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SUBMISSION ON THE DRAFT PROPOSAL FOR A WASTE LEVY IN NEW ZEALAND

**Name of
Submitter: Watercare Services Limited**

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1. Introduction and Reason for Submission

- 1.1 Watercare Services Limited (Watercare) was established in 1992 and is responsible for supplying the Auckland region with bulk potable water, reticulated through a regional water network. Watercare also supplies wastewater treatment and reticulation of wastewater for the majority of the Auckland region.
- 1.2 Watercare is a council organization under the Local Government Act 2002 and it is a company registered under the Companies Act 1993.
- 1.3 The shareholders of Watercare are the city and district councils of Auckland, Manukau, North Shore, Waitakere, Papakura, and Rodney.
- 1.4 Watercare treats 290,000 cubic metres of wastewater per day at the recently upgraded Mangere Wastewater Treatment Plant. The treatment plant services Auckland City, Manukau City, Waitakere City, and Papakura District. Watercare receives wastewater from around 800,000 people and industrial customers equivalent to a further population of 370,000. The treatment process generates about 300 wet tonnes of solid material (sewage sludge) per day. This results in the generation of approximately 100,000 wet tonnes of biosolids per annum.

- 1.5 Biosolids are an outcome of the updated wastewater treatment processes employed at the Mangere Plant in order to meet resource consent conditions, which required the decommissioning of the oxidation ponds. These new processes allow the recovery of methane gas which is in turn utilised to power gas turbines at the plant with the result that it is around 40% self sufficient in energy requirements.
- 1.6 Watercare is currently undertaking significant research and development to reduce the volume of biosolids utilising drying and other technologies in addition to undertaking biosolids reuse trials.
- 1.7 With the methane recovered, the residual biosolids are currently used to rehabilitate 35 hectares of former oxidation pond land alongside the plant in order to stabilise the site, facilitate long-term maintenance and make it accessible to foot and light vehicle traffic. The rehabilitation areas are specifically engineered to receive the biosolids.
- 1.8 Beneficial reuse trials demonstrating the application of the biosolids to forestry and designated agricultural land are planned to start within the next twelve months. These trials are designed to be highly consultative and to build Watercare's and its stakeholders understanding of the potential for beneficial reuse of biosolids as an agricultural fertiliser for a specific range of applications.
- 1.9 Watercare is New Zealand's largest company in the water and wastewater industry and is recognised as a leader in environmental business practice. Watercare's commitment to environmental best practice is demonstrated through involvement in national working groups on the application of biosolids to land and active research into this method of beneficial reuse.
- 1.10 As New Zealand's largest producer of biosolids, the introduction of a waste levy could impact Watercare's business significantly.

2. Comments on the Draft Proposal for a Waste Levy in New Zealand:

- 2.1 Watercare supports the need to encourage waste minimisation and the delivery of a higher and more sustainable recycling and recovery performance in New Zealand.
- 2.2 Watercare suggests that the terms "*beneficial reuse*" and "*final disposal*" must be clearly defined in order to ascertain which activities will derive the most benefit from a levy. This, in turn, should drive the development of criteria that define an activity's entitlement to exemption or rebate. Activities that qualify as the "*beneficial reuse*" of waste might include, but are not limited to, composting or mulching organic waste for sale, the use of composted or mulched organic waste as a partial top soil replacement, landfill rehabilitative purposes or marginal land enhancement. Activities that qualify as "*final disposal*" might include, but are not limited to, those

that remove a waste product from the waste hierarchy without providing social or environmental benefit.

2.3 It is essential to develop a workable definition and guideline of:

- a. what constitutes a “landfill”,
- b. the type of activities into which waste levy revenue is directed, and
- c. where the funds are directed i.e. waste minimisation, waste avoidance, or “*beneficial reuse*” activities only. Criteria that allow clear and consistent decisions on the allocation of the fund need to be developed in consultation with the parties affected by the waste levy.

