

Osflo Fertiliser Ltd
Monitoring Programme
Annual Report
2021-2022

Technical Report 2022-23



Taranaki Regional Council
Private Bag 713
Stratford

ISSN: 1178-1467 (Online)
Document: 3079021 (Word)
Document: 3130103 (Pdf)
March 2023

Osflo Fertiliser Ltd
Monitoring Programme
Annual Report
2021-2022

Technical Report 2022-23

Osflo Fertiliser Ltd
Monitoring Programme
Annual Report
2021-2022

Technical Report 2022-23

Taranaki Regional Council
Private Bag 713
Stratford

ISSN: 1178-1467 (Online)
Document: 3079021 (Word)
Document: 3130103 (Pdf)
March 2023

Executive summary

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

This report for the period July 2021 to June 2022 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.

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

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 consents to: discharge washwater from truck wash facilities into land via soakage; to discharge stormwater to land via soakage where it may enter an unnamed tributary of the Waiongana Stream; and to discharge emissions to air from the storage, blending and distribution of fertiliser.

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

The water samples from the unnamed tributary of the Waiongana Stream indicated that the Company were in compliance with consent defined conditions on the two occasions they were collected. It is noted that the stormwater facility discharge to surface water, only occurs during significant rainfall events.

The facility is allowed noticeable, but not objectionable or offensive odour beyond the boundary of the site. In the past, noticeable odours have been noted during the loading and unloading exercises, when material is agitated, or fresh from the supplier. However, during this monitoring period there were no noticeable or objectionable odours reported at or beyond the site boundary.

The Company has been proactive in their response to objectionable odour identification, with areas of the main storage shed closed to prevent odour release. Mesh doors were also installed in the 2020-2021 period to prevent mass air movement from within the shed.

The Company continues to develop shelter belts/vegetative environmental buffers (VEBs), as a passive odour mitigation technique. This involves planting trees and shrubs in locations that deflect/manipulate wind, however, these mitigations take time to mature.

The facility has a functional Odour Risk Management Plan, which requires the Company to assess the odour potential of incoming fresh product and to divert it if necessary.

No issues were reported during normal compliance inspections, and officers found the site to be well maintained and operating within consent conditions.

For reference, in the 2021-2022 year, consent holders were found to achieve a high level of environmental performance and compliance for 88% of the consents monitored through the Taranaki tailored monitoring programmes, while for another 10% 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, the consent holder's performance has improved since the last monitoring period.

This report includes recommendations for the 2022-2023 year.

Table of contents

	Page	
1	Introduction	1
1.1	Compliance monitoring programme reports and the Resource Management Act 1991	1
1.1.1	Introduction	1
1.1.2	Structure of this report	1
1.1.3	The Resource Management Act 1991 and monitoring	1
1.1.4	Evaluation of environmental and administrative performance	2
1.2	Process description	3
1.3	Resource consents	6
1.4	Monitoring programme	7
1.4.1	Introduction	7
1.4.2	Programme liaison and management	7
1.4.3	Site inspections	7
1.4.4	Chemical sampling	7
2	Results	9
2.1	Inspections	9
2.2	Water	10
2.2.1	Results of abstraction and discharge monitoring	10
2.3	Incidents, investigations, and interventions	11
3	Discussion	12
3.1	Discussion of site performance	12
3.2	Environmental effects of exercise of consents	13
3.3	Evaluation of performance	14
3.4	Recommendations from the 2020-2021 Annual Report	18
3.5	Alterations to monitoring programmes for 2022-2023	19
3.6	Exercise of optional review of consent	19
4	Recommendations	20
	Glossary of common terms and abbreviations	21
	Bibliography and references	24
	Appendix I Resource consents held by Osflo Fertiliser Limited	
	Appendix II Categories used to evaluate environmental and administrative performance	

List of tables

Table 1	Resource consents held by the Company	6
Table 2	Osflo surface water monitoring results 2021-2022	10
Table 3	Summary of performance for consent 10578-1.0	14
Table 4	Summary of performance for consent 10579-1.0	14
Table 5	Summary of performance for consent 10580-1.0	15
Table 6	Evaluation of environmental performance over time	17

List of figures

Figure 1	Company site layout 1319 Mountain Road	3
----------	--	---

List of photos

Photo 1	Osflo main storage facility	5
Photo 2	Rear of the Osflo main storage facility	5
Photo 3	Truck wash area	6

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 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 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 28th 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 through 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 2022-2023 monitoring year.

