

# AMENDMENT

## Assessing the Groundwater Pollution Potential of Cemetery Developments

This booklet was first issued in March 2002, and re-printed in March 2003.

Please note the following amendments:

i) Page 6 of the March 2002 issue, and page 5 of the March 2003 issue:

Replacement of the 2nd part of 'Table 2', with the table below:

Element	Mass (g)
Oxygen	43000
Carbon	16000
Hydrogen	7000
Nitrogen	1800
Calcium	1100
Phosphorus	500
Sulfur	140
Potassium	140
Sodium	100
Chlorine	95
Magnesium	19
Iron	4.2
Copper	0.07
Lead	0.1
Cadmium	0.01
Nickel	0.01
Uranium	0.00009
Total body mass	70000

ii) Page 8 of the March 2002 issue, and pages 7-8 of the March 2003 issue:

Potential contaminant release rates, 2<sup>nd</sup> paragraph, 3<sup>rd</sup> → 5th sentence.

....For instance an embalmed body contains about 180g of formaldehyde in 9 litres of embalming fluid. Assuming that about half of this is degraded rapidly in the decomposition process and with grass surface cover controlling the rainfall infiltration (see Table 5) the initial concentration in the effluent would be about 90mg l<sup>-1</sup>. Four years later, though this would have declined to about 5mg l<sup>-1</sup> and ten years later would be only 0.1mg l<sup>-1</sup>.

**Table 5** Estimation of water flux through a typical grave area.

Grave cover	Surface infiltration (l yr <sup>-1</sup> )	Infiltration from grass surrounds (l yr <sup>-1</sup> )	Total (l yr <sup>-1</sup> )
Chippings	750	500	1250
Grass	500	500	1000
Green burial	250	760	1010

Note: Assumes 1) a standard grave size of 2.1 x 1.2m, 2) mean annual rainfall of 650mm and typical evapotranspiration losses, 3) 1976 graves per hectare for conventional burials 4) 1580 graves per hectare for "green" burials.