# 13. CONSENT FOR CHRISTCHURCH WASTEWATER DISCHARGE UPDATE ON PROGRESS

| Officer responsible<br>Waste Manager                                       | Author Walter Lewthwaite, Liquid Wastes Engineer |
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| Corporate Plan Output: Waste Management Treatment and Disposal 9.2 text 14 |  |

The Community Secretary advises that this report has been promoted to all Community Boards on the basis that it will involve large financial decisions of the Council in due course. Whilst the residents of the eastern part of the city have an interest as ratepayers and recreational users of the Avon/Heathcote Estuary and the sea, it has been promoted to us for information at this time.

If the Board was of a mind, it could be referred to the Environmental Committee for further consideration

### **Background on wastewater strategy**

Since the early 1960's the Christchurch Wastewater Treatment Plant has discharged treated effluent to the western edge of the Avon-Heathcote Estuary, and from there it flows to the sea. The consent for this expires in 2001. While the city can be proud of the treatment provided in the past, it is timely to develop a longer-term vision for management of the city's wastewater. This vision will include the following components.

- Where feasible it is desirable to reuse and recycle wastes. For wastewater a major opportunity for this lies with the biosolids the stabilised solids produced during the treatment process. A consent has been granted for their reuse in forests around Christchurch, appeals have been settled, and it is intended that the Council will be operating this by about the middle of 1999. However it is expected the Council will be able to develop both a greater quantity and better quality of biosolids, with wider opportunities for reuse, such as agriculture and domestic gardens.
- A second area for significant improvement is in reduction of contaminants in industrial wastes. The Council has negotiated details of a new Trade Wastes Bylaw with industry, and when this is implemented it will have substantial incentives to reduce the level of trace elements.
- An expansion is under way at the treatment plant to accommodate 30 years of growth in the city's population as the present plant is vulnerable to malfunction from overload. The expanded plant will produce a significantly improved quality of effluent compared with the present, particularly by reducing bacteria levels.
- In the future there may be a range of other improvement opportunities: e.g. reuse of "greywater", i.e. the non-toilet components of domestic wastewater, or opportunities to reduce the total volume of wastewater and the strength of its nutrient load. These opportunities are acknowledged in the recent Issues-and-Options report and a strategic plan for investigation and implementation of feasible options will be developed more during 1999.

However whatever happens in the future with these and other opportunities the treatment plant will still need to be operating, with a growing waste stream, after the present consent expires in 2001, and it will need a new consent to discharge its treated wastes.

#### Discharge consent process

In August 1996 the Council approved a process of seeking a new discharge consent. The first action was to set up a consultation program. One of the main vehicles for this has been a broad-based community Working Party, which has included representatives from the two eastern Community Boards, and this group has built up a high level of expertise and understanding of the issues and options available. Community consultation through the Working Party and other means has consistently indicated two top priorities in the minds of citizens – i.e. a desire for clean water in the receiving environment so it is safe and pleasant for its range of uses, and a desire for a long-term plan that is not constrained by immediate budgets.

After two years of consultation with the community, and investigation by a team of consultants, the Council resolved in August 1998 to "favourably consider" a direct ocean outfall, but subject to a list of conditions. (The full text of the Council resolution is attached as page 33, and all members of Community Boards have received copies of the "Easy-read" version of the consultants' report. **Copy available from Community Secretary**). The reason for this preference was that it was seen as the minimum cost option that would

- ensure shellfish standards are maintained on the beaches
- maintain ocean bacteria standards at their present high level, or probably better
- give the maximum possible reduction of sea lettuce nuisance in the estuary
- lead to confidence that contact recreation standards will be achieved consistently throughout the estuary.

The main action since that decision last August has been to commission the following teams of helpers whose work is now well under way.