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

1.1.3 The Resource Management Act 1991 and monitoring

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

- a. the neighbourhood or the wider community around an activity, and may include cultural and social-economic effects;
- b. physical effects on the locality, including landscape, amenity and visual effects;
- c. ecosystems, including effects on plants, animals, or habitats, whether aquatic or terrestrial;

- d. natural and physical resources having special significance (for example recreational, cultural, or aesthetic); and
- e. risks to the neighbourhood or environment.

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

1.1.4 Evaluation of environmental and administrative performance

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

For reference, in the 2021-2022 year, consent holders were found to achieve a high level of environmental performance and compliance for 88% of the consents monitored through the Taranaki tailored monitoring programmes, while for another 10% of the consents, a good level of environmental performance and compliance was achieved.¹

¹ The Council has used these compliance grading criteria for more than 18 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 poultry litter storage, blending and distribution facility located at 1319 Mountain Road, Inglewood. The poultry litter is used as a general agricultural fertiliser. The site is a purpose built facility, operating on a three hectare site, however the overall site area is much larger at 46 hectares. It is situated in close proximity to an unnamed tributary of the Waiongana Stream on the eastern side of Mountain Road. The site is surrounded by grazing farm land, with the nearest neighbour 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 farms and provided to the general farming customer. A total of 17 people are employed in the operation, utilising seven trucks.



Figure 1 Company site layout 1319 Mountain Road

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. The additives are stored in separate portions of the main storage facility.

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 demand is in spring, for cropping and in autumn, for dairy farming.

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 are generated, both organic (aldehydes, ketones, organic acids, amines and organic sulphur compounds) and inorganic (ammonia, nitrogen oxides and hydrogen sulphide). The rate of heat generation depends on the amount of moisture and oxygen available.

Odour control

The litter is stored in two large, covered stockpiling areas (Photo 1), these form the main storage and blending facility (the main storage facility). The fresh litter is deposited on one side of the storage facility (eastern side), where it is composted with sawdust. Older more mature litter is stockpiled on the other side (western side). In this area the more mature litter can be mixed with additives as required, prior to being loaded for customers.

Odours at the facility were originally controlled with good air flow through the specially designed roof and sides of the facility, this actively dried 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. However during the 2020-2021 period, objectionable odour was recorded on one occasion so the main storage facility was modified. The modifications included closing in the rear and sides of the facility, and also fitting mesh doors on the entrance and exits of the facility, in order to prevent substantial air movement.

The Company has undertaken substantial planting in order to develop vegetative environmental buffers (VEBs) across the site. The effectiveness of this passive form of odour mitigation will need to be assessed over time, as the vegetation takes time to mature.



Photo 1 Osflo main storage facility



Photo 2 Rear of the Osflo main storage facility

Wastewater/stormwater

Wastewater from the facility is strictly limited to the truck wash down area (Photo 3). 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.



Photo 3 Truck wash area

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 the tanks have been filled, the system discharges the remaining stormwater to land, via a cut stormwater channel. In extreme weather events stormwater may discharge at location STW002100 (Figure 1) into an unnamed tributary of the Waiongana Stream. Surface water monitoring of the stormwater discharge is monitored at location (WGA000210) 25 m downstream of the discharge point.

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 in 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
<i>Air discharge permit</i>				
10578-1.0	To discharge emissions to air from the storage, blending and distribution of fertiliser.	August 2018	June 2022 (bi-annually)	June 2032
<i>Discharges of waste to land</i>				
10579-1.0	To discharge wash water from truck wash facilities into land via soakage pits.	August 2018	June 2022 (bi-annually)	June 2032

Consent number	Purpose	Granted	Review	Expires
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 2022 (bi-annually)	June 2032
<i>Certificate of compliance</i>				
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 Osflo fertiliser site was visited twice during the monitoring period for routine inspections. With regard to consents to discharge to water, the main points of interest were plant processes with potential or actual discharges to receiving watercourses. This included 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. The neighbourhood was surveyed for environmental effects.