2.4 It is generally agreed that a precautionary approach to biosolid’s application to land is required in New Zealand for predominantly cultural, health, and environmental reasons. In this regard, Watercare has been involved in the development of guidelines for the safe application of biosolids to land in New Zealand. The guidelines state that biosolids can and should be used beneficially. The guidelines are endorsed by the Ministry for the Environment, the Ministry of Health, and the Ministry of Agriculture and Forestry. Examples of the beneficial use of biosolids in other countries includes the restoration of depleted cropping soils, maintenance or enhancement of soil fertility in forests, rehabilitation of mine tailings and quarry sites, landfill cover and fertiliser for golf courses, parks and gardens.

2.5 It should be noted that there is social apprehension surrounding the reuse of biosolids in New Zealand. Watercare is concerned that the producers of biosolids will be penalised, as the potential uses for biosolids may be precluded by negative community perceptions. Watercare believes that the demonstration of the potential of biosolids, supported by science, is required before the widespread use of biosolids will gain support in New Zealand. Watercare’s monitored trials will address a number of factors including:

- soil improvement,
- soil condition & functionality, and
- consultation with key stakeholders.

These demonstrations will, by necessity, take time and this need should be considered if any levy is to be applied.

2.6 Watercare supports the contention that biosolids should be exempt from any waste levy (footnote 3 in the draft proposal). This is because Watercare has adopted strategies that:

- minimise the volume of biosolids generated at the Mangere Wastewater Treatment Plant,
- treat the final biosolids to a high degree so that it is essentially an inert material. This process includes reducing the methane content of the biosolids and reusing the extracted methane for power generation at the plant,

- realise the potential for the beneficial use of biosolids by rehabilitating the former oxidation pond sludge containment area.

2.7 Watercare has implemented these waste minimisation, waste avoidance and beneficial reuse strategies in the absence of a waste levy. Watercare suggests that the waste levy should target commercial landfills receiving materials that could be reused. Rehabilitation projects that aim to repair environmental degradation, such as that caused by quarrying or landfills, should be exempt from any waste levy and considered as the beneficial reuse of waste products.

2.8 Any waste levy be should be implemented through a staged process over a longer period than outlined in the proposal. An increase in the proposed period between levy quantum increases should be considered. This allows affected parties to reasonably plan for any increase in costs. The levy poses a challenge in this regard as the cost of disposal would need to be passed on to customers. For Watercare, the increase in cost, if applicable, would be managed most appropriately within the established planning framework and timeframes and in conjunction with Watercare's customers.

2.9 Given Watercare's role in the control and treatment of wastewater supplied by certain Territorial Authorities, the process, eligibility and allocation of levy funding is an important issue. The conditions outlined in the draft proposal for the distribution of the levy revenue fund may favour Territorial Local Authorities who possess "final disposal" facilities, such as landfills, within their jurisdiction. It is not clear how Territorial Local Authorities who do not possess "final disposal" facilities are to benefit from the Territorial Local Authority component of the levy revenue fund. Certainly, it appears that this situation may actually favour the creation of final disposal facilities, as this would allow Territorial Local Authorities to access a greater proportion of the levy revenue fund. Watercare suggests that a levy revenue fund distribution method based on the relative contribution of waste producers to a waste stream is required.

2.10 In terms of waste minimisation *at the source* of waste production, it should be noted that Watercare is not able to manage the total volume or load of wastewater received at the Mangere Wastewater Treatment Plant from domestic customers and therefore cannot specifically reduce the total volume of solids received at the treatment plant. This factor should be considered when applying any waste levy that promotes waste reduction to municipal water and wastewater suppliers.

2.11 Watercare also notes that it has limited control on the generation of waste such as sludges, grit and screenings that are associated with a high standard of potable-water and wastewater treatment. This factor should be considered when applying any waste levy that promotes waste reduction to municipal water and wastewater suppliers.

2.12 Watercare broadly supports having a national waste levy in New Zealand, subject to the issues raised in this submission being addressed to Watercare's satisfaction.

3. Conclusion

Watercare seeks participation in the development of a waste levy for New Zealand. Watercare believes that any waste levy for New Zealand should not unreasonably add a compliance cost to municipal wastewater service providers without firstly ensuring the provision of viable options of beneficial reuse, reduction or disposal of the biosolids they produce. The beneficial reuse of biosolids has been demonstrated in other countries, yet there remain barriers to the immediate replication of these uses in New Zealand.

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