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Report to Utility Services Committee
from Dan Roberts, Group Manager Operations

Security

1. Purpose

This paper is written as a result of the recent events in the United States and their implications for the security of our water supply activities.

2. Exclusion of the Public

Grounds for exclusion of the public under section 48(1) of the Local Government Official Information Act 1987 are:

That the public conduct of the whole or relevant part of the meeting would be likely to result in the disclosure of information for which good reasons for withholding exists, i.e. not to endanger the safety of any person.

3. Background

Since September 11th there have been various reported incidents within the United States that are said to be linked to the same terrorist organisations. These incidents have included the distribution of anthrax through the postal services.

Whilst the risk of attacks on water treatment facilities in the United States has been identified as high there is no indication that any incidents have occurred. We understand that security has been increased around the catchment areas and additional guards have been introduced around the treatment plants.

4. Operational Issues

There have been no reported incidents within New Zealand and no information received that we are operating in a high-risk situation. However, the Utility Services Division has as a matter of precaution assessed the risks associated with the operation of the treatment plants and the security of the water stored in the reservoirs.

Unlike the United States where the treatment plants are normally staffed 24 hours a day, in the Wellington region the treatment plants are staffed for eight hours a day during the week and are not staffed at the weekends.

Te Marua, Waterloo and Wainuiomata Water Treatment Plants are protected by security alarm systems that are monitored whereas at Gear Island Water Treatment Plant we are awaiting completion of the new chlorine treatment installation before the security alarm system can be fully activated.

All reservoir access hatches and pumping stations are alarmed whereby unauthorised access activates an alarm which is transmitted through the telemetry system to our standby duty operator.

Te Marua and Wainuiomata Water Treatment Plants supply chlorinated water; any marked reduction in quality parameters would immediately shut down the operation of the plant with the consequent alarm despatched through the telemetry installation to our standby duty operator.

The water supplied through Waterloo, which is abstracted from the aquifer, is not chlorinated and therefore poses the highest risk. The critical location for unauthorised addition of contaminant to the water would be at the Waterloo Treatment Plant.

The possibility of addition of contaminant into the distribution system is considered to be low risk as the pipes operate under high pressure with the result that it would be difficult to introduce a substance into the pipeline.

5. Immediate Actions

The possibility of unauthorised access into the Treatment Plants outside normal working hours has been identified as the highest risk and therefore a decision has been taken to obtain the services of a security company to provide additional security presence and surveillance. Te Marua, Waterloo and Wainuiomata are therefore provided with security guards outside normal working hours and Gear Island Water Treatment Plant is inspected and patrolled three or four times during the day outside normal working hours. This began on 19 October 2001.

The provision of this additional security is costing some \$9,000 per week.

It is not considered practical to provide additional security to the catchment areas and we have requested that existing staff operating within the areas increase their vigilance.

If alarms are received by our standby staff member he has been instructed to ensure that he is accompanied on any site inspection by a member of the security company.

It is proposed that the security systems at Te Marua and Waterloo be extended to include further access hatches which would be solid wired back into the existing security circuits. This would provide us with additional security.

At Wainuiomata the system installed after the plant was completed requires replacing. The existing system has been damaged by lightning and it is neither practical nor

economically viable to continue maintaining it. A hard wired security system as installed on other sites is a far more practical solution.

The cost of upgrading the existing system, renewing the system at Wainuiomata and installing a system at Gear Island will be in the region of \$70,000.

Once this work is completed it is believed that onsite security guards can be dispensed with.

Consideration has been given to a proposal to install remotely monitored closed circuit television. This monitoring would be carried out by a contracted security company. However, this development is not considered necessary at this stage but will be reviewed in the event that the perceived level of risk escalates.

All water treatment plants have been visited by the Police and we are awaiting a report of their findings before taking any further steps.

At the present time a regular programme of sampling and analysis is carried out throughout the Production and Distribution systems. No additional sampling and analysis will be carried out prior to receiving guidance from the Ministry of Health.

It is very difficult to carry out sampling and analysis for spurious contaminants until such time as you know vaguely what you are looking for.

We have been contacted by consultants who are carrying out an assessment of the situation for Watercare in Auckland. We are awaiting results of their investigation.

6. **The Future**

Instructions have been issued to immediately upgrade the existing security systems at Te Marua and Waterloo, to replace the system at Wainuiomata and to immediately proceed with the installation at Gear Island. The Wellington Regional Council will continue to liaise with the Police and will act on their recommendations. We will assess any information received from Watercare's consultants and will continue to act on any advice received from the Ministry of Health.

Expenditure will be managed within existing budgets.

7. **Recommendations**

That the report be received and note the actions taken by staff.

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