

Osflo Fertiliser Ltd
Monitoring Programme
Annual Report
2017-2018

Technical Report 2018-32

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Executive summary

Osflo Fertiliser Ltd (the Company) operates a facility for the storage, blending and distribution of poultry waste fertiliser. The site is located on 70 Hursthouse Road, Tarurutangi, in the Wainogana catchment. The Company stores, blends and distributes agricultural fertiliser based on poultry litter. The poultry waste is collected from farms around the Taranaki region and is sold as a registered fertiliser.

This report for the period July 2017 to June 2018 describes the monitoring programme implemented by the Taranaki Regional Council (the Council) to assess the Company's environmental and consent compliance performance during the period under review. The report also details the results of the monitoring undertaken and assesses the environmental effects of the Company's activities.

The Company holds two resource consents, which include a total of 24 conditions setting out the requirements that the Company must satisfy. The Company holds one consent to allow it to discharge effluent /stormwater into the land in the vicinity of the Awai Stream and one consent to discharge emissions into the air at this site. The Company also holds one certificate of compliance, to spread organic and inorganic fertiliser on to and into land at various locations, throughout the Taranaki region.

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

The Council's monitoring programme for the year under review included four inspections, six water samples collected for physicochemical analysis and four odour surveys. Additional inspections were carried out if required by complaints from the public.

The monitoring showed that the effect of the consented discharge to the Awai Stream via land soakage was insignificant. Stream monitoring did observe an elevated E-Coli result in the February 2018 sample round. However, the corresponding upstream concentration was similarly elevated. Subsequent analysis indicated significant variation in this parameter, with decreasing concentrations observed in the following sample rounds.

This monitoring period there were three complaints regarding objectionable odours, of which two were confirmed by Council staff. This resulted in an infringement notice being issued, as the facility was under an abatement notice from the previous monitoring period. The Company recognised the issues resulting in the odour incidents and have taken steps to prevent future occurrence.

During the year, the Company demonstrated an improvement required level of environmental and high level for administrative performance with respect to their resource consents.

The main rationale for the improvement required rating was due to the finding of objectionable odour on two occasions within the monitoring period and the resultant issuing of an infringement notice.

For reference, in the 2017-2018 year, consent holders were found to achieve a high level of environmental performance and compliance for 76% of the consents monitored through the Taranaki tailored monitoring programmes, while for another 20% of the consents, a good level of environmental performance and compliance was achieved.

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

This report includes recommendations for the 2018-2019 year.

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1 Introduction

1.1 Compliance monitoring programme reports and the Resource Management Act 1991

1.1.1 Introduction

This report is for the period July 2017 to June 2018 by the Taranaki Regional Council (the Council) on the monitoring programme associated with resource consents held by Osflo Fertiliser Ltd (the Company). The Company operate 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 the Company that relate to discharge of stormwater 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 nineteenth 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 2018-2019 monitoring year.

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

1.1.3 The Resource Management Act 1991 and monitoring

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

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

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

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

1.1.4 Evaluation of environmental and administrative performance

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

Environmental performance is concerned with actual or likely effects on the receiving environment from the activities during the monitoring year. Administrative performance is concerned with the Company's approach to demonstrating consent compliance in site operations and management including the timely provision of information to Council (such as contingency plans and water take data) in accordance with consent conditions.

Events that were beyond the control of the consent holder and unforeseeable (that is a defence under the provisions of the RMA can be established) may be excluded with regard to the performance rating applied. For example loss of data due to a flood destroying deployed field equipment.

The categories used by the Council for this monitoring period, and their interpretation, are as follows:

Environmental Performance

High: No or inconsequential (short-term duration, less than minor in severity) breaches of consent or regional plan parameters resulting from the activity; no adverse effects of significance noted or likely in the receiving environment. The Council did not record any verified unauthorised incidents involving 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.

For reference, in the 2017-2018 year, consent holders were found to achieve a high level of environmental performance and compliance for 76% of the consents monitored through the Taranaki tailored monitoring programmes, while for another 20% of the consents, a good level of environmental performance and compliance was achieved.

1.2 Process description

The Company 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 17 persons are employed in the operation, utilising seven trucks.

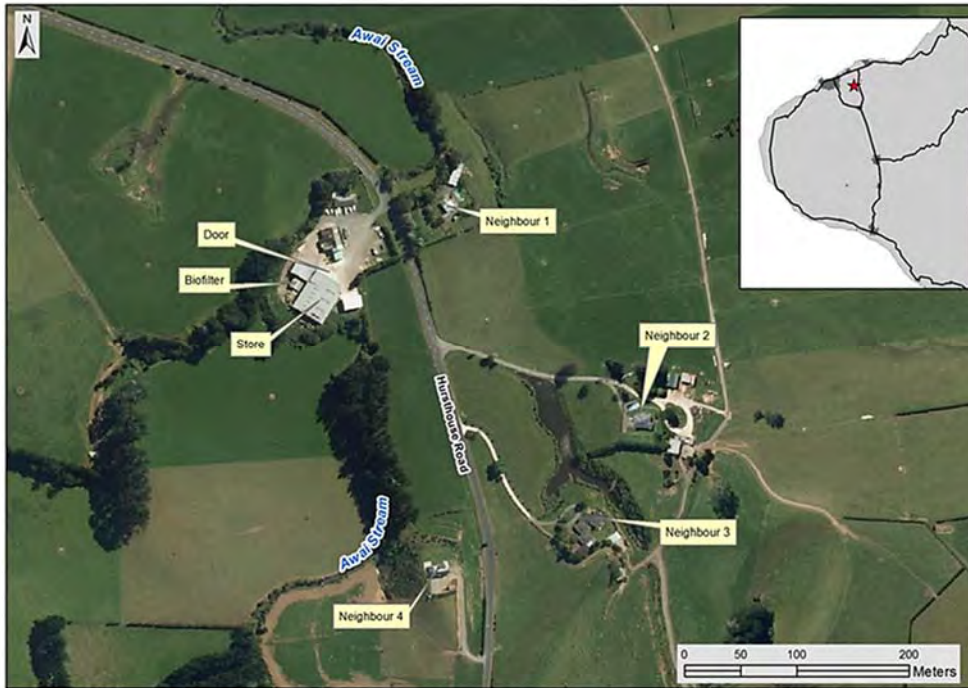


Figure 1 Osflo Fertiliser Ltd site on the Hursthouse Road

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, and are stored in a separate building.