1.4.4 Chemical sampling

The Council undertook sampling of the surface water of the unnamed tributary of the Waiongana Stream, downstream of the discharge point, post the mixing zone at location WGA000210 (Figure 1). The stormwater was not discharging at location STW002100 during any of the monitoring visits, as it only discharges during periods of extreme rainfall. Accordingly, no samples were collected from this source during the monitoring period.

Two 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:

- Total ammoniacal nitrogen
- Un-ionised ammonia/Free ammonia
- Turbidity
- pH
- Temperature
- Dissolved carbonaceous bio-chemical oxygen demand
- Dissolved reactive phosphorus
- *E. coli*
- Electrical conductivity

2 Results

2.1 Inspections

13 April 2022

At the time of inspection the weather was overcast with strong south east winds. Rainfall was forecast for later in the day. A brief site meeting was held with two of the Company Directors and the Environmental Representative.

This included discussing the state of current site operations, passive odour mitigation development and neighbourly relations. The site was then inspected via a walkover. This encompassed the main storage barns, the wash down area for the trucks, fuelling barge and waste water land soakage area. In addition, the rear of the main storage shed was also inspected. Throughout the walk over, the site appeared to be well managed with good housekeeping throughout.

There was no odour noted at the site entrance on Mountain Road. In terms of passive odour mitigation, significant plantings had occurred at keys areas around the site. The plantings are within their first year of growth, as such any potential passive odour mitigation will likely take a couple of seasons to take effect.

A fog cannon, coupled with low velocity nozzles had been leased by the Company. This was purportedly capable of reducing odour during calm weather conditions. However, during the lease period the weather conditions did not occur for which the fog cannon was required. In addition, the Company communicated that some site operations had evolved to be weather dependent, whereby an assessment of the weather forecast is undertaken to identify low velocity wind conditions. Once the weather is favourable, the Company undertakes any necessary agitation or turning of the composting chicken litter material. This action is proposed to limit the amount of agitation required, so that during the low velocity conditions minimal disturbance of the litter occurs.

A sample was collected from surface water in an unnamed tributary of the Waiongana Stream (WGA000210). No stormwater discharge was occurring.

Overall, at the time of the inspection the Company were operating in compliance with their resource consents.

21 June 2022

Inspection and sampling were undertaken at the Osflo facility. The weather was fine with a moderate southeast wind and light showers in the preceding week. No odour was noted at the site entrance on Mountain Road. Inspection was undertaken with the Operations Manager and Technical Specialist. Turnover had been good recently and there were low levels of material in the sheds. Site housekeeping was excellent with no tracking of litter from the sheds to the outdoor areas apparent. The storage and truck wash areas were very tidy. The pond systems were secure and functioning as intended.

A sample of the stream was taken from the main flow as the smaller western flow was stagnant and full of iron oxide sheen. The sample was clean and clear with no sheen or odour. There was no discharge from the stormwater system to sample.

Maintenance of the surrounding plantings is required as there had been significant loss of pine saplings to rabbits in the new shelter belts. No complaints had been received since the last visit.

At the time of the inspection the Company were operating in compliance with their resource consents.

2.2 Water

2.2.1 Results of abstraction and discharge monitoring

As previously discussed, the only discharge to surface water is stormwater during extreme rainfall events. The surface water running off the site is derived from roof surfaces and surrounding hard standing areas at the facility. Two surface water samples were collected from the unnamed tributary of the Waiongana Stream, at sample location WGA000210 (Figure 1).

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/m³.
- Carbonaceous biochemical oxygen demand no greater than 10 g/m³.
- Dissolved reactive phosphorus no greater than 5 g/m³.
- Suspended solids no greater than 100 g/m³.
- Ammoniacal nitrogen no greater than 5 g/m³.

