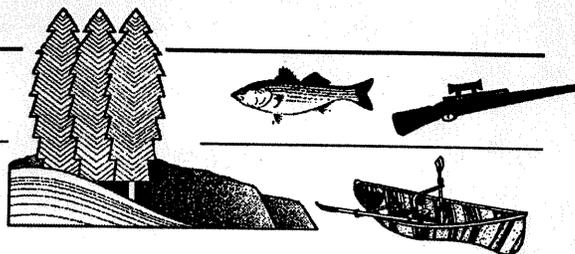


Assembly Committee on:

# Natural Resources

State Representative

DuWayne Johnsrud, Chair



## MEMORANDUM

DATE: May 1, 1995

TO: Members, Assembly Natural Resources Committee

FROM: DuWayne Johnsrud, Chair

RE: rule referral

The following Rules have been referred to our committee:

Clearinghouse Rule 94-181 Relating to groundwater quality standards.  
Submitted by Department of Natural Resources.

Clearinghouse Rule 94-187 Relating to the county administration of the  
private well code. Submitted by Department  
of Natural Resources.

Our current review period extends through May 30, 1995. Copies of each rule summary are enclosed. Please contact my office if you would like a copy of any rule.

Also, I am including a copy of the signed letter which the committee sent to the Joint Finance Committee for your files.

## REPORT TO LEGISLATURE

NR 140, Wis. Adm. Code  
Groundwater quality standards

Board Order No. WR-19-94  
Clearinghouse Rule No. 94-181

### Statement of Need

The proposed amendments to ch. NR 140 were initiated based on recommendations from the Department of Health and Social Services (DHSS) to add groundwater standards for 13 additional substances and revise the groundwater standards for 10 substances. Fifteen of the substances for which DHSS made recommendations are substances for which the U.S. EPA adopted federal drinking water standards called maximum contaminant levels (MCLs) in July of 1992. The DHSS has recommended adoption of the MCL for these 15 substances. For the remaining 8 substances, DHSS used available information from the U.S. EPA in developing a recommended groundwater standard in accordance with the requirements of ch. 160, Stats. The two new methods for total coliform bacteria analysis are based on the federal MCL are added to Table 1. The methods are currently specified in ch. NR 809 which covers public drinking water supplies.

Amendments are proposed to chs. NR 140 and 149 to promote consistency in language between the two chapters and clarify laboratory definitions, methods, data evaluation procedures and reporting requirements.

### Modifications as a Result of Public Hearing

Because of possible laboratory contamination in methylene chloride analysis, the Department has developed a decision flow chart to address the issue. The rule language regarding the use and interpretation of LOD/LOQ information and its submittal to the Department. The Department is also developing LOD/LOQ guidance.

The data reporting requirements in ss. NR 140.14 and 140.16 were also revised to provide more consistency in data reporting requirements throughout the Department.

### Appearances at the Public Hearings and Their Position

November 15, 1994 - Madison

In support - none

In opposition - none

As interest may appear:

Jay Goldring, WI Division of Health, Room 91, 1414 E. Washington, Madison, WI  
Jerry Bock, Northern Lake Service, 400 N. Lake Avenue, Crandon, WI 54520  
Carolyn Dallmann, Olin Corp., Badger Army Ammunition Plant, Hwy. 12, Baraboo, WI 53913  
James R. Baker, Multi-Flo of Wisconsin, P.O. Box 714, Janesville, WI 53547

November 16, 1994 - Stevens Point

In support:

Lynda Knobloch, Dept. of Health & Social Services, 1414 E. Washington Ave., Madison, WI 53703

In opposition - none

As interest may appear:

Karla M. Coenen, Enviroscan Corp., 303 West Military Road, Rothschild, WI 54474

Gary Lueck, 725 Illinois Avenue, Stevens Point, WI 54481

W. J. Nosek, Jr., Northern Lake Service, 400 N. Lake Avenue, Crandon, WI 54520

Response to Legislative Council Rules Clearinghouse Report

The recommendations were accepted, except for:

5.a. The definition of "approval" was taken directly from the definition of "approve" or "approval" included in s. NR 700.03(1), and satisfies the intended purpose of the definitions used in ch. NR 140.

5.b. "Reinfiltration" would include a situation where a liquid is initially infiltrated through an excavation and into groundwater and then that liquid is pumped to the surface, put back into the excavation and then "reinfiltred" back into the groundwater. The term "reinfiltred" was added to make it clear that substances or remedial material (usually liquids) cannot only be initially infiltrated into the groundwater but that the same liquid can then be reinfiltred into the groundwater if deemed necessary. The same logic follows for the use of the word "reinjction" in s. NR 140.05(10s). However, for clarity, the second sentence of s. NR 140.05(10e) and (10s) have been deleted.

"Similar methods" was intended to mean only infiltration into the same excavation that is wider than deep and injection into the same borehole or excavation that is deeper than wide. This phrase will be eliminated by deleting the second sentence of s. NR 140.05(10e) and (10s).

5.c. A note has been added to this subsection to specify the relationship between the limit of detection and the limit of quantitation.

5.e. The Department concurs with the first comment and will revise NR 1140.28(5)(a) to state "in lieu of an exemption granted under subs. (2) to (4), ...". The Department does not concur with the second comment. although combining both sentences may add a little clarity, the combining of the two sentences creates an unnecessarily long, drawn out sentence. The Department believes the language is clear as written.

Final Regulatory Flexibility Analysis

The Department does not believe that the proposed rule will have a significant economic impact on a substantial number of small businesses. The compliance and reporting requirements in ch. NR 140 are not changed by the proposed amendments. If a standard is exceeded, the owner or operator of a facility, practice or activity, including any small business, must report the violation to the appropriate regulatory agency. There would be 13 new substances for which a facility may have to monitor and report exceedances. A detailed final regulatory flexibility analysis is attached.