Up to about 35,000 tonnes per annum of litter is generated on farms within the Inglewood/Okato/Waitara area, mostly near Lepperton and Bell Block. 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, at present on the ground outside the store with a front-end loader (solids).

Wastewater from washing down the trucks (with 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 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.

Council compliance samples have focussed on assessing the quality of the Awai Stream as it passes the outside of the soakage area, via an upstream and downstream sample of the surface waters.

1.2.1 Odour mitigation

Due to the nature of the facility, the potential for odour generation while undertaking blending and mixing operations on site is high. Thus, in order to control this, the site follows a specific odour risk management plan (ORMP). As well as the adherence to the ORMP, the site has also undertaken various engineering controls to further mitigate the odour potential. These are as follows:

Odour neutralising spray

Odour neutralising spray is used along the site boundary, just east of the storage shed. Its purpose is to neutralise any potential odorous discharges emanating offsite.

The odour neutralising spray system is in operation when trucks are loading and blending product. The frequency and volume of the spray can be adjusted to mitigate potential odour impact.

Road boundary hedge

The south-eastern road boundary has been planted to help trap any potential odorous materials emanating offsite as well as screen site activities from neighbouring dwellings.

Bio-filter

The bio-filter fan is set at minimum power setting during normal operation and set at maximum power when odour mitigation is required.

Store room doors

Osflo are vigilant to make sure that the store doors will remain shut unless loading and unloading activities are occurring.

1.2.2 Site improvements

It was the Company's intention to move all blending/mixing and loading/unloading activities indoors at the Hursthouse Road facility by June 2019. This was proposed in the re-issuance of consents (4333-3.0 and 5918-2.0) which occurred in June 2015. This was to occur in four stages. However, the Company has recently purchased a new area of land which it intends to develop into a new purpose built facility. The new consents for the new facility have recently been received by the Company.

1.3 Resource consents

The Company holds three resource consents, the details of which are summarised in the table (Table 1) below and outlined in sections 1.3.1.

Table 1 Resource consents held by the Company

Consent number	Purpose	Granted	Review	Expires
4333-3.0	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.	June 2015	June 2020	June 2032
5918-2.0	To discharge emissions into the air from the storage and distribution of used poultry litter fertiliser.	June 2015	June 2020	June 2032
Certificate of compliance				
7463-0	To spread various organic and inorganic fertiliser onto and into land at various locations throughout the Taranaki region.	Transferred at Stratford January 2012		

1.3.1 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.

The Company holds water discharge permit **4333-3** to cover the discharge of treated wastewater and stormwater from poultry litter storage yard washings into land via soakage, in circumstances where it may enter ground and surface water. This consent was issued by the Council on 30 June 2015 under Section 87(e) of the RMA. It is due to expire on 1 June 2032. It has 16 special conditions:

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;

Condition 16 provides for review of consent.

A copy of permit 4333-3 is attached to this report in Appendix I.

This summary of consent conditions may not reflect the full requirements of each condition. The consent conditions in full can be found in the resource consent(s) which is/are appended to this report.

The following was extracted from the Officer report for 4333-3.0 and 5918-2.0 date 30 June 2015.

Region Freshwater Plan policies of particular relevance

Policy number	Commentary
4.1.1	Protecting as far as practicable, adverse effects on wahi tapu and other sites of cultural significance to Maori.
4.1.2	Avoiding to the fullest extent practicable adverse effects on mahinga kai and habitats of species harvested by Tangata whenua

Region Air Quality Plan policies of particular relevance

Policy number	Commentary
3.2	The adverse effects of the discharge of contaminants to air on wāhi tapu and other places, areas or features of significance to iwi o Taranaki should be avoided, remedied or mitigated to the fullest extent practicable.

Consultation

The applicant has undertaken consultation with adjacent landowners and occupiers and as a result changes are being proposed to the site to address their key concerns.

Any written approvals needed from affected persons are discussed under Non-notification below.

Non-notification

Nobody was considered adversely affected by the discharge of treated poultry wastewater to land, as sought in this application. The persons listed below provided their written approval for the air discharge application so could not be considered as adversely affected:

- G & W Street;
- D Stewart & J Holton; and
- R Buchanan.

The notification decisions are documented separately.

1.3.2 Air discharge permit

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.

The Company holds air discharge permit **5918-2** to discharge emissions into the air from the storage and distribution of used poultry litter fertiliser. This consent was issued by the Council on 30 June 2015 under Section 87(e) of the RMA. It is due to expire on 1 June 2032.

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.

Condition 5 require 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.

The permit is attached to this report in Appendix I.

This summary of consent conditions may not reflect the full requirements of each condition. The consent conditions in full can be found in the resource consent which are appended to this report.

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, the company 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 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 the Company, 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 scheduled compliance monitoring associated with a permitted activity, though breach of any of the conditions may be the subject of enforcement action.

2 Monitoring programme

2.1.1 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 Osflo site consisted of three primary components.

2.1.2 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 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.

2.1.3 Site inspections

The Osflo site was visited four times during the monitoring period. Additional inspections were also undertaken when required. With regard to consents, the main points of interest were plant processes with potential 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, including odour control. Air inspections also included odour surveys undertaken around the site and beyond the site boundary.

Sources of data being collected by the Company were identified and accessed, where necessary, so that performance in respect of operation, internal monitoring, and supervision could be reviewed by the Council.

The neighbourhood was surveyed for environmental effects.

2.1.4 Chemical sampling

The Council undertook sampling of the water quality upstream and downstream of the soakage point and potential mixing zone on the Awai Stream on four separate occasions.

The water samples were analysed for the following:

- Bio-chemical oxygen demand
- Conductivity
- Dissolved reactive phosphorus
- Faecal coliforms
- Ammoniacal nitrogen
- pH

- Temperature
- Turbidity

Originally discharge samples were proposed; however the site had no discharge location as the discharges soaks into a soakage pond. The aim of the upstream and downstream sampling is to ascertain whether the soakage pond and/or the facility may or may not be adversely affecting the Awai Stream in this locality.

