

Osflo Fertiliser Limited
Monitoring Programme
Biennial Report
2013-2015
Technical Report 2015-48

ISSN:1178-1467 (Online)
Document: 1559780 (Word)
Document: 1574648 (Pdf)

Taranaki Regional Council
Private Bag 713
STRATFORD

October 2015

Executive summary

Osflo Fertiliser Limited (Osflo), formerly Osflo Spreading Industries Limited, operates a facility for storage, blending and distribution of poultry waste fertiliser located on Hursthouse Road, Lepperton, in the Waiongana Catchment. This report for the period July 2013-June 2015 describes the monitoring programme implemented by the Taranaki Regional Council to assess the Company's environmental performance during the period under review, and the results and environmental effects of the Company's activities.

The Company holds two resource consents, which included a total of 18 conditions setting out the requirements that the Company must satisfy. The Company holds one consent to allow it to discharge stormwater and treated waste water from the poultry litter storage area into land in the vicinity of the Awai Stream, and one consent to discharge emissions into the air from the use and storage of the used chicken litter. Both consents expired in June 2014 and were replaced at the end of the review period. This represents the twentieth and twenty-first reports on the environmental performance of the Company.

During the period under review, Osflo demonstrated overall improvement required level of environmental performance.

The Council's monitoring programme for the period under review included four inspections each year, which looked at the plant processes and any potential or actual discharges to the receiving watercourses and to air. Fourteen complaints about odour were investigated; all but one occurred in the 2013-2014 year.

For the water discharges, the monitoring showed that, generally, operations were carried out in a manner that was environmentally sound. The disposal system was improved through construction of a third soakage pit beside the Awai Stream.

For the air emissions, the distinctive chicken litter odour was noted beyond the boundary during most inspections, and most of the investigations into odour complaints. On one occasion, in April 2014, the odour was found to be offensive and objectionable, for which an abatement notice was issued and an infringement notice was given.

After consultation with neighbours and Council during the consents replacement process, the Company formulated a four-year plan to develop the site for expansion of fertiliser handling capacity while improving odour control and the treatment and disposal of contaminated water. The agreed plan, which is to be completed by 1 June 2019, was incorporated into the new consents.

During the review period, Osflo demonstrated a high level of environmental and administrative performance with the consent to discharge into land and water. For the consent to discharge emissions to air Osflo demonstrated a poor environmental performance, and there was a high level of administrative performance.

For reference, in the 2014-2015 year, 75% of consent holders in Taranaki monitored through tailored compliance monitoring programmes achieved a high level of environmental performance and compliance with their consents, while another 22% demonstrated a good level of environmental performance and compliance with their consents.

The report includes recommendations for the 2015-2016 monitoring 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	2
1.1.4 Evaluation of environmental performance	2
1.2 Process description	5
1.3 Resource consents	6
1.3.1 Water discharge permit	6
1.3.2 Air discharge permit	8
1.3.3 Discharges of wastes to land	9
1.4 Monitoring programme	10
1.4.1 Introduction	10
1.4.2 Programme liaison and management	10
1.4.3 Site inspections	10
2. Results	12
2.1 Inspections	12
2.2 Investigations, interventions, and incidents	16
3. Discussion	17
3.1 Discussion of plant performance	17
3.2 Environmental effects of exercise of consents	18
3.3 Evaluation of performance	19
3.4 Recommendations from the 2010-2013 Annual Report	22
3.5 Alterations to monitoring programmes for 2015-2016	22
3.6 Exercise of optional review of consent	23
4. Recommendations	24
Bibliography	25
Appendix I Resource consents held by Osflo Spreading Industries	

List of tables

Table 1	Summary of performance for Consent 4333-2	19
Table 2	Summary of performance for Consent 4333-3	19
Table 3	Summary of performance for Consent 5918-1	20
Table 4	Summary of performance for Consent 5918-2	21

List of figures

Figure 1	Osflo Spreading Industries Limited site	5
Figure 2	Site expansion plan (stages 3 and 4 are combined)	18

List of photos

Photo 1	Blending of fertiliser and loading of truck outside store, 19 December 2013	12
Photo 2	The new third settling pond, 2 December 2014	14
Photo 3	Extension of odour control system and wind break, 2 December 2014	15

1. Introduction

1.1 Compliance monitoring programme reports and the Resource Management Act 1991

1.1.1 Introduction

This report provides the combined Annual Reports for the period July 2013-June 2015 by the Taranaki Regional Council on the monitoring programme associated with resource consents held by Osflo Fertiliser Limited (Osflo), formerly Osflo Spreading Industries Limited. The Company operates a used chicken litter storage and distribution facility located on Hursthouse Road, Lepperton, in the Waiongana Catchment.

This report covers the results and findings of the monitoring programme implemented by the Council in respect of the consents held by Osflo that relate to discharge of stormwater within the Waiongana Catchment, and the air discharge permit held by Osflo 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 Osflo's use of water, and air, and is the twentieth and twenty-first 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 compliance monitoring under the RMA and the Council's obligations and general approach to monitoring sites through annual programmes, the resource consents held by Osflo 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 at Osflo's site.

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

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

Section 4 presents recommendations to be implemented in the 2015-2016 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 socio-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);
- (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 performance of resource users and consent holders. Compliance monitoring, including both activity and impact monitoring, enables the Council to continually re-evaluate its approach and that of consent holders to resource management and, ultimately, through the refinement of methods and considered responsible resource utilisation, to move closer to achieving sustainable development of the region's resources.

1.1.4 Evaluation of environmental performance

Besides discussing the various details of the performance and extent of compliance by the consent holder during the period under review, this report also assigns a rating as to the Company's 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 significant 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 in response to unauthorised incident reports, 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 in response to unauthorised incident reports. 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 in response to unauthorised incident reports. 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.

In the 2014-2015 year, 75% of consent holders in Taranaki monitored through tailored compliance monitoring programmes achieved a high level of environmental performance and compliance with their consents, while another 22% demonstrated a good level of environmental performance and compliance with their consents.

1.2 Process description

Osflo operates a storage, blending and distribution facility for agricultural fertiliser based on poultry litter at the site of the old Tarurutangi dairy factory on Hursthouse Road, near Lepperton (Figure 1). The poultry waste is collected from farms around the Taranaki region, and sold as a registered fertiliser to be spread on pasture. The depot is the administration centre 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. Some blending in of additional ingredients occurs at the depot. A total of 14 persons are employed in the operation, utilising seven trucks.