The type of small businesses that are typically impacted by ch. NR 140, Wis. Adm. Code, include dry cleaners, small manufacturers, agricultural cooperatives, farmers, underground storage tank owners, small solid waste disposal facilities, small wastewater treatment operations, as well as others. In effect, any small business that has an unpermitted discharge of a hazardous substance exceeding health or welfare groundwater standards listed in ch. NR 140 will be responsible for responding to the release consistent with the requirements of ch. NR 140.

The Department anticipates that the proposed temporary exemption language may save small business time and money because allowing infiltration and injection should speed-up certain soil and groundwater contamination clean-ups and decrease costs under some circumstances.

Chapter 160, Stats., does not allow for less stringent schedules, deadlines or reporting requirements, or for exemptions to remedial action when a groundwater quality standard is attained or exceeded, based on the size of the business causing the contamination. The individual program that regulates the facility, practice or activity will determine whether a report is necessary and the amount of detail required in the report. The only new reporting deadline in ch. NR 140 is a 10 day limit for the submittal of data when private well data exceeds a PAL or ES. This data must be submitted by the owner or operator of the regulated facility, practice or activity and is consistent with s. NR 716.13(9). All other schedules, deadlines and specific compliance and reporting requirements are set on a case-by-case basis by the respective programs.

Chapter 160, Stats., requires establishment of both performance and design standards. The performance standards (the groundwater quality standards) are contained in ch. NR 140. The individual programs (e.g. solid waste, wastewater, DATCP) will establish or modify design and operational standards in their individual program rules.

The proposed amendments do not contain any exemptions from the requirements based on the size of a facility. Chapter NR 140, Wis. Adm. Code, provides for exemptions from remedial action based on background water quality, not on the size of a facility.

Facilities, practices and activities, including small businesses, that discharge a substance for which a standard has been established and which may adversely impact groundwater quality are affected by ch. NR 140, and the proposed amendments. The types of businesses affected include those with landfills, wastewater facilities, businesses at which discharges of hazardous substances occur, pesticide and herbicide bulk storage facilities and farms at which pesticides and herbicides are used.

Approximately 10 - 20% of the regulated laboratories would fit the definition of "small business", as given in s. 227.144(1)(a), Wis. Statutes. These laboratories are small in-state commercial laboratories. These proposals also affect small municipal laboratories and large commercial laboratories, for which no regulatory flexibility analysis is required.

The proposed rule changes to ch. NR 149 may or may not have a fiscal impact on laboratories. For those laboratories with good quality control and housekeeping practices the costs will be little to none. Those laboratories with poor quality control and housekeeping practices will need to improve. It is very difficult to estimate what the costs will be to these laboratories. The required procedures are not new to many laboratories currently certified in Wisconsin.

Summarize issues raised by small business during the hearings and any changes made.

One issue raised by laboratories during the hearing process was that while the proposed standard revision for methylene chloride is analytically attainable in the laboratory, it is the most common solvent used for extraction for many analytical methods, and it is not uncommon to find it at low levels in samples due to laboratory contamination. The proposed revised standard for methylene chloride is 5  $\mu\text{g}/\text{l}$  for the ES and 0.5  $\mu\text{g}/\text{l}$  for the PAL. The Department responded that it is aware of this potential problem and has developed a decision flow chart to address this issue.

The other issue of interest to laboratories was the definition of LOD and LOQ. The Department revised the rule language regarding the use and interpretation of LOD/LOQ information and its submittal to the Department; the Department is also developing LOD/LOQ guidance.

Identify and describe any reports required by the rule that must be submitted by small business and estimate the cost of their preparation.

Chapter NR 140 currently requires that the owner or operator of any facility, practice or activity, including any small business, report the exceedance of a groundwater standard to the appropriate regulatory agency. A detailed report may be necessary and possible remedial action depending on the seriousness of the exceedance. The individual program that regulates the facility, practice or activity will determine whether a report is necessary and the amount of detail required in the report. The cost of this report for small businesses will vary, depending on the complexity of the site and contamination at the facility, practice or activity, and federal and state laws that are being used to guide the remedial action.

For a relatively small site, such as a small underground storage tank site, the Department of Industry, Labor and Human Relations (DILHR) has estimated that a report that requires responsible parties (RPs) to evaluate 3 remedial options for the Petroleum Storage Remedial Action Fund (PECFA) costs an average of \$400 per site. The Department anticipates this average cost may increase to as much as \$800 due to the promulgation of ch. NR 722, Wis. Adm. Code. The promulgation of ch. NR 722 will require small businesses to submit several new reports to the Department. The preparation of these reports will be a new cost for small business; however, the Department anticipates that this increased cost will be recouped over the life of the project since the reports require small businesses to evaluate many remedial options thus finding the most cost-effective remedial option. For most other small businesses, the cost of preparing these reports should be similar.

On rare occasions, a small business may be a responsible party (in whole or in part) at a Superfund site or a site where the RP's are conducting a Superfund-like cleanup. Based on the Department's own experience, a remedial options report at a highly complex site can cost anywhere from \$20,000 to \$50,000. Usually, a small business is one of many responsible parties at a Superfund project and is therefore responsible for only a small portion of these costs. However, in most Superfund cases, ch. NR 140 groundwater standards are not the driving force for contamination cleanup and, therefore, reporting costs incurred at these sites are not caused by remedial responses required in ch. NR 140.

Section 144.95, Statutes, and ch. NR 149, Wis. Adm. Code, do not allow for less stringent schedules, deadlines or reporting requirements. Currently there are provisions in s. NR 149.45, Wis. Adm. Code, for variances from nonstatutory requirements.

Identify and describe any measures or investments that small business must take to comply with the rule and provide an estimate of the associated cost.

There will be 13 additional groundwater standards which would be used as design and compliance standards and clean-up standards in the event of a spill or discharge. If remedial action or other response is necessary, the individual programs which regulate the facility, practice or activity would determine the appropriate level of clean-up required.

As with the cost of remedial options reports, the cost of remediation of groundwater contamination for small business will vary, depending on the complexity of the site and contamination at the facility, practice or activity, and federal and state laws that are being used to guide the remedial action.