3 Results

3.1 Inspections

18 September 2017

On the day of the inspection the site had been experiencing intermittent heavy rainfall. An odour survey was undertaken prior to entering the Osflo facility on the Hursthouse Road. A noticeable odour, associated with burning, this was found on the downwind edge of the facility at the time of the inspection. No Osflo type odours were detectable downwind of the facility. A site walk over was undertaken with site manager. The fuel storage area appeared in order. It was noted that Osflo were about to undertake loading operations, as at the time a pile of fertiliser was in the center of the mixing yard ready to be loaded.

The onsite odour was described as noticeable, though not objectionable. The storage room was observed to be full, and the management remarked that any unloaded material currently on the blending pad will be loaded into the storage room at close of business. The storage room doors were closed upon inspection as is normal practice while not loading and unloading. The biofilter/soakage pond area was viewed and found to be in a satisfactory condition. Recent weather conditions had adversely affected the facilities odour control system, which was out of action due to a lightning strike which short circuited the control system. Overall, it was found that the site was operating within its consent conditions and no objectionable odour was observed. No stream samples were collected on this day as the Awai Stream was in high flow.

8 February 2018

An inspection was undertaken of Osflo fertiliser facility at 70 Hursthouse, Tarurutangi. At the time of inspection the weather was fine and sunny, 3/8 cloud cover and a light Northerly breeze of 3-4 m/s. An upwind odour survey was undertaken on the Hursthouse Road, no odour was detected. No downwind transect survey was undertaken as there were no perceived receptors in this area and the light wind conditions would negate any potential for offsite odour.

The inspecting officer met with the acting site manager whom escorted them for the duration of the inspection. At the time the staff had just finished loading a truck which was subsequently covered and washed down for any excess material which may have caught in the tyre tread. The yard was in the process of being washed down, with all washing directed to the first soakage pond. In the mixing yard there was localised noticeable odour, a mixture of the remnants of the last loading which was in the process of being cleaned up and the slight odour from the soakage pond.

Management noted that the soakage ponds were due for their programmed clean out and this will occur in the coming weeks, with the material given to a neighbour. The biofilter was observed and appeared to be running smoothly, localised barky odours were observed, as would be expected for this device. Some localised odour was noticed, associated with the drainage to the second soakage pond, however it was only noticeable and quickly dispersed once away from the direct vicinity of the flow way.

The storage room door was closed at the time of inspection, and was opened upon request. The storage room appeared 4/5 full and a negative pressure was clearly observable. One could feel the air being drawn in through the door opening as the room was observed. This would infer that the biofilter was functioning as it should. A discussion was held with respect to the sites' odour risk management plan and neighbourly communications. It was confirmed that communication had been on going with neighbours and that there were no issues to report.

At the time of inspection there was minimal odour mitigation in use as the current wind conditions were of such low velocity, it was not required. The cedars appeared to be growing well on the ridge and noted was the additional inclusion of newly planted cedars on the western edge of the facility, on the opposite bank of the Awai Stream.

Overall the site odour was low, varying from noticeable to barely noticeable. At the time of the inspection the facility was operating within consent conditions. Upstream and downstream surface water samples of the Awai Stream were collected. The Awai Stream was in low flow at the time of sampling with minimal turbidity.

1 May 2018

An inspection was undertaken at the Osflo chicken litter fertiliser facility located at 70 Hursthouse Road, Tarurutangi. Prior to entering the site an odour survey was undertaken at both the upwind and downwind locations at 12:30 pm. The weather at the time of odour surveys was fine and sunny with a moderate south easterly breeze of approximately 20 kph. The odour survey at the upwind location denoted normal country side odours. The downwind survey identified Osflo type odours which were noticeable but intermittent.

At the time of the downwind survey, two trucks were being loaded with Osflo product, this would account for the fluctuating odour observed. Once the trucks had departed the odour relented, though light Osflo odours were still slightly noticeable. Given the wind direction of south east, there were no likely receptors.

The inspecting officer met with the site manager whom escorted them around the site for the duration of the inspection. Discussions were held with respect to the recent odour complaints and also the fire which had disabled the biofilter and had affected much of the rear roofing of the facility, effectively disabling the facility's main odour mitigation device, the biofilter.

Since the occurrence of the fire on the 10th April 2018, Osflo had engaged a contractor whom had been working every day since to get the roof and wall fixed. This was proposed to be finalised later that week and the biofilter by a week later.

Onsite there was noticeable odour, however not objectionable. Fuel systems were observed and found to be satisfactory. The yard was clear as far as practicable at the time of observation, though the concrete padding was showing signs of wear. Recent rainfall events had caused the area to the south west of the main storage building to be quite muddy under foot.

At the time of inspection the storage room doors were closed, as is normal for operations when they are not loading trucks. The mineral bins appeared in good order. Odour mitigation and the communication plan, which had been put to effect throughout the past few weeks post the fire, were discussed. The neighbours had been updated with respect to the recent operational issues. Odour mitigation at the time was limited to the utilisation of the ring of odourisers whilst the back roofing and biofilter were repaired. Stream samples were collected of the Awai Stream, both upstream and downstream. The results of the previous surface water analysis was discussed.

21 June 2018

An inspection was undertaken at the Osflo chicken litter fertiliser facility located at 70 Hursthouse Road, Tarurutangi. Prior to entering the site an odour survey was conducted. The weather conditions at the time of the inspection were overcast, dry, with 5/8 cloud cover and a moderate south easterly breeze at approximately 20 kph.

At the upwind location, no odour other than normal country odours were detected. The downwind location denoted Osflo (chicken litter) type odours. This was defined as noticeable, however, not objectionable. The odour remained quite consistent for the period of the odour survey at the downwind location. Due to the wind direction, there were no likely receptors at the downwind location. When the officer arrived on site they were met and accompanied by the site manager for the duration of the inspection. The loading yard was observed and found to be reasonably clean.

The level of ambient odour on site at this location was found to be low. The soakage ponds had been recently cleaned out. The neighbours had been informed through the communication plan as this activity

has the potential to create noticeable odour which at times could cause offense, while the clean out operation was being undertaken.

