

11. REVIEW OF CHRISTCHURCH WASTEWATER TREATMENT PLANT

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The purpose of this report is to inform the Committee of the outcomes of an external review of the operation of the Christchurch Wastewater Treatment Plant.

BACKGROUND

The restructuring of Council units completed in December 2000 did not look closely at the operation of the Wastewater Plant because of the disruptions caused by the capacity upgrade work under way at that time. Subsequently a full independent review has been carried out by a team of three individual consultants from different firms with wide experience in wastewater treatment plant operation, strategic and compliance management (Frank Lewis of Sinclair Knight Merz, Jim Hodges of URS, Garry Law of Law Associates). The report was completed in October 2001.

KEY FINDINGS OF REVIEW

The key findings of this review covered the following areas:

- Management and staff structure
- Capital project management
- Benchmarking as a practice
- Scope of performance objectives and measures
- Marketing the plant
- Operational processes procedures and costs
- Energy management
- Maintenance practices and costs
- Occupational safety and health
- Perceived risks to the Council
- Compliance with statutory requirements
- Neighbour relations

The comments associated with these areas are attached to this report. These findings have highlighted a number of areas where improvements can be achieved, as well as commenting positively on aspects that are seen to be operating well. The report recommends a direction for the next six months to:

- Develop a structured approach to Managing Risk
- Develop Operating Procedures that support the Resource Consent process and the associated Management Plans
- If possible, automate the manual data transfer to the Laboratory database

PROGRESS ON RECOMMENDATIONS

1. Risk Management

The development of a Plant Risk Management Plan has commenced with staff training in risk identification, assessment and management practices, and the preparation of preliminary risk assessment and draft risk register completed. The completion of this risk management plan by the end of 2002 will identify the key risks and provide input to the capital works programme.

2. Operating Procedures

Clearly documented operating procedures and specific contingency planning for high risk items will be a necessary adjunct to achieving and demonstrating consent compliance, particularly if consent breaches need to be defended. Documented operating procedures will also reduce risk exposure by committing institutional knowledge to paper and will provide an additional staff training resource. The development of these operating procedures covering all aspects of plant is programmed to commence in June 2002 and will be completed in August 2003.

3. Automate Data Transfer

The key plant operating data is stored on the Laboratory server, as it is used in collating other Laboratory data and the annual report statistics. Transfer of some of this data has been manual following data validation. Automatic transfer of this data once validated has already been actioned.

The above are the main recommendation areas highlighted in the review. There are a large number of other minor recommendations that have been identified, considered and implemented as appropriate. Examples of such recommendations are:

- To set up some process benchmarking with like plants in other countries where the trickling filter/solids contact process is used
- Improved capital project reporting
- Move to computerised maintenance system
- Raise public awareness of the plant

SUMMARY

This review has provided an independent comprehensive review of the operation of the Christchurch Wastewater Treatment Plant. The review has clearly identified areas where improvements can be made, in particular where future resource consent requirements may impact on plant operations and risks to the Council. The review has been very helpful in identifying improvement opportunities and has at the same time provided accolades for some aspects of the operation. Copies of the full report can be made available upon request.

Chairman's

Recommendation:

1. That the information be received.
2. That staff report back to the Committee on efficiency and effectiveness measures for a range of different treatment technologies.