In October 1991, DILHR and the DNR prepared a joint publication on the Petroleum Storage Remedial Action Fund (PECFA) which provides monies for cleanup of contamination caused by leaking underground storage tanks. The report indicated that average remediation costs at leaking underground storage tank sites ranged from \$20,000 to \$175,000 depending on the size and complexity of a site. This cost average range included both soil and groundwater remediation. For other small businesses site remediation costs should be similar. Underground storage tank remediation cost estimates as of June 1994 indicated that over 60% of PECFA eligible sites cost under \$50,000, approximately 30% of sites cost from \$50,000 to \$200,000, and approximately 7% of sites cost over \$200,000.

Laboratories certified or registered under ch. NR 149, Wis. Adm. Code, would be required to determine 1) limit of detection and quantitation for analyses performed and 2) qualify or rerun samples that fail method blank criteria. Currently, the rule requires that the limits of detection and quantitation be reported when requested. These two proposed rule changes may or may not have a fiscal impact on laboratories. For those laboratories with good quality control and housekeeping practices the costs will be little to none. Many laboratories use Laboratory Information Manage System (LIMS) software that is commercially available. This software has the capability of reporting the required data. When a laboratory fails the criteria for methods blanks the laboratory can qualify the data or rerun the samples in the batch. Qualifying the data is a less costly option than rerunning the samples. The method blank criteria will help protect facility owners from false positives thereby reducing their costs in taking corrective action when the laboratory has a method blank problem resulting in a high bias on sample results.

These requirements will assist in leveling the playing field for analytical laboratories. Those laboratories with poor quality control and housekeeping practices will need to improve. It is very difficult to estimate what the costs will be to the laboratories due to the information given. These procedures (limit of detection & method blank criteria) have been available since 1984 and 1990. Therefore, these procedures are not new to many laboratories currently certified by the State of Wisconsin.

Identify the additional administrative or enforcement costs to the state of a rule method which would reduce costs on small business.

There would be additional costs to the state if reports were not required to be prepared describing the cause and significance of violations of groundwater standards, or if they were not required to implement remedial responses. The 1983 Wisconsin Act 410 established the Groundwater Account of the Environmental Fund to provide funds to evaluate the extent of contamination and finance remedial action if the facility, practice or activity causing the contamination is not taking action. The Account

would be depleted more quickly if the Department had to use it to prepare reports and implement remedial actions for groundwater contamination caused by small business.

Potential adverse impacts to property owners and citizens include having a contaminated private well which would require finding another suitable potable water supply (e.g., drilling a deeper well, hookup to a public water utility, bottled water, etc), lost property value, illness from consuming contaminated water, and other adverse impacts as well. Adverse impacts to other small businesses may include finding another suitable water supply (if the business's well becomes contaminated), lost property value, and increased difficulty in selling a property do to economic risk of purchasing environmentally contaminated property.

Describe the impact on public health, safety and welfare caused by a rule method which would reduce costs on small business.

There would be adverse impacts on public health, welfare, safety and the environment if small businesses were not required to submit such reports and implement remedial responses. The more quickly the contamination can be evaluated and responses initiated, the less likely that public health, safety and welfare will be adversely affected. If small businesses were exempt from these requirements, groundwater contamination would continue unabated at least until the Department could appropriate sufficient resources to undertake this work. The delay or possibility that nothing would be done would lead to adverse impacts on public health, welfare, safety and the environment. Any delay of a remedial response will allow the contamination to expand and migrate further, thus dramatically increasing the cost of remediation once implemented in the future. This would have adverse effects on other property owners and citizens including other small businesses often adversely impacted by groundwater contamination.

ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCES BOARD  
RENUMBERING, RENUMBERING AND AMENDING, AMENDING, REPEALING AND  
RECREATING AND CREATING RULES

.....  
IN THE MATTER of renumbering NR 140.28(5);  
renumbering and amending NR 140.14(3)(c);  
amending NR 140.10 Table 1, 140.24(1)(a)  
and (5)(intro.), 140.26(1)(a) and 149.03(15),  
(16), and (18)Note, 149.11(5) and 149.14(3)(d)  
and (h); repealing and recreating NR 140.05(12)  
and (13) and 140.14(3)(intro.) and (a) and (b);  
and creating NR 140.05(1s), (10e), (10s) and (20k),  
140.16(4), 140.28(5), and NR 140 Appendix I  
relating to groundwater quality standards.

WR-19-94

.....  
Analysis Prepared by the Department of Natural Resources

Statutory authority: ss. 144.025(2), 144.95, 160.03, 160.07(5), 160.09(3), 160.15, 160.19, 160.21 and 227.11(2)(a), Stats.

Statutes interpreted: ss. 144.025(2), 144.95, 160.001, 160.05, 160.07, 160.09, 160.11, 160.13, 160.15, 160.19, 160.21, 160.23, 160.25 and 160.29, 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 13 additional substances and modify the enforcement standard and preventive action limit for 10 substances based on recommendations from the Department of Health and Social Services. Groundwater standards are proposed for antimony, beryllium, bromomethane, chloromethane, dacthal, 1,3-dichloropropene (cis/trans), fluorene, hexachlorobenzene, nickel, picloram, 1,1,2,2-tetrachloroethane, thallium, and 1,2,4-trichlorobenzene. Revised standards are proposed for benzo(a)pyrene, bromodichloromethane, dibromochloromethane, di(2-ethylhexyl) phthalate, dinoseb, dioxins, endrin, methylene chloride (dichloromethane), simazine, and 1,2,2-trichloroethane. Language is proposed to clarify the evaluation and response procedures of ch. NR 140 and laboratory data evaluation in chs. NR 140 and 149.

SECTION 1. NR 140.05 (1s), (10e) and (10s) are created to read:

NR 140.05 (1s) "Approval" means written acceptance by the department of a plan, report or other document that has been submitted to the department for review.

