Hearing Committee Report and Decision on applications by Remediation [NZ] Limited to renew existing resource consents associated with a composting operation at Uruti

Taranaki Regional Council Private Bag 713 STRATFORD

27 May 2010

Doc# 759984

Report and decision
of a Committee of the Taranaki Regional Council which heard,
commencing at 9.30 am on 6 May 2010
at the Taranaki Regional Council offices, Stratford,
two resource consent applications by Remediation [NZ] Limited.

One application seeks to renew consent 5838-1 to continue to discharge:

- treated stormwater and leachate, mostly derived from a composting process, to land via spray irrigation; and
- treated stormwater and leachate which is derived from the storage of paunch grass, in association with a vermiculture process, directly to an unnamed tributary of the Heahanga Stream.

The second application seeks to renew consent 5839-1 to continue to discharge emissions into the air, namely odour and dust, from a composting operation.

The applications, made in accordance with the Resource Management Act 1991 ["the Act"], were lodged with the Taranaki Regional Council [Council] and referenced 5276 and 5277 respectively.

Present: Taranaki Regional Council Committee

Cr David Lean [Chairperson]

Cr Michael Joyce

Applicant: Remediation (NZ) Limited

Kerry O'Neill Director
Karen O'Neill Investor
Herbert Van Veen Investor
John Maassen Legal Counsel
Andrew Curtis Chemical Engineer

Consent Authority: Taranaki Regional Council

Colin McLellan

Phillip Milne

Ange Lenz

Darlene Ladbrook

Janette Harper

Consents Manager

Legal Counsel

Consents Officer

Senior Consents Administration Officer

Consents Administration Officer

Submitters in attendance:

John Oxenham Vikki Bazeley Ian & Linda Jury Syd & Jennifer Baker Bernard & Kathleen Coils [in support of Syd & Jennifer Baker] Lauren Wallace [Legal Counsel]

Submitters not in attendance:

Duane & Tina Bland Nathan Jury

Director General of Conservation [withdrawn request to be heard]

Graham & Janice Cook [withdrawn request to be heard]

Description of Proposed Activity

- 1. Remediation [NZ] Limited ['RNZ' or 'the applicant'] owns and operates a composting and vermiculture operation located at 1460 Mokau Road [State Highway 3], Uruti. The operation was established in 2001 and is situated within the valley floor of the Haehanga Stream catchment, approximately 1.3 km south of the highway [as shown in Figure 1 below]. The nearest property boundary and dwelling to the operation are located approximately 450 m and 1450 m away, respectively.
- 2. The proposal and the receiving environment are set out in full in the Council Officers' Report. A summary of the proposal is given below.
- 3. A wide range of materials are utilised in the composting process such as chicken mortality, fish waste and greenwaste. The material is wedge piled on 'Pad 1' and turned on a frequent basis prior to being screened and blended for sale.
- 4. Paunch grass is stockpiled on 'Pad 2' and fed to worms as part of the vermiculture process. The vermicast derived is screened and dried to form the final product.
- 5. Drilling waste from the hydrocarbon industry is received in a series of ponds within the 'Drill Mud Pad' [DMP], where it is blended with bulking agents such as sawdust prior to being stockpiled into rows for composting. This material is then processed through the vermiculture process.
- 6. Stormwater and leachate generated on Pad 1 and the DMP is treated through a pond treatment system [PTS]. The treated wastewater is then irrigated to land, over an approximate area of 5.8 ha.
- 7. Stormwater and leachate generated on Pad 2 is treated through a wetland treatment system [WTS] prior to being discharged into an unnamed tributary of the Haehanga Stream.
- 8. The main practices and measures that the applicant currently employs to minimise odour generated in association with the composting and vermiculture operation include:
 - Process management practices to ensure that aerobic conditions in the composting product and windrows are maintained;
 - Windrow and compost covers [the use of compost covers is recent];
 - The use of aeration systems and enzymes in the final ponds of the WTS and PTS;
 - Ceasing the acceptance of chicken DAF¹ from 31 March 2010 because the applicant determined that it is likely to have caused significant off-site odour; and
 - The use of a fogging system over the PTS that deodorises the ponds [installed approximately two months ago].

¹ Chicken DAF is largely the fats, oils and solids obtained from a dissolved air flotation process used in treatment of chicken processing waste.

- 9. Consents 5838-1 and 5839-1, which relate to activities undertaken in association with the composting and vermiculture operations, expired in June 2009.
- 10. Accordingly, the two resource consent applications described below were lodged with the Council on 28 November 2008:
 - Application 5276 [consent 5838-2] to discharge waste material to land for composting, and treated stormwater and leachate from composting operations onto and into land in circumstances where the discharge may enter streams within the Haehanga Stream catchment, and directly into an unnamed tributary of the Haehanga Stream; and
 - Application 5277 [consent 5839-2] to discharge emissions into the air, namely odour and dust, from composting operations.

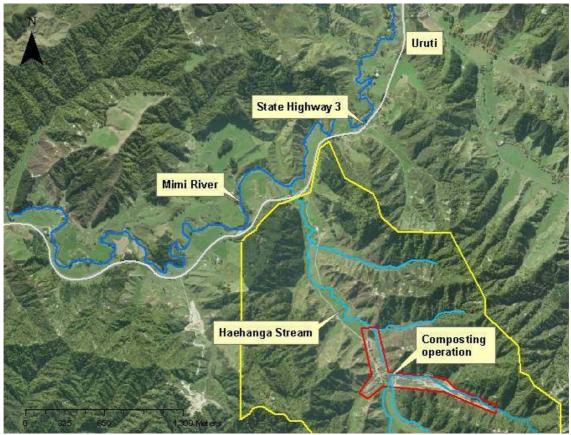


Figure 1 Location of the application site with the boundary of the site highlighted in yellow and the location and extent of the composting operation [excluding the irrigation areas] highlighted in red.

Regional Plan Rules Affected

11. The *Regional Fresh Water Plan for Taranaki* [RFWP] details Council policies in relation to fresh water. The RFWP has been operative since 2001. The RFWP is the statutory document containing Council policy and rules in relation to fresh water management under the Act.

- 12. As the stormwater and leachate generated on site converge, the discharges cannot be meaningfully separated. No rules within the RFWP specifically provide for the discharge of leachate and, as such, the discharge of leachate and stormwater onto and into land [where contaminants may enter water], and into water, fall for consideration under Rules 44 and 43 [respectively] of the RFWP as discretionary activities.
- 13. The *Regional Air Quality Plan for Taranaki* [RAQP] details Council policies relating to fresh air. The RAQP has been operative since 1997. The *Proposed Regional Air Quality Plan* [PRAQP] has been notified but submissions have not been heard.
- 14. The proposed continued discharges to air are classed as discretionary activities under both the RAQP and PRAQP. As the proposed plan is the most recent the activity falls for consideration under that plan [being Rule 50 of the PRAQP].

Notification and Submissions Received

- 15. The applications were publicly notified on 21 March 2009 in accordance with section 93 of the Act [being prior to the Simplifying and Streamlining Amendment Act 2009]. A total of thirteen submissions were received in opposition to the applications. Of those submitters, eight wished to be heard and five did not.
- 16. In summary, the main concerns of submitters were:
 - That the existing operation discharges odour beyond the site boundary and the effects of this on amenity values. Some submitters also stated that the odour causes embarrassment in front of visitors.
 - That the applicant breaches the existing conditions of consent.
 - The presence of biting flies and other vermin as a result of the composting operation.
 - The potential effects of the discharges [to air and water] on public health.
 - Deficiencies of information in the application relating to the discharge stormwater and leachate.
 - The potential effects of the discharges to the Haehanga Stream on ecology.
 - That the Council is not taking complaints seriously or adequately addressing complainants concerns.