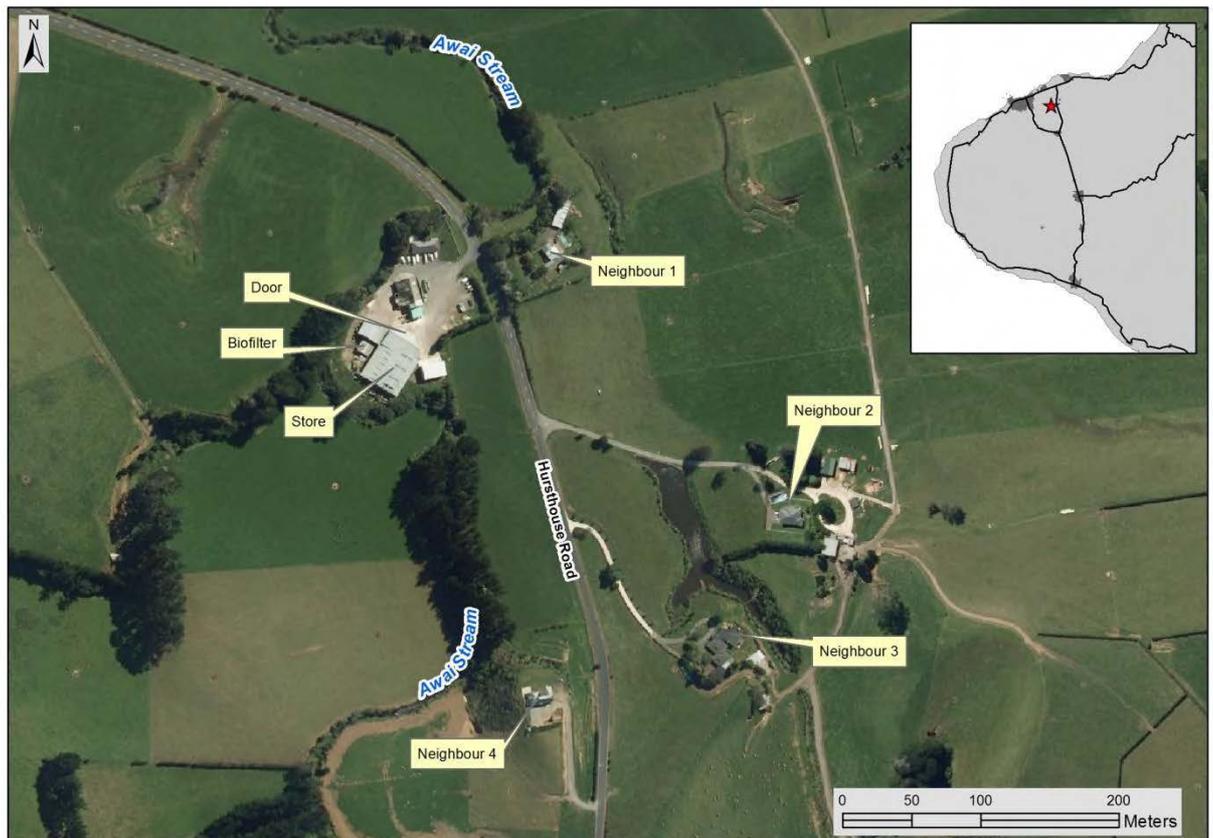


Figure 1 Osflo Spreading Industries Limited site

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, selenium may be blended into the litter according to customer requirements, and are stored in a separate building. Up to about 30,000 tonnes per annum of litter is generated on farms within the Inglewood/Okato/Waitara area, mostly near Lepperton and Bell Block. This amount is forecast to increase owing to expansion of the poultry industry. The amount stored at the depot ranges from about 100 to 3,000 tonnes. Peak seasonal activity is in spring, for cropping, and in autumn, for dairy farming.

The Hursthouse Road depot is on an area of about one hectare in the bottom of a valley, bounded on the north and west by the Awai Stream, on the east by Hursthouse Road, and on the south by a fence and tree shelter belt. The site is surrounded by farm grazing land, with four dwellings nearby beyond the site boundary, one 100 metres to

the east, two within 300 metres to the southeast, and a new dwelling 250 metres to the south on a hill. The predominant winds in the area are westerly and south-easterly.

The litter comprises 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.

The storage shed is designed so that the fugitive emissions of gas from the storage of poultry wastes will not escape the building. Emissions are extracted by a fan and forced through a biofilter. Biofilters decompose odorous compounds, using micro-organisms such as bacteria. The use of an extraction fan within the closed facility has the added benefit of maintaining slight negative pressure inside the building, which reduces the egress of untreated gaseous emissions. The ventilation rate is increased during loading out, when the door is left open to allow clearer viewing by operators in the dusty conditions. An odour-neutralising agent is pumped into the air from a manifold around the door while it is open.

The store remains closed and inoperative for about 30% of days in the year. Filling takes place for about 50% of days in a year, and emptying for 20%.

Additional components are mixed into the chicken litter, either on the ground outside the store with a front-end loader (solids), or by injection with a lance into loaded trucks (liquids).

Wastewater from washing down the trucks (with quaternary ammonia sanitiser) and yard, and stormwater from this area, is directed to a concrete settling pond which then overflows to two soakage pits in series that are situated beside and discharge to the Awai Stream. A screen is placed between the holding pond and the first soakage pit to prevent solids from entering the pit. A third soakage pit was excavated in November 2014.

Stormwater with less potential to be contaminated, from other areas of the premises, soaks to ground or is directed to the second soakage pit.

1.3 Resource consents

1.3.1 Water discharge permit

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.

Osflo held two permits to discharge to water during the 2013-2015 review period. Discharge permit **4333-2** expired and was replaced with discharge permit **4333-3**.

Osflo held water discharge permit **4333-2** to cover the discharge of up to 225 litres per second of stormwater and treated wastewater from poultry litter storage yard washings into land via soakage in the vicinity of, and stormwater onto and into land in the vicinity of and into, the Awai Stream in the Waiongana Catchment. This permit was issued by the Council to Osflo Spreading Industries Limited on 19 December 1997 as a resource consent under Section 87(e) of the RMA. It was transferred to Osflo Fertiliser Limited on 17 January 2012. It expired on 1 June 2014, but Council exercised its discretion under Section 124(2)(e) of the Act to allow Osflo to continue while application for a new consent was being processed

The consent had four special conditions. These special conditions covered the method of disposal of wastewater and maintenance of the disposal system, and effects on the Awai Stream.

Condition 1 stated that there shall be no direct discharge of wastewater.

Condition 2 required maintenance of the soakage system to ensure efficient operation.

Condition 3 addressed the location point of the discharge, to achieve rapid mixing in the river.

Condition 4 was a review provision.

This was the second consent granted for the water discharge. The first permit **4333-1** was issued on 8 September 1993 for a period of five years until 1 June 1998, and also covered discharges to air from the storage facility.

A replacement consent for the water discharge, permit **4333-3**, to discharge treated wastewater and stormwater from poultry litter storage yard washings into land via soakage, in circumstances where it may enter ground and surface water, was issued by the Council on 30 June 2015 under Section 87(e) of the RMA. It is due to expire on 1 June 2026.

There are 16 conditions attached to this permit.

Condition 1 requires adoption of the best practicable option to prevent or minimise effects.

Conditions 2 and 3 apply to discharge to water, before 1 June 2019, placing limits on significant potential contaminants beyond a mixing zone, and standards on the effluent itself.

Conditions 4 to 10 apply to discharge to land, after 1 June 2019. Condition 4 prohibits direct discharge of wastewater to Awai Stream. Conditions 5 to 7 relate to operation of the disposal system. Conditions 8 to 10 relate to the design and construction of the disposal system.

Condition 11 limits the size of the washwater catchment. Condition 12 requires all stormwater to be treated.

Conditions 13 and 14 require the production of spill contingency plan and a management plan.

Condition 15 deals with changes in processes or operations, and condition 16 provides for review of consent.

Copies of permits **4333-2** and **4333-3** are attached to this report in Appendix I.

1.3.2 Air discharge permit

Section 15(1)(c) of the Resource Management Act 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.

Osflo held two permits to discharge to air during the 2013-2015 review period. Discharge permit **5918-1** expired and was replaced with discharge permit **5918-2**.

Osflo held air discharge permit **5918-1** for the discharge of emissions into the air from the storage and distribution of used poultry litter fertiliser. This permit was issued by the Council to Osflo Spreading Industries Limited on 20 September 2004 as a resource consent under Section 87(e) of the RMA. It was transferred to Osflo Industries Limited on 17 January 2012. It expired on 1 June 2014, but Council exercised its discretion under Section 124(2)(e) of the Act to allow Osflo to continue while application for a new consent was being processed.