(10e) "Infiltration" means the underground emplacement of substances or remedial material, or both, into an excavation that is wider than deep so as to percolate or move through unsaturated material to groundwater.

(10s) "Injection" means the underground emplacement of substances or remedial material, or both, into a borehole or other excavation that is deeper than wide so as to percolate or move through unsaturated material to groundwater or to enter groundwater directly.

SECTION 2. NR 140.05 (12) and (13) are repealed and recreated to read:

NR 140.05 (12) "Limit of detection" means the lowest concentration level that can be determined to be statistically different from a blank.

(13) "Limit of quantitation" means the level above which quantitative results may be obtained with a specified degree of confidence.

**Note:** The limit of quantitation is 10/3 or 3.333 times the limit of detection.

SECTION 3. NR 140.05 (20k) is created to read:

NR 140.05 (20k) "Remedial material" means any solid, liquid, semi-solid or gaseous material, either naturally occurring or manmade, in its original form or as a metabolite or degradation product, or naturally occurring non-pathogenic biological organisms which have not undergone human induced genetic alteration, which enhances the restoration of soil or groundwater quality, or both.

SECTION 4. NR 140.10, Table 1 is amended to read:

Table 1

Public Health Groundwater Quality Standards

| Substance <sup>2</sup>                 | Enforcement Standard<br>(micrograms per liter-<br>except as noted)  | Preventive Action Limit<br>(micrograms per liter-<br>except as noted) |
|--|---|---|
| Acetone                                | 1000  | 200   |
| Alachlor                               | 2   | 0.2   |
| Aldicarb                               | 10  | 2   |
| <u>Antimony</u>                        | <u>6</u>  | <u>1.2</u>  |
| Arsenic                                | 50  | 5   |
| Asbestos                               | 7 million fibers<br>per liter (MFL)   | 0.7 MFL   |
| Atrazine, total<br>chlorinated residue | 3 <sup>1</sup>  | .3 <sup>1</sup>   |
| Bacteria, Total Coliform               | <del>Less than one in 100 ml for membrane filter method or not present<br/>in any 10 ml portion by fermentation tube method for both<br/>preventive action limit and enforcement standard</del> |   |
|  | <u>0<sup>3</sup></u>  | <u>0<sup>3</sup></u>  |
| Barium                                 | 2 milligrams/liter (mg/l)   | .4 mg/l   |
| Benzene                                | 5   | 0.5   |
| Benzo(a)pyrene                         | 0.003 <u>0.2</u>  | 0.0003 <u>0.02</u>  |
| <u>Beryllium</u>                       | <u>4</u>  | <u>0.4</u>  |
| Bromodichloromethane                   | 179 <u>0.6</u>  | 36 <u>0.06</u>  |
| Bromoform                              | 4.4   | 0.44  |
| <u>Bromomethane</u>                    | <u>10</u>   | <u>1</u>  |
| Butylate                               | 67  | 6.7   |
| Cadmium                                | 5   | 0.5   |
| Carbaryl                               | 960   | 192   |
| Carbofuran                             | 40  | 8   |

|   |               |                 |
|---|---------------|-----------------|
| Carbon Tetrachloride  | 5             | .5              |
| Chloramben  | 150           | 30              |
| Chlordane   | 2             | 0.2             |
| Chloroethane (Ethyl chloride)                                     | 400           | 80              |
| Chloroform  | 6             | .6              |
| <u>Chloromethane</u>  | <u>3</u>      | <u>0.3</u>      |
| Chromium  | 100           | 10              |
| Copper  | 1300          | 130             |
| Cyanazine   | 12.5          | 1.25            |
| Cyanide   | 200           | 40              |
| <u>Dacthal</u>  | <u>4 mg/l</u> | <u>0.8 mg/l</u> |
| Dibromochloromethane<br>(Chlorodibromomethane)                    | 215 60        | 43 6            |
| 1,2-Dibromoethane (EDB), ethylene<br>dibromide, dibromoethane)    | 0.05          | 0.005           |
| 1,2-Dibromo-3-chloropropane<br>(DBCP), dibromoethylchloropropane) | 0.2           | 0.02            |
| Dicamba   | 300           | 60              |
| Dichlorodifluoromethane<br>(Freon-12)                             | 1000          | 200             |
| 1,2-Dichlorobenzene<br>(O-dichlorobenzene)                        | 600           | 60              |
| 1,3-Dichlorobenzene<br>(M-dichlorobenzene)                        | 1250          | 125             |
| 1,4-Dichlorobenzene<br>(p-Dichlorobenzene)                        | 75            | 15              |
| 1,1-Dichloroethane  | 850           | 85              |
| 1,2-Dichloroethane  | 5             | 0.5             |
| 1,1-Dichloroethylene  | 7             | 0.7             |
| 1,2-Dichloroethylene (cis)  | 70            | 7               |