Pre-hearing meetings

17. Two pre-hearing meetings were held to discuss the applications and issues raised by the submissions. Details of the pre-hearing meetings were reported in the Council Officers' Report and distributed with the hearing agenda.

Officers' Report

- 18. Council officers prepared a report in accordance with section 42A of the Resource Management Act, which had been provided to all parties at least five working days before the hearing [the Officers' Report]. The Officers' Report included an assessment of the proposal under the provisions of the Act and recommended that the applications be granted for a period of five years subject to conditions.
- 19. Important conditions recommended in the Officers' Report were to avoid offensive and/or objectionable odours beyond the site boundary, and to protect the quality of the soil, groundwater and surface water receiving environments from the stormwater and leachate discharges.
- 20. Specifically, these recommended conditions included:
 - the provision for an appropriately qualified and experienced professional to audit the appropriateness of the existing site management practices and treatment measures in avoiding offensive and/or objectionable odours leaving the site boundary;
 - that the consent holder implement site management practices and/or treatment measures, recommended in accordance with the audit outlined above;
 - that there be no discharge of offensive and/or objectionable odours at or beyond the site boundary;
 - discharge quality standards to protect the receiving waters of the Haehanga Stream catchment and avoid any adverse effects downstream of the mixing zones; and
 - soil and groundwater monitoring and a provision that any effects attributable to the discharges [as shown by the monitoring] are to be avoided, remedied or mitigated.

The Hearing

Procedural Matters

21. The Chairperson, Cr David Lean, opened the hearing at 9:30 am on 6 May 2010. Following introductions, Cr Lean noted that the Committee had undertaken a site visit on 4 May 2010 and were familiar with the site and its general area. Cr Lean also noted that the hearing was being recorded.

Summary of legal submissions and evidence heard

Applicant

- 22. The applicant presented legal submissions or evidence from:
 - John Maassen [Cooper Rapley Lawyers] Legal Counsel

- Kerry O'Neill Director of Remediation [NZ] Limited
- Andrew Curtis [URS New Zealand Limited] Chemical Engineer and expert on the effects of discharges to air.

Legal submissions

- 23. John Maassen opened the applicant's proceedings by providing legal submissions, a summary of the proposal and an overview of the main issues.
- 24. Mr Maassen stated that the applicant did not intend on presenting any evidence on water quality as the monitoring results, as detailed within the Officers' Report, are definitive that the adverse effects associated with the discharges to land and water are minor. He advised that the applicant accepts the officers' recommended conditions relating to the stormwater and leachate discharges, apart from a few minor changes in wording. Mr Maassen requested, on behalf of the applicant, that consent be granted for duration of 15 years.
- 25. Mr Maassen submitted the following reasons as a basis for the requested duration of 15 years:
 - the relevant Council plans provide no guidance on term;
 - the default statutory period is 35 years;
 - the discharges to land and water have had minimal environmental effects for 10 years;
 - term is not a mechanism for enforcement and should not be used as a Damocletian sword;
 - the discharge to air non-compliances have been comparatively infrequent over the life of the consent;
 - the review clause enables adaptive management and more best practicable options to be applied as required;
 - the applicant's investment in more technology should be recognised;
 - long-term contracts [with those industries who supply waste materials] are possible with a long-term consent;
 - a longer term consent promotes waste minimisation and enables long term planning of businesses that rely on the facility to receive organic waste; and
 - promotes achievement of the relevant waste minimisation targets of the Taranaki region [with special reference to the Waste Minimisation Act 2008].
- 26. Mr Maassen submitted that the PVL Proteins Limited v. Auckland Regional Council [EnvC A061/2001] decision was relevant in the terms of forming a decision on an appropriate consent duration. In this decision, the Environment Court granted consent for the discharge of contaminants to air from the operation of a slaughter house and rendering plant for 14 years.

Mr Curtis

- 27. Mr Curtis noted that there is the potential for odour to arise from two sources, namely the raw materials used in the process and the degradation process itself.
- 28. Mr Curtis agreed with the Council officers that the most likely reason that odours have been observed at the highway is due to katabatic air flows. Mr Curtis stated that there is the potential for the proposal to result in odours being detected at the highway under certain meteorological conditions.
- 29. In evaluating the raw materials, Mr Curtis considered that the chicken DAF, being highly odorous in nature, was most likely to be a significant cause of odour complaints. Mr Curtis noted that while RNZ was no longer accepting this product, some of this material remained on site at various stages of decomposition. Mr Curtis stated that during his site visit on 29 April 2010, typical compost odours were generally overpowered by the odours associated with chicken DAF composting and that these odours were also detectable from the wastewater ponds, which contained leachate from the chicken DAF compost.
- 30. Mr Curtis concluded from his site observations and the description of the odour characteristics from complaints [being "sewage" like], that odours that have been detected offsite are likely to come from either the PTS or the chicken DAF material.
- 31. It was Mr Curtis' expert opinion that once the last of the chicken DAF material on site is fully decomposed, that the potential for odour nuisance would be small.
- 32. Mr Curtis stated that the residents are not at risk from any pathogens associated with the composting operation, because:
 - the temperatures reached in the composting process are sufficient to kill most of the bacteria that could be in the raw materials;
 - the microorganisms associated with the compost process naturally occur in soils and, as such, would already be present in a rural environment such as Uruti;
 - the results of monitoring that he undertook around a composting plant in the Waikato showed that there was no significant contribution to the local environment from the composting; and
 - the distance of the composting operation from the highway, and hence residents, is greater than 1 km.
- 33. Mr Curtis considered the conditions of consent recommended by Council officers for the air discharges to be generally appropriate but suggested some additional conditions to provide further confidence.
- 34. Mr Curtis stated that a minimum duration of 10 years to be appropriate. This opinion was based on:
 - concern that Council Officers may, in the past, have incorrectly determined odours from the composting operation to be offensive at the highway, because on the highway exposure to an odour would be of a short duration and therefore they would not breach the FIDOL test of frequency and duration;

- the potential for odour nuisance is small once the last of the chicken DAF onsite has decomposed;
- the consent conditions recommended within the Officers' Report are generally appropriate and with the incorporation of his recommended changes should provide the Committee confidence; and
- conclusions reached in the Officers' Report do not support a shorter duration.

Mr O'Neill

- 35. Mr O'Neill presented evidence in relation to the monetary value of the investment of the composting operation. Mr O'Neill stated that the land value of the site is approximately \$1.9 million, the capital cost of the structures is in the order of \$5 million, and the annual turnover is approximately \$1.4 million. On questioning by the Committee, Mr O'Neill stated that in relation to the capital cost of the structures, that the worms used in the vermiculture process account for approximately \$2 million and that the remaining \$3 million is associated with the establishment of the operation [e.g. draining the swampy land within the site, establishment of the WTS].
- 36. Mr O'Neill also stated that the composting operation at Uruti and its associated sites employ around 20 people, most of whom are located in the Taranaki region.
- 37. Mr O'Neill emphasised the importance of the operation to existing business owners in the region which must dispose of their organic waste. As part of his evidence he provided letters of support from five of the applicant's main suppliers.
- 38. In response to the submitters concerns of odour, Mr O'Neill acknowledged that from time to time, poor management or insufficient attention to odour mitigation measures may have resulted in odour beyond the site boundary at an unacceptable level. Mr O'Neill submitted that the recent investments in new mitigation measures and changes to the operation should reduce the frequency and magnitude of such incidents.
- 39. In regards to the sought duration, Mr O'Neill submitted that any future investment required in maintaining best management practices relies upon financing which, in turn, relies on having sufficiently secure consents to operate over the investment amortisation period.

