**REPORT TO: ENVIRONMENTAL AND CONSUMER PROTECTION COMMITTEE** 

REPORT BY: DIRECTOR OF ENVIRONMENTAL AND CONSUMER PROTECTION

REPORT ON: RESULT OF STAGE 2 OF BALDOVIE STUDY

**REPORT NO: 270-2000** 

### 1.0 PURPOSE OF REPORT

1.1 To appraise members of the results of stage 2 of the study carried out by Dr. F. Williams and Dr. M. Roworth, to determine the probable effects on the health of local residents, of the operation of the former incineration plant at Baldovie.

### 2.0 **RECOMMENDATIONS**

2.1 That the committee accepts the findings of Dr. Williams and Dr. Roworth, and that no further work be undertaken, in respect of this study.

### 3.0 FINANCIAL IMPLICATIONS

3.1 There are no financial implications attached to this report.

## 4.0 EQUAL OPPORTUNITIES IMPLICATIONS

4.1 There are no equal opportunities implications in this report.

# 5.0 DUNDEE 21 IMPLICATIONS

5.1 Pollution is limited to levels at which natural systems can cope.

## 6.0 BACKGROUND

- 6.1 In response to concerns from residents in the location of the former incineration plant at Baldovie, the Council commissioned a study to be carried out by Dr. Fiona Williams of the Department of Public Health and Epidemiology of the University of Dundee, and Dr. Mike Roworth, Public Health Specialist at Tayside Health Board.
- 6.2 The study was designed in three distinct stages, with progress to each stage being dependent on the results of the preceding stage.
- 6.3 Stage 1 established the parameters by which Stage 2 would be carried out, by the process of rigorously examining existing data and standards for assessing the products of the incineration of municipal waste. In carrying out Stage 1 information was sourced from around the world, and an extremely comprehensive database of emission limit values and possible health effects was compiled.
- 6.4 The merits of Stage 1 have been recognised by the Scottish Centre for Infection and Environmental Health (SCIEH) who have published the content of Stage 1 as an authoritative reference document.

- 6.5 Having established the parameters to be used in Stage 1, Stage 2 of the study was then undertaken. This stage involved the establishment of an area within the city where the evidence of pollution might have been expected to be found, from the emissions of the former plant.
- 6.6 Within the area selected, a number of sampling sites were identified and soil samples taken from those sites. The samples were then submitted for analysis, to the Scientific Services Section of the Environmental and Consumer Protection Department. To ensure absolute neutrality, a coded system of sample labelling was used, so that staff in the laboratory would not know which samples came from which location.
- 6.7 In addition to the samples referred to above, control samples were taken from sites not associated with the former incineration plant.
- 6.8 Detailed results are contained in the report, a copy of which is available in the Members Lounge.
- 6.9 A main point of note in the report is that Dr. Williams selects an area which she considers would have been affected by the emissions from the former plant, which differs from that chosen by the consultants who prepared the Integrated Pollution Control Authorisation Application, in respect of the new Waste to Energy plant operated by Dundee Energy Recycling Limited (DERL).
- 6.10 In the case of the DERL application, the consultants have chosen an areas to the east and north of the locus, as being that primarily affected, whereas Dr. Williams has chosen an area to the south and west of the locus. The difference is a matter of difference in expert opinion, and cannot be overcome without prejudicing the independence of the study. Dr. Williams' study does also include, however, several samples taken within the area selected by the DERL consultants.
- 6.11 The results of the study are very detailed with considerable statistical explanation, and can be found in the main body of the report.
- 6.12 The principal conclusion is that no evidence exists of significant pollution from the former Baldovie Incinerator, and Dr. Williams concludes that there is no basis for carrying out any further study work. In particular Dr. Williams states that there is no evidence to justify carrying out Stage 3 of the study. (Stage 3 would have consisted of a study of the health of selected individuals).

## 7.0 CONCLUSIONS

- 7.1 The City Council has made every attempt to address the concerns of residents, by commissioning a "health study", as requested.
- 7.2 In commissioning the study, the best available expertise has been employed, from the disciplines of both epidemiology and public health medicine.
- 7.3 This powerful combination of knowledge and expertise in fields that are directly related to the subject, has produced a very thorough and methodical study, which has been subjected to peer approval from experts in various parts of the world.
- 7.4 The excellence of the work has been recognised by the publication of the results by SCIEH.
- 7.5 The conclusions represent the completion of the study.

### 8.0 CONSULTATIONS

8.1 The Chief Executive The Director of Support Services The Director of Finance

## 9.0 BACKGROUND PAPERS

9.1 Report prepared for Dundee City Council – Environmental Assessment – Baldovie Incinerator – Stage 2, by Dr. F. L. R. Williams and Dr. M. Roworth.

10.0

Date: 28<sup>th</sup> March 2000 Director of Environmental and Consumer Protection