Previously, the Osflo operations at their Hursthouse Road facility were considered a permitted activity under Rule 17 of the Regional Air Quality Plan for Taranaki, however it was determined that activities at the site relating to the discharge of emissions to air were no longer meeting the standards, terms and conditions of Rule 17 of the Regional Air Quality Plan, and accordingly consent was sought by the Company and granted by the Council.

The consent had fourteen special conditions which related to the management and operation of the discharge to air in a manner which minimises adverse effects on the surrounding environment.

Condition 1 required the adoption of the best practicable option to prevent or minimise effects.

Condition 2 required use of the most appropriate equipment to manage processes and discharges from the site.

Condition 3 required the treatment of air prior to discharge to environment.

Condition 4 required notification prior to changes to onsite processes.

Condition 5 required that odour at the site not be objectionable beyond the boundary of the site.

Condition 6 required that exercise of consent shall not cause suspended or deposited dust beyond the boundary of the site.

Condition 7 required that all storage and loading areas be cleaned and maintained.

Condition 8 stated discharged particulates shall not exceed 125 mg/m³.

Condition 9 set the limits for the ammonia concentration at the boundary of the site.

Condition 10 required the door to the storage facility to be closed at all times apart from loading and unloading.

Condition 11 detailed the need to mitigate effects (if any) of the discharge on neighbours water supply.

Condition 12 required the Company prepare a management plan.

Condition 13 stated that the management plan may be reviewed.

Condition 14 provided for a review of the consent.

A second consent for the air discharge, permit **5918-2** to discharge emissions into the air from the storage and distribution of used poultry litter fertiliser, was issued by the Council on 30 June 2015 under Section 87(e) of the RMA. It is due to expire on 1 June 2026.

There are eight conditions attached to this permit.

Condition 1 requires adoption of the best practicable option to prevent or minimise effects.

Condition 2 requires the containment of all potentially odorous material for treatment of emissions by 1 June 2019.

Condition 3 prohibits offensive or objectionable odour beyond the site boundary.

Condition 4 deals with change in process.

Conditions 5 requires the door of the store to be kept shut except during entry and exit.

Condition 6 addresses dust.

Condition 7 requires the site to be operated in accordance with an approved odour management plan.

Condition 8 is a review provision.

Copies of the permits **5918-1** and **5918-2** are attached to this report in Appendix I.

1.3.3 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.

Until 2009, Osflo held discharge permit **3923-1** to cover the placement of up to 12 tonnes per hectare of the Ministry of Agriculture and Fisheries-registered organic fertiliser onto land in the Taranaki region. This permit was issued by the Council on 10 July 1991 as a resource consent under Section 87(e) of the RMA. This consent expired on 1 June 2009 and was not replaced, as, under Rule 31 of the Regional Freshwater Plan for Taranaki (RFP), which had become operative in October 2001, the activity was now a permitted activity.

Certificate of compliance 7463-0 was issued to Osflo, pursuant to section 139 of the RMA, in respect of the discharge of fertiliser onto and into land at various locations throughout the Taranaki region, on 26 March 2009. The activity is permitted provided there is compliance with four conditions that are intended to avoid adverse effect on soil and water.

A copy of the certificate with conditions is attached in Appendix I.

There is no compliance monitoring associated with a permitted activity, though breach of any of the conditions may be the subject of enforcement action.

1.4 Monitoring programme

1.4.1 Introduction

Section 35 of the RMA sets out an obligation for the Council to: gather information, monitor, and conduct research on the exercise of resource consents, and the effects arising, within the Taranaki region.

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 Osflo site consisted of two primary components, which are discussed below.

1.4.2 Programme liaison and management

There is generally a significant investment of time and resources by the Council in ongoing liaison with resource consent holders over consent conditions and their interpretation and application, in discussion over monitoring requirements, preparation for any reviews, renewals, or new consents, advice on the Council's environmental management strategies and the content of regional plans, and consultation on associated matters.

1.4.3 Site inspections

The Osflo site was visited four times each year during the review period. With regard to consents for the discharge of stormwater, 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 consent holder 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.

2. Results

2.1 Inspections

Officers of the Council carried out four routine inspections of the Osflo storage facility at Hursthouse Road each year during the 2013-2015 monitoring period.

24 September 2013

A routine air and water inspection was undertaken on 24 September 2013. Light rain began at the start; there was a light easterly wind. An odour survey along Hursthouse Road found nothing to the north, and a noticeable typical litter odour at the southern neighbours' farm gateway.

The store was about 75% full. Load-outs started on a large scale the previous day. The odour control system (de-odorant, extraction, bio-filter) was working. The truckwash settling pond had been cleaned out recently. The stormwater system, diesel store bunding and additives store were all inspected and found to be satisfactory. Consents replacement preparation was underway.

19 December 2013

A routine air and water inspection was undertaken on 19 December 2013. The weather was bright, with a light-moderate south-westerly wind. An odour survey along Hursthouse Road found a slight odour of ruminating cows to the south, and nothing to the north. There was strong noticeable litter odour within a 100-metre band directly opposite the depot entrance, including the neighbour's driveway.

The store was about 15% full, with the door open to allow loading. "Mixing-in" of superphosphate with litter was occurring immediately outside the store (Photo 1). The strength of the downwind odour adjacent to the mixing area was less than that observed earlier at the depot entrance. The odour control system was working, with citrus odour noticeable; the bio-filter was a little dry, but not odorous. The settling/soakage ponds and additives and diesel stores were satisfactory. Consents replacement and future storage/operations options were discussed.



Photo 1 Blending of fertiliser and loading of truck outside store, 19 December 2013

29 January 2014

An additional inspection of the stormwater catchment, store and odour treatment system was carried out on 29 January 2014, following a meeting of interested parties in the pre-application stage of the consents replacement process. Consents compliance was achieved.

23 April 2014

A routine air and water inspection, and follow-up of an odour complaint, was undertaken on 23 April 2014. The weather was fine, with a light north-westerly wind that varied in direction during the inspection. An initial odour survey along Hursthouse Road found continuous fluctuating noticeable litter odour at the entranceways to neighbours opposite and immediately south of the depot. A second odour survey, about two hours later in early afternoon, found the same continuous odour, and coincided with a complaint from a worker on a neighbouring farm. (Refer to section 2.2).

The store was about 30% full; the door was open while blending of litter with lime was occurring outside, generating noticeable odour. The odour control system was working; the bio-filter was again a little dry, but not odorous. The settling/soakage ponds were satisfactory; a slight discharge to Awai Stream was reported for earlier in the day. The additives and fuel stores were satisfactory.

The inspection notice stated that the doors to the store needed to be kept shut when not transferring litter, and that the blending area needed to be kept clean.

29 May 2014

A routine air and water inspection was undertaken on 29 May 2014, following a series of odour complaints over the last 6 weeks. (Refer to section 2.2). There were intermittent light to moderate showers, and a light north-westerly wind. An odour survey along Hursthouse Road found nothing to the north, other than wet ground/road smell; continuous noticeable litter odour was detected at the farm gateway to the south, while an Osflo truck was being loaded.

The store was about 5% full; the door was opened during the inspection to load in litter. Recent blending had been carried out inside the store, with some blended material stored outside. Residual litter, from "tracking" of trucks was on the ground outside, draining to the settling ponds. The odour was less than that noticed earlier at the road while a truck was being loaded. The odour control system was working; citrus odorant was noticeable inside the store; the bio-filter was recently wetted. Truckwashing was occurring in light rain; the settling pond would need desludging soon. The soakage ponds were discharging to Awai Stream at about 0.2 litres/second, and emitted a noticeable sulphurous odour.

