

SCHEDULE 1

PART 2

Environmental Standards

Environmental standards for lake water quality

9. Once the Department has, in accordance with paragraph 5 of Part 1 of this Schedule, assigned to a lake or part thereof a geological category, depth category and colour category specified in Tables 5, 6 and 7 in that Part, it must apply, as applicable, the “high”, “good”, “moderate”, “poor” or “bad” total phosphorus standard to that lake or part thereof, calculated in accordance with the formulae specified in columns 1, 2, 3, 4 and 5 respectively of Table 12 below, where in relation to those formulae—

“R” represents the annual mean total phosphorus concentration expected for the lake in the absence of more than very minor phosphorus inputs to the lake resulting from human activities and, where a reliable estimate of ‘C’ is available, shall have the value given by the formula: $\text{Antilog}_{10} [1.36 - (0.09 \times A) + (0.24 \times B)]$ for non-humic lakes; and $\text{Antilog}_{10} [1.62 - (0.09) \times A + (0.24 \times B)]$ for humic lakes;

“A” = Log_{10} of the altitude in metres above mean sea level of the lake;

“B” = $\text{Log}_{10} (C \div D)$;

“C” = the mean alkalinity of the lake in milli-equivalents per litre estimated for the lake;

“D” = the mean depth of the lake in metres;

“H” = $0.755 + (0.012 \times C) - (0.001 \times D)$; or 0.7, whichever is larger value; and

“G” = $0.506 + (0.023 \times C) - (0.002 \times D)$; or 0.46, whichever is the larger value.