

ILLINOIS POLLUTION CONTROL BOARD
July 31, 1986

VILLAGE OF WILLOWBROOK,)
)
 Petitioner,)
)
 v.) PCB 86-65
)
 ILLINOIS ENVIRONMENTAL)
 PROTECTION AGENCY,)
)
 Respondent.)


CONCURRING OPINION (by J.D. Dumelle):

In concurring in this variance, I am not changing my views on the risks involved in drinking water with these radium levels. Rather, the blending program here ordered, if accepted, will quickly protect all of the 6,250 people who now live in the Village of Willowbrook (Willowbrook). I would have preferred a six-month variance. Blending is probably to be done by turning various valves so that the elevated tank, if one exists, is filled from various well sources. It seems to me that this could (and should) be done immediately and that a year is excessive to do this.

The Federal Register of August 14, 1975, gives the risk as "between 0.7 and 3 fatal cancers annually per million exposed persons" at 5 pCi/l of combined radium. Willowbrook's level of combined radium is 5.6 pCi/l. However, Well No. 3 has been analyzed at 6.85 ± 0.61 pCi/l. If it supplies nearby homes without effective dilution from other sources then some residents may be ingesting 7.46 pCi/l in their drinking water.

The risk at 5 pCi/l averages to 1.85 fatal cancers per year per million persons exposed. At 7.46 pCi/l, the risk increases to 2.76 fatal cancers, etc. Put another way, this means that some residents of Willowbrook have a 1-in-363,000 chance of contracting a fatal cancer in the year's time until the variance ends.

Since this is an annual risk, I would urge the Village to immediately begin blending. The cost is low and lives may be saved by prompt action.



Jacob D. Dumelle, P.E.
Chairman of the Board