

CR 89-115



State of Wisconsin | DEPARTMENT OF NATURAL RESOURCES

Carroll D. Besadny, Secretary  
Box 7921  
Madison, Wisconsin 53707  
TELEFAX NO. 608-267-3579  
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STATE OF WISCONSIN )  
 )  
DEPARTMENT OF NATURAL RESOURCES )

ss.

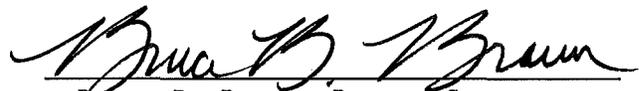
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JUL 16 1990  
9:00 am  
Revisor of Statutes  
Bureau

TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETINGS:

I, Bruce B. Braun, Deputy Secretary of the Department of Natural Resources and custodian of the official records of said Department, do hereby certify that the annexed copy of Natural Resources Board Order No. WR-16A-89 was duly approved and adopted by this Department on March 29, 1990. I further certify that said copy has been compared by me with the original on file in this Department and that the same is a true copy thereof, and of the whole of such original.

IN TESTIMONY WHEREOF, I have here-  
unto set my hand and affixed the  
official seal of the Department at  
the Natural Resources Building in  
the City of Madison, this 29<sup>th</sup>  
day of June, 1990..

  
Bruce B. Braun, Deputy Secretary

(SEAL.)

ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCES BOARD  
AMENDING AND CREATING RULES

.....  
IN THE MATTER of amending ss. NR 140.10 Table 1, .  
140.14(1)(b), (2) and (3)(b) and 140.16(1) .  
pertaining to groundwater quality standards .  
.....

WR-16A-89

Analysis Prepared by the Department of Natural Resources

Statutory authority: ss. 144.025(2) and 227.11(2)(a) and ch. 160, Stats.  
Statutes interpreted: s. 144.025(2) and ch. 160, Stats.

Chapter 160, Stats., requires the Department to develop numerical groundwater quality standards, consisting of enforcement standards and preventive action limits. Chapter NR 140, Wis. Adm. Code, establishes groundwater standards and creates a framework for implementation of the standards by the Department. The proposed amendments to ch. NR 140 would add enforcement standards and preventive action limits for 12 additional substances, modify the enforcement standard and preventive action limit for p-dichloro-benzene and modify the enforcement standard for benzene, 1,2-dichloroethane, 1,1-dichloroethylene, fluoride, vinyl chloride and trichloroethylene, based on recommendations from the Department of Health and Social Services. Groundwater standards are proposed for: bromodichloromethane, carbaryl, carbon tetrachloride, chloramben, chloroform, dibromochloromethane, dicamba, dimethoate, dioxin (2,3,7,8-TCDD), metribuzin, pentachlorophenol and trifluralin. Language is also proposed to clarify statistical procedures.

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SECTION 1. NR 140.10, Table 1 is amended to read:

Table 1

Public Health Groundwater Quality Standards

<u>Substance</u>	<u>Enforcement Standard (micrograms per liter- except as noted)</u>	<u>Preventive Action Limit (micrograms per liter- except as noted)</u>
Alachlor	0.5	0.05
Aldicarb	10	2
Arsenic	50	5
Atrazine	3.5	0.35