In addition to condition 3, condition 4 details that the following effects should not occur as a result of a stormwater discharge, beyond a 25 m mixing zone.

- 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/m³; and
- Un-ionised ammonia exceeding 0.025 g/m³.

In order to assess these conditions the Council collected two 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 surface water monitoring results 2021-2022

Osflo surface water monitoring	Site	Consent limit 10580-1.0 (Conditions 3 & 4)	WGA000210	WGA000210
2021-2022	Collected		13 Apr 2022	21 Jun 2022
Parameter	Time		12:45	14:00
Sample Temperature	°C		14.9	11.7
Dissolved C-Biochemical Oxygen Demand (CBOD ₅)	g O ₂ /m ³	a rise in dissolved CBOD of ≤ 2.0 g/m ³	<1.0	1.0
Dissolved Reactive Phosphorus	g/m ³	≤5	<0.004	<0.004
Electrical Conductivity (EC)	µS/cm		166	108
	mS/m		16.6	10.8

Osflo surface water monitoring	Site	Consent limit 10580-1.0 (Conditions 3 & 4)	WGA000210	WGA000210
2021-2022	Collected		13 Apr 2022	21 Jun 2022
Parameter	Time		12:45	14:00
<i>Escherichia coli</i>	MPN / 100 mL		866	201
Free Ammonia (NH ₃)	g/m ³	≤0.025	0.00129	0.00032
pH	pH Units	6.0 to 9.0	6.7	6.6
Total Ammoniacal-N (NH ₄ N)	g/m ³	≤5	0.77	0.28
Turbidity - ISO 7027 Method	FNU		129	2.6

- A sample of the stormwater discharge (STW002100) was not collected due to the fact the Company was not discharging during inspection times.
- The two samples of the receiving waters (WGA000210) were compliant with condition 4 of consent 10580-1.0 regardless of the fact that there was no stormwater discharge.
- All washwater from the truck wash occurs to land, by land soakage, via a multi soakage pond system (Figure 1).
- *E. coli* levels are variable, with only two samples analysed during this monitoring period it is difficult to determine a trend or determine a reason, levels ranged from 201 to 866 MPN/100 ml.

2.3 Incidents, investigations, and interventions

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

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

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

In the 2021-2022 period, the Council was not required to undertake significant additional investigations and interventions, or record incidents, in association with the Company's conditions in resource consents or provisions in Regional Plans.

3 Discussion

3.1 Discussion of site performance

The Company facility at 1319 Mountain Road completed its third full monitoring period. This site became operational in February 2019, and the facility is now complete.

During the monitoring period there were no process changes undertaken by the Company. There have been no odour complaints from any members of the public or neighbouring properties. During both site inspections no odour was noticeable at the site boundary.

The development of the VEBs along the western and southern boundaries continue to grow. There was an issue of rabbits eating some of the saplings. In order to remediate this, replanting will be incorporated into the Company's annual planting plan, and is scheduled to occur during the next planting season.

Whilst the VEB's are continuing to grow, monitoring the impacts on odour control will indicate the effectiveness of these over time.

A wetland enhancement area proposed for the western boundary area has now been completed see Photo 4.



Photo 4 Aerial view of the wetland enhancement area (June 2022).

The washwater from truck wash facilities are functioning as planned. The partially enclosed truck wash reduces the potential for spray drift, and the associated concrete pad area was observed as clean during inspections, demonstrating regular housekeeping. There were no visible signs of the treatment ponds overflowing and these are monitored by site staff. Regular cleaning out and desludging occurs when required.

The stormwater discharge to the unnamed tributary of the Waiongana Stream only occurs under significant heavy rainfall. In this monitoring period there were no samples collected.

The Company continue to adhere to their Odour Risk Management Plan and the Stormwater Management Plan.