24 September 2014

A routine air and water inspection was undertaken on 24 September 2014 in bright weather, with a blustery, reducing westerly wind. An odour survey was carried out along Hursthouse Road before and after the site visit. Initially, fresh litter odour, similar to baby faeces, was occasionally noticeable at the farm entrance to the south and bordering on objectionable at the depot entrance, while a truck was being unloaded of double-batched chicken litter. Finally, occasional wafts of old chicken litter being loaded out were noticed at the depot entrance, and were more frequent at the farm entrance to the south. Nothing was detected to the north.

Litter sales were stronger than usual through late winter, owing to dry weather: a big load-out had occurred that day.

The store was about 90% full; the door was open, to load out litter. The odour control system was working. The building walls were becoming corroded, with some small holes. The truckwash settling pond had recently been cleaned out, and the load-out area was reasonably tidy. The soakage settling ponds were discharging to Awai Stream at about 0.1 litres/second, and had a noticeable sulphurous odour. The additives and fuel stores were satisfactory.

Preparations were being made for installation of odour neutralisation sprayers and wind cloth on/beside the roof of the additives store.

Consents replacement was discussed, particularly the proposal to construct a new building for product transfer and mixing, methods of controlling odour generated within the building, and alterations to the site drainage system.

A new house site was being prepared on a hill east of Hursthouse Road, about 400 metres south of the depot.

2 December 2014

A routine air and water inspection was undertaken on 2 December 2014, following an informal meeting between Osflo and submitters to the consent applications. Weather conditions were bright, with a light south-westerly breeze. An odour survey, carried out along Hursthouse Road after the midday inspection, found nothing to the south, and slightly noticeable intermittent “characteristic” litter odour to the north.

The litter store was about 25% full. There was no strong odour, inside or out. The odour control system was working. The truckwash settling pond had recently been cleaned out. Another soakage pond had been dug about a month ago in series with (south of) the two existing soakage ponds beside Awai Stream. There was no surface discharge. The additives store and diesel fuel store were satisfactory.



Photo 2 The new third settling pond, 2 December 2014

The extension of the odour control system, comprising odour neutralisation sprayers and wind cloth on/beside the roof of the additives store, had been completed.



Photo 3 Extension of odour control system, and wind break, 2 December 2014

There was no activity at the new house site to the south. The dairy farm opposite had been for sale since October.

17 February 2015

A brief inspection of the Hursthouse Road site was undertaken on 17 February 2015, prior to travel to a new litter storage depot on Normanby Road, South Taranaki. There was a light westerly wind in bright conditions. No objectionable odour was found.

10 June 2015

A routine air and water inspection was undertaken on 10 June 2015. There had been recent showers; a moderate-strong westerly wind was blowing. An odour survey along Hursthouse Road found nothing to the north, and almost continuous noticeable litter odour at the farm entrance to the south. Several large screening shrubs had been removed from the frontage of the property opposite the depot entrance, and *Cryptomeria* planted.

Part of the roof of the store was carried away by a tornado on 11 May. This was reported to Council immediately, and neighbours were informed. Some odour complaints had been made directly to Osflo. The store was half-full at that date and since had been emptied and was now half full again.

Repair of the store roof had been hampered by poor weather. The side door was left open during the repairs; completion was expected to take another two weeks. The odour control system was not operated during the repair; there was continuous litter odour around the building. The load-out area was covered with solids and the truckwash settling pond needed to be cleaned out. The soakage ponds were not discharging, nor odorous. The additives and diesel stores were satisfactory.

Consents processing was discussed. Land had been purchased adjacent to Hursthouse Road to facilitate the proposed site improvements. Fencing off of the new land was in progress, and screening plants were ready for planting.

A new house had been constructed east of Hursthouse Road, about 400 m south of the depot. A new shed was under construction between the road and the first farm house south of the depot.

2.2 Investigations, interventions, and incidents

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

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

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

In the 2013-2015 period, it was necessary for the Council to undertake significant additional investigations and interventions, or record incidents, in association with Osflo Fertiliser's conditions in resource consents or provisions in Regional Plans in relation to the Company's activities on 14 occasions, 13 in 2013-2014, and one in 2014-2015. All of the incidents related to complaint about odour, those in 2013-14 from the occupiers of one property, and the one in 2014-2015 from another. The complaints were investigated as soon as practicable, mostly within two hours, by a total of nine Council officers.

Three complaints were received over three weeks in October 2013, all in mid-late morning. On two occasions, no odour was found beyond the site boundary. On the third occasion, noticeable odour was found on Hursthouse and Upland Roads; the door to the store was open while trucks were loading. Chicken litter had been applied to land on neighbouring property that morning. Inspection Notices were issued. No further action was taken as no objectionable odour was found.

Ten complaints were received over a six-week period between 12 April and 21 May 2014 at times ranging from early morning to mid-late afternoon. On three occasions, no odour was found beyond the site boundary. On six occasions, there was noticeable chicken litter odour beyond the site boundary, mostly when litter was being transferred, stronger during load-in than load-out. On Saturday 19 April 2014, the odour was found to be offensive and objectionable. An Abatement Notice was issued to comply with consent conditions relating to odour control, and an Infringement Notice (\$1,000 fine) was given.

On 21 April 2015, a complaint was received by email after normal work hours. (An Environmental Hot-line is available). Upon investigation the next day, no odour was found. The wind direction had changed.

3. Discussion

3.1 Discussion of plant performance

Air emissions

On several inspections during the 2013-2015 review period, noticeable odour from the Osflo site was detected beyond the site boundary on Hursthouse Road, the strength varying depending on the activity occurring and the wind conditions. In the previous, 2010-2013 review period, the main source of odour appeared to be the transfer of newly broken-up chicken litter from within the store to trucks outside - the mixing of fertiliser components on the ground outside the store building was found to generate relatively little odour.

In spring 2013, three complaints, the first in several years, were received about odour, though they were not substantiated upon investigation.

In autumn 2014, during the seasonal increase in litter transfer, the odour associated with load-in of litter appeared to become the dominant source. This followed a change in the batching process in chicken sheds to "brood and move", and in chicken feed composition, which resulted in the incoming waste litter being wetter and having a stronger smell. Investigations were made into an increased number of complaints, some of which found noticeable odour from the store beyond the boundary, and one found offensive odour, resulting in an abatement notice and a fine.

Site expansion plan

The complaints occurred shortly before and after Osflo applied for replacement of its resource consents, which were to expire in June 2014 but remained in force while the applications were processed. After consultation and negotiation with neighbours, Osflo drew up a proposal to develop the site for expansion of fertiliser handling capacity while improving odour control and wastewater/stormwater treatment and disposal.

An agreed four-year site expansion plan, which is to be completed by 1 June 2019, was incorporated into the two new consents. The plan involves three stages. (See Figure 2).

The first stage includes purchase of land alongside the road east of the depot, and the landscaping and planting with dense vegetation of that land to establish a visual and odour buffer. The land was purchased, and planting began, in June 2015. As an interim measure, to treat odour during litter transfer while the shelter belt matures, an extension of the neutralising odour system, together with a shelter cloth barrier, had already been put in place along the adjacent (former) site boundary.

The second stage involves: the construction of a new workshop, partly on the recently purchased land; upgrade of the water drainage system, to separate clean and contaminated water; and the construction of a new contaminated water treatment and land-disposal system.

The third stage is demolition of the old dairy (storage/workshop) building, and renovation/extension of the existing storage facility to accommodate mixing and unloading/loading activities within a contained area, with appropriate treatment of air emissions.



