

21 January 2025

Bay of Plenty Regional Council
PO Box 364
WHAKATĀNE 3158
RegulatoryAdmin@boprc.govt.nz

Submission to Resource Consent Application Number RM16-0434, Waste Management New Zealand Limited – Waste Oil Recovery Facility

Thank you for the opportunity for Health New Zealand National Public Health Service (NPHS) Bay of Plenty, Te Manawa Taki region, to provide a submission on the entire consent application applied for by Waste Management New Zealand Limited to continue to discharge contaminants to air and operate a waste oil recovery facility at 216-218 Totara Street, Mount Maunganui.

National Public Health Service Te Manawa Taki services Taranaki, Lakes, Waikato, Bay of Plenty and Tairāwhiti, which includes the Bay of Plenty Regional Council territory. Our National Public Health Service purpose is:

Manaakitia ngā whānau mō pae ora |

Enable whānau and communities to lead lives of wellness.

NPHS recognises its responsibilities to improve, promote and protect the health and wellbeing of people and communities of Aotearoa New Zealand under the Pae Ora (Healthy Futures) Act 2022 and the Health Act 1956. To achieve healthy communities and health equity across population groups, we work together across Health New Zealand and with other sectors to address the determinants of health¹.

This submission aligns to Health New Zealand's position to realise healthier and more resilient communities. Incorporating public health commitments will support efforts to reduce inequities and promote the good health and wellbeing of communities along with the environment and places where we grow, live, learn, work and play.

Medical Officers of Health² have a responsibility to reduce conditions within their local community which are likely to cause disease. Many of the crucial underlying factors that contribute to improving, promoting, and protecting the health of people and communities are directly influenced by the decisions and activities of Councils. In part, this is undertaken by assisting Councils with their responsibilities pursuant to the Resource Management Act to address the improvement, protection, and promotion of public health.

¹ Determinants of health. (2017, February 3). World Health Organization. <https://www.who.int/news-room/questions-and-answers/item/determinants-of-health>

² Section 7A, Health Act 1956 - <https://www.legislation.govt.nz/>

The NPHS represents a relevant aspect of the public interest in this resource consent. Medical Officers of Health, in their designated position, also have an interest that is greater than the interest of the public. To clarify, the public means anyone and includes people who reside, work, and visit an area.

We welcome the opportunity to share public health perspectives in planning and decision-making with Bay of Plenty Regional Council.

The primary contact point for this submission is:

Annaka Davis
Health Protection Officer
National Public Health Service Te Manawa Taki | Bay of Plenty/Rotorua
enquiries@toiteora.govt.nz
Phone: 0800 221 555

Air Quality and Public Health

Health is a state of complete physical, mental, and social well-being and is more than the absence of illness; it is the opportunity to live in an environment where populations can thrive, be connected to their communities and their environments.

- Clean air is a basic requirement for human health and wellbeing and is a fundamental human right.³
- Exposure to air pollutants is largely beyond the control of individuals.
- Environments should improve not harm our health.
- To Māori, air is a taonga or treasure. In the Māori world view, air pollution degrades and lessens the mauri or life-force of this taonga. It also affects the mauri of other taonga, for example plants and animals, as all living things need air, and all things share the same air. It is important to Māori to exercise kaitiakitanga to protect and maintain the mauri of taonga.⁴
- Air pollution affects everyone. However, there are inequities in who is likely to be exposed to air pollution than not, and who will be affected more when they are exposed. We refer to this population as the most vulnerable groups to air pollution. These populations are:
 - people 65 years and over
 - pregnant people
 - children
 - communities with poorer air quality, e.g., those situated close to industry and ports
 - people with cardiovascular disease and/or respiratory disease.

The more vulnerabilities a population has, the greater the health impact. Māori are likely disproportionately represented in most of the vulnerable groups above.

- There is no practical way of treating or cleaning air like we can treat water for drinking and therefore discharges to air are most effectively controlled at source.
- Every effort must be taken to avoid the production and release of contaminants, especially when those contaminants are known to cause adverse health effects. It is not acceptable to knowingly harm the health of the public, in the same way that it is not acceptable to harm the health of people in a workplace.
- Economic prosperity does help to improve health, but the industries associated with this prosperity should not be producing discharges which are known to be detrimental to human health.
- The Resource Management (National Environmental *Standards* for Air Quality) Regulations 2004 (the national environmental standards) set a guaranteed level of health protection for all New Zealanders. The National Ambient Air Quality *Guidelines* set minimum requirements to protect human health and the environment. Coupled with global ambient air quality guidelines published by the World Health Organization, these guidelines and standards provide quantitative limits for the protection of human health. Because these limits are not being met in the Mount Maunganui airshed, health is being harmed.