3.2 Environmental effects of exercise of consents

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

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

No noticeable odour was observed at the site entrance or boundary during both site inspections. The facility is allowed noticeable, but not objectionable or offensive odour beyond the boundary of the site. Noticeable odour has in the past been noted during incidents and subsequent investigations, both at complainant's properties as well as at the site entrance. This has occurred, on occasion, during loading and unloading exercises, when the material is agitated, or fresh from the supplier.

During this monitoring period the Council received no odour complaints from neighbours. This is an improvement from the previous monitoring period where 20 complaints were lodged.

The Company remains to be proactive in their odour mitigation efforts. The VEBs are still growing and these mitigation measures will take time to continue to mature. Due to some saplings being impacted by rabbits, remediation measures have been incorporated into the site's annual planting plan.

The facility has a functional odour risk management plan which they refer to when needed. 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 washwater from truck wash facilities to land via soakage, consent **10579-1.0**.

Minimal effects were noted from the exercise of this consent. No overflow has been observed. The ponds have a regular clean out schedule which appears to occur, as noted during inspections.

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**.

In this monitoring period no samples of the discharge were obtained. The unnamed tributary of the Waiongana Stream was sampled on two separate occasions this monitoring period. The results were found to be compliant with consent conditions on both 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 3-6.

Table 3 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 associated with the discharge of contaminants into the air from the site	Inspections.	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	Yes
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	Council notifications	Yes
4. The site shall be operated in accordance with an 'Odour Management Plan' (OMP)	Provided 8 July 2019	Yes
5. Optional review of consent	June 2022 review not exercised- not necessary.	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable

Table 4 Summary of performance for consent 10579-1.0

Purpose: To discharge wash water 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

Purpose: To discharge wash water from truck wash facilities into land via soakage		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
2. The consent holder shall at all times adopt the best practicable option including by: <ul style="list-style-type: none"> a. removing as much solid matter from the truck as practicable before washing it; and b. removing accumulated solid material from the soakage pit as necessary 	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. Optional review of consent	June 2022 review not exercised- not necessary.	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable

Table 5 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, including by: <ul style="list-style-type: none"> a. removing as much solid matter from the truck as practicable before washing it; and b. removing accumulated solid material from the soakage pit as necessary 	Inspections	Yes
2. The stormwater discharged shall only be from the area shown on the plan attached as 'Appendix II'	Inspections	Yes

Purpose: <i>To discharge stormwater from a fertiliser storage facility and associated yard to land where it may enter an unnamed tributary of the Waiongana Stream</i>		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
<p>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:</p> <ul style="list-style-type: none"> - pH (6-9) - Oil and grease (<15 g/m³) - Carbonaceous biochemical oxygen demand (CBOD) (10 g/m³) - Dissolved reactive phosphorus (DRP) (5 g/m³) - Suspended solids (100 g/m³) - Ammoniacal nitrogen (5 g/m³) 	Sampling of discharge when possible	N/A
<p>4. The discharge post a 25 m mixing zone shall not cause the following effects in surface water:</p> <ul style="list-style-type: none"> 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 CBOD of greater than 2.0 g/m³; g) unionised ammonia exceeding 0.025 g/m³. 	Inspection and sampling	Yes
<p>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</p>	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	Yes
8. Optional review of consent	June 2022 review not exercised- not necessary.	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable

Table 6 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	-	-	-
2010-2013	4333-2	1	-	-	-

Year	Consent no	High	Good	Improvement req	Poor
	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	-	-	-
2019-2020	10578-1	1	-	-	-
	10579-1	1	-	-	-
	10580-1	1	-	-	-
2020-2021	10578-1	-	-	1	-
	10579-1	1	-	-	-
	10580-1	1	-	-	-
2021-2022	10578-1	1			
	10579-1	1			
	10580-1	1			
Totals		24	9	2	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 Appendix II.

3.4 Recommendations from the 2020-2021 Annual Report

In the 2020-2021 Annual Report, it was recommended:

1. THAT in the first instance, monitoring of consented activities at the Company site in the 2021-2022 year continue at the same level as in 2020-2021.
2. THAT should there be issues with environmental or administrative performance in 2021-2022, monitoring may be adjusted to reflect any additional investigation or intervention as found necessary.

