

ILLINOIS POLLUTION CONTROL BOARD  
May 22, 1986

VILLAGE OF BENSENVILLE, )  
 )  
Petitioner, )  
 )  
v. ) PCB 86-42  
 )  
ILLINOIS ENVIRONMENTAL )  
PROTECTION AGENCY, )  
 )  
Respondent. )

DISSENTING OPINION (by J. D. Dumelle):

My reasons for dissenting lie in the increased risk of cancer, including leukemia, to new residents and the lack of specificity as to hardship.

Bensenville's combined radium level in its drinking water is 9.8 pCi/l. This is 96% in excess of the standard of 5 pCi/l.

The risk can be easily computed. The Federal Register of August 14, 1975 gives it as "... the potential risk due to radium drinking water ingestion at 5 pCi/l is estimated to be between 0.7 and 3 fatal cancers annually per million exposed persons." 40 F.R. 34325. The key word here is "annually."

Since Bensenville is 96% over the standard, the risk becomes 1.4 to 6 instead of 0.7 to 3. These average to 3.7. In Bensenville, every individual drinking the water will have an average risk of a fatal cancer of 3.7 in one million each year. That is a 1-in-270,000 chance.

One may argue that this risk is low compared to the 1-in-5,470 chance of being killed each year in an auto accident (43,500 fatalities in a population of 238 million in 1985). But sometimes one must drive to get somewhere while here an alternative exists - the deferral of residential construction.

The variance here granted runs until May 22, 1991. In five years, a new resident's chance of getting cancer from the water becomes five times greater than the 1-in-270,000 computed above or 1-in-54,000 over that period. Should that risk be imposed upon a largely uninformed public?

A recent paper in the respected Journal of the American Medical Association of August 2, 1985 is titled "Association of Leukemia with Radium Groundwater Contamination" and is authored

by a physician, Dr. Gary H. Lyman and others. The article points out that "A significant association between leukemia incidence and the extent of groundwater contamination with radium is reported herein."

While the Agency seems to rely on certain professional testimony and exhibits by non-medical persons, it did not see fit to cite Dr. Lyman's paper. A related paper, "Drinking Water and Cancer Incidence in Iowa" by Dr. Judy A. Bean and others which appeared in the American Journal of Epidemiology (Vol. 116, No. 6) was also not cited. This paper found that "Incidence rates of cancers of the lung and bladder among males and of cancers of the breast and lung among females were higher in towns with a radium-226 level in the water supply exceeding 5.0 pCi/l."

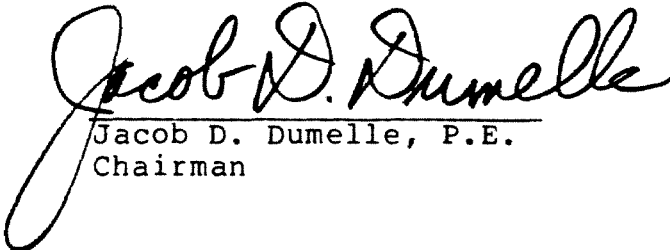
It is quite possible that these two studies and others not cited may result in a USEPA finding that the current 5 pCi/l standard for combined radium in drinking water is too loose and needs to be tightened. We will know in 1987.

Bensenville's statement of hardship is vague. No impending development is cited. I would have voted for the program outlined in Attachment 2 to improve fire flows, etc. but I would have deferred new residential construction to avoid the real cancer risk to new residents.

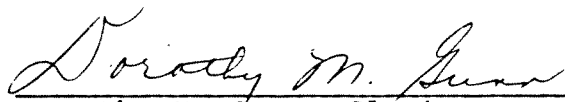
The Agency notes that Bensenville did not follow three of this Board's conditions set in PCB 80-51. Thus there is no assurance, based upon past performance, that the conditions here adopted by the majority will be met. Are we not overlooking past non-compliance by granting this variance? Should not the Agency have enforced the earlier variance? Will the instant variance conditions be followed?

The Agency's Recommendation appears somewhat flawed. On p. 10 the Agency refers to "the possibility of compliance with the MAC standard due to blending or new shallow wells, etc." Yet the Petitioner clearly states in Paragraph 27 "The Petitioner has not taken any steps to achieve compliance at this time and does not foresee any in the future, beyond the Lake Michigan water." Would the Agency's recommendation to grant this variance been the same had it realized that shallow wells were not to be considered?

For all these reasons I dissent.

  
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Jacob D. Dumelle, P.E.  
Chairman

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Dissenting Opinion was filed on the 6<sup>th</sup> day of June 1986.

  
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Dorothy M. Gunn, Clerk  
Illinois Pollution Control Board