Figure 2 Site expansion plan (stages 3 and 4 are combined)

Water discharges

With regard to the water discharges, in general, the washwater and stormwater treatment and disposal systems were found to be operated and maintained in a satisfactory manner in the 2013-2015 review period. The truckwash settling pit was desludged as needed. A third soakage pit was constructed for stormwater and settled truck washings. Discharge directly to Awai Stream from the second soakage pit was observed at low rate in 2014, before the new pit was constructed.

3.2 Environmental effects of exercise of consents

No adverse effects on the surrounding environment or the Awai Stream from the discharge of stormwater at the Osflo site have been recorded during the 2013-2015 review period. This is consistent with monitoring carried out in previous years, including sampling of the Awai Stream which occurred in 1994, 1995 and 1996 which confirmed that the stormwater management system at the Osflo site was effectively managing the discharge of stormwater from the site without adverse environmental effect. No samples were collected by Council in the period under review. Monitoring of conditions on the new water discharge consent 4333-3 will require sampling and analysis of the discharge and receiving water. (Refer to section 3.5).

In terms of environmental effects from the discharge of emissions to air, dust has not been found to be a concern outside the boundary of the site. In terms of the amenity of

the surrounding environment, mild to strong odours were detected beyond the boundary of the site during inspections.

There were 14 complaints in relation to odours from the site over the two-year review period, eight of which were confirmed to be due to activities at the site. On immediate investigation by Council, odour from the site beyond the boundary was found to be noticeable on seven occasions, and objectionable and offensive on one occasion.

3.3 Evaluation of performance

A tabular summary of the Company's compliance record for the year under review is set out in Table 1 to Table 4. The consents relating to Table 2 and Table 4 were issued on 30 June 2015, and so were not monitored during the review period.

Table 1 Summary of performance for Consent 4333-2

Purpose: To discharge up to 225 litres/second of stormwater and treated wastewater from poultry litter storage yard washings into land via soakage in the vicinity of and stormwater onto and into land in the vicinity of and into the Awai Stream in the Waiongana Catchment		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. No direct discharge into the stream	Inspections of treatment system and discharge point	Yes
2. Maintenance of soakage system	Inspections of treatment system and discharge point	Yes
3. Discharge mixing zone requirements	Inspections of discharge point	Yes
4. Optional review provision re environmental effects	Option not available. Consent expired 2014	N/A
Overall assessment of consent compliance and environmental performance in respect of the consent		High
Overall assessment of administrative performance in respect of this consent		High

Table 2 Summary of performance for Consent 4333-3

Purpose: To discharge treated wastewater and stormwater from poultry litter storage yard washings into land via soakage, in circumstances where it may enter ground and surface water		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Best practicable option	Site inspections	N/A
2. Limits on ammonia and BOD in Awai Stream	Sampling and testing of stream as necessary by Council staff, before 1 June 2019	N/A
3. Limits on potential contaminants in discharge	Sampling and testing of discharge as necessary by Council staff, before 1 June 2019	N/A
4. No direct discharge into the stream	Site inspection, after 1 June 2019	N/A
5. Control of ponding	Site inspection, after 1 June 2019	N/A
6. Even application of effluent	Site inspection, after 1 June 2019	N/A

7. Provision for effluent storage	Site inspection, after 1 June 2019	N/A
8. Completion of site works	Site inspection, after 1 June 2019	N/A
9. Works to be as proposed	Site inspection, after 1 June 2019	N/A
10. Provision of updated stormwater and wastewater plan	Receipt of as-built plan, and inspection	N/A
11. Limit on washdown catchment area	Site inspection, after 1 June 2019	N/A
12. Treat prior to stormwater discharge	Site inspection	N/A
13. Maintenance of and adherence to a spill contingency plan	Receipt of Plan	N/A
14. Maintenance of and adherence to a Management Plan	Receipt and certification of Plan, site inspection	N/A
15. Written notification of changes	Site inspection	N/A
16. Optional review provision re environmental effects	N/A	N/A
Overall assessment of consent compliance and environmental performance in respect of the consent		N/A
Overall assessment of administrative performance in respect of this consent		N/A

Table 3 Summary of performance for Consent 5918-1

Purpose: To discharge emissions into air from the storage and distribution of used poultry litter fertiliser			
Condition requirement	Means of monitoring during period under review		Compliance achieved?
1. Best practicable option	Site inspections		Yes
2. Minimise emissions through use of most appropriate equipment, including operation and maintenance	Inspections of equipment		Yes
3. Odour to be treated prior to discharge	Site inspections showed odour being treated and treatment system working		Yes
4. Notification of any change in processes	Site inspections showed no changes to processes		Yes
5. Effects of odour	Site inspections.	No. An abatement notice and infringement notice (\$1,000 fine) were issued for an incident on 19 April 2014.	
6. Effects of dust	Site inspections		Yes
7. All areas to be maintained and cleaned	Site inspections		Yes
8. Limits on particulate matter	Site inspections		Yes

9. Limits on ammonia levels	Site inspections	Yes
10. Door of storage area to be closed at all times except during loading	Site inspections	No. Door sometimes left open
11. Adverse effects on neighbours roof water supply system	Inspections and records of complaints	Yes
12. Prepare management plan	Management plan submitted to Council	Yes
13. Review of management plan	No review sought by Council	N/A
14. Review of consent	Option not available. Consent expired 2014	N/A
Overall assessment of consent compliance and environmental performance in respect of the consent		Poor
Overall assessment of administrative performance in respect of this consent		High

Table 4 Summary of performance for Consent 5918-2

Purpose: To discharge emissions into the air from the storage and distribution of used poultry litter fertiliser		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Best practicable option	Site inspections	N/A
2. Containment of odorous material and treatment of emissions	Site inspection, after June 2019	N/A
3. No objectionable odour beyond boundary	Site inspection	N/A
4. Written notification of changes	Site inspection	N/A
5. Door to store kept closed	Site inspection	N/A
6. Dust control	Site inspection	N/A
7. Maintenance of and adherence to a Management Plan	Receipt and certification of Plan, site inspection	N/A
8. Optional review provision re environmental effects	N/A	N/A
Overall assessment of consent compliance and environmental performance in respect of the consent		N/A
Overall assessment of administrative performance in respect of this consent		N/A

During the period under review, Osflo demonstrated an improvement required level of environmental performance and a high level of administrative performance with its resource consents.

Thirteen of the 14 incidents at Osflo relate to the 2013-2014 period, and only one in the 2014-2015 period, suggesting that environmental improvements are already in place. This is further supported by the site expansion plans, which are linked to the consent

for completion in 2019. The expansion planned should contain the majority of the operations and reduce the risk of odour beyond the site boundary..

3.4 Recommendations from the 2010-2013 Annual Report

In the 2010-2013 monitoring report it was recommended:

1. THAT monitoring of air emissions from Osflo Fertiliser Ltd in the 2013-2014 year continue at the same level as in 2012-2013.
2. THAT monitoring of stormwater discharges from Osflo Fertiliser Ltd in the 2013-2014 year continue at the same level as in 2012-2013.

These recommendations were fully implemented during the 2013-2015 monitoring period.

3.5 Alterations to monitoring programmes for 2015-2016

In designing and implementing the monitoring programmes for air/ water discharges in the region, the Taranaki Regional Council has taken into account the extent of information made available by previous authorities, its relevance under the Resource Management Act, the obligations of the Act in terms of monitoring emissions and discharges and effects, and subsequently reporting to the regional community, 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 emitting to the atmosphere and discharging to the environment.