Submitters

- 40. The Committee heard from the following submitters and their representatives:
 - Lauren Wallace [Govett Quilliam] Legal Counsel for submitters John Oxenham, Syd and Jennifer Baker, Ian and Lynda Jury, and Vikki Bazeley [the 'Uruti residents']
 - John Oxenham resident of Uruti
 - Vikki Bazeley resident of Uruti

- Ian and Linda Jury parents of Vikki Bazeley
- Syd and Jennifer Baker residents of Uruti
- Bernard Coils provided a statement of support for Syd and Jennifer Baker
- Kathleen Coils provided a statement of support for Syd and Jennifer Baker, Vikki Bazeley and John Oxenham.

Legal submissions

- 41. Ms Wallace submitted that the requirement to provide management plans by way of conditions of consent was not an appropriate way to ensure that the effects of odour can be mitigated. Ms Wallace's consideration was based on the following factors:
 - critical actual or potential adverse effects need to be identified and appropriately avoided, remedied or mitigated with conditions before a decision to grant is made and not left to be addressed via a future management plan; and
 - such a condition is based on the assumption that methods are readily available to enable compliance with the condition. The applicant had not provided sufficient information to establish that such methods are available.
- 42. Overall, it was Ms Wallace's opinion that the conditions of consent recommended by Council Officers would not ensure the effects of the composting operation can be avoided, remedied or mitigated such that the community can be provided for. Ms Wallace concluded on that basis, the applications fail to achieve the statutory purpose of the Act and should be declined.
- 43. Ms Wallace asked that the Committee read, prior to forming their decision, the Waikato Environmental Protection Society Inc v Waikato Regional Council [W060/07] decision as it is a similar site and a similar operation.
- 44. Ms Wallace highlighted that management plan conditions were recommended to address any potential effects of the discharges to land, specifically on soil and groundwater quality. Ms Wallace submitted that the requirement of a management plan was not an appropriate way to remedy a deficient application and without this information, that the consents should be declined.
- 45. Ms Wallace raised the following concerns in regards to the recommended conditions relating to groundwater and soil monitoring:
 - There is no baseline data;
 - The conditions do not require that the monitoring data be submitted to Council and therefore, any increasing trends and the need for a management plan to avoid, remedy or mitigate the adverse effects is left to the discretion of the applicant;
 - There is no guarantee that measures exist to avoid, remedy or mitigate adverse effects if they become apparent;

- That it would seem prudent to monitor the groundwater more frequently than every 6 months given the lack of information.
- 46. Ms Wallace's submitted that without sufficient information to fully assess the potential effects of the proposal, it is difficult to determine whether or not the composting activities will be consistent with the objectives and polices of the relevant planning documents.
- 47. Ms Wallace also submitted that there is not an acceptable degree of certainty that the discharges to air will be mitigated to the fullest extent practicable to avoid offensive and objectionable odours, and to ensure that Objective 3 and Policy 1.2 of the RAQP will be met.
- 48. If the Committee chose to grant consent Ms Wallace noted that the duration should be no longer than 5 years. Her submission was based on the factors discussed in paragraphs 31 and 32 of the PVL Proteins decision. In summary, these factors include:
 - Uncertainty about the effectiveness of conditions [including the applicant being unresponsive to effects on the environment in the past];
 - The operation having caused considerable public disquiet and that the review of conditions may not be adequate as it cannot be initiated by affected residents; and
 - Fluctuating or variable effects are generated by the operation or the operation depends on management for maintaining satisfactory performance.
- 49. Ms Wallace also suggested additional conditions to those recommended that would be required if the consent were granted. Most conditions suggested relate to preventing adverse water quality effects, but she also suggested that the opportunity for reviewing consent conditions be more frequent, and that advice note attached to recommended condition 12² be deleted.

Uruti residents

50. In evidence from the Uruti residents, including the statements of support, the following relevant points were raised in relation to the proposal and the effects of odour:

- The applicant has had repeated failures in containing offensive and objectionable odours within their site boundary and, as such, the consent should be declined;
- The types of materials that they propose to accept should not be allowed due to the potential for odour;

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² Relating to determination of offensive and objectionable odours

- That odours from the existing operation have caused: frustration, depression, stress, loss of appetite, nausea, headaches, difficulty breathing and embarrassment around visitors;
- Odours from the existing operation have resulted in a loss of amenity values of their properties and the Uruti valley;
- The existing site is unsuitable due to the topography trapping odours;
- The operation growing in scale in the future resulting in the odours worsening is a concern; and
- A complaints procedure should be included as a condition of consent.
- 51. From the submissions of the Uruti residents that were heard by the Committee, the following points were raised in relation to the proposed wastewater discharges:
 - Concerns of rainfall events which exceed the capacity of the ponds and the wastewater then entering the Haehanga and Mimi catchments; and
 - That there is no detailed reinstatement clause which requires the removal of raw or composted material, the cleaning of treatment ponds, and the testing of soil in the irrigation areas for ammonium, nitrate and nitrite.
- 52. The Committee heard the submissions of Mr and Mrs Baker, and Mrs Coils [in support] in regards to their concerns of pathogens. In her statement, Mrs Coils sought further clarification in regards to the likelihood of the composting operation promoting conditions where pathogens or disease can develop.

Legal advice and presentation of Officers' Report

- 53. Following the presentations from the applicant, the submitters and their representatives, the Committee heard from:
 - Phillip Milne [Simpson Grierson] Legal Counsel for the Committee; and
 - Ange Lenz Consents Officer, Taranaki Regional Council.
- 54. Mr Milne identified two issues of contention consent conditions and consent duration.
- 55. Mr Milne agreed with Mr Maassen that the PVL Proteins decision provided useful guidance. In reviewing the decision, Mr Milne concluded the key factors to be weighed are:
 - Costs to the applicant;
 - Investment certainty for the applicant [although Mr Milne stated this may not be a factor for this case];
 - Adequacy of the consent conditions; and

- The extent of which the review condition will allow further restrictions to be imposed if necessary to ensure that odour effects are acceptable.
- 56. Mr Milne referred to the recent Court of Appeal decision for Genesis Power Limited³ as authority that normally the use of review conditions can deal with future adverse effects. The Court found that the Environment Court was wrong to have limited the term of consent to 10 years in the apparent hope that this would encourage the consent holder and Maori to reach agreement as to the effects and mitigation.
- 57. Putting the comments above into the context of the present application, Mr Milne advised that the duration of consent should not be used to simply provide the community with a further opportunity to challenge the consent. Rather, a shorter term consent would only be appropriate if the Committee concluded that the combination of:
 - mitigation measures required by the consent;
 - voluntary mitigation and management plans;
 - enforceable standards [e.g. no objectionable odour and no chicken DAF or similar products];
 - enforcement by the Council; and
 - review conditions;

may be insufficient to address any future issues which may arise during the term of consent.

