MORE ABOUT MERCURY

Following the report in the Spring edition about samples for Mercury taken at a crematorium, it is now possible to publish the results from two other crematoria in different parts of the country.

In the November edition of the Lancet, Volume 352, an article appeared concerning mercury levels in the hair of crematoria workers. In view of the claims made it was decided to carry out an investigation into possible mercury contamination of the grounds surrounding the crematorium.

The crematorium in question has carried out in excess of 112,000 cremations since opening 40 years ago.

It was decided to take five soil samples from within the crematorium grounds along the axis of the prevailing wind. The soil samples 9H005P and 9H004P were taken upwind of the crematorium chimney and the three remaining samples, 9H003P, 9H002P and 9H001P were taken downwind. The results indicate a higher concentration of mercury downwind of the crematorium (see Table A below). All the results, however, were within acceptable levels.

In July 1987 the Interdepartmental Committee on the Redevelopment of Contaminated land issued a number of 'trigger concentrations' for determining the significance of contamination in soil, ICRCL 59/93 2nd Edition July 1987.

If samples taken from a site are in below the trigger concentration it is reasonable to regard the site as uncontaminated. The trigger concentration for mercury in domestic gardens and allotments, which takes into account the possibility that food could be grown and mercury could enter the food chain, is 1mg/kg. The trigger concentration for parks, playing fields and open spaces is 20mg/kg. The concentrations found within the crematorium grounds ranging between 0.09mg/kg and 0.17mg/kg are below the trigger concentrations and therefore the ground can be considered to be uncontaminated.

TABLE A:

Sample Number	Distance from Chimney	Mercury (mg/kg)
9H005P	142 metres	0.09
9H004P	61 metres	0.10
9H003P	51 metres	0.17
9H002P	138 metres	0.17
9H001P	233 metres	0.09