first instance, monitoring of consented activities at Company facility on the Mountain Road in the 2019-2020 year continue at the same level as in 2018-2019.
2. THAT should there be issues with environmental or administrative performance in 2019-2020, monitoring may be adjusted to reflect any additional investigation or intervention as found necessary.
3. THAT the option for a review of resource consent 10578-1.0 in June 2020, as set out in condition 5 of the consent, not be exercised, on the grounds that they are fit for purpose.
4. THAT the option for a review of resource consent 10579-1.0 in June 2020, as set out in condition 4 of the consent, not be exercised, on the grounds that they are fit for purpose.
5. THAT the option for a review of resource consent 10580-1.0 in June 2020, as set out in condition 8 of the consent, not be exercised, on the grounds that they are fit for purpose.

- Recommendation 1 was undertaken.
- Recommendation 2 was not required.
- Recommendations 3-5 were not required.

3.5 Alterations to monitoring programmes for 2020-2021

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

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

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

It is proposed that for 2020-2021 monitoring period the compliance monitoring programme remains unchanged.

It should be noted that the proposed programme represents a reasonable and risk-based level of monitoring for the site in question. The Council reserves the right to subsequently adjust the programme from that initially prepared, should the need arise if potential or actual non-compliance is determined at any time during 2020-2021.

4 Recommendations

1. THAT in the first instance, monitoring of consented activities at the Company site in the 2020-2021 year continue at the same level as in 2019-2020.
2. THAT should there be issues with environmental or administrative performance in 2020-2021, monitoring may be adjusted to reflect any additional investigation or intervention as found necessary.

Glossary of common terms and abbreviations

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

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.
Cu*	Copper.
Cumec	A volumetric measure of flow- 1 cubic metre per second (1 m^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.
F	Fluoride.
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.
FNU	Formazin nephelometric units, a measure of the turbidity of water.
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.
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.
MPN	Most Probable Number. A method used to estimate the concentration of viable microorganisms in a sample.
µS/cm	Microsiemens per centimetre.
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).
Pb*	Lead.
pH	A numerical system for measuring acidity in solutions, with 7 as neutral. Numbers lower than 7 are increasingly acidic and higher than 7 are increasingly alkaline. The scale is logarithmic i.e. a change of 1 represents a ten-fold change in strength. For example, a pH of 4 is ten times more acidic than a pH of 5.
Physicochemical	Measurement of both physical properties (e.g. temperature, clarity, density) and chemical determinants (e.g. metals and nutrients) to characterise the state of an environment.
PM_{10}, $PM_{2.5}$, $PM_{1.0}$	Relatively fine airborne particles (less than 10 or 2.5 or 1.0 micrometre diameter, respectively).
Resource consent	Refer Section 87 of the RMA. Resource consents include land use consents (refer Sections 9 and 13 of the RMA), coastal permits (Sections 12, 14 and 15), water permits (Section 14) and discharge permits (Section 15).
RMA	*Resource Management Act 1991* and including all subsequent amendments.
SS	Suspended solids.
SQMCI	Semi quantitative macroinvertebrate community index.
Temp	Temperature, measured in °C (degrees Celsius).
Turb	Turbidity, expressed in NTU.
Zn*	Zinc.

*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 Science Services Manager.

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 (2019): "Osflo Fertiliser Ltd Monitoring Programme Report 2017-2018". Technical Report 2019-15.

Taranaki Regional Council (2018): "Osflo Fertiliser Ltd Monitoring Programme Report 2017-2018". Technical Report 2018-32.

Taranaki Regional Council (2017): "Osflo Fertiliser Ltd Monitoring Programme Report 2016-2017". Technical Report 2017-12.

Taranaki Regional Council (2016): "Osflo Fertiliser Ltd Monitoring Programme Report 2015-16". Technical Report 2016-81.

Taranaki Regional Council (2015): "Osflo Fertiliser Limited Monitoring Programme Report 2013-15". Technical Report 2015-48.

Taranaki Regional Council (2013): "Osflo Fertiliser Limited Monitoring Programme Report 2010-2013". Technical Report 2013-33.

Taranaki Regional Council (2010): "Osflo Spreading Industries Monitoring Programme Report 2009-2010". Technical Report 2010-111.

Taranaki Regional Council (2009): "Osflo Spreading Industries Monitoring Programme Report 2008-2009". Technical Report 2009-31.

Taranaki Regional Council (2008): "Osflo Spreading Industries Monitoring Programme Report 2007-2008". Technical Report 2008-38.

Taranaki Regional Council (2007): "Osflo Spreading Industries Monitoring Programme Report 2006-2007". Technical Report 2007-103.

Taranaki Regional Council (2006): "Osflo Spreading Industries Monitoring Programme Report 2005-2006". Technical Report 2006-90.