- 58. Mr Milne advised that in the present instance:
 - the conditions of consent are reasonably stringent and are clear and enforceable;
 - the requirement of no offensive or objectionable odour at the boundary is conservative to a degree since the receiving dwellings are some distance from the boundary;
 - the recommended review condition has been strengthened and in his opinion, provides a clear basis for further restrictions on the operation if required;
 - more importantly, that conditions and the ability of the Council to take enforcement action provide powerful incentives for compliance;
 - there appear to be other measures which the applicant may be able to apply such as enclosure of the pads and the use of bio filters, which could be required if necessary via the review process or voluntarily; and
 - the Council has a strong history of taking enforcement action where appropriate and is currently considering whether do to so in the present instance.

³ Ngati Rangi Trust, Tamahaki Inc Society and Whanganui River Maori Trust Board v Genesis Power Limited and Manawatu-Wanganui Regional Council [CA518/2007]

- 59. Mr Milne acknowledged that it is clear that there are some weather conditions where it is difficult to achieve no objectionable odour beyond the boundary. However, Mr Milne considered that the proposed conditions provide a reasonable degree of certainty that action can be taken if compliance is not achieved.
- 60. In that context, Mr Milne noted that a 5-year duration initially recommended by Council officers may not be justified, and that the officers accepted this. However, Mr Milne also noted that there remains some risk that full compliance will not be achieved and, accordingly, concluded that it was for the Committee to decide the appropriate duration.
- 61. Miss Lenz presented the Officer's Report, which was taken as read, and responded to the conditions suggested by the applicant and submitters. She advised some minor changes to the recommended consent conditions based on the evidence and submissions presented to the hearing.
- 62. Conditions recommended that were agreed by the applicant and Council officers, and that are integral to the adverse effects of odour being avoided, remedied or mitigated, included:
 - not allowing material on site which is produced as a result of a dissolved air flotation process [e.g. chicken DAF];
 - the establishment of equipment on site to measure and record the wind speed and direction so that RNZ can account for his in management decisions and wind conditions can be assessed in the event of any odour event;
 - undertaking proactive odour monitoring surveys on a regular basis;
 - that a complaints procedure be prepared and implemented; and
 - strengthening the recommended review condition to include explicit purposes for when a review can be invoked and to allow for more frequent reviews [being yearly].
- 63. In response to Ms Wallace's concerns, Miss Lenz stated that Council undertakes monitoring on behalf of the consent holder and therefore there is no requirement for the information to be submitted. She also explained that the groundwater is not recommended to be monitored at shorter intervals because there would be a lag between a discharge and any resulting effects on groundwater so any effects are not likely to be apparent within a shorter time frame. The Officers' Report notes that monitoring is also recommended to be undertaken in un-impacted areas to provide important baseline information.
- 64. In response to the Uruti residents' concerns about the ponds being overtopped in large rainfall events, Miss Lenz highlighted that from her assessment of the treatment ponds in the Officers' Report the ponds are able to accommodate a 1 in 50 year return period rainfall event, and that this adequately mitigates the risks associated with overtopping.

- 65. Miss Lenz noted that a site reinstatement condition had been recommended where the materials that were allowed to be accepted had to be removed from the site. This requirement addresses a concern of submitters.
- 66. Miss Lenz highlighted the agreed conditions which dealt with the water quality issues highlighted in Ms Wallace's suggested conditions. Miss Lenz also accepted that the review condition needed to allow for more frequent reviews and the advice note attached to recommended condition 12 should be removed, as also suggested by Ms Wallace.

Applicant's right of reply

- 67. Mr Maassen presented the right of reply, on behalf of the applicant, incorporating questioning of the applicant's witnesses to address the main issues raised.
- 68. In response to Ms Wallace referencing the *Waikato Environment Protection Society* decision, Mr Maassen noted through paragraph 184 of the decision, that it is not useful to be quoting odour cases as if being directly applicable to the circumstances of this case in the Taranaki region. Mr Curtis confirmed that the site of that case has different topography and metrological conditions, different operating conditions [resulting in a constant odour being generated], and that the surrounding residents were situated much closer than at Uruti [at 150-200 m from the composting operation].
- 69. Mr Maassen submitted that it is apparent that Ms Wallace considers that certainty has to be demanded in terms of evidence whereas, in his opinion, resource management is about risk management.
- 70. In response to Ms Wallace's submission that the composting operation was industrial in character and detracted from the rural amenity values, Mr Maassen submitted that land use effects cannot be considered in relation to the effects of discharge permits.
- 71. Mr Curtis stated that excluding produced water, biosolids and whole chickens from being composted on the site, as suggested by Ms Wallace, would make no difference to the level of odour produced from the site.
- 72. During the applicant's right of reply, Mr Maassen noted that the applicant agreed with Mr Milne's advice about consent duration but pointed out that a tightening of the review condition as recommended by Council officers further justifies a longer term consent being granted.

Hearing closure

- 73. Cr David Lean, on behalf of the Committee, thanked the submitters, applicant, and Council staff for the information they provided and the manner in which it was presented.
- 74. Cr Lean noted that all evidence presented at the hearing would be considered, a decision would be issued in accordance with the Act timeframes, and declared the hearing closed.

Principal issues in contention

- 75. The Act requires the Committee to identify the principal issues in contention and the main findings of fact. During the Hearing the following issues arose which require special consideration by the Committee:
 - Odour;
 - Effects of discharges on water and soil;
 - Public health effects; and
 - The appropriate consent duration should the application be granted.

Main findings of fact

- 76. The Committee deliberated on the applications, all submissions [including those not heard], the Officers' Report, and other evidence presented, with particular regard to the matters which it is required to address under the Act. The Committee's main findings of fact are detailed below.
- 77. At the outset it can be said that the Committee's determination is that the applications can be granted. The key considerations are the appropriate conditions and duration.
- 78. In determining the application the Committee notes that some of the matters raised in submissions relate to the effects of land use at the site [i.e. they are unrelated to the discharge permits]. Therefore although the Committee accepts that they are real concerns they are not within its jurisdiction and therefore cannot be considered. These matters include:
 - Surveying and controlling vermin such as biting flies, seagulls and rats;
 - Any effects on property values and land use in the vicinity; and
 - Any effects of flooding within the application site.
- 79. The Committee accepts the assessment and conclusions presented in the Officers' Report, including the assessment of section 104 and Part 2 of the Act. This assessment is not repeated in the decision.
- 80. The Committee is satisfied that there is sufficient information available to determine the applications. It is also satisfied that all potential adverse effects have been identified and appropriately addressed.
- 81. The Committee notes that the effects based conditions recommended adequately avoid, remedy and mitigate adverse effects. While the Committee is satisfied that the conditions can be met, the management plans required will demonstrate specifically how the applicant will achieve compliance. This reduces the risk of poor management or insufficient attention to odour mitigation measures leading to odour events, as Mr O'Neill acknowledged has previously occurred.