The concrete pad was showing signs of wear. The biofilter was observed and found to be functioning normally. This had been out of action during the last inspection as the facility suffered a fire, which disabled the biofilters and destroyed some of the rear roofing and wall. This area had since been repaired, with the rear wall and roofing repaired and all emissions heading to the biofilter. Some chicken litter was observed outside of the rear wall and this will be removed in due course. There was little odour in this area other than the earthy odour of the biofilter.

The storage room shed was observed. The doors were closed as is normal procedure when the facility is not loading or unloading. The shed was full upon opening and strong ammonia type odours were detected. Light negative pressure was observed and upon closing the doors the odour quickly relented. The mineral bins appeared in good order. The laydown area was then observed with post washed trucks stationed.

Overall there was low ambient odour on site. The site was operating within consent conditions at the time of inspection. The new site and the proposed developments were discussed. The previous surface water sample results were discussed. These were within compliance standards. The surface water samples of the Awai Stream were then collected.

3.2 Results of environmental monitoring

The Osflo facility discharges its stormwater and plant washings into a series of soakage ponds (Figure 2). The soakage ponds, which soak stormwater and plant washings into ground, in the close vicinity to the Awai Stream, do not discharge directly in to the Awai Stream.

To determine for any potential effect arising in the Awai Stream from the discharge into the soakage ponds, surface water samples of the Awai Stream are collected, both upstream and downstream of the soakage ponds.

The two monitoring locations are AWY000223 and AWY000226 (Figure 2).

Four rounds of surface water monitoring were proposed this period. These samples are collected during routine compliance monitoring inspections. During this monitoring period, three of the four surface water monitoring rounds were collected (Table 4). On one round, 18 September 2017, significant heavy rainfall meant the receiving waters of the Awai Stream were in high flow, thus sample analysis would have not produced meaningful results.

The analysis of the surface water samples undertaken across the three rounds is provided in Table 4.

Specifically in relation to consent 4333-3.0, condition 2 states the maximum allowable concentration for two target parameters. These are a maximum concentration of un-ionised ammonia (NH_3), no greater than 0.025 g/m^3 , and filtered carbonaceous biochemical oxygen demand (BODCF), no greater than 2.0 g/m^3 .

The monitoring indicated compliance with this condition. The additional parameters, as defined in Table 4 and Table 5 indicated a slight elevation between monitoring sites, however the increase was negligible. Of note was the increase in E-coli between sites, specifically the 8 February 2018. However, as this parameter has only recently been added to the monitoring program (in this monitoring period). Therefore continued monitoring will seek to further understand the likely variation and contributors at this location. Previous analysis focused on fecal coliform counts.

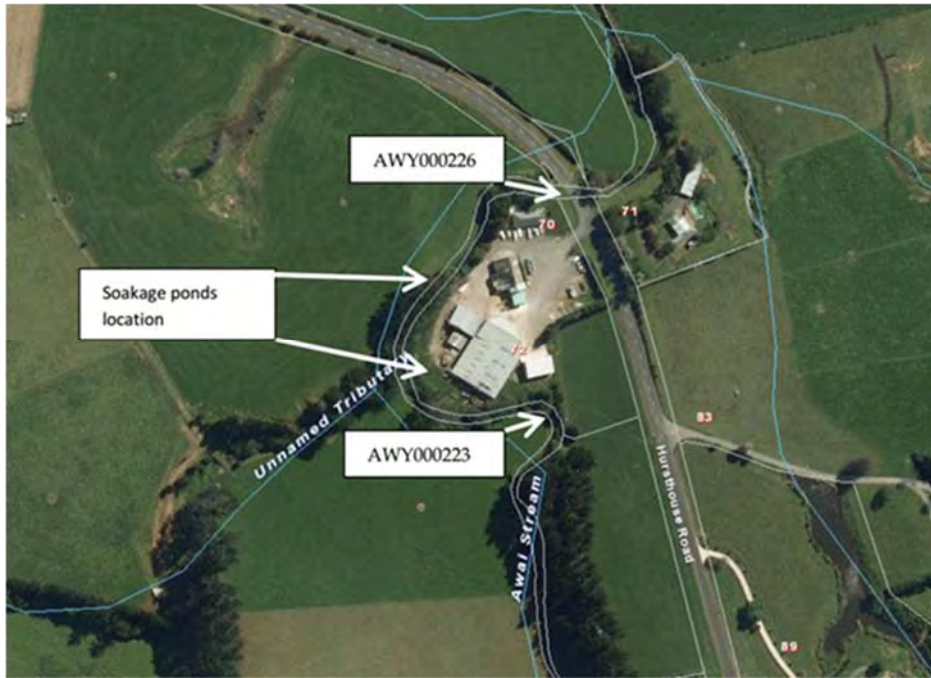


Figure 2 Aerial view of the Osflo facility with annotated sample collection points

Table 2 Surface water sampling of Awai Stream in relation to Osflo 2017-2018 monitoring period

Osflo SW	Site	AWY000223	AWY000226	AWY000223	AWY000226	AWY000223	AWY000226	AWY000223	AWY000226
Parameter	Collected	18 Sep 2017	18 Sep 2017	08 Feb 2018	08 Feb 2018	01 May 2018	01 May 2018	21 Jun 2018	21 Jun 2018
	Time	13:00	13:15	12:50	12:40	13:45	13:30	11:25	11:12
NH3	g/m3	No sample	No sample	0.00028	0.00078	0.00009	0.00022	< 0.010	< 0.010
TEMP	°C			18.9	18.8	15.1	15.1	10.8	10.9
BODCF	g/m3			<0.5	<0.5	<0.5	<0.5	< 2	< 2
CONDY	mS/m@20C			12.8	13	11.1	11.3	11.5	11.6
DRP	g/m3 P			0.005	0.006	0.005	0.012	< 0.004	0.008
E-COLI	/10ml			866	1,120	449	615	270	280
NH4	g/m3 N			0.02	0.057	0.014	0.027	0.034	0.059
pH	pH			7.5	7.5	7.3	7.4	6.8	7.2
TURBIDITY	NTU			1.4	1.3	1.6	1.8	1.58	3.2

Table 3 Surface water sampling parameter index

Parameter	Description	Consent 4333-3.0	Units
BODCF	Bioch. Ox. Demand, 5 day, filt; Ninh	2	g/m ³
CONDY	Conductivity @ 20 °C	-	Ms/M@20°C
DRP	Dissolved reactive phosphorus	-	g/m ³ P
ECOL	E.coli bacteria	-	/100ml
NH3	Un-ionised ammonia	0.025	g/m ³
NH4	Ammoniacal nitrogen	-	g/m ³ N
pH	Ph	-	pH

Parameter	Description	Consent 4333-3.0	Units
TEMP	Temperature	-	°C
TURBY	Turbidity	-	NTU

3.3 Investigations, interventions, and incidents

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.