Taranaki Regional Council (2005): "Osflo Spreading Industries Monitoring Programme Report 2004-2005". Technical Report 2005-112.

Taranaki Regional Council (2004): "Osflo Spreading Industries Monitoring Programme Report 2003-2004". Technical Report 2004-92.

Taranaki Regional Council (2003): "Osflo Spreading Industries Monitoring Programme Report 2001-2003". Technical Report 2003-30.

Taranaki Regional Council (2002b): "Osflo Spreading Industries Limited. Analysis of Odour Diaries 2002-2003". July 2003.

Taranaki Regional Council (2001): "Osflo Spreading Industries Monitoring Programme Annual Report 2000-2001". Technical Report 2001-69.

Taranaki Regional Council (2000): "Osflo Spreading Industries Resource Consent Monitoring Programme Annual Report 1999-2000". Technical Report 2000-21.

Taranaki Regional Council (1999): "Osflo Spreading Industries Resource Consent Monitoring Programme Annual Report 1998-99". Technical Report 99-34.

Taranaki Regional Council (1998): "Osflo Spreading Industries Resource Consent Monitoring Programme Annual Report 1997-98". Technical Report 98-30.

Taranaki Regional Council (1997a): "Regional Air Quality Plan for Taranaki".

Taranaki Regional Council (1997b): "Osflo Spreading Industries Resource Consent Monitoring Programme Annual Report 1996-97". Technical Report 97-19.

Taranaki Regional Council (1996): "Osflo Spreading Industries Resource Consent Monitoring Programme Annual Report 1995-96". Technical Report 96-61.

Taranaki Regional Council (1995): "Osflo Spreading Industries Resource Consent Monitoring Programme Annual Report 1994-95". Technical Report 95-60.

Appendix I

Resource consents held by Osflo

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

Water abstraction permits

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

Water discharge permits

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

Air discharge permits

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

Discharges of wastes to land

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

Land use permits

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

Coastal permits

Section 12(1)(b) of the RMA stipulates that no person may erect, reconstruct, place, alter, extend, remove, or demolish any structure that is fixed in, on, under, or over any foreshore or seabed, unless the activity is expressly allowed for by a resource consent, a rule in a regional plan, or by national regulations. Coastal permits are issued by the Council under Section 87(c) of the RMA.

Certificate of compliance

A consent authority issues a certificate of compliance under section 139 of the Resource Management Act 1991 ("RMA") to confirm that an activity can be undertaken lawfully without a resource consent (i.e. as a permitted activity). In this case it is permitted under Rule 31 of the Regional Freshwater Plan (RFWP).

Discharge Permit

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

Name of Consent Holder:	Osflo Fertiliser Limited PO Box 761 New Plymouth 4340
Decision Date:	17 August 2018
Commencement Date:	17 August 2018

Conditions of Consent

Consent Granted:	To discharge emissions to air from the storage, blending and distribution of fertiliser
Expiry Date:	1 June 2032
Review Date(s):	June 2020 and at 2-yearly intervals thereafter and in accordance with special condition 5
Site Location:	1319 Mountain Road, Inglewood
Grid Reference (NZTM)	1705313E-5667164N

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 (as defined in section 2 of the Resource Management Act 1991) to prevent or minimise any actual or likely adverse effect on the environment associated with the discharge of contaminants into the air from the site.

2. The discharges authorised by this consent shall not give rise to any odour that is offensive or objectionable at or beyond the boundary of the site, as shown in 'Appendix 1'.

3. The consent holder shall advise the Chief Executive, Taranaki Regional Council, prior to making any change in the processes undertaken at the site, which could alter the nature of the discharge. Any such change shall then only occur following receipt of any necessary approval under the Resource Management Act 1991. Notification shall include the consent number, a brief description of the activity consented and an assessment of the environmental effects of any changes, and be emailed to consents@trc.govt.nz.

4. The site shall be operated in accordance with an 'Odour Management Plan' (OMP) prepared by the consent holder and approved by the Chief Executive, Taranaki Regional Council, acting in a certification capacity. The plan shall detail how the site will be managed to achieve compliance with the consent conditions and shall address the following matters:

   a) raw material quality check and acceptance;
   b) washwater pond de-sludging procedure;
   c) monitoring of stored product including records of product storage and transfer;
   d) operation of a meteorological recording station;
   e) site odour assessments;
   f) operation and maintenance procedures;
   g) prevention of off-site odour emissions;
   h) staff training; and
   i) contingency procedures.

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

   a) during the month of June 2020 and at 2-yearly intervals thereafter; and/or
   b) within 3 months of receiving a notification under special condition 3 above.

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

Signed at Stratford on 17 August 2018

For and on behalf of
Taranaki Regional Council

_____

A D McLay
Director - Resource Management

Appendix 1: Boundary of the site.