The recommendations were implemented as appropriate.

3.5 Alterations to monitoring programmes for 2022-2023

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

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

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

It is proposed that for 2022-2023 monitoring period the compliance monitoring programme remains unchanged.

However, if subsequent odour impacts reoccur, the Company may be requested to update their odour risk management plan (OMP).

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 2022-2023.

3.6 Exercise of optional review of consent

Resource consents 10578-1, 10579-1 and 10580-1 provided for an optional review of the consent in June 2022. Condition 5, 4 and 8 respectively allows the Council to review the consent, if there are grounds to warrant a review.

Based on the results of monitoring in the year under review, and in previous years as set out in earlier annual compliance monitoring reports, it was determined during the 2021-2022 monitoring period that there are no grounds that require a review to be pursued or grounds to exercise the review option in June 2022 for any of the consents. Therefore, this review was not exercised.

4 Recommendations

1. THAT in the first instance, monitoring of consented activities at the Company site in the 2022-2023 year continue at the same level as in 2021-2022.
2. THAT should there be issues with environmental or administrative performance in 2022-2023, monitoring may be adjusted to reflect any additional investigation or intervention as found necessary.
3. If subsequent odour impacts reoccur, the Company may be requested to update their odour risk management plan (OMP).

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 $\mu\text{S}/\text{cm}$.
Cu*	Copper.
Cumec	A volumetric measure of flow- 1 cubic metre per second ($1 \text{ m}^3\text{s}^{-1}$).
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.
$\text{g}/\text{m}^2/\text{day}$	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.
OMP	Odour risk management plan.
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	<i>Resource Management Act 1991</i> 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.
VEB	Vegetative environmental buffer
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 an Environmental Quality 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 (2021): "Osflo Fertiliser Ltd Monitoring Programme Report 2020-2021". Technical Report 2021-22.
- Taranaki Regional Council (2020): "Osflo Fertiliser Ltd Monitoring Programme Report 2019-2020". Technical Report 2020-70.
- Taranaki Regional Council (2019): "Osflo Fertiliser Ltd Monitoring Programme Report 2018-2019". 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 Fertiliser Limited

(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

**Pursuant to section 139 of the Resource Management Act 1991
a certificate of compliance is hereby issued by the
Taranaki Regional Council**

Name of certificate holder	Osflo Fertiliser Limited P O Box 761 New Plymouth 4340
Site location	Various locations throughout the Taranaki region [legal description: Various locations throughout the Taranaki region]
Proposal/Activity	To spread organic and inorganic fertiliser onto and into land at various locations throughout the Taranaki region
Certification	<p>The Taranaki Regional Council hereby certifies that:</p> <p>the discharge of fertiliser onto and into land as outlined within the documentation supplied in support of the application is a permitted activity under Rule 31 of the RFWP at the date of receipt of the application for this certificate provided that it complies with and continues to comply with the following conditions:</p> <ul style="list-style-type: none">• <i>Fertiliser is approved for use under section 5 of the Fertilisers Act 1960 or under the Agricultural Compounds and Veterinary Medicines Act 1997;</i>• <i>Discharger shall at all times adopt the best practicable option to prevent or minimise any adverse effects of fertiliser drift beyond the boundary of the target property or on other non-target areas within the boundary of the property;</i>

- *If discharge is by any other method than aerial application, discharge shall not occur directly on or above a river, lake, wetland or other surface water body, including any drain which is discharging to a surface water body; or*
- *If discharge is by aerial application, fertiliser shall be applied in a manner which does not cause or is not likely to cause an adverse effect from deposition into a river, lake, wetland or other surface water body, including any drain which discharges to a surface water body.*

Any discharge which causes any of the above conditions to be breached is not permitted and may be the subject of enforcement action.

Transferred at Stratford on 17 January 2012

For and on behalf of
Taranaki Regional Council

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 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.

Consent 10578-1.0

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/m³; and
 - g) un-ionised ammonia exceeding 0.025 g/m³.
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.