In the case of Osflo Spreading Industries Ltd, the programme for 2013-2015 was unchanged from that for 2010-2013.

The replacement consents that were issued in June 2015 impose new conditions that require some monitoring to be undertaken, in addition to the quarterly inspections.

For the new water discharge permit **4333-3**, additional monitoring is needed to determine compliance with conditions on effluent composition and effects in the Awai Stream. Sampling and testing of the discharge, and the receiving water upstream and downstream at the mixing zone boundary, under normal site operating conditions would be appropriate. Parameters to be determined for consent compliance are pH, suspended solids and oil and grease for the discharge, and total ammonia (with temperature and pH for unionised ammonia calculation) and filtered carbonaceous BOD for the receiving water. For interpretation of results, turbidity, conductivity and dissolved reactive phosphorus will be included. The sampling will be undertaken during routine quarterly inspections, arranged to occur under both dry and wet weather conditions so as to establish effects on the stream, if any, both directly from the surface discharge and indirectly via groundwater flow.

The Spill Contingency Plan and Management Plan will need to be reviewed.

The new air discharge permit **5918-2**, requires an updated Odour Management Plan be provided to Council by 30 September 2015.

Progress with the proposed expansion of the site by 1 June 2019, to increase litter storage capacity and improve odour control, and to upgrade the wastewater/ stormwater treatment and disposal system, can be monitored adequately during the quarterly inspections. It is noted that the improvements to be made during the expansion programme as proposed, with respect to odour control in particular, were the basis for submitters to the consent applications withdrawing their right to be heard.

It is proposed that for 2015-2016, the monitoring programme remain the same as the 2014-2015 year, with the addition of annual sampling of effluent and the Awai Stream to determine compliance with new consent conditions. A recommendation to this effect is attached to this report.

3.6 Exercise of optional review of consent

Neither of the consents associated with the Osflo used chicken litter store provides for an optional review in June 2016. The next review date is 1 June 2020.

4. Recommendations

1. THAT monitoring of air emissions from Osflo Fertiliser Ltd in the 2015-2016 year continue at the same level as in 2014-2015.
2. THAT monitoring of wastewater and stormwater discharges from Osflo Fertiliser Ltd in the 2015-2016 year continue at the same level as in 2014-2015, with the addition of sampling and testing of the effluent and Awai Stream to determine compliance with new consent conditions.

Bibliography

- 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

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
 P O Box 761
 NEW PLYMOUTH 4340

Decision Date: 19 December 1997

Commencement
Date: 19 December 1997

Conditions of Consent

Consent Granted: To discharge up to 225 litres/second of stormwater and treated wastewater from poultry litter storage yard washings into land via soakage in the vicinity of and stormwater onto and into land in the vicinity of and into the Awai Stream in the Waiongana Catchment at or about (NZTM) 1702114E-5673854N

Expiry Date: 1 June 2014

Review Date(s): June 2002, June 2008

Site Location: Hursthouse Road Tarurutangi New Plymouth

Legal Description: Lot 1 DP 4905 Lot 1 DP 8670 Blk VII Paritutu SD

Catchment: Waiongana

Tributary: Awai

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

General conditions

- (a) The consent holder shall provide on request by the Chief Executive, Taranaki Regional Council, plans, specifications and maintenance programmes of works associated with the exercise of the consent, showing that the conditions of the consent are able to be met.
- (b) The standards, techniques and frequency of monitoring of the consent shall be to the specific approval of the Chief Executive, Taranaki Regional Council.
- (c) The consent holder shall pay all charges required by the Chief Executive, Taranaki Regional Council, to enable recovery of the actual and reasonable costs incurred in administration, monitoring and supervision of the consent.

Special conditions

- 1. That the consent holder shall ensure that there is no direct discharge of wastewater into the stream.
- 2. That the consent holder shall maintain the soakage system to ensure its efficient operation at all times.
- 3. That allowing for a mixing zone of 10 metres in the groundwater, the discharge shall not give rise to any of the following effects in the Awai Stream:
 - i) the production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials;
 - ii) any conspicuous change in the colour or visual clarity;
 - iii) any emission of objectionable odour;
 - iv) the rendering of fresh water unsuitable for consumption by farm animals;
 - v) any significant adverse effects on aquatic life, habitats, or ecology.
- 4. That the Taranaki Regional Council may review any or all of the conditions of this consent by giving notice of review during the month of June 2002 and/or June 2008, for the purpose of ensuring that the conditions are adequate to deal with any adverse effects of the discharge on the environment arising from the exercise of this consent, which were not foreseen at the time the application was considered and which it was not appropriate to deal with at that time.

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: 30 June 2015

Commencement Date: 30 June 2015

Conditions of Consent

Consent Granted: To discharge treated wastewater and stormwater from
 poultry litter storage yard washings into land via soakage, in
 circumstances where it may enter ground and surface water

Expiry Date: 01 June 2032

Review Date(s): June 2020, June 2026

Site Location: 70 Hursthouse Road, Tarurutangi

Legal Description: Lot 1 DP 4905 Lot 1 DP 8670 Blk VII Paritutu SD

Grid Reference (NZTM) 1702115E-5673767N

Catchment: Waiongana

Tributary: Mangaoraka
 Awai

*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.

Discharge to water (Before 1 June 2019)

2. The wastewater discharge shall not cause the maximum concentration of any constituent shown in the following table to be exceeded in the receiving water more than 25 metres downstream of the discharge to the receiving water.

Constituent	Maximum Concentration
Unionised ammonia	0.025 gm ⁻³
Filtered carbonaceous BOD ₅	2.0 gm ⁻³

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

Constituent	Standard
pH	Within the range 6.0 to 9.0
suspended solids	Concentration not greater than 100 gm ⁻³
oil and grease	Concentration not greater than 15 gm ⁻³

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

Discharge to land (After 1 June 2019)

4. There shall be no direct discharge wastewater to the Awai Stream after 1 June 2019.
5. Discharges to land shall not result in wastewater ponding on the surface that remains for more than 30 minutes.
6. The effluent shall be applied as evenly as practicable over an area of no less than 40 m².
7. The consent holder shall ensure that at all times, while complying with the other requirements of this consent, there is sufficient storage available in the effluent treatment system for any reasonably likely inflow, so that there is no unauthorised discharge to land or water.

Consent 4333-3.0

8. The consent holder shall complete the proposed site expansion by 1 June 2019, in accordance with the details submitted with the application and as shown in the plans prepared by BTW Company Limited and in Attachments 1 – 5.
9. The upgraded stormwater and wastewater treatment system shall be installed in accordance with the details provided as part of the additional information provided to the Council (Council Document Reference 1458593) prepared by BTW Company Limited.
10. Within a month of completion of the site expansion required in condition 8 above, the consent holder shall provide the as-built on-site stormwater and wastewater management plan to the Chief Executive, Taranaki Regional Council.
11. The treated washdown water discharged shall be from a catchment area not exceeding 250 m².
12. All stormwater shall be directed for treatment through the stormwater treatment system for discharge in accordance with the special conditions of this permit.
13. The consent holder shall maintain and regularly update a 'Spill Contingency Plan' (SCP) 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 shall be approved by the Chief Executive, Taranaki Regional Council, acting in a certification capacity.
14. The site shall be operated in accordance with a 'Management Plan' (MP) 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) maintenance of conveyance systems;
 - c) general housekeeping; and
 - d) management of the interceptor system.
15. 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. 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.