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 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 2017-2018 period, the Council was 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.

[IN/35927 31 March 2018 11:00](#)

A complaint was received concerning odour discharging from a fertiliser site at Hursthouse Road. An odour survey was undertaken and objectionable odour was found beyond the boundary of the site. Inspection of the site found that best practice was not being maintained with product left in the yard and that the deodorisers were not operating.

A fourteen day letter was requested from the Company to account for the complaint received. The Company accepted that they were not operating within their consent conditions with corrective actions undertaken by the Company post incident. This was communicated to the Council through the 14 day letter process and the response was accepted.

[IN/36018 3 April 2018 09:18](#)

A complaint was received concerning odour emanating from a fertiliser site on Hursthouse Road. An odour survey was undertaken and an objectionable odour was found beyond the boundary of the site.

An infringement fine was issued to account for the offensive odour discharging beyond the site boundary.

[IN/35994 25 April 2018 16:00](#)

Odour surveys were undertaken in response to a complaint received regarding objectionable odour discharging beyond the site boundary of the Osflo facility on the Hursthouse Road. The odour surveys identified intermittent typical 'site' odours along Hursthouse Road. However, no site odours were found at the complainant's property at the time of inspection. No site activity was occurring and the gates were shut.

[Officer's note](#)

The Company alerted the Council to the occurrence of a fire within the Company's storage shed. This fire occurred during high winds on the evening of the 10th April 2018. This fire disabled much of the rear wall

and associated roofing, it also distorted the odour extraction ducting, effectively incapacitating the facilities main odour mitigation device, the bio-filter. The works took a few weeks to complete with construction well underway during the 1 May 2018 inspection (Photo1). The construction was completed on the 8 May 2018 and was observed on the 21 June 2018 inspection (Photo 2).



Photo 1 Osflo construction of new rear wall 1 May 2018



Photo 2 Osflo roof and bio-filter observed 21 June 2018

4 Discussion

4.1 Discussion of site performance

Site performance by the Company in the 2017-2018 monitoring period was generally good. However, there were a spate of odour complaints within a short period of time. The site management accepted that they could have undertaken additional work to prevent objectionable odours from discharging beyond the boundary of their facility.

For comparison, in the previous monitoring period there were eight odour complaints, of which one was confirmed as objectionable and resulted in the issuance of an abatement notice. This period there were two confirmed objectionable odour incidents within a short space of time. As a consequence the Company were issued with an infringement fine, as they were in breach of their air discharge consent. They were also under abatement notice which was issued in the previous monitoring period for the same reason.

This was prior to the fire which occurred on the 10 April 2018. The Company were forthcoming with informing the Council, and their neighbours through the use of their communication plan. This is part of the odour risk management plan. They also engaged a contractor whom repaired the rear wall and roof. This was undertaken within a month of the fire.

The two odour incidents, prior to the fire, emphasised the continued requirement to maintain standards across the facility.

The other main performance item from the end of this period, and into the 2018-2019 monitoring period, is the movement of the mixing and blending of material from outside to inside. This is scheduled to be completed by the 1 June 2019. As defined in the consent renewal undertaken on 30 June 2015. The Company have communicated that they are still on target to move all mixing and blending activities inside by the consented date of 1 June 2019.

4.2 Environmental effects of exercise of consents

Environmental effects associated with the Company facility in the 2017-2018 monitoring period centred on short term objectionable odour impacts. Prior to the two complaints, it had been a full year since the previous complaint (1st December 2016). This would indicate that for the vast majority of the time, the facility was managing its odour. They were also aware of the triggers for the production of objectionable odour. The two confirmed incidents related to non-conformance with best practice, which the Company has owned. The trigger has since been rectified by the site management.

Surface water sampling from the Awai Stream was undertaken on three out of four occasions this period. The analysis indicated negligible impacts in relation to the facility. Of note was an elevated e-coli result observed in the February 2018 sampling round, however the upstream water conditions were also similarly elevated. This period the e-coli monitoring was added to the program and the follow up analysis undertaken in May and June 2018 indicated a decrease in concentrations. This parameter will continue to be monitored moving forward.

4.3 Evaluation of performance

A tabular summary of the consent holder's compliance record for the year under review is set out in Tables 4 and 5.

Table 4 Summary of performance for consent 4333-3.0 (2017-2018)

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 inspection and surface water monitoring.	Yes
2. Limits on ammonia and BOD in Awai Stream	Sampling and testing of stream as necessary by Council staff, before 1 June 2019.	Yes
3. Limits on potential contaminants in discharge	No direct discharge.	Yes
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. After 1 June 2019.	Yes
11. Limit on washdown catchment area	Site inspection, after 1 June 2019.	N/A
12. Treat prior to stormwater discharge	Site inspection, no discharge, soakage field. After 1 June 2019.	N/A
13. Maintenance of and adherence to a spill contingency plan	Receipt of Plan. 1 June 2019.	N/A
14. Maintenance of and adherence to a Management Plan	Receipt and certification of Plan, site inspection. After 1 June 2019.	N/A
15. Written notification of changes	Site inspection. After 1 June 2019.	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		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable

Table 5 Summary of performance for consent 5918-2 (2017-2018)