³ United Nations, 2021. A/RES/76/300. UN. General Assembly (76th session: 2021-2022). [Online: <https://digitallibrary.un.org/record/3983329>]

⁴ *Māori and the air* | Waikato Regional Council <https://www.waikatoregion.govt.nz/community/your-community/iwi/a-maori-perspective-te-ao-maori/maori-and-the-air/>

- The air quality standard and guidelines are not targets to pollute up to. This is because there is no safe level for human health for some of these contaminants. To be protective of health, air quality must improve beyond standard and guideline limits.

Air Quality and Health in Bay of Plenty

The importance of air quality to public health is clearly expressed in the current Regional Natural Resources Plan purpose to *protect sensitive receiving environments, including human health*.

This importance is supported through objectives in the Regional Natural Resource Plan that aim for the *protection of human health from adverse effects of anthropogenic contaminant discharges to air* and the *region's ambient air quality meets the National Environmental Standards for Air Quality (2004)*.

Air Quality and Health in Mount Maunganui

- Medical practitioners are legally required to notify Medical Officers of Health of ill health suspected to have arisen from contamination of the environment. The Medical Officer of Health has received such reports associated with the Mount Maunganui area. Our investigations into these reports led to our involvement in Plan Change 13 to the Regional Natural Resources Plan to improve ambient air quality in the Bay of Plenty, and particularly the Mount Maunganui airshed.
- Poor air quality is harming human health in Mount Maunganui⁵. The seriousness of this has been recognised by the community and noted in the interim Environment Court decision to the Regional Natural Resources Plan Change 13⁶. The Environment Court, to my understanding, has expressed the view that improvements to air quality should be implemented as soon as possible.
- Due to the significance of the impacts to public health we carry out regular reviews of air quality monitoring data to learn whether air quality is improving⁷. The 2022 and 2024 reports show localised improvement in the vicinity of Whareroa Marae in PM₁₀ however not everywhere and not all contaminants relevant to public health. This means that the health of the people in Mount Maunganui continues to be impacted while air quality remains a problem.

Improving air quality and safeguarding public health is largely beyond the control of individuals and is reliant on proactive best practice implementation by emitting industry and effective management by regulatory authorities. Bearing in mind the points above I make the following comments:

⁵<https://www.esr.cri.nz/digital-library/environmental-health-report-air-pollution-health-risk-assessment-mount-maunganui/>

⁶ [\[2023\] NZEnvC 001 Swap Stockfoods Limited v Bay of Plenty Regional Council](https://www.justice.govt.nz/assets/2023-NZEnvC-001-Swap-Stockfoods-Limited-v-Bay-of-Plenty-Regional-Council.pdf)
<https://www.justice.govt.nz/assets/2023-NZEnvC-001-Swap-Stockfoods-Limited-v-Bay-of-Plenty-Regional-Council.pdf>

⁷<https://www.esr.cri.nz/digital-library/environmental-health-report-mount-maunganui-air-quality-monitoring-review-2022/> and <https://www.esr.cri.nz/digital-library/mount-maunganui-air-quality-monitoring-review-2024/>

Comments on the Proposal

Effective management of discharges from industrial activities or trade premises is important in protecting the health of the public.

Although the Waste Management New Zealand site is in an industrial zone there are a number of vulnerable people, groups, and sensitive activities in close proximity to the Waste Management site. For example, there are residences, kaumātua housing (papakāinga) less than 100 meters to the southwest, a kōhanga reo and Whareroa Marae about 200 meters also to the southwest, and five early childhood centres inside the Mount Maunganui airshed.

There are also vulnerable populations and sensitive activities adjacent to the industrial zone as a whole, such as schools, childhood centres and kōhanga reo (Figure 1).

I have outlined the disproportionate health impacts of poor air quality to people in these groups.



