

intake water. The average background level of asbestos fibre concentrations in the water distribution systems in the Great Lake Basin was 1.6×10^6 fibre/liter and 90% of the areas tested at $<3 \times 10^6$ fibre/l.

Of the various Canadian studies, only at Ottawa and Toronto were samples taken by different investigators at different times. Ratios between the counts ranged from about 2 to 14. Ratios in samples taken at Niagara Falls and Thunder Bay in different years ranged from about 1 to 5. Variability of the counts was within a factor of 2 or 3.

Comparison of the effects of filtration in a water treatment plant are available for Windsor. In Windsor the reduction was as much as 90%. Pang (1975) recorded up to 99.8% removal by flocculation using 10 ppm ferrichloride and 1 ppm polyelectrolyte at pH = 7.5.

Continued drinking water sampling programs of the Canada Centre for Inland Waters produced additional results in May 1974. In the Northern Ontario mining/milling area at Timmins (Natagan River) untreated water had a concentration of 1.78×10^6 and treated water 0.261×10^6 fibres/l. At the Union treatment plant in Leamington on Lake Erie values were 2.17 and 5.15×10^6 (untreated) and 0.957×10^6 (treated).

The American Waterworks Association Research Foundation published "A study of the problem of asbestos in water" in September 1974 (13). A facsimile of report no. E404-79 of the John-Manville Research and Engineering Centre concerning the removal of chrysotile fibre from the inner walls of asbestos cement pipe by potable water in water systems has been incorporated. Two municipal systems were selected: Malvern, Pennsylvania and Glendale, Arizona. Both systems utilised well water sources. The Malvern well was drilled in a serpentine rock belt containing chrysotile fibre while the Glendale system was outside any serpentine-bearing area. Table 6 gives some characteristics and data summary.

Statistical analyses of the fibre level data resulted in an average of all well site samples for Malvern of 0.04 µg/l and 0.005 µg/l for Glendale. There was a 90 percent probability of an increase in fibre level between the well site and the domestic site at both Malvern and Glendale. It was also shown

that the amount is present at Malvern from the exposure

Table 1

Pipe size
diam
length
area
water
water
pipe
water

Water
total
Calc
alka
dis
pH
Ave
(9/5
Ave
(9/5

* The
[c]
** Over

from
appro

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