|   |                                     |                                       |
|---|-------------------------------------|---------------------------------------|
| 1,2-Dichloroethylene (trans)  | 100                                 | 20                                    |
| 2,4-Dichlorophenoxyacetic Acid (2,4-D)                                    | 70                                  | 7                                     |
| 1,2-Dichloropropane   | 5                                   | 0.5                                   |
| <u>1,3-Dichloropropene (cis/trans)</u>                                    | <u>0.2</u>                          | <u>0.02</u>                           |
| Di(2-ethylhexyl) phthalate<br>( <del>Bis(2-ethylhexyl) phthalate</del> )  | 3 <u>6</u>                          | <u>0.3</u> <u>0.6</u>                 |
| Dimethoate  | 2                                   | .4                                    |
| 2,4-Dinitrotoluene  | 0.05                                | 0.005                                 |
| 2,6-Dinitrotoluene  | 0.05                                | 0.005                                 |
| Dinoseb   | <del>13</del> <u>7</u>              | <del>2.6</del> <u>1.4</u>             |
| Dioxin (2,3,7,8-TCDD)   | <del>0.0000022</del> <u>0.00003</u> | <del>0.00000022</del> <u>0.000003</u> |
| Endrin  | <del>2</del> <u>2</u>               | <del>0.2</del> <u>0.4</u>             |
| EPTC ( <del>Eptam</del> )   | 250                                 | 50                                    |
| Ethylbenzene  | 700                                 | 140                                   |
| Ethylene glycol   | 7 mg/l                              | 0.7 mg/l                              |
| <u>Fluorene</u>   | <u>400</u>                          | <u>80</u>                             |
| Fluoride  | 4 mg/l                              | 0.8 mg/l                              |
| Fluorotrichloromethane<br>( <del>Freon 11, trichlorofluoromethane</del> ) | 3490                                | 698                                   |
| Formaldehyde  | 1000                                | 100                                   |
| Heptachlor  | 0.4                                 | 0.04                                  |
| Heptachlor epoxide  | 0.2                                 | 0.02                                  |
| <u>Hexachlorobenzene</u>  | <u>1</u>                            | <u>0.1</u>                            |
| Lead  | 15                                  | 1.5                                   |
| Lindane   | 0.2                                 | 0.02                                  |
| Mercury   | 2                                   | 0.2                                   |
| Methoxychlor  | 40                                  | 4                                     |

|   |              |                 |
|---|--------------|-----------------|
| Methylene Chloride<br>(Dichloromethane)                                       | 150 <u>5</u> | 15 <u>0.5</u>   |
| Methyl ethyl ketone (MEK)   | 460          | 90              |
| Methyl isobutyl ketone<br>(MIBK) ; 4-methyl-2-pentanone,<br>isopropylacetone) | 500          | 50              |
| Methyl tert-butyl ether<br>(MTBE) ; 2-methoxy-2-methylpropane)                | 60           | 12              |
| Metolachlor   | 15           | 1.5             |
| Metribuzin  | 250          | 50              |
| Monochlorobenzene<br>(Chlorobenzene)  | 100          | 20              |
| Naphthalene   | 40           | 8               |
| <u>Nickel</u>   | <u>100</u>   | <u>20</u>       |
| Nitrate (as N)  | 10 mg/l      | 2 mg/l          |
| Nitrate + Nitrite (as N)  | 10 mg/l      | 2 mg/l          |
| Nitrite (as N)  | 1 mg/l       | 0.2 mg/l        |
| Pentachlorophenol (PCP)   | 1            | 0.1             |
| Polychlorinated<br>biphenyls (PCBs)   | 0.03         | 0.003           |
| Phenol  | 6 mg/l       | 1.2 mg/l        |
| <u>Picloram</u>   | <u>500</u>   | <u>100</u>      |
| Selenium  | 50           | 10              |
| Silver  | 50           | 10              |
| Simazine  | 1.7 <u>4</u> | 0.17 <u>0.4</u> |
| Styrene (Ethenylbenzene)  | 100          | 10              |
| <u>1,1,2,2-Tetrachloroethane</u>  | <u>0.2</u>   | <u>0.02</u>     |
| Tetrachloroethylene<br>(Perchloroethylene)                                    | 5            | 0.5             |
| Tetrahydrofuran   | 50           | 10              |

|   |             |                |
|---|-------------|----------------|
| <u>Thallium</u>   | 2           | 0.4            |
| Toluene   | 343         | 68.6           |
| Toxaphene   | 3           | 0.3            |
| <u>1,2,4-Trichlorobenzene</u>   | <u>70</u>   | <u>14</u>      |
| 1,1,1-Trichloroethane   | 200         | 40             |
| 1,1,2-Trichloroethane   | .6 <u>5</u> | .06 <u>0.5</u> |
| Trichloroethylene (TCE)   | 5           | 0.5            |
| 2,4,5-Trichlorophenoxy-<br>propionic Acid (2,4,5-TP)<br>( <del>silvex</del> ) | 50          | 5              |
| Trifluralin   | 7.5         | .75            |
| Vinyl Chloride  | .2          | 0.02           |
| Xylene <sup>4</sup>   | 620         | 124            |

<sup>1</sup>Total chlorinated atrazine residue includes parent compound and the following metabolites of health concern: deethylatrazine, deisopropylatrazine and diaminoatrazine.

<sup>2</sup>Appendix I contains Chemical Abstract Service (CAS) registry numbers, common synonyms and trade names for most substances listed in Table 1.

<sup>3</sup>Total coliform bacteria may not be present in any 100 ml sample using either the membrane filter (MF) technique, the presence-absence (P-A) coliform test, the minimal medium ONPG-MUG (MMO-MUG) test or not present in any 10 ml portion of the 10-tube multiple tube fermentation (MTF) technique.

<sup>4</sup>Xylene includes meta-, ortho-, and para-xylene.

SECTION 5. NR 140.14 (3)(intro.), (a) and (b) are repealed and recreated to read:

NR 140.14 (3)(intro.) In addition to sub. (2), the following applies when a preventive action limit or enforcement standard is equal to or less than the limit of quantitation:

(a) If a substance is not detected in a sample, the regulatory agency may not consider the preventive action limit or enforcement standard to have been attained or exceeded.

(b) If the preventive action limit or enforcement standard is less than the limit of detection, and the concentration of a substance is reported between the limit of detection and the limit of quantitation, the regulatory agency shall consider the preventive action limit or enforcement standard to be attained or exceeded only if:

1. The substance has been analytically confirmed to be present in the same sample using an equivalently sensitive analytical method or the same analytical method, and

2. The substance has been statistically confirmed to be present above the preventive action limit or enforcement standard, determined by an appropriate statistical test with sufficient samples at a significance level of 0.05.

(c) If the preventive action limit or enforcement standard is between the limit of detection and the limit of quantitation, the regulatory agency shall consider the preventive action limit or enforcement standard to be attained or exceeded if the concentration of a substance is reported at or above the limit of quantitation.

