

ILLINOIS POLLUTION CONTROL BOARD
March 1, 1979

IN THE MATTER OF:)
)
AMENDMENT TO THE) R77-13
PUBLIC WATER SUPPLY)
REGULATIONS)

OPINION AND ORDER OF THE BOARD (by Mr. Dumelle):

The Board has received only two public comments since it proposed these revisions on November 30, 1978 and adopted a Proposed Opinion on December 14, 1978.

The Agency has asked the Board to reexamine its proposal to exempt community water supplies which provide an average of 10,000 gallons of water per day or less from the new standards for iron (1.0 mg/l) and manganese (0.15 mg/l). The Agency feels that the proposed exemption will curtail its ability to use Rule 304B1 and Section 18 of the Act as enforcement tools. If the Board chooses to retain an exempt classification, the Agency asks that the exemption be based on something more definite, e.g. number of service connections or population served.

Commonwealth Edison Company (Edison) pointed to its experience as owner and operator of a supply serving 18,500 persons in Lincoln, Illinois. Edison claimed that the treatment costs cited in Exhibit 9 were underestimated.

The Agency is correct in its assumption that creation of an exempt class will rule out the use of Rule 304B1 to enforce iron and manganese violations. When the Board adopted Rule 304B1 it stated in part: "While no absolute limits on any contaminants have been set in this subsection, it lays the ground rules for Table 1" (In the Matter of: Public Water Supplies, R73-13, January 3, 1975, 15 PCB 103, 120). In Exhibit 5 of R73-13 the Agency stated its rationale for proposing Rule 304B1. The Agency stated in part: "The list of substances given in the table represents only a partial list of materials that could be harmful to these people, but are considered to be those most probably to be found in the supply." When these two statements are read together, they show that since specific standards for iron and manganese have been established, Rule 304B1 does not apply to these contaminants.

The Agency's concern over the use of Section 18 of the Act is misplaced. Section 18 states in part that ". . . water shall be . . . of satisfactory mineral character for ordinary domestic consumption." This statutory mandate cannot be abrogated by the Board or the Agency. None of the values in Table 1 can survive

challenge in an enforcement action which shows that the public is not receiving the protection which the law requires. This conclusion would hold true even in the case of a supply which complied with every provision of Chapter 6.

When the Board proposed an iron and manganese exemption for supplies providing less than 10,000 gallons per day, it was not creating a double standard based on the size of each Illinois water supply. The Board was simply recognizing the fact that smaller supplies face higher per capita treatment costs. These costs should not be automatically imposed where the primary thrust of the standard is protection of taste and the avoidance of laundry staining. High cost protection of this nature should be provided only when a significant number of consumers demands it. The proper forum for a demonstration of this demand is the enforcement process described in Title VIII of the Act.

The Board agrees with the Agency's concern over the nature of the proposed exemption. The 10,000 gallon per day figure was based on an analysis of treatment costs. While the information in the record on costs is valuable in a relative sense, the Board recognizes Edison's concern that relative costs are not reliable when they are applied to a specific situation. An exemption based on costs is further suspect since the volume of water provided does not necessarily correlate with a range of affected consumers. In order to make any exemption manageable by the Agency, it must be based on readily ascertainable information. The Board is aware that Agency files contain information on population served and the number of service connections for most water supplies in Illinois. The population/service connection cutoff must also be a manageable size so that the Agency is not overburdened in its attempts to ascertain the consensus of each affected community. The Board concludes that a population of 1000 affected consumers or 300 service connections constitutes an appropriate exemption.

The Board hereby adopts its Proposed Opinion and this Final Opinion as its Opinion in this matter.

ORDER

- 1) Rule 105 of Chapter 6: Public Water Supplies is hereby amended to read as follows:

"Analytical Testing

To determine compliance with these rules and regulations, all sampling and physical, chemical, bacteriological, and microscopic analyses shall be made according to the methods described in the National Primary Drinking Water Regulations or any other method specifically approved by the Agency and the United States Environmental Protection Agency. All

analyses for substances other than those listed in these rules and regulations must be performed by methods acceptable to the Agency."

- 2) The definition of "Standards" in Rule 104 of Chapter 6: Public Water Supplies is hereby amended to read as follows:

"'Standards' means the 'Recommended Standards for Water Works,' 1976 edition, as adopted by the Great Lakes - Upper Mississippi River Board of State Sanitary Engineers (commonly referred to as the Ten-States Standards)."

3) Table I of Rule 304 of Chapter 6: Public Water Supplies is hereby amended to read as follows:

"TABLE I - MAXIMUM ALLOWABLE CONCENTRATIONS - Finished Water Quality


Substance	Reported As	Maximum Concentration mg/l
Arsenic	As	0.05
Barium	Ba	1.
Cadmium	Cd	0.010
Chromium	Cr	0.05
Copper	Cu	5.
Cyanide	CN	0.2
Fluoride	F	1.8 (d)
Iron	Fe	1.0 (a)
Lead	Pb	0.05
Manganese	Mn	0.15 (a)
Mercury	Hg	0.002
Nitrate-Nitrogen	N	10. (b)
Organics		
Pesticides		
Chlorinated Hydrocarbon Insecticides		
Aldrin		0.001
Chlordane		0.003
DDT		0.05
Dieldrin		0.001
Endrin		0.0002
Heptachlor		0.0001
Heptachlor Epoxide		0.0001
Lindane		0.004
Methoxychlor		0.1
Toxaphene		0.005
Chlorophenoxy Herbicides		
2,4-Dichlorophenoxyacetic acid (2,4-D)		0.1
2,4,5-Trichlorophenoxypropionic acid (2,4,5-TP or Silvex)		0.01
Selenium	Se	0.01
Silver	Ag	0.05
Turbidity	NTU	1.0 (c)
Zinc	Zn	5. "

- 4) Note a of Table I of Rule 304 of Chapter 6: Public Water Supplies is hereby amended to read as follows:

"All noncommunity water supplies and those community water supplies which serve a population of 1000 or less or 300 service connections or less shall be exempt from the standards for iron and manganese. All other water supplies shall comply with these standards by July 1, 1981. Iron in excess of 1.0 mg/l and manganese in excess of 0.15 mg/l may be allowed at the discretion of the Agency if sequestration tried on an experimental basis proves to be effective. If sequestering is not effective, positive iron or manganese reduction treatment as applicable must be provided. No experimental use of a sequestering agent may be tried without previous Agency approval."

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the 15th day of March, 1979 by a vote of 4-0.



Christan L. Moffett, Clerk
Illinois Pollution Control Board