- 82. The Committee notes that the applicant has breached consent conditions in the past but is also satisfied that the Council has responded appropriately in each case and this prior conduct cannot be the basis for declining this application.
- 83. The Committee notes that the applicant and Council officers have reached agreement on consent conditions that they believe would adequately avoid, remedy or mitigate adverse effects on the environment. The Committee generally concurs with those recommended conditions but considers additional conditions are necessary.
- 84. The Committee has determined that the recommended site reinstatement condition needs to be strengthened by requiring the applicant to submit a Site Exit Plan to the Council. This plan would outline how the site would be reinstated so that:
 - No raw materials [as listed as being allowed to be accepted] remain on site;
 - No partially decomposed material remains on site; and
 - Details are provided as to how any remaining leachate or sludge, resulting from the operation, will be either removed from the site, buried, treated or otherwise to avoid any adverse effects on groundwater or surface water.
- 85. In order to ensure that environmental effects are adequately avoided the Committee has determined that a condition is necessary to require any pond containing wastewater be constructed, maintained and managed to avoid any leakage of wastewater to surface water.
- 86. Odour monitoring surveys need to be conducted more frequently and/or at the times of year that meteorological conditions which promote odour events are present to enable the effectiveness of the recent improvements and any further improvements [in relation to odour management] to be determined. The Committee notes that in the case that these surveys are no longer needed that the applicant can apply for a change/cancellation of this consent condition under Section 127 of the Act.
- 87. Incorporating the conditions noted in the paragraphs above, the Committee has determined that the conditions recommended by the officers, subject to minor modifications for purposes of accuracy and certainty, will effectively avoid, remedy or mitigate the actual and potential adverse effects of the composting operation. In making this determination the Committee notes that:
 - Mr Milne submitted that the conditions are reasonably stringent, clear and enforceable;
 - Chicken DAF or similar products will not be allowed on site and Mr Curtis'
 evidence was that this condition in itself should minimise the potential for
 nuisance odours;
 - Additional measures are available, if necessary, to ensure that the operation
 does not cause offensive and objectionable odours beyond the boundary to arise
 e.g. the composting pads could be contained and a biofilter installed to treat the
 odour emissions. Any further measures required could be implemented via the
 management plan requirement, review or voluntarily;

- The conditions require that appropriate discharge and water quality standards are met to avoid any adverse effects on the aquatic ecosystem, downstream of the mixing zones.
- Monitoring will ensure that the Council will be aware of any adverse effects on water and soil, and can take these into account when deciding if a review of consent conditions is required.
- The applicant has undertaken riparian planting that offsets those effects that cannot be avoided, e.g. within the mixing zones.
- Monitoring in association with the existing wastewater discharges indicates that there are no discernable effects as a result of the operation;
- Measures are available to avoid, remedy or mitigate any adverse effects that are
 observed in association with soil and groundwater quality. For example by
 ceasing discharges in the affected areas and allowing bioremediation of affected
 soils to occur, mitigation or environmental compensation to offset adverse
 effects.
- 88. The Committee accepts the expert evidence of Mr Curtis and is satisfied that the proposal will not result in public health effects from the transmission of pathogens or disease.
- 89. The Committee has determined that the duration of each consent is to be eight years. The reasons for this determination are in the following paragraphs.
- 90. It is desirable in the interests of integrated resource management that both consents have the same duration.
- 91. The Committee noted the advice of Mr Milne [paragraphs 57 and 58 of this decision], in particular his conclusion that, considering the case law, the five year duration recommended by officers may be too short to be able to justified.
- 92. The applicant has stated in evidence that poor management has resulted in non-compliance in respect of odour, so there remains risk that full compliance will not be achieved. Granting longer term consents is not appropriate for the community under these circumstances.
- 93. A duration of 8 years provides the applicant enough commercial surety to implement any required upgrades, and allow Council to review the effectiveness of these upgrades within a reasonable time frame. It is noted that a year has elapsed since the previous consents expired so the duration is effectively 9 years.
- 94. In weighing the cost to the applicant of renewing the consents in 8 years time the Committee concluded that the cost is likely to be low if an adequate level of compliance is achieved because opposition to the activity is largely as a result of noncompliance.
- 95. The Committee confirms that they have taken the *Waikato Environmental Protection Society* decision into account.

Relevant statutory provisions

- 96. The actual and potential effects on the environment of the activity were assessed in the Officers' Report. Subject to the comments made in this decision the Committee accepts the officers' assessment.
- 97. Similarly the Officers' Report comprehensively assessed the proposal against the above planning documents. This assessment is accepted by the Committee.

Decision

98. The Committee, acting pursuant to the powers delegated to it by the Taranaki Regional Council, and having given due consideration to sections 104, 104B, 105, 107 and 108 of the Act, hereby grants the following resource consents subject to the conditions detailed in this decision report for a duration of 8 years.

Consent 5838-2 [5276] - to discharge:

- a) waste material to land for composting; and
- b) treated stormwater and leachate from composting operations:
 - onto and into land in circumstances where contaminants may enter water in the Haehanga Stream catchment; and
 - directly into an unnamed tributary of the Haehanga Stream.

Consent 5839-2 [5277] - to discharge emissions into the air, namely odour and dust, from composting operations.

Reasons for the decision

- 99. The reasons for the decision are detailed in this decision report and can be summarised as:
 - The operation provides a necessary service to the social, economic and cultural wellbeing of the Taranaki region; and
 - The actual and potential adverse effects of the proposal will be adequately avoided, remedied and mitigated provided by the terms and conditions of consent.

Consent 5838-2: to discharge treated stormwater and leachate [application 5276]

That application 5276; to discharge:

- a) waste material to land for composting; and
- b) treated stormwater and leachate from composting operations:
 - onto and into land in circumstances where contaminants may enter water in the Haehanga Stream catchment; and
 - directly into an unnamed tributary of the Haehanga Stream;

be approved for a period to 1 June 2018, subject to the Council's standard conditions and the following special conditions:

General

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.

Acceptable wastes

- 2. The raw materials accepted onsite shall be limited to the following:
 - Paunch grass;
 - Animal manure from meat processing plant stock yards and dairy farm oxidation pond solids;
 - Green vegetative wastes;
 - Biosolids wastes including, but not limited to, pellets from wastewater treatment plants;
 - Mechanical pulping pulp and paper residue [excluding any pulping wastes that have been subject to chemical pulping or treated or mixed with any substance or material containing chlorine or chlorinated compounds];
 - Solid drilling cuttings from hydrocarbon exploration provided they are blended down to a maximum hydrocarbon content of 5.0 % total petroleum hydrocarbon within 3 days of being received onsite;
 - Water based and synthetic based drilling fluids from hydrocarbon exploration provided they are blended down to a maximum hydrocarbon content of 5.0 % total petroleum hydrocarbon content within 3 days of being brought onto the site;
 - Produced water from hydrocarbon exploration;
 - Vegetable waste solids [being processing by-products];
 - Grease trap waste [from food service industries];
 - Fish skeletal and muscle residue post filleting [free from offal]; and
 - Poultry industry waste [eggshells, yolks, macerated chicks and chicken mortalities].

The acceptance of any other materials shall only occur if the Chief Executive, Taranaki Regional Council advises in writing that he is satisfied on reasonable grounds that the other materials will have minimal effects beyond those materials listed above.

3. Material produced as a result of a dissolved air flotation process shall not be accepted on site.

Maintenance of measures

4. All sediment ponds and silt traps on site, that are located upstream of the pond treatment system or wetland treatment system, shall be managed so that they are no more than 20% full of solids at any one time.

<u>Note</u>: For the purposes of this condition, the location of the pond treatment system and wetland treatment system are shown on Figure 1, attached as Appendix 1 of this consent.

- 5. All treatment measures on site shall be implemented and maintained so that:
 - clearwater runoff is prevented from entering Pad 1, Pad 2 and the Drill Mud Pad;
 and
 - all stormwater and/or leachate from Pad 1, Pad 2, the Drill Mud Pad and any other exposed areas within the composting site is directed for treatment through the Pond or Wetland Treatment System.

<u>Note</u>: For the purposes of this condition, the location and extent of Pad 1, Pad 2 and the Drill Mud Pad are shown on Figure 1, attached as Appendix 1 of this consent.

