

**REPORT TO: ENVIRONMENTAL & CONSUMER PROTECTION COMMITTEE –
21st OCTOBER 2002**

REPORT ON: BALDOVIE HEALTH STUDY – STAGE 3

REPORT BY: DIRECTOR OF ENVIRONMENTAL & CONSUMER PROTECTION

REPORT NO. 737-2002

1.0 PURPOSE OF REPORT

1.1 To advise members of the outcome of the Stage 3 Report of the Baldovie Health Study.

2.0 RECOMMENDATIONS

2.1 It is recommended that members accept the findings of the report and acknowledge that this represents the conclusion of the City Council's actions in this issue.

3.0 FINANCIAL IMPLICATIONS

3.1 There are no direct financial implications arising from this report.

4.0 LOCAL AGENDA 21 IMPLICATIONS

4.1 Information of concern to local residents is made available.

5.0 EQUAL OPPORTUNITIES IMPLICATIONS

5.1 None.

6.0 BACKGROUND

6.1 Reference is made to the meeting of this committee on 19th March 2001.

6.2 At that meeting members considered the recommendations of a Working Group set up by a meeting of this committee on 18th December 2000.

6.3 The meeting on 19th March 2001 approved the recommendation of the Working Group "that it be remitted to Dr. Fiona Williams and Dr. Mike Roworth to carry out a health study replicating that carried out in the vicinity of the Besancon Incinerator in France, on the basis that this would conclude any research/study work into the operations of the original Baldovie Incinerator as far as the City Council was concerned".

6.4 The study entitled "Investigation of the Incidence of Cancer in the City of Dundee and Environs" has now been concluded and was considered by the Working Group on Wednesday, 11th September 2002.

6.5 The decision of the Working Group was to accept the findings of the report, and to submit the findings of this report to this committee with a similar recommendation.

- 6.6 The report was carried out by Dr. Williams and Dr. Roworth, assisted by Dr. Andrew Lawson, formerly of Aberdeen University. Dr. Lawson was unable to attend the meeting of the Working Group as he has recently taken up a professorship in the United States.
- 6.7 The findings of the report are contained within the Executive Summary, which is attached at Appendix 1.
- 6.8 In terms of the original remit, the main finding is that no association could be found between residential proximity to the Baldovie Incinerator and the case cancers selected for the study.
- 6.9 The study did identify issues of clustering of certain cancers which were incidental to the study.
- 6.10 These clusters were not associated with the Baldovie Incinerator and are being investigated by Tayside NHS Board independently of this study.
- 6.11 Although not originally intended to come within the scope of the study, following concerns expressed by staff employed in the Council's Social Work Department, breast cancer was also included in this study as a case cancer (breast cancer has no known link to exposure to dioxin) to supplement an ongoing separate investigation into the issue.
- 6.12 This particular study found no evidence of clustering of breast cancer for the period 1979-96.
- 6.13 The study is based on data derived from residential proximity which is more significant in terms of exposure than employment proximity.
- 6.14 Notwithstanding this finding from the Baldovie Cluster Study, Tayside NHS Board and Dundee University are continuing their separate study based on the employment records of the staff concerned.

7.0 **CONSULTATIONS**

- 7.1 The Chief Executive, Director of Finance, Director of Support Services, Director of Social Work, Dr. Fiona Williams and Dr. Mike Roworth have been consulted in the preparation of this report.

8.0 **BACKGROUND PAPERS**

- 8.1 The following papers have been referred to in compiling this report.
1. Executive summary of "Investigation of the Incidence of Cancer in the City of Dundee and Environs" – a report of Stage 3 prepared by Dr. F. L. R. Williams, Dr. M. Roworth and Dr. A. B. Lawson.

2. Minutes of Meeting of Environmental and Consumer Protection Committee of Dundee City Council on 19th March 2001.

9.0 **SIGNATURE**

Director of Environmental & Consumer Protection Date: 27th September 2002

Appendix 1

EXECUTIVE SUMMARY

1. At the end of 2000 a publication by Professor Jean-Francois Viel linked residential proximity to a municipal waste incinerator with clustering of soft-tissue sarcomas and non-Hodgkin's lymphoma. This paper caused public concern within Dundee and we were asked to investigate the incidence of Non-Hodgkin's Lymphoma and Soft Tissue Sarcoma in Dundee City.
2. This study investigated the spatial distribution of groups of cancer that the research literature suggested *might* be associated with exposure to dioxins: Soft Tissue Sarcoma; Non-Hodgkin's Lymphoma; Hodgkin's Lymphoma; cancers of the liver, gall bladder, bile duct; Multiple Myeloma; Myeloid leukaemia; and other leukaemias.
3. The spatial distribution of breast cancer was investigated because of the concern raised by the Social Work Department. Breast cancer has no known link with exposure to dioxin.
4. The spatial distribution of the groups of cancers listed in points 2 and 3 was compared to the spatial distribution of a "control" group of cancers; the control cancers were selected if we found no evidence in the research literature of a consistent link with dioxin exposure.
5. There was no evidence of spatial clustering for all cancers combined; soft tissue sarcoma; other leukaemias and breast cancer.
6. There was evidence of clustering for myeloid leukaemia. The cluster centred to the north of the City of Dundee and did not encompass the Baldovie Incinerator.
7. There was evidence of clustering of Non-Hodgkin's Lymphoma. The cluster for females was small and centred on the north of the City of Dundee; the Baldovie Incinerator was not encompassed within the cluster. For males, the cluster was diffuse (radius 5.3 km), centred to the north of the City boundary but included the Baldovie Incinerator at its southern perimeter.
8. Focussed statistical tests, which compared the distance and direction from the Baldovie Incinerator to the cases with the distance and direction from the Baldovie Incinerator to the controls, found **no** evidence of a distance decline effect or of a directional effect.
9. Overall, we have found no evidence of an association between residential proximity to the Baldovie Incinerator and the incidence of non-Hodgkin's lymphoma and soft tissue sarcoma.