SECTION 6. NR 140.14 (3)(c) is renumbered NR 140.16(5) and amended to read:

NR 140.16(5) The owner or operator of the facility, practice or activity shall report the limit of detection and the limit of quantitation with the sample results ~~when requested by the regulatory agency~~. If a substance is detected below the limit of quantitation, the owner or operator shall report the detected value with the appropriate qualifier to the regulatory agency.

SECTION 7. NR 140.16 (4) is created to read:

NR 140.16 (4) The department may reject groundwater quality data that does not meet the requirements of the approved or designated analytical methods.

SECTION 8. NR 140.24 (1)(a) and (5)(intro.) are amended to read:

NR 140.24 (1)(a) The owner or operator of the facility, practice or activity shall notify the department in writing when monitoring data is submitted that a preventive action limit has been attained or exceeded in accordance with any deadlines in applicable statutes, rules, permits or plan approvals. Where no deadlines are imposed, the owner or operator shall notify the department as soon as practical after the results are received. When the results of any private well sampling exceed a preventive action limit, the owner or operator of the facility, practice or activity shall notify the department as soon as practical but no more than 10 days after the results are received. The notification shall provide a preliminary analysis of the cause and significance of the concentration.

(5)(intro.) NO ACTION RESPONSE CRITERIA For facilities, practices and activities with a design management zone specified in s. NR 140.22(3) Table 4, the department may determine

that no response is necessary and that an exemption under s. NR 140.28 is not required when either of the following conditions is met:

SECTION 9. NR 140.26 (1)(a) is amended to read:

NR 140.26 (1)(a) The owner or operator of the facility, practice or activity shall notify the department in writing when monitoring data is submitted that an enforcement standard has been attained or exceeded in accordance with any deadlines in applicable statutes, rules, permits or plan approvals. Where no deadlines are imposed, the owner or operator shall notify the department as soon as practical after the results are received. When the results of any private well sampling exceed an enforcement standard or preventive action limit, the owner or operator of the facility, practice or activity shall notify the department as soon as practical but no more than 10 days after the results are received. The notification shall provide a preliminary analysis of the cause and significance of the concentration.

SECTION 10. NR 140.28 (5) is renumbered NR 140.28 (6).

SECTION 11. NR 140.28 (5) is created to read:

NR 140.28 (5) CRITERIA FOR GRANTING A TEMPORARY EXEMPTION WHERE INFILTRATION OR INJECTION IS UTILIZED FOR A REMEDIAL ACTION. (a) General. In lieu of an exemption granted under subs. (2) to (4), the department may grant a temporary exemption under this subsection to an owner or operator of a proposed or existing facility, practice or activity when a preventive action limit or enforcement standard may be attained or exceeded at a point of standards application. This exemption applies to the owner or operator of a facility, practice or activity that is undertaking a remedial action that: includes the infiltration or injection of contaminated groundwater or remedial material, has been approved by the department, and will comply with the applicable response objectives under s. NR 140.24 or 140.26 within a reasonable period of time. The owner or operator of the facility, practice or activity may submit a temporary exemption request to the department at the same time or after the department has approved the remedial action.

(b) Exemption request. The owner or operator of the facility, practice or activity shall submit a request for a temporary exemption to the department. As part of the request, the applicant shall indicate how the exemption prerequisites under par. (c) and applicable remedial design, operational and monitoring criteria under par. (d) will be met.

Note: For most remedial actions, a microcosm or treatability study, or other bench scale or pilot scale study will be required by the department prior to consideration of an exemption under this section.

(c) Exemption prerequisites. As part of the temporary exemption request, the owner or operator shall demonstrate to the satisfaction of the department that all of the following requirements will be met:

1. The remedial action for restoring contaminated soil or groundwater, and any infiltrated or injected contaminated water and remedial material, shall achieve the applicable response objectives required by s. NR 140.24 (2) or 140.26 (2) within a reasonable period of time.

2. The type, concentration and volume of substances or remedial material to be infiltrated or injected shall be minimized to the extent that is necessary for restoration of the contaminated soil or groundwater and be approved by the department prior to use.

3. Any infiltration or injection of contaminated water or remedial material into soil or groundwater will not significantly increase the threat to public health or welfare.

4. No uncontaminated or contaminated water, substance or remedial material will be infiltrated or injected into an area where a floating non-aqueous phase liquid is present in the contaminated soil or groundwater.

5. There will be no expansion of soil or groundwater contamination, or migration of any infiltrated or injected contaminated water or remedial material, beyond the edges of previously contaminated areas, except that infiltration or injection into previously uncontaminated areas may be allowed if the department determines that expansion into adjacent, previously uncontaminated areas is necessary for the restoration of the contaminated soil or groundwater, and the requirements of subd. 1 will be met.

6. All necessary federal, state and local licenses, permits and other approvals are obtained and all applicable environmental protection requirements will be complied with.

Note: The issuance of a wastewater discharge permit by the department is required prior to the infiltration or injection of substances or remedial material into unsaturated soil or groundwater. A wastewater discharge permit establishes the effluent or injection limits for substances or remedial material which may be infiltrated or injected into unsaturated soil or groundwater. A temporary exemption granted under this subsection applies to substances or remedial material which may enter groundwater or may be detected at a point of standards applications; it does not apply to substances or remedial material infiltrated or injected into unsaturated soil.

(d) Remedial action design, operation and monitoring criteria. In addition to providing information on how the requirements under par. (c) will be met, the application shall specify the following information where applicable:

1. The remedial action design, operation and soil and groundwater monitoring procedures to insure compliance with the requirements under par. (c) and applicable criteria under this paragraph.