6. Any pond(s) used on site for the purposes of stormwater and leachate treatment shall be constructed and maintained in a manner which avoids the seepage of wastewater through the pond walls entering surface water.

Irrigation

- 7. The consent holder shall record the following information in association with irrigating wastewater to land:
 - a) the date, time and hours of irrigation;
 - b) the approximate volume of wastewater irrigated to land;
 - c) the source of the wastewater [e.g. Pond or Wetland Treatment System]; and
 - d) the location and extent where the wastewater was irrigated.

The above records shall be made available to the Chief Executive, Taranaki Regional Council, on request.

- 8. There shall be no direct discharge to water as a result of irrigating wastewater to land. This includes, but is not necessarily limited to, ensuring the following:
 - No irrigation shall occur closer than 25 m to any surface water body;
 - The discharge does not result in surface ponding;
 - No spray drift enters surface water;
 - The discharge does not occur at a rate at which it cannot be assimilated by the soil/pasture system; and
 - The pasture cover within irrigation areas is maintained at all times.

- 9. Treated wastewater discharged by irrigation to land shall not have a hydrocarbon content exceeding 5 % total petroleum hydrocarbon.
- 10. Discharges irrigated to land shall not give rise to any of the following adverse effects in the Haehanga Stream, after a mixing zone extending 30 m from the downstream extent of the irrigation areas, being monitoring sites HHG000100 [at or about grid reference 1732295E-5684964N] and HHG000150 [at or about grid reference 1731673E-5685796N]:
 - a) a rise in filtered carbonaceous biochemical oxygen demand of more than 2.00 gm⁻³;
 - b) a level of unionised ammonia greater than 0.025 gm⁻³;
 - c) an increase in total recoverable hydrocarbons;
 - d) an increase in chloride levels;
 - e) the production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials;
 - f) any conspicuous change in the colour or visual clarity;
 - g) any emission of objectionable odour;
 - h) the rendering of fresh water unsuitable for consumption by farm animals; and
 - i) any significant adverse effects on aquatic life.

Soil quality

- 11. Representative soil samples shall be taken from each irrigation area at intervals not exceeding six months for total petroleum hydrocarbons, chloride, sodium, total soluble salts, conductivity and the sodium absorption ratio [SAR].
- 12. Should the results of soil sampling, undertaken in accordance with condition 11 above, indicate an increasing trend in any of the measured parameters, the consent holder shall prepare a Soil Quality Management Plan which details how any significant adverse effects will be avoided, remedied or mitigated.

The Management Plan shall be submitted for approval to the Chief Executive, Taranaki Regional Council, acting in a certification capacity, within three months of receiving written notice, from the Taranaki Regional Council, of the results and the requirement for a plan.

<u>Note</u>: for the purposes of this condition, an 'increasing trend' will be determined by the Chief Executive, Taranaki Regional Council and is defined as a consistent increase in a parameter level over time whilst taking into account any seasonal variations between results and any extreme weather conditions that may have had any influence on results.

13. Measures outlined in the Soil Quality Management Plan, approved under condition 12 above, shall be implemented within a timeframe specified by the Chief Executive, Taranaki Regional Council.

Groundwater quality

14. The consent holder shall establish at least one groundwater monitoring well at each of the following locations for the purpose of monitoring the effect of the wastewater discharges on groundwater quality:

- a) up gradient of the irrigation areas in an un-impacted area;
- b) down gradient of the extent of the irrigation area situated upstream of the composting area; and
- c) down gradient of the extent of the irrigation area situated downstream of the composting area.

The design, location and establishment of the monitoring wells shall be to the reasonable approval of the Chief Executive, Taranaki Regional Council, acting in a certification capacity. The monitoring wells shall be fully established and operational within three months of the commencement date of this consent.

- 15. Groundwater shall be monitored at the wells approved under condition 14 at intervals not exceeding six months for total petroleum hydrocarbon, chloride, nitrate, nitrite and ammoniacal nitrogen.
- 16. Should the results of groundwater monitoring, undertaken in accordance with condition 15 above, indicate an increasing trend in one or more of the monitored parameters, the consent holder shall prepare a Groundwater Quality Management Plan which details how any significant adverse effects will be avoided, remedied or mitigated.

The Management Plan shall be submitted for approval to the Chief Executive, Taranaki Regional Council, acting in a certification capacity, within three months of receiving written notice, from the Taranaki Regional Council, of the results and the requirement for a plan.

<u>Note</u>: for the purposes of this condition, an 'increasing trend' will be determined by the Chief Executive, Taranaki Regional Council and is defined as a consistent increase in a parameter level over time whilst taking into account any seasonal variations between results and any extreme weather conditions that may have had any influence on results.

17. Measures outlined in the Groundwater Quality Management Plan, approved under condition 16 above, shall be implemented within a timeframe specified by the Chief Executive, Taranaki Regional Council.

Pond Treatment System

18. The consent holder shall prepare a Pond Treatment System Management Plan which details management practices undertaken to maximise treatment capabilities of the system. The plan shall be submitted for approval to the Chief Executive, Taranaki Regional Council, acting in a certification capacity, within one month of the commencement date of this consent.

The Management Plan shall address, but not necessarily be limited to, the following matters:

 how the build up of sediment and/or sludge will be managed within the entire system, how the level of build-up will be monitored including factors that will trigger management, and the frequency of undertaking the identified measures or procedures;

- b) how overloading of the system will be prevented; and
- c) how any offensive or objectionable odours at or beyond the site boundary will be avoided in accordance with condition 13 of consent 5839-2.
- 19. Operations on site shall be undertaken in accordance with the Pond Treatment System Management Plan, approved under condition 18 above, except in circumstances when the Proposed Implementation Plan, approved under condition 9 of consent 5839-2, specifies otherwise.

Wetland Treatment System

20. The consent holder shall prepare a Wetland Treatment System Management Plan that details management practices undertaken to maximise treatment capabilities of the system. The plan shall be submitted for approval to the Chief Executive, Taranaki Regional Council, acting in a certification capacity, within one month of the commencement date of this consent.

The Management Plan shall address, but not necessarily be limited to, the following matters:

- a) how the build up of sediment and/or sludge will be managed within the entire system, how the level of build-up will be monitored including factors which will trigger management, and the frequency of undertaking the identified measures or procedures; and
- b) how plant die-off within the system will be managed, and the frequency and/or timing of undertaking the identified measures or procedures.
- 21. Operations on site shall be undertaken in accordance with the Wetland Treatment System Management Plan, approved under condition 20 above.
- 22. The discharge from the Wetland Treatment System shall meet the following standards [at monitoring site IND003008]:
 - a) the suspended solids concentration shall not exceed 100 g/m³; and
 - b) the pH shall be between 6.0 and 9.0.
- 23. Discharges from the Wetland Treatment System shall not give rise to any of the following effects in the unnamed tributary of the Haehanga Stream, after a mixing zone of 40 m, at established monitoring site HHG000103 [at or about grid reference 1732695E-5685050N]:
 - a) a rise in filtered carbonaceous biochemical oxygen demand of more than 2.00 gm⁻³;
 - b) a level of unionised ammonia greater than 0.025 gm⁻³;
 - c) the production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials;
 - d) any conspicuous change in the colour or visual clarity;
 - e) any emission of objectionable odour;
 - f) the rendering of fresh water unsuitable for consumption by farm animals; and
 - g) any significant adverse effects on aquatic life.

Riparian planting

24. The consent holder shall maintain the areas of riparian planting, undertaken in accordance with option 1 of riparian management plan RMP383, by ensuring the ongoing replacement of plants which do not survive, the eradication of weeds until the plants are well established, and the exclusion of stock from the planted areas.