Consent 10580-1.0

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;

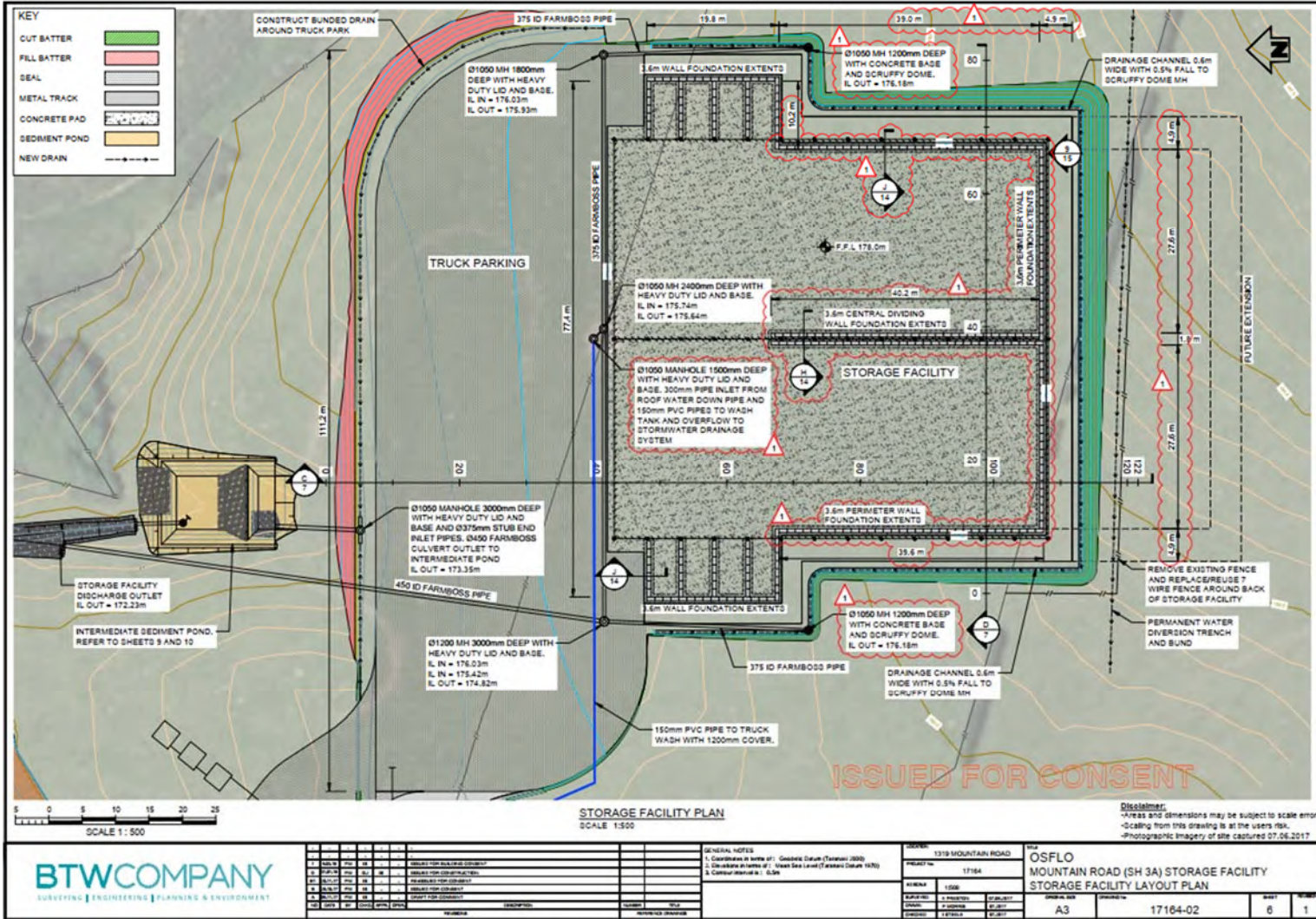
for the purpose of ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, which were either not foreseen at the time the application was considered or which it was not appropriate to deal with at the time.

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.



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.