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

Y2K Preparedness

1 Purpose

This paper has been prepared in order to update members of the Utility Services Committee as to progress on Y2K preparedness.

2 Background

Since March 1998 the Water Group have been working to ensure that installed systems and equipment are compliant for the Y2K syndrome.

Presentations have been given to members of this Committee as to the way in which this compliance has been ascertained. In addition, an onsite test has been demonstrated at Te Marua in which the system clock was set to run through the critical time period during the transition from 1999 to 2000.

The work preceding this test included the identification of all equipment and systems, preparation of a comprehensive listing of these items, establishing contact with the manufacturers and suppliers, and obtaining reassurance that all items were Y2K compliant. Onsite tests were then carried out using software developed by General Motors in which the operation of equipment and systems were run through Y2K critical dates.

All this work was identified under the terms of an Action Plan, which was developed by a working party comprising of members of the Operation Group. The format of these Action Plan meetings was akin to brainstorming sessions during which various scenarios were identified which could be affected by non Y2K compliant equipment and systems. Contingency plans were developed to counter this situation.

During the course of these sessions the necessity for possible manual operation of the treatment facilities became apparent, and therefore plans were put in place to simulate failure of critical items of equipment and systems. These tests were scheduled to occur during June. Due to other projects that are ongoing, and due to delayed completion of some of these projects, it is impractical to consider further disruption to the operation of the department by implementing manual test procedures until July.

Early this year the Government determined that the Emergency Management and Civil Defence Department should establish a Y2K incident monitoring mechanism for utility organisations and emergency services.

This operation involved the preparation of a questionnaire which was circulated to all utilities and emergency services. The returns from these questionnaires were not as reassuring as they deemed necessary. The results being highlighted at a Local Government Conference held in Wellington in March of this year. It should be stressed that the monitoring procedure is exactly that, it does not attempt to instruct organisations how they should test for compliance, but is intended to monitor the organisations perception of their readiness.

A second questionnaire has indicated that progress has been made and that there is now more confidence being exhibited.

The Local Government Conference also determined that all organisations should undertake audits of the procedures they had used to determine readiness.

The Water Group do not believe that as yet they have completed all necessary work to ensure compliance and are continuing to look for potential problems and test the installations. Replacing equipment that is or has been determined as non compliant is a natural progression and will be followed by retesting of the system to ensure that the new equipment has not affected the integrity of the complete control system.

3 **Audit**

Our procedures have been inspected by Audit New Zealand who have determined their satisfaction as to the principles involved. Whilst this was reassuring, we did not believe that this was sufficient and commissioned Beca Ferner and Hollings to carry out an indepth audit of what had been done.

The results of this audit have now been received and reveal several additional steps which they consider we should take. Namely:

- Three personal computers used for monitoring and operation of the control system have not been individually tested for compliance.
- Seven pH meters at Te Maura have not been tested, these are non critical items and have no real impact on the treatment process.
- No Contingency Plan was available for inspection at the time of the audit.

The main point they make is that we have not allocated criticality to individual pieces of equipment. This point is not disputed. However, all items of equipment and software have been treated with the same measure of criticality, with the risk attributable to each individual phase of operation being assessed.

It is believed that the results of this audit were reassuring.

4 **Risk**

In the early stages of the procedures to determine compliance it was identified that the whole process was one of business risk, and whilst the Action Plan identified the requirement for various actions to be undertaken, it did not initially fully address the problem of business continuity.

5 **Power**

What it did reveal was the reliance that it placed on the provision of power. The Water Group has had numerous discussions and presentations with the relevant power generation, distribution and network companies and now has some measure of confidence that we will receive power to our installations. Information has been given to the network company indicating the most important installations under our control.

6 **Business Continuity Planning**

Our Network Section was commissioned by Wellington City Council to prepare a Business Continuity Plan for the reticulation system within the City boundaries. This was done utilising standard format supplied by Wellington City. This work identified a process plan which highlighted key processes. The operation of these processes was analysed and the requirement for contingency action identified. See Process Plan 1 (**Appendix 1**).

Following the completion of this action it was decided to perform the same exercise for the operation of the Water Group.

The results of this exercise produced a Process Plan again highlighting key processes which were rated for criticality and again the necessity for contingency action identified. See Process Plan 2 (**Appendix 2**).

It can be seen that these Process Plans are interlinked.

7 **Contingency Planning**

The Action Plan identified the necessity for setting up Incident Rooms and an Emergency Management Room. It also established the necessity for establishing communication links and a format for media release. It also identified the necessity for establishing communication links within the Wellington Regional Council. The format of these links will be as proposed by the Governmental Y2K Incident Monitoring Group utilising standard forms and transmitting these via fax machines.

8 **The Future**

It is now proposed to continue with inter group brainstorming in an attempt to identify further problems, to continue testing our installations and to further develop interaction between ourselves and the Territorial Authorities. As changes occur to any installation, we will carry out compliance testing to ensure that alterations have not compromised what has already been tested.

The major problem that we are faced with is the apparent difficulties that exist with reimbursing staff who have already been instructed to be in attendance on New Years Eve for a period of at least 24 hours operating in two shifts. In the event of system failure this attendance will have to be extended. At the present time it is proposed that all staff will be reimbursed in accordance with the terms and conditions of the Collective Employment Contract and that some form of recognition be made to acknowledge the commitment of our staff and their families.

9 **Recommendation**

That the report be received and the contents noted.

Report prepared by:

Approved for submission:

DAN ROBERTS
Group Manager Operations

DAVID BENHAM
Divisional Manager, Utility Services

Attachments

Appendix 1
Appendix 2

Process Plan 1
Process Plan 2