Figure 1. [Airshed Mount Maunganui \(arcgis.com\)](https://boprc.maps.arcgis.com/apps/Embed/index.html?webmap=27a304e541694b06b979ce2fec9b534b&extent=176.1482%2C-37.6872%2C176.2571%2C-37.6353&zoom=true&scale=true&search=true&searchextent=true&disable_scroll=true&theme=light)⁸

There are also approximately 10,000 people working in the Mount Maunganui airshed every day.

For these reasons, I am pleased to see the council officer's section 92 request for more information seeking an assessment of effects on sensitive receptors including childcare centres and schools within the vicinity (regarding all contaminants, including odour), and for the

⁸https://boprc.maps.arcgis.com/apps/Embed/index.html?webmap=27a304e541694b06b979ce2fec9b534b&extent=176.1482%2C-37.6872%2C176.2571%2C-37.6353&zoom=true&scale=true&search=true&searchextent=true&disable_scroll=true&theme=light

applicant to consider and discuss separation distances. The lack of adequate separation to vulnerable populations is a significant public health concern.

In the absence of New Zealand guidance and for information, the Environment Protection Authority Victoria⁹ provides advice on separation distances between industrial land uses that emit odour and/or dust, and sensitive land uses. The recommended distance between recycling and purification of waste oils (mineral oils, grease trap waste, tallow etc.) and sensitive populations is 500 meters. This emphasises the public health risk and vulnerability of the population located less than 100 meters from the site. It also highlights the substantial reliance for robust operational controls, and proactive regulatory oversight, low thresholds for regulatory intervention such as consent reviews, compliance and enforcement to protect human health.

Bearing in mind the close proximity to sensitive neighbours, I would expect to see the applicant carefully consider the pros and cons, including public health, of alternative locations.

Waste Management New Zealand initially lodged their application in 2016.¹⁰ Proposed changes to the Regional Air Plan seeking to better manage known air quality issues in the Bay of Plenty were also made public in 2016. Improved air quality monitoring in Mount Maunganui in 2018 resulted in this air shed being gazetted polluted in 2019. Concerns about air pollution and health in this area have clearly been well known over the last eight or nine years.

In an area where air quality is significantly harming human health¹¹ and presents a number of public health concerns, I have previously expressed publicly that I would like to see emitters pre-empt regulatory requirements and proactively implement best practice controls to improve public health in a timely manner. Although, improvements in 2019 to their processes are a step in the right direction by the applicant, I am concerned that a further five years have passed where complaints continue to be received, particularly when odour complaints have been validated and local monitors have measured exceedances of the national guideline for hydrogen sulphide (H₂S).

Should this application be approved, I would like to see a technical review undertaken after one year and every five years thereafter to ensure that the applicant continues to operate to best practices and to verify the predicted effectiveness of the planned emission control by the applicant. I would expect the applicant to demonstrate that it has taken steps to continually reduce air emissions.

Air Emissions

As mentioned earlier, the Waste Management New Zealand site is within the Mount Maunganui airshed which has a polluted status. This is due to breaches of the national environmental standard for PM₁₀. The airshed has historically exceeded the World Health Organization annual ambient guideline for PM_{2.5} and has no room for any increase in PM_{2.5} emissions.

It is important to note that SO₂ is a secondary pollutant that, once emitted, goes on to form fine particulate (PM_{2.5}). Thus, emissions of SO₂ have significance for ambient levels of both PM_{2.5} and PM₁₀.

⁹ [Separation distance and landfill buffer guidelines https://www.epa.vic.gov.au/about-epa/publications/separation-distance-and-landfill-buffer-guidelines](https://www.epa.vic.gov.au/about-epa/publications/separation-distance-and-landfill-buffer-guidelines)

¹⁰ [AEE, Application for Resource Consent Form 4C, Part 2, Section 4 https://atlas.boprc.govt.nz/api/v1/edms/document/A4829086/content](https://atlas.boprc.govt.nz/api/v1/edms/document/A4829086/content)

¹¹ [Air Pollution: Health Risk Assessment Mount Maunganui https://www.esr.cri.nz/digital-library/environmental-health-report-air-pollution-health-risk-assessment-mount-maunganui/](https://www.esr.cri.nz/digital-library/environmental-health-report-air-pollution-health-risk-assessment-mount-maunganui/)

No less important to public health is that Mount Maunganui airshed also has at times in some locations ambient air quality levels of particulate matter less than 2.5 microns (PM_{2.5}), sulphur dioxide (SO₂) and nitrogen dioxide (NO₂) that are also elevated relative to New Zealand and World Health Organization health-based guidelines. As mentioned above, these guidelines provide concentration limits for the protection of human health.