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

Consent 4333-3.0

16. In accordance with section 128 and section 129 of the Resource Management Act 1991, the Taranaki Regional Council may serve notice of its intention to review, amend, delete or add to the conditions of this resource consent by giving notice of review during the month of June 2020 and/or June 2026, 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 30 June 2015

For and on behalf of
Taranaki Regional Council



A D McLay
Director - Resource Management

Advice Note

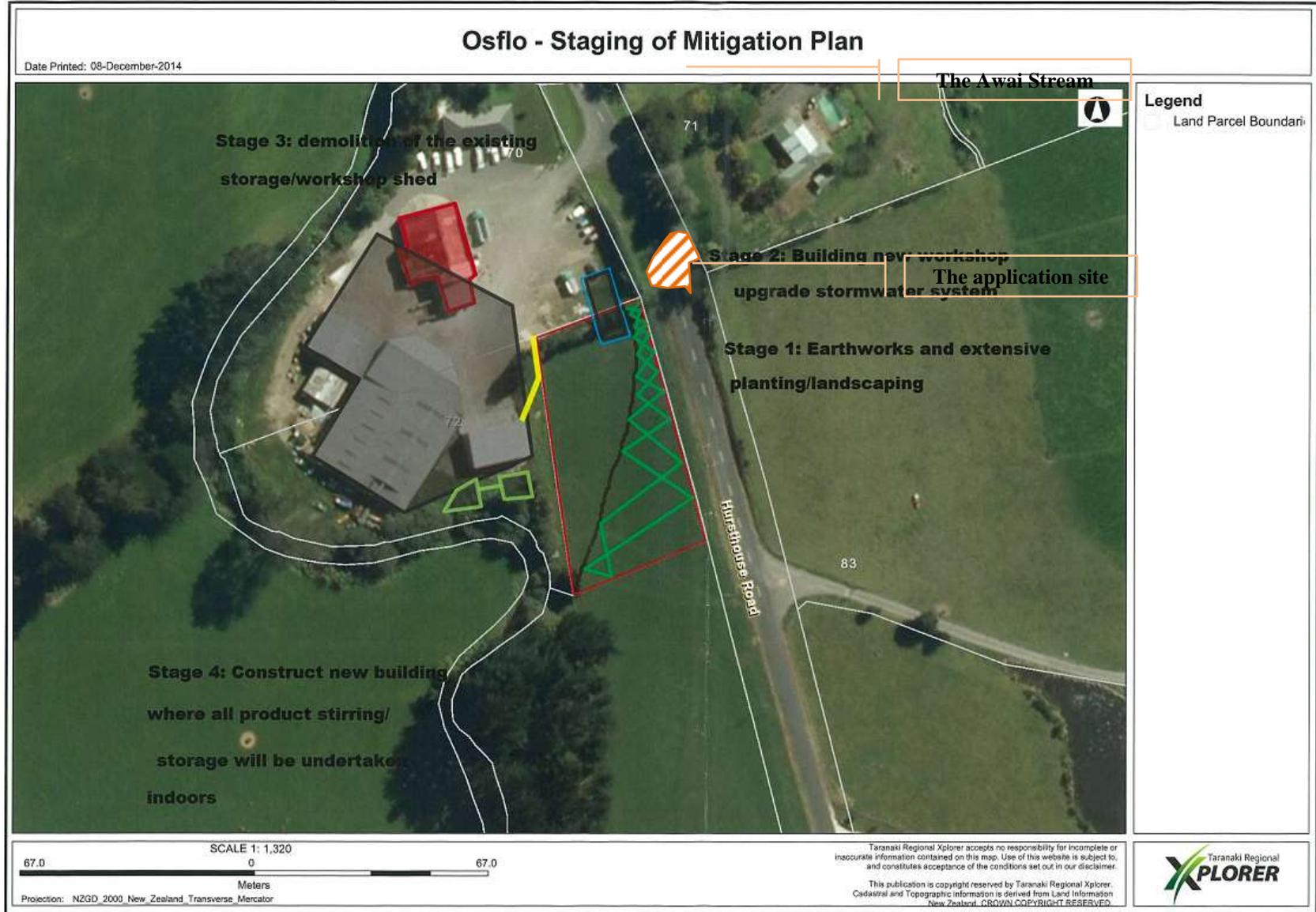
The consent holder's attention is drawn to MPI's "New Zealand Code of Practice for the Design and Operation of Farm Dairies (NZCP1) which restricts:

- *the discharge of specified wastes to land used for grazing of milking animals; and*
- *the use of feed from land which has had specified wastes applied to it.*

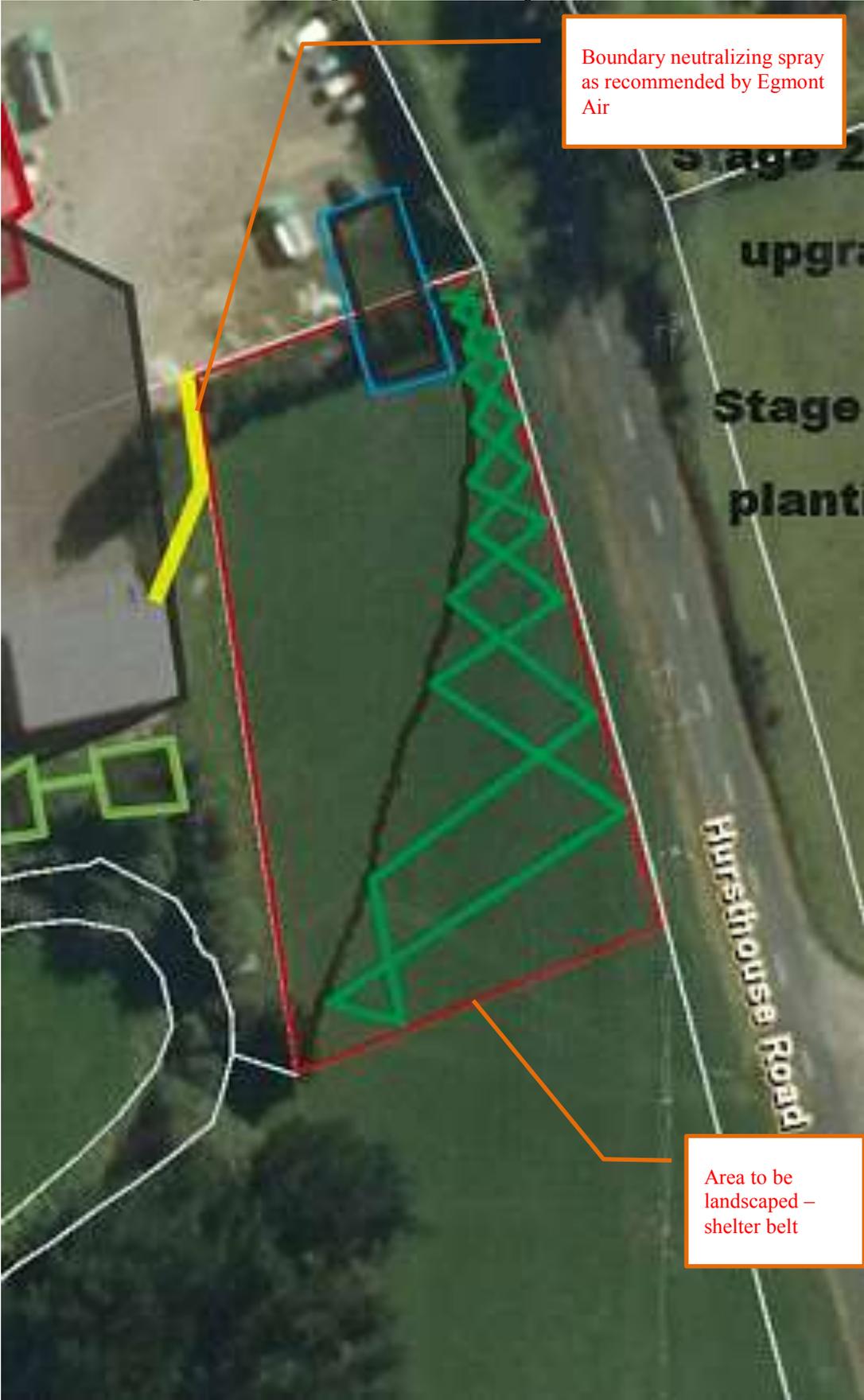
Should you require further information, please contact a Dairy Industry Technical Advisory Group (DITAG) representative or visit <http://www.foodsafety.govt.nz/elibrary/industry/dairy-nzcp1-design-code-of-practice/amdt-2.pdf> (specifically section 6.4 Disposal of effluent and other wastes and section 7.8 Purchased Stock Food) or contact an operating dairy processing company regarding conditions of supply.