Discharge Permit

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

Name of Consent Holder:	Osflo Fertiliser Limited PO Box 761 New Plymouth 4340
Decision Date:	17 August 2018
Commencement Date:	17 August 2018

Conditions of Consent

Consent Granted:	To discharge washwater from truck wash facilities into land via soakage pits
Expiry Date:	1 June 2032
Review Date(s):	June 2020 and at 2-yearly intervals thereafter
Site Location:	1319 Mountain Road, Inglewood
Grid Reference (NZTM)	1705252E-5667255N
Catchment:	Waiongana

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

General condition

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

Special conditions

1. The exercise of this consent shall be undertaken in general accordance with the information provided in support of the application for this consent. Where there is conflict between the application and consent conditions, the conditions shall prevail.

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

    a) removing as much solid matter from the truck as practicable (e.g. by sweeping) before washing it; and
    b) removing accumulated solid material from the soakage pit as necessary.

3. This consent shall lapse on 30 September 2023, 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.

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 2020 and at 2-yearly intervals thereafter for the purpose 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
    b) requiring the installation of monitoring bores to determine effects on groundwater, and potential effects on surface water, if sampling of the discharge indicates the need for such monitoring.

Signed at Stratford on 17 August 2018

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:	Osflo Fertiliser Limited PO Box 761 New Plymouth 4340
Decision Date:	17 August 2018
Commencement Date:	17 August 2018

Conditions of Consent

Consent Granted:	To discharge stormwater from a fertiliser storage facility and associated yard to land where it may enter an unnamed tributary of the Waiongana Stream
Expiry Date:	1 June 2032
Review Date(s):	June 2020 and at 2-yearly intervals thereafter and in accordance with special condition 8
Site Location:	1319 Mountain Road, Inglewood
Grid Reference (NZTM)	1705252E-5667362N
Catchment:	Waiongana

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

General condition

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

Special conditions

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

2. The stormwater discharged shall only be from the area shown on the plan attached as 'Appendix 2'.

3. Constituents of any discharges to the unnamed tributary of the Waiongana Stream that arise as a result of the exercise of this consent shall meet the standards shown in the following table.

Constituent	Standard
pH	Within the range 6.0 to 9.0
total recoverable oil and grease	Concentration not greater than 15 gm^{-3}
CBOD (carbonaceous biochemical oxygen demand)	10 gm^{-3}
dissolved reactive phosphorus	5 gm^{-3}
suspended solids	100 gm^{-3}
ammoniacal nitrogen	5 gm^{-3}

4. After allowing for reasonable mixing, within a mixing zone extending 25 metres downstream of the discharge point, the discharge shall not, either by itself or in combination with other discharges, give rise to any or all of the following effects in the receiving water:

   a) the production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials;
   b) any conspicuous change in the colour or visual clarity;
   c) any emission of objectionable odour;
   d) the rendering of fresh water unsuitable for consumption by farm animals;
   e) any significant adverse effects on aquatic life;
   f) a rise in dissolved carbonaceous biochemical oxygen of greater than 2.0 g/m^3; and
   g) un-ionised ammonia exceeding 0.025 g/m^3.

5. Within 3 months of the consent being granted the consent holder shall submit and regularly update a 'Contingency Plan' that details measures and procedures that will be undertaken to prevent, and to avoid environmental effects from, a spillage or any discharge of contaminants not authorised by this consent. The plan and any amended versions shall be provided to the Chief Executive of the Taranaki Regional Council.

6. Within 3 months of the consent being granted the site shall be operated in accordance with a 'Management Plan' prepared by the consent holder and approved by the Chief Executive, Taranaki Regional Council, acting in a certification capacity. The plan shall detail how the site is to be managed to minimise the contaminants that become entrained in the stormwater and shall include as minimum:

   a) the loading and unloading of materials;
   b) general housekeeping; and
   c) management of the treatment systems.

   Note: A Stormwater Management Plan template is available in the Environment section of the Taranaki Regional Council's web site www.trc.govt.nz.

7. The consent holder shall notify the Chief Executive, Taranaki Regional Council, prior to making any changes to the processes or operations undertaken at the site, or the chemicals used or stored on site that could alter the nature of the discharge. Any such change shall then only occur following receipt of any necessary approval under the Resource Management Act, 1991. Notification shall include the consent number, a brief description of the activity consented and an assessment of the environmental effects of any changes, and be emailed to consents@trc.govt.nz.

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

   a) during the month of June 2020 and at 2-yearly intervals thereafter; and/or
   b) within 3 months of receiving a notification under special condition 7 above;

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

Signed at Stratford on 17 August 2018

For and on behalf of
Taranaki Regional Council

_____

A D McLay
Director - Resource Management

Appendix 2: Area of stormwater, including roof water and truck parking.