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	Two odour incidents in a short period of time. This was coupled with an observation of non-best practice. This resulted in an infringement fine as the facility was under an abatement notice from the previous monitoring period.	No
2. Containment of odorous material and treatment of emissions	Site inspection, after June 2019.	N/A
3. No objectionable odour beyond boundary	Two occasions where objectionable odour was observed. Infringement fine issued as site was under abatement notice from previous monitoring period.	No
4. Written notification of changes	Site inspection.	Yes
5. Door to store kept closed	Site inspection.	Yes
6. Dust control	Site inspection. All emissions put to bio-filter.	Yes
7. Maintenance of and adherence to a Management Plan	Receipt and certification of Plan, site inspection.	Yes
8. Optional review provision re environmental effects	N/A.	N/A
Overall assessment of consent compliance and environmental performance in respect of the consent		Improvement required
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			

Year	Consent no	High	Good	Improvement req	Poor
	5918-1	1			
2009-2010	4333-2	1			
	5918-1	1			
2010-2013	4333-2	1			
	5918-1		1		
2013-2015	4333-2/3	1			
	5918-1				1
2015-2016	4333-3	1			
	5918-2		1		
2016-2017	4333-3	1			
	5918-2		1		
Totals		10	8	1	1

During the year, the Company demonstrated an Improvement required level of environmental and High level of administrative performance with the resource consents as defined in Section 1.1.4.

The main rationale for the improvement required rating was due to the finding of objectionable odour on two occasions within the monitoring period. This resulted with the issuance of a fine, as the facility was still under an abatement notice due to objectionable odour from the previous monitoring period.

4.4 Recommendations from the 2016-2017 Annual Report

In the 2016-2017 Annual Report, it was recommended:

1. THAT monitoring of consented activities at Osflo in the 2017-2018 year continue at the same level as in 2016-2017.

4.5 Alterations to monitoring programmes for 2018-2019

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 2018-2019 monitoring period, the current monitoring programme remains unchanged.

It should be noted that the proposed programme represents a reasonable and risk-based level of monitoring for the site in question. The Council reserves the right to subsequently adjust the programme from that initially prepared, should the need arise if potential or actual non-compliance is determined at any time during 2018-2019.

5 Recommendations

1. THAT in the first instance, monitoring of consented activities at the Osflo fertiliser facility in the 2018-2019 year continue at the same level as in 2017-2018.
2. THAT should there be issues with environmental or administrative performance in 2018-2019, monitoring may be adjusted to reflect any additional investigation or intervention as found necessary.

Glossary of common terms and abbreviations

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

BOD	Biochemical oxygen demand. A measure of the presence of degradable organic matter, taking into account the biological conversion of ammonia to nitrate.
BODF	Biochemical oxygen demand of a filtered sample.
Bund	A wall around a tank to contain its contents in the case of a leak.
CBOD	Carbonaceous biochemical oxygen demand. A measure of the presence of degradable organic matter, excluding the biological conversion of ammonia to nitrate.
cfu	Colony forming units. A measure of the concentration of bacteria usually expressed as per 100 millilitre sample.
Conductivity	Conductivity, an indication of the level of dissolved salts in a sample, usually measured at 20°C and expressed in mS/m.
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.
F	Fluoride.
Fresh	Elevated flow in a stream, such as after heavy rainfall.
g/m ² /day	Grams/metre ² /day.
g/m ³	Grams per cubic metre, and equivalent to milligrams per litre (mg/L). In water, this is also equivalent to parts per million (ppm), but the same does not apply to gaseous mixtures.
Incident	An event that is alleged or is found to have occurred that may have actual or potential environmental consequences or may involve non-compliance with a consent or rule in a regional plan. Registration of an incident by the Council does not automatically mean such an outcome had actually occurred.
Intervention	Action/s taken by Council to instruct or direct actions be taken to avoid or reduce the likelihood of an incident occurring.
Investigation	Action taken by Council to establish what were the circumstances/events surrounding an incident including any allegations of an incident.
Incident register	The incident register contains a list of events recorded by the Council on the basis that they may have the potential or actual environmental consequences that may represent a breach of a consent or provision in a Regional Plan.
L/s	Litres per second.
m ²	Square Metres.
MCI	Macroinvertebrate community index; a numerical indication of the state of biological life in a stream that takes into account the sensitivity of the taxa present to organic pollution in stony habitats.
mS/m	Millisiemens per metre.

Mixing zone	The zone below a discharge point where the discharge is not fully mixed with the receiving environment. For a stream, conventionally taken as a length equivalent to 7 times the width of the stream at the discharge point.
NH ₄	Ammonium, normally expressed in terms of the mass of nitrogen (N).
NH ₃	Unionised ammonia, normally expressed in terms of the mass of nitrogen (N).
NO ₃	Nitrate, normally expressed in terms of the mass of nitrogen (N).
NTU	Nephelometric Turbidity Unit, a measure of the turbidity of water.
O&G	Oil and grease, defined as anything that will dissolve into a particular organic solvent (e.g. hexane). May include both animal material (fats) and mineral matter (hydrocarbons).
pH	A numerical system for measuring acidity in solutions, with 7 as neutral. Numbers lower than 7 are increasingly acidic and higher than 7 are increasingly alkaline. The scale is logarithmic i.e. a change of 1 represents a ten-fold change in strength. For example, a pH of 4 is ten times more acidic than a pH of 5.
Physicochemical	Measurement of both physical properties (e.g. temperature, clarity, density) and chemical determinants (e.g. metals and nutrients) to characterise the state of an environment.
Resource consent	Refer Section 87 of the RMA. Resource consents include land use consents (refer Sections 9 and 13 of the RMA), coastal permits (Sections 12, 14 and 15), water permits (Section 14) and discharge permits (Section 15).
RMA	<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.
Zn*	Zinc.

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

For further information on analytical methods, contact a Scientific Services Manager.