Incident notification

25. The consent holder shall keep a permanent record of any incident related to this consent that results, or could result, in an adverse effect on the environment. The consent holder shall make the incident register available to the Taranaki Regional Council on request.

Details of any incident shall be forwarded to the Taranaki Regional Council immediately. At the grant date of this consent, the Council's phone number is 0800 736 222 [24 hour service].

Site reinstatement

26. The consent holder shall prepare a Site Exit Plan which details how the site is going to be reinstated prior to the consent expiring or being surrendered. The Plan shall be submitted for approval to the Chief Executive, Taranaki Regional Council, acting in a certification capacity, at least 3 months prior to this consent expiring or being surrendered.

The Site Exit Plan shall address, but not necessarily be limited to, the following matters:

- a) How the site will be reinstated so that no raw materials listed or approved under condition 2 of this consent remain on site;
- b) How the site will be reinstated so that no partially decomposed material remains on site;
- c) How any remaining leachate or sludge, resulting from the operation, will be either removed from the site, buried, treated or otherwise to avoid any adverse effects on groundwater or surface water; and
- d) Timeframes for undertaking the activities identified in association with a) to c) above.

<u>Note:</u> The requirement of this condition shall not apply if the consent holder applies for a new consent to replace this consent when it expires.

27. The consent holder shall reinstate the site in accordance with the plan approved under condition 26 above prior to this consent expiring or being surrendered.

Review

28. 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 within one month of approving the plan required under condition 9 of consent 5839-2 and/or during the month of June in any year for any of the following purposes:

- a) Ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, and in particular to address any more than minor adverse effects relating to odour discharges from the site and/or water quality issues;
- b) To incorporate into the consent any modification to the operation and maintenance procedures or monitoring that may be necessary to deal with any adverse effects on the environment arising from changes in association with condition 9 of consent 5839-2; and
- c) To determine any measures that may be appropriate to comply with condition 1 of this consent, and which are necessary to address any adverse effects relating to the wastewater discharges and/or odour from the site.

Appendix 1 of consent 5838-2

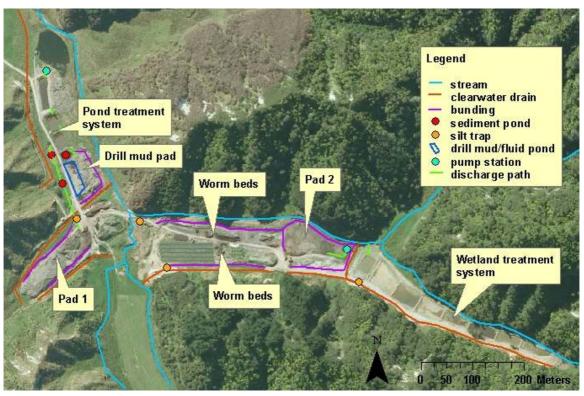


Figure 1 The location and extent of the Pond Treatment System, Wetland Treatment System, Pads 1 and 2, and the Drill Mud Pad.

Consent 5839-2: to discharge emissions into the air [application 5277]

That application 5277; to discharge emissions into the air, namely odour and dust, from composting operations; be approved for a period to 1 June 2018, subject to the Council's standard conditions and the following special conditions:

General

- 1. The consent holder shall at all times adopt the best practicable option, as defined in section 2 of the Resource Management Act 1991, to prevent or minimise any adverse effects on the environment from the exercise of this consent.
- 2. The surface areas of Pad 1 and Pad 2 shall not exceed 3,500 m² and 4,000 m², respectively.

<u>Note</u>: For the purposes of this condition, the location and extent of Pad 1 and Pad 2 are shown on Figure 1, attached as Appendix 1 of this consent.

Incoming material

- 3. The raw materials accepted onsite shall be limited to the following:
 - Paunch grass;
 - Animal manure from meat processing plant stock yards and dairy farm oxidation pond solids;
 - Green vegetative wastes;
 - Biosolids wastes including, but not limited to, pellets from wastewater treatment plants;
 - Mechanical pulping pulp and paper residue [excluding any pulping wastes that have been subject to chemical pulping or treated or mixed with any substance or material containing chlorine or chlorinated compounds];
 - Solid drilling cuttings from hydrocarbon exploration provided they are blended down to a maximum hydrocarbon content of 5.0 % total petroleum hydrocarbon within 3 days of being received onsite;
 - Water based and synthetic based drilling fluids from hydrocarbon exploration provided they are blended down to a maximum hydrocarbon content of 5.0 % total petroleum hydrocarbon content within 3 days of being brought onto the site;
 - Produced water from hydrocarbon exploration;
 - Vegetable waste solids [being processing by-products];
 - Grease trap waste [from food service industries];
 - Fish skeletal and muscle residue post filleting [free from offal]; and
 - Poultry industry waste [eggshells, yolks, macerated chicks and chicken mortalities].

The acceptance of any other materials shall only occur if the Chief Executive, Taranaki Regional Council advises in writing that he is satisfied on reasonable grounds that the other materials will have minimal effects beyond those materials listed above.

- 4. Material produced as a result of a dissolved air flotation process shall not be accepted on site.
- 5. The consent holder shall record the following information in association with accepting all incoming material on site:
 - a) the date and time that the material is accepted;
 - b) description of the material; and
 - c) the approximate volumes of material.

The above records shall be made available to the Chief Executive, Taranaki Regional Council, on request.

Management practices

6. The consent holder shall prepare a Site Practices Management Plan which details management practices undertaken to ensure that offensive or objectionable odours at or beyond the site boundary will be avoided in accordance with condition 13 of this consent. The plan shall be submitted for approval to the Chief Executive, Taranaki Regional Council, acting in a certification capacity, within one month of the commencement date of this consent.

The Management Plan shall address, but not necessarily be limited to, the following matters:

- a) identification of all activities on site which have the potential to generate odour [e.g. turning compost piles, removing sludge from ponds];
- b) the conditions and/or time of day when activities identified under a) above should be undertaken [e.g. during favourable weather conditions and the identification of those conditions] and/or measures that shall be implemented to avoid odours arising [e.g. containment measures];
- c) measures undertaken to minimise odours during receiving and storing material on Pad 1 and Pad 2 and throughout the composting and vermiculture processes [e.g. method[s] used to cover material once received, how anaerobic conditions are maintained];
- d) measures undertaken to minimise odours arising in the Wetland Treatment System, and identification of the time of year and/or frequency when undertaken;
- e) measures undertaken to minimise odours arising in the Pond Treatment System and associated treatment measures [e.g. silt traps located upstream], and identification of the time of year and/or frequency when undertaken; and
- f) details of how a complaint investigation procedure shall operate, including what data shall be collected and what feedback is to be provided to the complaint.
- 7. Operations on site shall be undertaken in accordance with the Site Practices Management Plan, approved under condition 6 above, except in circumstances when the Proposed Implementation Plan, approved under condition 9 of this consent, specifies otherwise.

Site audit and implementation

8. The consent holder shall engage a suitably qualified and experienced professional to prepare and submit an Odour Assessment Report for approval to the Chief Executive, Taranaki Regional Council, acting in a certification capacity, within three months of the commencement date of this consent. The professional that the consent holder engages shall be to the reasonable approval of the Chief Executive, Taranaki Regional Council.