2. The level of pre-treatment for contaminated groundwater prior to reinfiltration or reinjection.

3. The types and concentrations of substances or remedial material being proposed for infiltration or injection.

4. The volume and rate of infiltration or injection of contaminated groundwater or remedial material.

5. The location where the contaminated groundwater or remedial material will be infiltrated or injected.

(e) Granting an exemption. The department may only grant a temporary exemption under this subsection at the same time or after the department has approved the remedial action. When the department grants an exemption under this subsection, it shall follow the exemption procedures included in sub. (6) and shall require the owner or operator of the facility, practice or activity to comply with the requirements and criteria in pars. (c) and (d). The temporary exemption shall also include:

1. The expiration date of the temporary exemption. The expiration date shall be selected to achieve the applicable response objectives required by s. NR 140.24 (2) or 140.26 (2) within a reasonable period of time, not to exceed 5 years from the effective date of the exemption. The

temporary exemption may be reissued following a department review of information documenting the performance of the remedial action and a successful demonstration that reissuance of the exemption is necessary to achieve the response objectives required by s. NR 140.24 (2) or 140.26 (2).

2. Any other conditions or requirements the department determines are necessary relating to the temporary exemption.

(f) Responses to exemption violations. If the department determines that the conditions or requirements specified in the temporary exemption are not being met, the department may:

1. Require that the owner or operator of the facility, practice or activity revise the remedial action design, operation or monitoring procedures in accordance with par. (d). All revisions shall comply with the requirements established under pars. (c) and (e) and may require approval from the department prior to implementation.

2. Revoke the exemption and require implementation of an alternate remedial action to restore soil or groundwater quality.

SECTION 12. Appendix I is created to read:

WISCONSIN ADMINISTRATIVE CODE

APPENDIX I TO TABLE 1 — PUBLIC HEALTH GROUNDWATER QUALITY STANDARDS

| Substance            | CAS RN <sup>1</sup> | Common synonyms/Trade name <sup>2</sup> |
|----------------------|---------------------|---|
| Acetone              | 67-64-1             | <i>Propanone</i>                        |
| Alachlor             | 15972-60-8          | <i>Lasso</i>                            |
| Aldicarb             | 116-06-3            | <i>Temik</i>                            |
| Asbestos             | 12001-29-5          |   |
| Benzene              | 71-43-2             |   |
| Benzo(a)pyrene       | 50-32-8             |   |
| Bromodichloromethane | 75-27-4             | Dichlorobromomethane                    |
| Bromoform            | 75-25-2             | Tribromomethane                         |
| Bromomethane         | 74-83-9             | Methyl bromide                          |
| Butylate             | 2008-41-5           |   |
| Carbaryl             | 63-25-2             | <i>Sevin</i>                            |
| Carbofuran           | 1563-66-2           | <i>Furadan</i>                          |
| Carbon tetrachloride | 56-23-5             |   |
| Chloramben           | 133-90-4            |   |
| Chlordane            | 57-74-9             |   |
| Chloroethane         | 75-00-3             | Ethyl chloride                          |
| Chloroform           | 67-66-3             | Trichloromethane                        |
| Chloromethane        | 74-87-3             | Methyl chloride                         |
| Cyanazine            | 21725-46-2          |   |
| Cyanide              | 57-12-5             |   |
| Dacthal              | 1861-32-1           |   |
| Dibromochloromethane | 124-48-1            | Chlorodibromomethane                    |

|  |           |  |
|--|-----------|--|
| 1,2-Dibromo-3-chloropropane                  | 96-12-8   | DBCP, Dibromochloropropane             |
| 1,2-Dibromoethane                            | 106-93-4  | EDB, Ethylene dibromide, Dibromoethane |
| Dicamba                                      | 1918-00-9 | <i>Banvel</i>                          |
| 1,2-Dichlorobenzene                          | 95-50-1   | o-Dichlorobenzene                      |
| 1,3-Dichlorobenzene                          | 541-73-1  | m-Dichlorobenzene                      |
| 1,4-Dichlorobenzene                          | 106-46-7  | p-Dichlorobenzene                      |
| Dichlorodifluoromethane                      | 75-71-8   | <i>Freon 12</i>                        |
| 1,1-Dichloroethane                           | 75-34-3   |  |
| 1,2-Dichloroethane                           | 107-06-2  | DCE, Ethylene dichloride               |
| 1,1-Dichloroethylene                         | 75-35-4   | 1,1-DCE, 1,1-Dichloroethene            |
| 1,2-Dichloroethylene (cis)                   | 156-59-2  | cis-Dichloroethylene                   |
| 1,2-Dichloroethylene (trans)                 | 156-60-5  | trans-1,2-Dichloroethylene             |
| 2,4-Dichlorophenoxyacetic acid               | 94-75-7   | 2,4-D                                  |
| 1,2-Dichloropropane                          | 78-87-5   | Propylene dichloride                   |
| 1,3-Dichloropropene (cis/trans) <sup>3</sup> |           | <i>Telone</i>                          |
| Di(2-ethylhexyl) phthalate                   | 117-81-7  | DEHP, Bis(2-ethylhexyl) phthalate      |
| Dimethoate                                   | 60-51-5   |  |
| 2,4-Dinitrotoluene                           | 121-14-2  | 2,4-DNT                                |
| 2,6-Dinitrotoluene                           | 606-20-2  | 2,6-DNT                                |
| Dinoseb                                      | 88-85-7   |  |
| Dioxins                                      | 1746-01-6 | 2,3,7,8-TCDD                           |
| Endrin                                       | 72-20-8   |  |
| EPTC   | 759-94-4  | <i>Eptam, Eradicane</i>                |
| Ethylbenzene                                 | 100-41-4  |  |
| Ethylene glycol                              | 107-21-1  |  |