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

Attachment 1: Proposed Site Expansion Plan - Overall Plan



Attachment 2: Proposed Site Expansion Plan – Stage 1



Attachment 3: Proposed Site Expansion Plan – Stage 2



Attachment 4: Proposed Odour Mitigation Plan – Stage 3



New extension to current storage facility to accommodate mixing and loading /unloading activities indoors

Attachment 5: Proposed stormwater / wastewater plan



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
 P O Box 761
 NEW PLYMOUTH 4340

Decision Date: 20 September 2004

Commencement
Date: 20 September 2004

Conditions of Consent

Consent Granted: To discharge emissions into the air from the storage and
 distribution of used poultry litter fertiliser at or about
 (NZTM) 1702091E-5673814N

Expiry Date: 1 June 2014

Review Date(s): June 2006, June 2008

Site Location: 70 Hursthouse Road, Tarurutangi

Legal Description: Lot 1 DP 4905 Lot 1 DP 8670 Secs 151 159 Pt Sec 12
 Tarurutangi Dist Blk VII Paritutu SD

Catchment: Waiongana

Tributary: Mangaoraka
 Awai

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

General conditions

- a) On receipt of a requirement from the Chief Executive, Taranaki Regional Council the consent holder shall, within the time specified in the requirement, supply the information required relating to the exercise of this consent.
- b) Unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent must be at the consent holder's own expense.
- c) The consent holder shall pay to the Council all required administrative charges fixed by the Council pursuant to section 36 in relation to:
 - i) the administration, monitoring and supervision of this consent; and
 - ii) charges authorised by regulations.

Special conditions

1. 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 consent holder shall minimise the emissions and impacts of air contaminants discharged from the site by the selection of the most appropriate process equipment, process control equipment, and emission control equipment, the methods of control, supervision and operation, the proper and effective operation, supervision, maintenance and control of all equipment and processes, on the site.
3. All potentially odorous material shall be contained to prevent the escape of odour directly to air, and any emissions from the material shall first be treated by the best practicable option before being discharged to air, to the satisfaction of the Chief Executive, Taranaki Regional Council.
4. 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.
5. The discharges authorised by this consent shall not give rise to any odour that, in the opinion of at least one enforcement officer of the Taranaki Regional Council, is offensive or objectionable at or beyond the boundary of the site.
6. The discharges authorised by this consent shall not give rise to suspended or deposited dust at or beyond the boundary of the site that, in the opinion of at least one enforcement officer of the Taranaki Regional Council, is offensive or objectionable.
7. All access, loading/unloading and storage areas, and equipment shall be maintained and cleaned to the satisfaction of the Chief Executive, Taranaki Regional Council, to ensure that emissions of odour are minimised.
8. The discharge of particulate matter from any duct, vent or other emission source shall not exceed 125 milligrams of particulate matter per cubic metre of air corrected to 0 degrees Celsius, 101.3 kPa [kilopascals], on a dry gas basis.

Consent 5918-1

9. The concentration of ammonia in air at the boundary of the site shall not exceed 500 micrograms of ammonia per cubic metre of air corrected to 0 degrees Celsius and 101.3 kPa [kilopascals].
10. The door of the storage facility where stockpiling of poultry wastes is to be carried out shall remain closed at all times except during the loading and unloading of vehicles.
11. Should there be any adverse effect on the roof water supply system of the occupant of the property at legal description Lot 1 DP 11858 Blk VII Paritutu SD, from operations carried out by the consent holder, then the consent holder shall mitigate this effect to the satisfaction of the Chief Executive, Taranaki Regional Council, or shall provide a suitable alternative water supply to the occupant of the property.
12. The consent holder shall prepare a management plan for the activity no later than three months after the granting of this consent. The plan shall demonstrate the ability to comply with consent conditions and shall address the following matters:
 - a) minimising use of the storage facility;
 - b) operation and maintenance procedures;
 - c) prevention of off-site odour emissions;
 - d) staff training;
 - e) records of product storage and transfer; and
 - f) contingency procedures.

The consent holder shall subsequently adhere to and comply with the procedures, requirements, obligations and all other matters specified in the management plan, except by the specific agreement of the Chief Executive, Taranaki Regional Council. In case of any contradiction between the management plan and the conditions of this consent, the conditions of this consent shall prevail.

13. The management plan described in special condition 12 of this consent shall be reviewed upon three months' notice by either the consent holder or the Chief Executive, Taranaki Regional Council.
14. 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 2006 and/or June 2008, for the purpose of ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, which were either not foreseen at the time the application was considered or which it was not appropriate to deal with at the time.

Transferred at Stratford on 17 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: 30 June 2015

Commencement Date: 30 June 2015

Conditions of Consent

Consent Granted: To discharge emissions into the air from the storage and
 distribution of used poultry litter fertiliser

Expiry Date: 01 June 2032

Review Date(s): June 2020, June 2026

Site Location: 70 Hursthouse Road, Tarurutangi

Legal Description: Lot 1 DP 4905 Lot 1 DP 8670 Blk VII Paritutu SD

Grid Reference (NZTM) 1702071E-5673797N

*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. After 1 June 2019, all potentially odorous material shall be contained to prevent the escape of odour directly to air, and any emissions from the material shall first be treated in a bio-filter being discharged to air.
3. 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.
4. 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. 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.
5. The door of the storage facility where stockpiling of poultry litter is to be carried out shall remain closed at all times, except during entry or exit of trucks and personnel.
6. The discharge of particulate matter from any duct, vent or other emission source shall not exceed 125 milligrams of particulate matter per cubic metre of air corrected to 0 degrees Celsius, 101.3 kPa (kilopascals), on a dry gas basis.
7. The site shall be operated in accordance with an updated ' Odour Management Plan' (OMP) prepared by the consent holder and approved by the Chief Executive, Taranaki Regional Council, acting in a certification capacity, no later than three months after the granting of this consent. The plan shall demonstrate the ability to comply with consent conditions and shall address the following matters:
 - a) minimising use of the storage facility;
 - b) operation and maintenance procedures;
 - c) prevention of off-site odour emissions;
 - d) staff training;
 - e) records of product storage and transfer; and
 - f) contingency procedures.

Consent 5918-2.0

8. In accordance with section 128 and section 129 of the Resource Management Act 1991, the Taranaki Regional Council may serve notice of its intention to review, amend, delete or add to the conditions of this resource consent by giving notice of review during the month of June 2020 and/or June 2026, 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 30 June 2015

For and on behalf of
Taranaki Regional Council

A D McLay
Director - Resource Management

