

Health concerns about smell and odour from Remediation Limited at Uruti

Thank you for contacting our service with health concerns about the odours coming from Composting and Vermiculture Facility at Uruti. On 30th June 2020 you called the Taranaki Public Health Unit and said that that your family had “Issues with smell/odour, experiencing headaches, nausea, tiredness, skin/throat irritation, son experiencing a skin rash (seen by a Dr), eye irritation. All get headaches - happens all the time. Next door neighbours also experience this... neighbouring cows are having eye irritations.... there is a lot of cancers around Uruti”. During the discussion with the trainee Health Protection Officer you mentioned that you believed that ‘ethyl mercaptan’ was the cause “as Remediation Ltd accept oil/gas drilling waste”.

It was decided to investigate further with the objective of assessing whether the odours were a statutory nuisance under the Health Act 1956 and likely to be injurious to health through poisoning arising from chemical contamination of the environment.

Information was gathered from the following sources:

- your general practitioner
- other people who live adjacent to Remediation Limited at Uruti
- odour complaints made to the Taranaki Regional Council and the New Plymouth District Council
- data sheets about the toxicity of ethyl mercaptan
- an air monitoring survey carried out by the Taranaki Regional Council for hydrocarbon compounds (BTEX) in the Taranaki Region in 2019
- the revised Assessment of Environmental Effects dated June 2020, the Assessment of Odour Effects by AECOM Limited dated 28 June 2019 and submissions received in 2019 by the Taranaki Regional Council about the renewal of the resource consent <https://www.trc.govt.nz/environment/resource-consents/notified-consents/>
- the amount of sick leave taken by staff at Remediation Limited (the group of people with the highest risk of exposure to potentially toxic fumes) – we were informed that the staff rarely took sick leave
- previous news media reports
- a visit to the site and interview of David Gibson (Revital Group General Manager, Special Projects and Resource Consents) by public health staff on Tuesday 25 August 2020

Our health risk assessment based on this evidence is that it is **unlikely** that toxic emissions from Remediation Limited are making your family unwell (moderate level of certainty).

However the evidence suggests that the **odours** beyond the boundary of Remediation Limited are **unnecessarily offensive at times** (high level of certainty).

Offensive odours are known to be capable of causing a variety of non-specific multi-system adverse health effects which include headaches, nausea, gastro-intestinal distress, retching, reduced appetite, fatigue, eye irritation, throat irritation, shortness of breath, runny nose, sleep disturbance, inability to concentrate, depression, tearfulness and classical stress response. These adverse health effects are mediated through the olfactory system and vary from person to person.

Unpleasant odours can occur acutely or chronically. The 2016 Ministry for the Environment *Good Practice Guide for Assessing and Managing Odour* defines acute odours as “high-intensity and/or highly unpleasant odours occurring infrequently or for short periods of time” and chronic odours as “low-intensity and/or moderately unpleasant odours occurring frequently or continuously over a long period ... cumulatively these low-level odours can have an adverse effect even though no single odour event in isolation could reasonably be considered offensive or objectionable”.

It appears that both types of odour effects are operating at Uruti. It seems likely that your symptoms are being caused by odour pollution from Remediation Limited. Your doctor said that your health improves when you are out of the area on holiday.

The Assessment of Odour Effects report by AECOM Limited concluded that nearby neighbours at Uruti were most likely to be affected when there were certain weather conditions. These weather condition events occur approximately 4.5 percent of the time. This adds up to 394 hours per year which is not an insignificant amount of time.

There is considerable overlap between the nuisance section (S.29) of the Health Act 1956 and the Resource Management Act 1991 in this situation. Territorial local authorities have duties and responsibilities in relation to the abatement of statutory nuisances under the Health Act 1956 but I understand that the New Plymouth District Council has not been recently involved. In my opinion the Resource Management Act 1991 should be considered to be the primary legislation as the resource consent discharge permit (expired 1 June 2018) states:

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.

The ongoing nature of the odour complaints over many years and the high level of community dissatisfaction concern me as well as not having a high level of certainty that toxic discharges to air at the site are not injurious to health.

With your permission I would like to share my findings with the Taranaki Regional Council, the New Plymouth District Council and David Gibson from Revital Group.

In summary it appears likely that your symptoms are being caused by odour pollution from Remediation Limited. However based on the present evidence it is unlikely that the symptoms are caused by poisoning arising from toxic gases.

My recommendations for Remediation Limited are as follows:

1. Remediation Limited engages an air quality specialist who can provide independent evidence-based advice on the odour issue and provide a high level of certainty that toxic gases are not being injurious to health.
2. The advice from this independent air quality assessment is considered by the Taranaki Regional Council and if appropriate is incorporated into the new resource consent.
3. Remediation Limited pays for staff at Uruti to have a health assessment by an occupational health specialist. I understand that Remediation Limited has proactively organised this to happen.
4. Remediation Limited carries out an annual odour annoyance survey of the affected community. This survey along with data from the Taranaki Regional Council should show that the level of dissatisfaction about both the acute and chronic odours coming from the site is significantly declining compared with current levels of dissatisfaction.

Yours sincerely



Dr Jonathan Jarman
Medical Officer of Health