ALKYLPHENOLS, WASTE SLUDGE USED AS FARM FERTILISER

1508. Hon. C.L. Edwardes to the Minister for the Environment and Heritage

I refer to the use of bio-solid waste from sewage treatment plants, as a farm fertiliser and ask -

(a) what tests are conducted for the presence of Alkylphenols in the bio-solid waste;

(b) have Alkylphenols been detected in the waste sludge used as a farm fertiliser;

(c) what action is being taken to combat the presents of Alkylphenols in farm fertiliser sludge;

(d) what action will be taken to test areas already exposed to the bio-solid waste fertiliser, to test for the presence of Alkylphenols contamination; and

(e) does the Minister agree with American studies that show Alkylphenols can pollute and damage soil, pollute ground water with heavy metal and other toxic chemicals, as well as course reproductive and development problems with live stock?

Dr EDWARDS replied:

a) The Department of Environmental Protection (DEP) has advised that Western Australian biosolids were tested for nonylphenols, the most common alkylphenol, in 1998 and 2000. Further testing is proposed for 2002.

b) The Water Corporation has advised that low levels of nonylphenols have been detected in biosolids from Beenyup Wastewater Treatment Plant, with higher levels detected in biosolids from Woodman Point Wastewater Treatment Plant.

c) Alkylphenols occur in biosolids as breakdown products of surfactants which are found in common domestic and industrial cleaning agents. It is therefore difficult to eliminate their presence. However, the recent upgrade of Woodman Point Wastewater Treatment Plant to secondary treatment should reduce the concentration of alkylphenols in biosolids sourced from that plant.

d) No immediate action is proposed to test for these compounds in soils exposed to biosolids products.

e) Alkylphenols have been linked to endocrine disruption. However, the DEP has advised they are not considered a problem for land treated with biosolids for a number of reasons:

Alkylphenols break down in soils, and would therefore not be expected to accumulate.

Animals are not grazed on paddocks which have had biosolids freshly applied, which minimises their risk of exposure.

Alkylphenols tend to bind to organic matter in the soil, and therefore do not tend to move into groundwater.

Alkyphenols do not cause pollution of groundwater with heavy metals. Biosolids may contain trace amounts of heavy metals. However, there are criteria in place to ensure that biosolids are not applied at a rate which could cause accumulation of heavy metals above accepted health and environmental protection criteria.