The report shall include, but not necessarily be limited to, the following:

- a) The appropriateness of the management practices and control measures undertaken in avoiding offensive and/or objectionable odours arising beyond the property boundary in association with the composting processes on Pad 1;
- b) Recommendations in association with a) above;
- c) The appropriateness of the design and management of the Pond Treatment System and associated pre-treatment devices (e.g. silt ponds) in effectively managing odours arising from treating leachate derived from Pad 1 and avoiding offensive and/or objectionable odours arising beyond the property boundary; and
- d) Recommendations in association with c) above.

For assisting with the above assessment, the consent holder shall provide a copy of the documents listed below to the engaged and approved professional:

- The Taranaki Regional Council final officers report and hearing decision report for applications 5276 and 5277;
- Consent certificates [including conditions] for consents 5838-2 and 5839-2;
- The Pond Treatment System Management Plan approved under condition 18 of consent 5838-2; and
- The Site Practices Management Plan approved under condition 6 of this consent.
- 9. The consent holder shall prepare and submit a Proposed Implementation Plan for approval to the Chief Executive, Taranaki Regional Council, acting in a certification capacity, within one month of the Odour Assessment Report being approved under condition 8 above.

The Plan shall include, but not necessarily be limited to, the following:

- a) Management practices and/or control measures proposed to be implemented in association with the composting processes on Pad 1, of which are from the recommendations of the Odour Assessment Report, approved in accordance with condition 8;
- b) Management practices and/or control measures proposed to be implemented in association with the Pond Treatment System, of which are from the recommendations of the Odour Assessment Report, approved in accordance with condition 8;
- c) The reasons for the chosen practices and/or measures identified in accordance with a) and b) above
- d) A timeframe by when each of the practices and/or measures identified in accordance with a) and b) above will be implemented

- e) Identification of appropriate management practices to ensure the on-going functionality of any chosen control measures identified in accordance with a) and b) above
- 10. Operations and activities on site shall be undertaken in accordance with the Proposed Implementation Plan, approved under condition 9 above.

Dust

11. The dust deposition rate beyond the boundary of the consent holder's site arising from the discharge shall be less than $4.0 \text{ g/m}^2/30 \text{ days}$.

Note: For the purposes of this condition, the consent holder's site is defined as Sec 34 Pt Sec 4 Blk II Upper Waitara SD.

12. Any discharge to air from the site shall not give rise to any offensive, objectionable, noxious or toxic levels of dust at or beyond the boundary of the consent holder's site, and in any case, total suspended particulate matter shall not exceed 120 μ g/m³ as a 24 hour average [measured under ambient conditions] beyond the boundary of the consent holder's site.

Note: For the purposes of this condition, the consent holder's site is defined as Sec 34 Pt Sec 4 Blk II Upper Waitara SD.

Odour

13. The discharges authorised by this consent shall not give rise to an odour at or beyond the boundary of the consent holder's site that is offensive or objectionable.

Note: For the purposes of this condition:

- The consent holder's site is defined as Sec 34 Pt Sec 4 Blk II Upper Waitara SD; and
- Assessment under this condition shall be in accordance with the *Good Practice Guide for Assessing and Managing Odour in New Zealand, Air Quality Report 36, Ministry for the Environment, 2003.*

Monitoring

14. The consent holder shall install a monitoring device that continuously records wind speed and direction in the area of the composting activity. The device shall be capable of logging collected data for at least six months and shall be installed and be operational within three months of the commencement date of this consent.

The data shall be provided telemetrically to the Taranaki Regional Council. If this method is not technically feasible, the data shall be provided to the Taranaki Regional Council at a frequency and a form advised by the Chief Executive, Taranaki Regional Council until such a time it is technically feasible to telemetric the data.

Odour surveys

15. The consent holder shall undertake an odour survey within six months of the Plan approved under condition 9 of this consent being implemented and thereafter at yearly intervals during periods when metrological conditions are most likely to result in

offsite odour. The methodology for the survey shall be consistent with German Standard VDI 3940 "Determination of Odorants in Ambient Air by Field Inspection", or similar. Prior to the survey being carried out, the methodology shall be approved by the Chief Executive, Taranaki Regional Council, acting in a certification capacity.

The results of the survey shall be provided to the Chief Executive, Taranaki Regional Council, within three months of the survey being completed.

Community liaison

16. The consent holder and the Director – Resource Management, Taranaki Regional Council, or his delegate, shall meet locally as appropriate, six monthly or at such other frequency as the parties may agree, with submitters to the application of this consent and any other interested party at the discretion of the Chief Executive, Taranaki Regional Council, to discuss any matter relating to the exercise of this consent, in order to facilitate ongoing community consultation.

Incident notification

17. The consent holder shall keep a permanent record of any incident related to this consent that results, or could result, in an adverse effect on the environment. The consent holder shall make the incident register available to the Taranaki Regional Council on request.

Details of any incident shall be forwarded to the Taranaki Regional Council immediately. At the grant date of this consent, the Council's phone number is 0800 736 222 [24 hour service].

Site reinstatement

18. The consent holder shall prepare a Site Exit Plan which details how the site is going to be reinstated prior to the consent expiring or being surrendered. The Plan shall be submitted for approval to the Chief Executive, Taranaki Regional Council, acting in a certification capacity, at least 3 months prior to this consent expiring or being surrendered.

The Site Exit Plan shall address, but not necessarily be limited to, the following matters:

- a) How the site will be reinstated so that no raw materials listed or approved under condition 3 of this consent remain on site;
- b) How the site will be reinstated so that no partially decomposed material remains on site;
- c) How any remaining leachate or sludge, resulting from the operation, will be either removed from the site, buried, treated or otherwise to avoid any adverse effects on groundwater or surface water; and
- d) Timeframes for undertaking the activities identified in association with a) to c) above.

<u>Note:</u> The requirement of this condition shall not apply if the consent holder applies for a new consent to replace this consent when it expires.

19. The consent holder shall reinstate the site in accordance with the Plan approved under condition 18 above prior to this consent expiring or being surrendered.

Review

- 20. 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 within one month of approving the plan required under condition 9 of this consent and/or during the month of June in any year for any of the following purposes:
 - a) Ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, and in particular to address any more than minor adverse effects relating to odour discharges from the site;
 - b) To incorporate into the consent any modification to the operation and maintenance procedures or monitoring that may be necessary to deal with any adverse effects on the environment arising from changes in association with condition 9 of this consent; and
 - c) To determine any measures that may be appropriate to comply with condition 1 of this consent, and which are necessary to address any adverse effects of odour from the site.

Appendix 1 of consent 5839-2

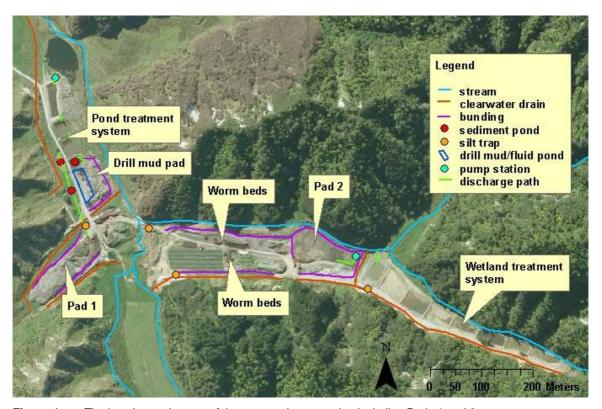


Figure 1 The location and extent of the composting operation including Pads 1 and 2.

For the Taranaki Regional Council:

Dated: 27 May 2010

Councillor David Lean [Chairman]

Councillor Michael Joyce