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Appendix I

Resource consents held by Osflo Fertiliser Ltd

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

Consent number	Purpose	Granted	Review	Expires
4333-3.0	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.	June 2015	June 2020	June 2032
5918-2.0	To discharge emissions into the air from the storage and distribution of used poultry litter fertiliser.	June 2015	June 2020	June 2032
Certificate of compliance				
7463-0	To spread various organic and inorganic fertiliser onto and into land at various locations throughout the Taranaki region.	Transferred at Stratford January 2012		

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

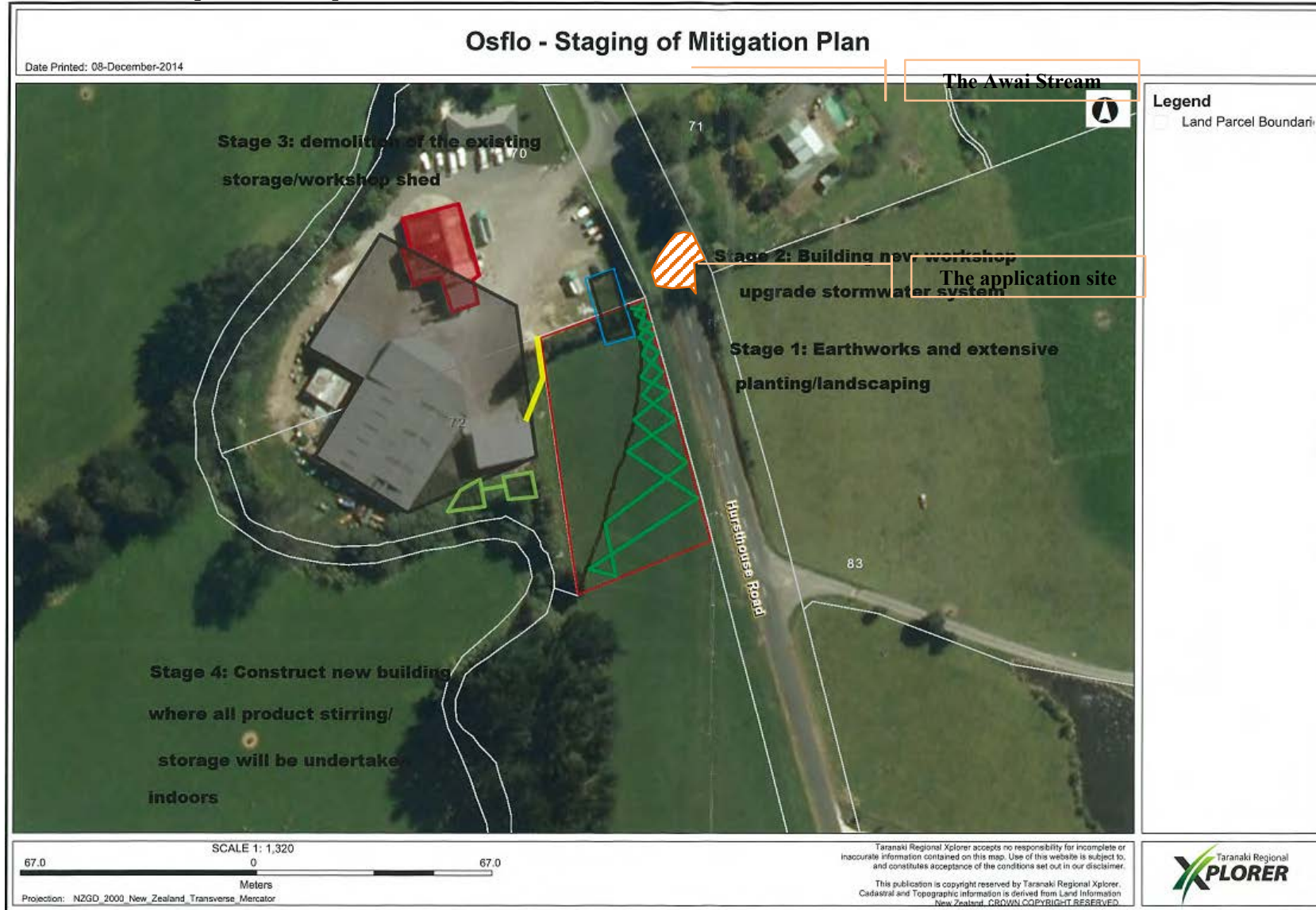
The consent holder's attention is drawn to MPI's "New Zealand Code of Practice for the Design and Operation of Farm Dairies (NZCP1) which restricts:

- *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.*

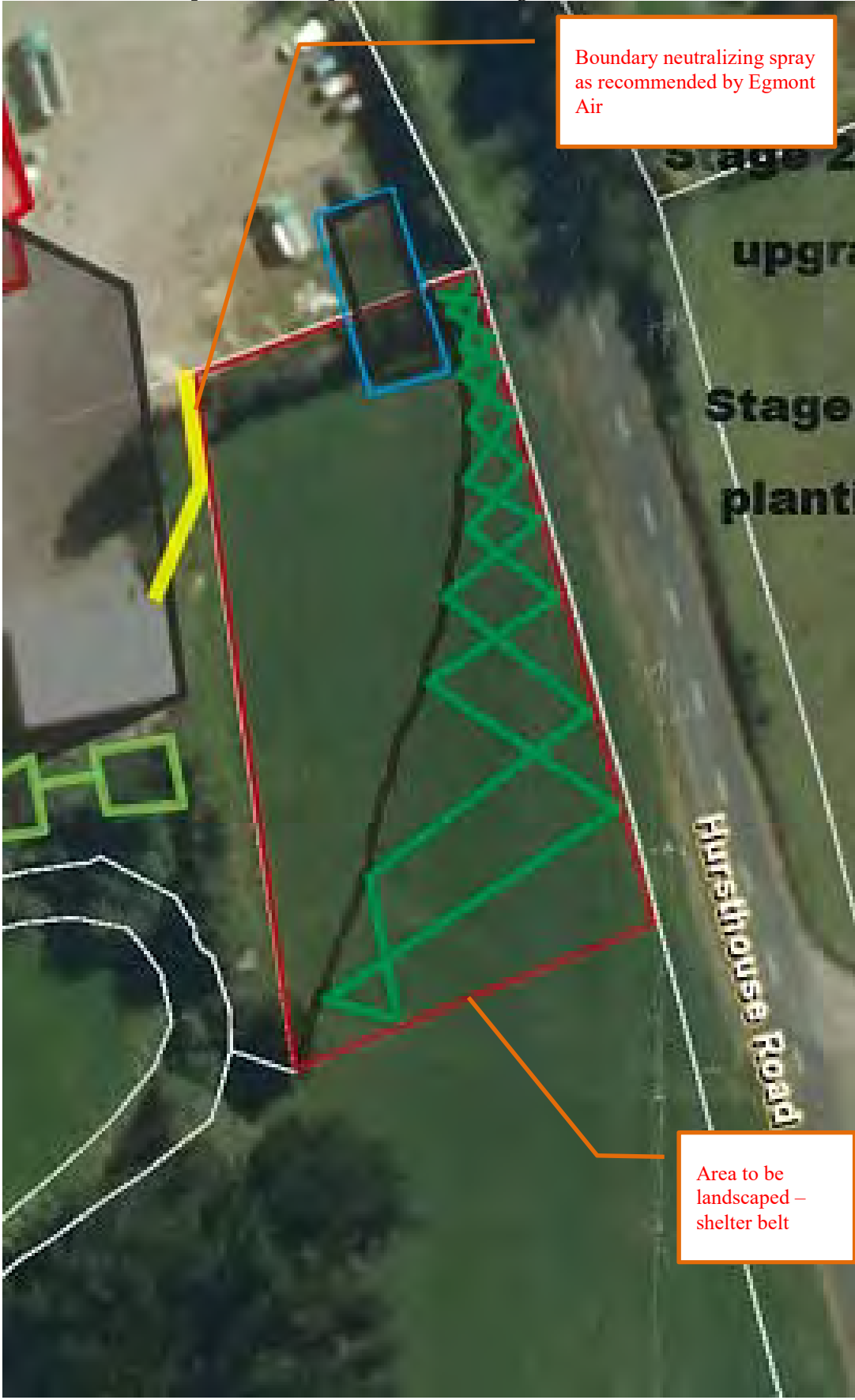
Should you require further information, please contact a Dairy Industry Technical Advisory Group (DITAG) representative or visit <http://www.foodsafety.govt.nz/elibrary/industry/dairy-nzcp1-design-code-of-practice/amdt-2.pdf> (specifically section 6.4 Disposal of effluent and other wastes and section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