This activity will emit contaminants from both stack and fugitive sources. Although the applicant's consideration of classical pollutants (e.g. SO₂) from stack sources appears comprehensive and the updated air quality assessment is consistent with good practice, volatile organic compounds, particularly benzene, appear to have been overlooked. While we are aware that Bay of Plenty Regional Council have recently begun monitoring benzene and at the time of writing the initial quarterly results show values well below the annual guideline value, there has been no assessment of fugitive sources by the applicant.

Fugitive emissions¹² from an oil recycling facility are expected and are likely to be significant.

Contaminants such as benzene, a known carcinogen, need to be characterised, quantified, and assessed. I note the odour complaints associated with this activity, most of which are substantiated, refer to benzene/petroleum odours. While odour continues to feature in the majority of calls to the Pollution Hotline about air quality issues in the Mount Maunganui,¹³ a complete assessment of all contaminant effects is needed to ensure the protection of public health.

The sense of smell is important for ensuring health and wellbeing. The sensory system provides people with the opportunity to enjoy their environment and identify safe food. The detection of unpleasant or offensive odours alerts humans to harmful substances in the air, food, or water.

Therefore, frequent exposure to unpleasant smells, even at low levels, means people are regularly on alert. The assessment documents some improvements in downwind levels of H₂S measured at Whareroa Marae and attributes these to the implementation of carbon filters on some sources at Waste Management New Zealand. However, in the absence of a comprehensive site emissions inventory that includes all sources of discharges to air (i.e., including fugitives), it is unclear what other sources are present. Whareroa Marae continues to measure exceedances of the national guideline for H₂S.

Duration of Consent

I understand the applicant continues to seek a duration of consent of 30 years. Such a lengthy consent period may not be prudent at this time for a number of reasons.

In practice, industrial conditions of consent set many years ago, subsequent monitoring and enforcement have not been adequate to protect public health¹⁴. It would seem reasonable to avoid a repeat of this situation.

¹² The US EPA defines a fugitive emissions component as *any component that has the potential to emit fugitive emissions of VOC (or methane) such as valves, connectors, pressure relief devices, open-ended lines, flanges, certain covers and closed vent systems, certain thief hatches or other openings on a storage vessel, compressors, instruments, meters, and yard piping.*

¹³ Bay of Plenty Regional Council, Mount Maunganui Industrial Air Quality Network Newsletter, December 2024

¹⁴ [\[2023\] NZEnvC 001 Swap Stockfoods Limited v Bay of Plenty Regional Council Paragraph 166](https://www.justice.govt.nz/assets/2023-NZEnvC-001-Swap-Stockfoods-Limited-v-Bay-of-Plenty-Regional-Council.pdf)
<https://www.justice.govt.nz/assets/2023-NZEnvC-001-Swap-Stockfoods-Limited-v-Bay-of-Plenty-Regional-Council.pdf>

There is uncertainty around the site's long-term land use at this location since the Tauranga City Council, Mount to Arataki Spatial Plan¹⁵ identifies the area as a transition industrial area.

The applicant intends to heat the thermal oil heater using distillate oil or a distillate oil/diesel blend fuel, however the National Policy Statement for Greenhouse Gas Emissions for industries that use fossil fuel combustion devices to generate industrial process heat allow a maximum consent duration of 10 years¹⁶. While it is sensible to consider consents required under different legislation to discharge contaminants, I am uncertain whether the National Policy Statement and National Environmental Standards for Greenhouse Gas Emissions from Industrial Process Heat applies to this activity.

Conclusion and Decisions Sought

This activity has the potential to impact public health and wellbeing. While upgrades are proposed which are likely to improve public health, **I am not satisfied from the information provided to me**, that this activity will contribute to improving air quality to the degree that public health is protected. I am also uncertain that process and site improvements will occur at regular intervals and within an acceptable timeframe over the substantial 30-year consent duration sought.

For these reasons, I **neither support nor oppose** the application in its current form provided Council seeks additional information and imposes conditions of consent that will protect the wellbeing of the public going forward.