Bacteria, Total Coliform	Less than one in 100 ml for membrane filter method or not present in any 10 ml portion by fermentation tube method for both preventive action limit and enforcement standard	
Barium	1 milligram/liter (mg/l)	.2 mg/l
Benzene	<del>.67</del> <u>5</u>	.067
<u>Bromodichloromethane</u>	<u>179</u>	<u>36</u>
Butylate	67	6.7
Cadmium	10	1
<u>Carbaryl</u>	<u>960</u>	<u>192</u>
Carbofuran	50	10
<u>Carbon Tetrachloride</u>	<u>5</u>	<u>.5</u>
<u>Chloramben</u>	<u>150</u>	<u>30</u>
<u>Chloroform</u>	<u>6</u>	<u>.6</u>
Chromium	50	5
Cyanazine	12.5	1.25
Cyanide	200	40
<u>Dibromochloromethane</u>	<u>215</u>	<u>43</u>
1,2-Dibromoethane (EDB)	.010	.001
1,2-Dibromo-3-chloropropane (DBCP)	.05	.005
<u>Dicamba</u>	<u>300</u>	<u>60</u>
1,2-Dichlorobenzene	1250	125
1,3-Dichlorobenzene	1250	125
p-Dichlorobenzene (1,4-Dichlorobenzene)	<del>750</del> <u>75</u>	<del>150</del> <u>15</u>
1,1-Dichloroethane	850	85
1,2-Dichloroethane	<del>.5</del> <u>5</u>	.05

1,1-Dichloroethylene	<del>24</del> <u>7</u>	.024
1,2-Dichloroethylene (cis)	100	10
1,2-Dichloroethylene (trans)	100	20
2,4-Dichlorophenoxyacetic Acid	100	20
<u>Dimethoate</u>	<u>2</u>	<u>.4</u>
Dinoseb	13	2.6
<u>Dioxin (2,3,7,8-TCDD)</u>	<u>.00000022</u>	<u>.000000022</u>
Endrin	.2	.02
EPTC (Eptam)	250	50
Ethylbenzene	1360	272
Fluoride	<del>2.2</del> <u>4</u> mg/l	.44 mg/l
Fluorotrichloromethane (Freon-11)	3490	698
Lead	50	5
Lindane	.02	.002
Mercury	2	2
Methoxychlor	100	20
Methylene Chloride <u>(Dichloromethane)</u>	150	15
Metolachlor	15	1.5
<u>Metribuzin</u>	<u>250</u>	<u>50</u>
Nitrate + Nitrite (as N)	10 mg/l	2 mg/l
<u>Pentachlorophenol</u>	<u>300</u>	<u>30</u>
Selenium	10	1
Silver	50	10

Simazine	2.15 mg/l	.215 mg/l
Tetrachloroethylene	1	.1
Tetrahydrofuran	50	10
Toluene	343	68.6
Toxaphene	.0007	.00007
1,1,1-Trichloroethane	200	40
1,1,2-Trichloroethane	.6	.06
Trichloroethylene	<del>1.8</del> <u>5</u>	.18
2,4,5-Trichlorophenoxy-propionic Acid	10	2
<u>Trifluralin</u>	<u>7.5</u>	<u>.75</u>
Vinyl Chloride	<u>.2</u>	.0015
Xylene	620	124

SECTION 2. NR 140.14(1)(b), (2) and (3)(b) are amended to read:

NR 140.14(1)(b) The regulatory agency shall require a remedial response in accordance with the rules promulgated under s. 160.21, Stats. No remedial response shall be required if it is demonstrated to the satisfaction of the appropriate regulatory agency that a scientifically valid determination cannot be made that the preventive action limit or enforcement standard for a substance in Table 1 or 2 has been attained or exceeded based on consideration of sampling procedures or laboratory precision and accuracy, ~~using statistical procedures specified in sub. (2)~~ at a significance level of 0.05.

(2) The regulatory agency shall use one or more ~~of the following~~ valid statistical procedures to determine if a ~~preventive action limit or an enforcement standard for a substance in Table 1 or 2 is attained or exceeded~~

~~or if a change in the concentration of the a substance in Table 1 or 2 has occurred.~~ A significance level of 0.05 shall be used for all tests.

~~(a) Student t test;~~

~~(b) Temporal or spatial trend analysis; or~~

~~(c) Other valid statistical analyses which are appropriate for the data being considered.~~

(3)(b) If a substance is reported to be present in a sample above the limit of detection but below the limit of quantitation, and if the preventive action limit or enforcement standard for that substance is below the limit of detection, the preventive action limit or enforcement standard shall be considered to have been attained or exceeded only if the presence of that substance has been confirmed by ~~a sufficient number of analyses of multiple samples and~~ the use of an appropriate statistical test under sub. (2) at a significance level of 0.05.