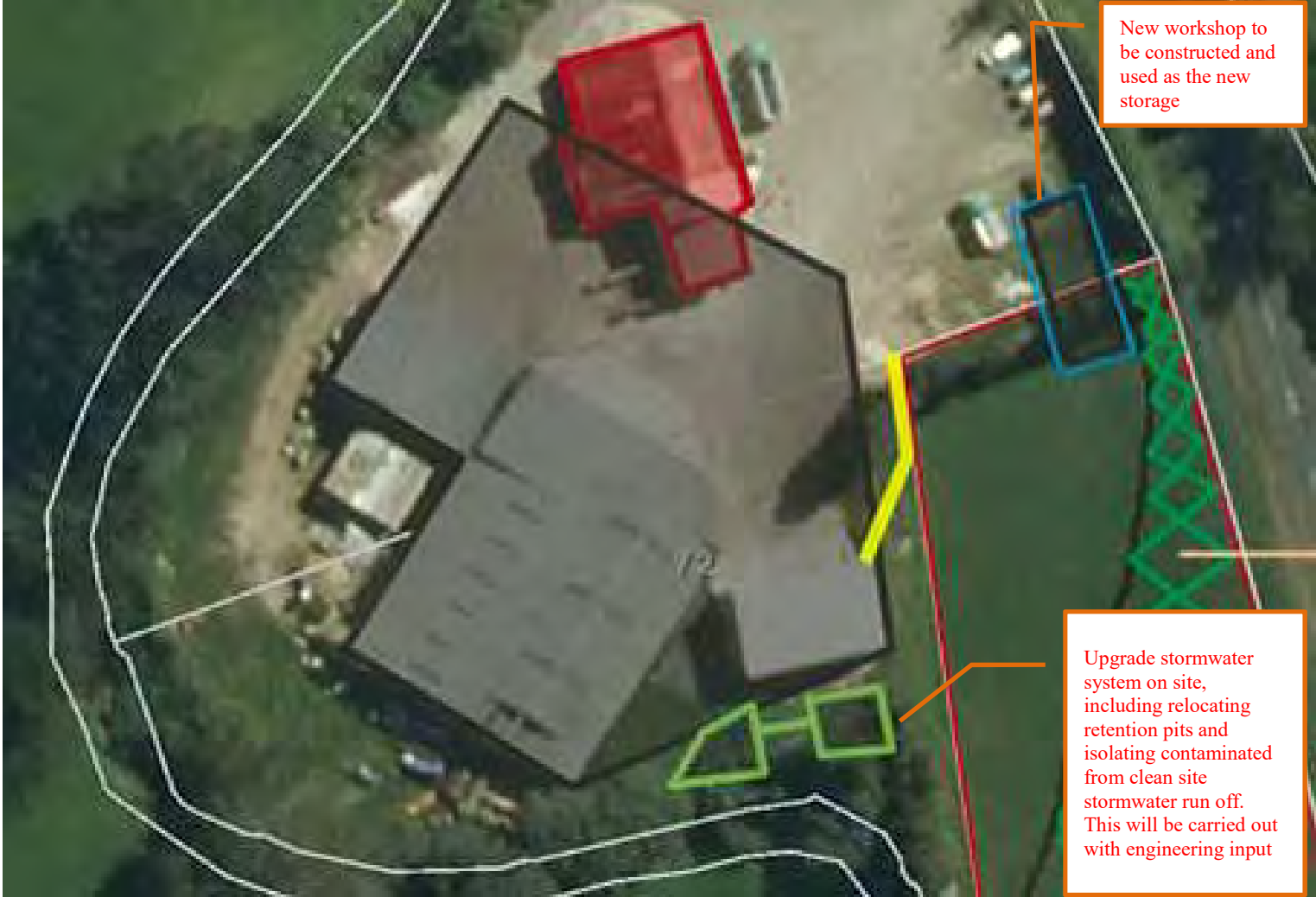
Attachment 1: Proposed Site Expansion Plan - Overall Plan



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
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

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 Spreading Industries Limited P O Box 761 New Plymouth
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.

Signed at Stratford on 26 March 2009

For and on behalf of
Taranaki Regional Council

Director—Resource Management