

POLLUTION, PM10 AND PM2.5 MONITORING

24. Hon Jim Scott to the Minister for Housing representing the Minister for the Environment and Heritage
- (1) Does the Department of Environmental Protection (DEP) monitor particulate matter air quality levels of PM10 ug/m3 or PM2.5 ug/m3 or PM1 ug/m3 in the Perth metropolitan region?
- (2) If yes -
- (a) at what locations is this monitoring carried out for each PM level and how regularly is it carried out;
- (b) what are the average levels of each PM level for each location; and
- (c) What are the peak levels for each PM level for each location?
- (3) What 24 hour average ug/m3 standard has the State Government adopted for PM10 and PM2.5 and PM1?
- (4) What level of premature deaths can be expected from these levels of PM pollution?

Hon TOM STEPHENS replied:

- (1) Yes. DEP monitors PM10 and PM2.5 in the Perth metropolitan area.
- (a) PM10 is monitored at Duncraig and South Lake as 10-minute averages. It is also monitored at Caversham, Duncraig, Queens Building (CBD) and Swanbourne as 24-hour averages every sixth day. PM2.5 is monitored at Caversham and Duncraig as 10-minute averages.
- (b) The annual average concentrations for 2000 were:
- SITE PM10 PM2.5
- Caversham 15 ug/m3 7.4 ug/m3
- Duncraig 15.6 ug/m3 8.0 ug/m3
- Queens Building 20 ug/m3 N/A
- South Lake 18.4 ug/m3 N/A
- Swanbourne 19 ug/m3 N/A
- (c) The peak 24-hour concentrations for 2000 were:
- SITE PM10 PM2.5
- Caversham 35 ug/m3 20.1 ug/m3
- Duncraig 29.8 ug/m3 22.2 ug/m3
- Queens Building 38 ug/m3 N/A
- South Lake 39.6 ug/m3 N/A
- Swanbourne 36 ug/m3 N/A
- (3) The State government has adopted the ambient air quality National Environment Protection Measure (NEPM) PM10 standard of 50ug/m3 over a 24hr period. There is currently no standard for PM2.5 or 1. The information required to establish a standard for PM2.5 is currently being evaluated in accordance with the NEPM schedule.
- (4) A report on daily air pollution levels and mortality and hospitalisations for Perth is currently being finalised. Results will indicate the significance of the association between mortality and hospitalisations and daily particle levels as measured by nephelometry only. The results will not be able to be interpreted in terms of premature deaths. Additional studies as outlined in the Perth Air Quality Management Plan may be able to indicate whether levels of pollution in Perth are contributing to premature deaths, although this is a very difficult health outcome to measure because of the range of contributing factors.