SECTION 3. NR 140.16(1) is amended to read:

NR 140.16(1) All water quality samples collected to determine compliance with ch. 160, Stats., except samples collected for total coliform bacteria analysis and field analyses for pH, specific conductance, and temperature, shall be analyzed by a laboratory certified or registered under s. 144.95, Stats., and rules adopted under that section ch. NR 149. Samples for total coliform bacteria analysis shall be analyzed by the state laboratory of hygiene or at a laboratory approved or certified by the department of health and social services. The results of the analysis shall be submitted to the department and the appropriate regulatory agency. ~~This~~ Except as provided in s. NR 205.07(3)(c) for wastewater permittees, this subsection does not

require the submission of groundwater monitoring data which is collected voluntarily and which is not being collected to determine compliance with this chapter. The samples shall be collected in accordance with procedures specified by the department or, where no procedures are specified, in accordance with published sampling procedures.

Note: Published sampling procedures include those contained in the following sources. Other published sampling procedures are also acceptable.

1. "Groundwater Sampling Procedures Guidelines." Wisconsin Department of Natural Resources, PUBL-WR-153, February 1987.

2. "Groundwater Sampling Procedures Field Manual." Wisconsin Department of Natural Resources, PUBL-WR-168, September 1987.

~~1-3.~~ "Procedures Manual for Groundwater Monitoring at Solid Waste Disposal Sites." EPA SW-611, Office of Water and Waste Management, U.S. Environmental Protection Agency, Dec. 1980, Washington, D.C.

~~2-4.~~ "Techniques of Water Resources Investigations of the United States Geological Survey, Guidelines for Collection and Field Analysis of Groundwater Samples for Selected Unstable Constituents," Book I, Chapter D2, U.S. Geological Survey, Washington, D.C.

~~3-5.~~ "Procedures for the Collection of Representative Water Quality Data from Monitoring Wells," Cooperative Groundwater Report 7, Illinois State Water Survey, 1981, Champaign, Illinois.

~~4-6.~~ "Manual of Groundwater Sampling Procedures," NWWA/EPA Series, Robert S. Kerr, Environmental Research Laboratory, 1981, Ada, Oklahoma.

~~Note: This subsection does not require data from laboratories certified or registered under s. 144.95, Stats., until the laboratory certification rules become effective.~~

The foregoing rules were approved and adopted by the State of Wisconsin Natural Resources Board on March 29, 1990.

The rules shall take effect on the first day of the month following publication in the Wisconsin administrative register as provided in s. 227.22(2)(intro.), Stats.

Dated at Madison, Wisconsin June 29, 1990

STATE DEPARTMENT OF NATURAL RESOURCES

By Carroll D. Besadny  
Carroll D. Besadny, Secretary

(SEAL)  
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State of Wisconsin

DEPARTMENT OF NATURAL RESOURCES

Carroll D. Besadny, Secretary

Box 7921

Madison, Wisconsin 53707

TELEFAX NO. 608-267-3579

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June 29, 1990

In reply refer to 1020

Mr. Gary L. Poulson  
Assistant Revisor of Statutes  
Suite 702  
30 W. Mifflin Street

RECEIVED

JUL 16 1990

Revisor of Statutes  
Bureau

Dear Mr. Poulson:

Enclosed are two copies, including one certified copy, of State of Wisconsin Natural Resources Board Order No. WR-16A-89. These rules were reviewed by the Assembly Committee on Natural Resources and the Senate Committee on Urban Affairs, Environmental Resources, Utilities and Elections pursuant to s. 227.19, Stats. Summaries of the final regulatory flexibility analysis and comments of the legislative review committees are also enclosed.

You will note that this order takes effect following publication. Kindly publish it in the Administrative Code accordingly.

Sincerely,

A handwritten signature in cursive script, appearing to read 'C. D. Besadny'.

C. D. Besadny  
Secretary

Enc.