- 1. A team of consultants led by Woodward-Clyde Ltd, and consisting of environmental scientists, wastewater engineers, sociologists and planners has been engaged to complete a detailed assessment of environmental effects (AEE) of two discharge locations, for a variety of effluent qualities. (These two locations are the present estuary edge, and the tentatively-preferred direct ocean outfall.)
- 2. A team of consultants led by Unisearch, of Sydney, has been engaged to do a study of current patterns in the estuary and Pegasus Bay, to feed into the AEE contract and enable a good picture to be obtained of the comparison between the impacts of the different locations and a range of possible treatment standards.
- 3. A trio of experts has been engaged as "peer reviewers" to oversee the work of these two teams of consultants, so that we will be involving many of New Zealand's leaders in these fields.
- 4. A group of 10 users of Pegasus Bay and the local beaches has agreed to act as an "Coastal Reference Team", reviewing the work of the technical experts to ensure it matches their own real-life experience of current patterns in Pegasus Bay.
- 5. A group from the Estuary Association has agreed to perform the same function for the estuary.

In addition the Working Party continues to provide a comprehensive "citizens' overview" of both the process and outcome, and later this year it will be asked to form a

recommendation to the Council on what option to finally select. Discussions continue with other groups as well.

# **Next steps**

The following key steps are planned from here on to obtain a consent. Note that the timetable is subject to change.

| - | complete scientific studies                                | April - May 99 |
|---|--|----------------|
| - | seminar for City Councillors                               | April          |
| - | review with teams 3 to 5 above, and the Working Party      | May            |
| - | draft assessment of environmental effects written up       | May            |
| - | consultation with interested groups, including Community   | May - June     |
|   | Boards, special interest groups, tangata whenua,           |                |
| - | Working Party forms recommendation to Council              | June           |
| - | Council selects final option                               | July           |
| - | assessment of environmental effects completed, on selected | July-August    |
|   | option   |                |
| - | application lodged for consent                             | August         |
| - | public submissions sought by Regional Council              | September      |
| - | consent granted  | December 99    |

Note that there will be on-going public interaction throughout the whole process. Note also there will be a more intensive period of public consultation, probably for the months of May and June.

Mr Lewthwaite's recommendation to the Burwood/Pegasus and Hagley/Ferrymead Community Boards is that they consider what role they wish to take in the main consultation stage, expected at this point in time to take place in the months of May and June.

# Chairperson's

**Recommendation**: That the information be received.

## On 31 August 1998 the Council passed the following resolutions:

#### The Council will:

- 1. Receive the report and the recommendations of the Working Party for an ocean outfall, noting that the recommendation is conditional upon the results of further investigations as detailed in the report.
- 2. Favourably consider for possible adoption, the implementation of an ocean outfall with appropriate staging of the project following and subject to:
  - (a) The investigations authorised below demonstrating that
    - (i) Contact recreation standards would be met on the surface above the outfall, and
    - (ii) Shellfish standards would be met at all points on New Brighton and Sumner beaches.
  - (b) Each stage of the project being reviewed on technical performance before any following stage is approved.
  - (c) The project, and each stage of it, being reviewed as part of the Council's usual process for the prioritisation of capital expenditure.
- 3. Authorise staff to commission a hydrodynamic model of the Estuary and nearshore parts of Pegasus Bay, and an Assessment of Environmental Effects (AEE).
- 4. Leave further decisions on details of technology until the modelling results and AEE are completed.
- 5. Engage in on-going community consultation and education on the issues and the continuing findings from research and AEE preparation.
- 6. Retain the experience and expertise of the Working Party to help review the ongoing research and AEE preparation, and develop appropriate conditions on a consent application.
- 7. Develop a coordinated plan for the western edge of the Estuary taking these objectives into account:
  - (a) the wastewater treatment plant,
  - (b) the lifelines project relating to the Ferrymead Bridge and its roading connections (with special reference to Humphrey's Drive), and the Heritage Cob Cottage,
  - (c) the Green Edge concept previously recommended to the Council,
  - (d) opportunities to enhance tourism, recreation, and the protection and enhancement of wildlife in this area".