Should consent be granted, I would like to see conditions that effectively control the activity's emissions by addressing the following:

- A technical review undertaken after one year and every five years thereafter to ensure that the applicant continues to operate to best practices and to verify the predicted effectiveness of the planned emission control by the applicant to demonstrate that it has taken steps to continually reduce air emissions.
- Monitoring (point source and fugitive) and discharge limits on emissions to provide evidence of compliance to the consent conditions.
- Annual reporting to consent authorities and the local Medical Officer of Health of the activity's compliance with consent conditions.
- No detectable offensive, objectionable, noxious or dangerous odour beyond the boundary of the site.
- Notification to the Medical Officer of Health within five working days of an abatement notice or enforcement order served on the applicant.
- Robust and proactive complaints procedures which trigger a review of consent conditions by the consenting authorities in the event of validated complaint.

¹⁵ [Te Mahere ā-Takiwā o, Mauao ki Arataki Mount to Arataki Spatial Plan, March 2024.](https://www.tauranga.govt.nz/council/council-documents/strategies-and-plans/action-investment-plans-aips/mount-to-arataki-spatial-plan)
<https://www.tauranga.govt.nz/council/council-documents/strategies-and-plans/action-investment-plans-aips/mount-to-arataki-spatial-plan>

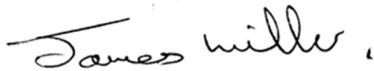
¹⁶ [National Policy Statement for Greenhouse Gas Emissions from Industrial Process Heat | Ministry for the Environment.](https://environment.govt.nz/acts-and-regulations/national-policy-statements/national-policy-statement-for-greenhouse-gas-emissions-from-industrial-process-heat/#factsheets-and-guidance) <https://environment.govt.nz/acts-and-regulations/national-policy-statements/national-policy-statement-for-greenhouse-gas-emissions-from-industrial-process-heat/#factsheets-and-guidance>

- Regular reviews by the consent authorities throughout the duration of consent, including a requirement for the consent authorities to undertake a review when the Medical Officer of Health raises concerns that public health may not be protected.

The National Public Health Service and I **will not** gain an advantage in trade competition through this submission. This submission seeks to provide helpful, objective, and independent input to assist Bay of Plenty Regional Council in protecting sensitive receiving environments¹⁷ and human health.¹⁸

I **wish to be heard** in support of this submission and the National Public Health Service and I would not be prepared to consider presenting a joint case with others who make a similar submission.

I **am willing** to participate in formal prehearings with the consent authority and applicant to discuss this submission. Following the receipt of this submission and at the convenience of the applicant, I also wish to undertake a visit to the application site.



Dr James Miller
Medical Officer of Health
National Public Health Service Te Manawa Taki
Bay of Plenty & Lakes

Copy to Applicant:
Waste Management New Zealand
C/- Tonkin Taylor
PO Box 317
TAURANGA 3144
rcalland@tonkintaylor.co.nz

¹⁷ Bay of Plenty Regional Natural Resources Plan, Purpose

¹⁸ Bay of Plenty Regional Natural Resources Plan Objective

Appendix 1

About Health New Zealand | Te Whatu Ora

Health New Zealand | Te Whatu Ora (Health New Zealand) leads the day-to-day running of the health system across Aotearoa New Zealand, and either provides or commissions services at local, regional and national levels. Under the Pae Ora (Healthy Futures) Act 2022, one of the key objectives of Health New Zealand is “to promote health and prevent, reduce, and delay ill-health, including by collaborating with other agencies, organisations, and individuals to address the determinants of health.”

About National Public Health Service

The National Public Health Service (NPHS) is a division of Health New Zealand and leads the delivery of Health Protection, Health Promotion and Prevention services, as well as working with the Public Health Agency in the Ministry of Health - Manatū Hauora on intelligence, population health and policy.

As a Te Tiriti o Waitangi partner, National Public Health Service advocates for equitable health outcomes, by striving to eliminate health differences, particularly for Māori, and build towards Pae Ora (healthy futures) for everyone.

About Te Manawa Taki Region

Te Manawa Taki represents communities within Taranaki, Waikato, Bay of Plenty, Lakes District, and Tairāwhiti.

About Medical Officers of Health and Health Protection Officers

Medical Officers of Health and Health Protection Officers are appointed by the Director General of Health under [Section 7A of the Health Act](#), and have a responsibility to reduce conditions within their local community which are likely to cause disease.