CentrePort
Wellington

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Report on Medical Waste (Wellington) Limited By CentrePort Management To Wellington Regional Council

The recent media storm on the alleged discharge of higher than acceptable emissions into the atmosphere by the Miramar waste incineration operation of Medical Waste (Wellington) Limited (MWWL) reinforces the view of Directors of the Company that while it has been able to continue to operate over a long period of time within accepted safe discharge limits, the relative proximity of the built up areas which have evolved and overlook the site, will always make the business operation there contentious with the public - regardless of the performance of the plant.

In this regard, the Board of MWWL has for some time been considering the relocation of the business operation to an industrial site and also to replace the current technology with new advances in processing quarantine waste.

It is currently monitoring and evaluating the installation and trialling of new quarantine waste processing technology at the Auckland site of the Medical Waste Croup. This site utilises rotary autoclave technology to sterilise the waste product which is then ground and compressed into material suitable for discharge to land.

This method avoids the need to use the current high temperature incineration techniques which can give rise to the release of emissions, albeit in relatively minute quantities.

Dioxins is a general term used for a group of 210 related chemical compounds. Only one member of this group has been recognised by the World Health Organisation Experts as being a class I carcinogen (namely 2378 TCDD).

The WHO Expert Committee further stated that workers who had been highly exposed to this single compound would have an increased cancer risk comparable to that from environmental tobacco smoke.

Dioxin studies in New Zealand by the Ministry for the Environment showed that domestic fires are the single major source of dioxins in our atmosphere.

The current operation has involved a schedule of regular monitoring and testing of complex discharge gases by both the Company and the Wellington Regional Council. The regular testing process in June 1999 identified **a** diverse range of emissions results of which the media has been led to focus on the high end result only. In fact the other test resulted in **a** level 41 times less than the first test.

This was not mentioned in the media release.

The current plant in use at the site is a high temperature incinerator plant.

While the Discharge Consent contains emission standards which the plant is required to meet it is of note that there are currently no set limits on what is an acceptable level of dioxin emissions for the Miramar plant. The plant has complied with the Discharge Consent issued by the Wellington Regional Council.

Recent developments in industrialised countries have led to a level of 0.1 ng/m3 being generally accepted as the international standard.

New Zealand has, as yet, no set limits on dioxin emissions but it is expected that it will move to the 0. I ng/m3 requirement.

To achieve the 0.1 ng/m3 level, an incinerator will need major emission control equipment to be installed

When the original resource consent was grantedfor the incinerator, no dioxin emission limits were set. At that time the authorities accepted the incinerator without any emission controls.

The underlying reason why the incinerator was accepted without emission control was that the emissions are low compared to industrial standards and that modelling showed that the expected maximum ground level concentration of pollutants to be well within accepted guidelines.

The wide range in the June test results led to the identification of a plant fault in the combustion air system and this has been corrected with a subsequent improvement in plant performance.

A fresh set of tests for dioxin compounds in discharge gases has been commissioned for the **first week of October 1999** to be undertaken by Unilabs in conjunction with ESR

These tests are expected by management of MWWL to yield results in line with a substantial reduction in the levels of dioxin emissions compared to the high reading in June.

The complex nature of the testing process requires a substantial preparation period as well as an analysis and evaluation period. The results from these new tests are expected in November. This report timing is dictated by the extensive and lengthy laboratory treatment for the sampling that is required prior to actual analysis.

Despite the low to negligible health risk posed by the high temperature incinerator process, the Company recognises the growing negative perception of the business operation at it's current site and as a result, it's joint venture owners have focused on a managed programme to relocate the business operation which performs an extremely important function for the healthcare sector and other quarantine waste producers in the Wellington Region.

A MWWL Board decision is expected in the first quarter of the new calendar year which will focus on the timing for the relocation of the activity and also the appropriateness of adopting the new technology currently being evaluated.