|  |            |  |
|--|------------|--|
| Fluorene                               | 86-73-7    |  |
| Fluoride                               | 16984-48-8 |  |
| Fluorotrichloromethane                 | 75-69-4    | Freon 11, Trichloro-<br>fluoromethane                          |
| Formaldehyde                           | 50-00-0    |  |
| Heptachlor                             | 76-44-8    |  |
| Heptachlor epoxide                     | 1024-57-3  |  |
| Hexachlorobenzene                      | 118-74-1   | Perchlorobenzene, <i>Granox</i>                                |
| Lindane                                | 58-89-9    |  |
| Mercury                                | 7439-97-6  |  |
| Methoxychlor                           | 72-43-5    |  |
| Methylene chloride                     | 75-09-2    | Dichloromethane  |
| Methyl ethyl ketone                    | 78-93-3    | MEK, 2-Butanone  |
| Methyl isobutyl ketone                 | 108-10-1   | MIBK, 4-Methyl-2-pentanone,<br>Isopropylacetone, <i>Hexone</i> |
| Methyl tert-butyl ether                | 1634-04-4  | MTBE, 2-Methoxy-2-methyl-<br>propane, tert-Butyl methyl ether  |
| Metolachlor                            | 51218-45-2 | <i>Dual</i>  |
| Metribuzin                             | 21087-64-9 | <i>Sencor, Lexone</i>  |
| Monochlorobenzene                      | 108-90-7   | Chlorobenzene  |
| Naphthalene                            | 91-20-3    |  |
| Pentachlorophenol                      | 87-86-5    | PCP  |
| Phenol                                 | 108-95-2   |  |
| Picloram                               | 1918-02-1  | <i>Tordon</i>  |
| Polychlorinated biphenyls <sup>4</sup> |            | PCBs   |
| Simazine                               | 122-34-9   | <i>Princep</i>   |
| Styrene                                | 100-42-5   | Ethenylbenzene   |
| 1,1,2,2-Tetrachloroethane              | 79-34-5    | TCA  |

|                                       |           |                         |
|---------------------------------------|-----------|-------------------------|
| Tetrachloroethylene                   | 127-18-4  | Perchloroethylene       |
| Tetrahydrofuran                       | 109-99-9  |                         |
| Toluene                               | 108-88-3  |                         |
| Toxaphene                             | 8001-35-2 |                         |
| 1,2,4-Trichlorobenzene                | 120-82-1  |                         |
| 1,1,1-Trichloroethane                 | 71-55-6   | Methyl chloroform       |
| 1,1,2-Trichloroethane                 | 79-00-5   |                         |
| Trichloroethylene                     | 79-01-6   | TCE                     |
| 2,4,5-Trichlorophenoxy-propionic Acid | 93-72-1   | 2,4,5-TP, <i>Silvex</i> |
| Trifluralin                           | 1582-09-8 | <i>Treflan</i>          |
| Vinyl Chloride                        | 75-01-4   |                         |
| Xylene <sup>5</sup>                   |           |                         |

<sup>1</sup>Chemical Abstracts Service (CAS) registry numbers are unique numbers assigned to a chemical substance. The CAS registry numbers were published by the U. S. Environmental Protection Agency in 40 CFR Part 264, Appendix IV.

<sup>2</sup>Common synonyms include those widely used in government regulations, scientific publications, commerce and the general public. A trade name, also known as the proprietary name, is the specific, registered name given by a manufacturer to a product. Trade names are listed in *italics*. Common synonyms and trade names should be cross-referenced with the CAS registry number to ensure the correct substance is identified.

<sup>3</sup>This is a combined chemical substance which includes *cis* 1,3-Dichloropropene (CAS RN 10061-01-5) and *trans* 1,3-Dichloropropene (CAS RN 10061-02-6).

<sup>4</sup>Polychlorinated biphenyls (CAS RN 1336-36-3); this category contains congener chemicals (same molecular composition, different molecular structure and formula), including constituents of Aroclor-1016 (CAS RN 12674-11-2), Aroclor-1221 (CAS RN 11104-28-2), Aroclor-1232 (CAS RN 11141-16-5), Aroclor-1242 (CAS RN 53469-21-9), Aroclor-1248 (CAS RN 12672-29-6), Aroclor-1254 (CAS RN 11097-69-1), and Aroclor-1260 (CAS RN 11096-82-5).

<sup>5</sup>Xylene (CAS RN 1330-20-7) refers to a mixture of three isomers, *meta*-xylene (CAS RN 108-38-3), *ortho*-xylene (CAS RN 95-47-6), and *para*-xylene (CAS RN 106-42-3).

SECTION 13. NR 149.03 (15), (16), and (18) Note are amended to read:

NR 149.03 (15) "Limit of detection" means the lowest concentration level that can be determined to be ~~significantly~~ statistically different from a blank.

(16) "Limit of quantitation" means the level above which quantitative results may be obtained with a specified degree of confidence.

Note: The limit of quantitation is 10/3 or 3.333 times the limit of detection.

(18) Note: When analyzing samples which are other than aqueous matrices the use of a matrix-matched method may be is advisable. The matrix blank may not contain the analyte above the level of detection.

SECTION 14. NR 149.11 (5) is amended to read:

NR 149.11 (5) ~~If requested, the~~ The limit of quantitation and limit of detection shall be determined in accordance with a method specified by the department for each analyte reported by a laboratory in accordance with a method specified by the department. The department may also require that the limit of detection be determined for a specific matrix.

SECTION 15. NR 149.14 (3)(d) and (h) are amended to read:

NR 149.14 (3)(d) At least one method blank shall be prepared or analyzed, or both on each analysis day, for those tests for which method blanks are appropriate. ~~For certain tests, Certain methods require that a nonreacted sample may be used as a blank. Method blanks may not be used to correct sample results, except when specified in the method.~~ There is no requirement to run a blank for solids testing performed under test category 4. The method blank results exceed control limits when results are higher than the highest of any of the following:

1. The limit of detection.
2. Five percent of the regulatory limit for that analyte.
3. Five percent of the measured concentration in the sample.

(3)(h) If the results of known standards, spiked samples, method blanks or replicates exceed the quality control limits, corrective action shall be taken by the laboratory. ~~When the attempted corrective action does not solve the problem, the~~ The laboratory shall reanalyze the affected samples or qualify the results back to the last acceptable quality control check of the same type unless the laboratory determines that sample results are unaffected. The results are qualified by reporting that the laboratory analysis was not within the acceptance limits for this test.

The foregoing rules were approved and adopted by the State of Wisconsin Natural Resources Board on March 23, 1995.

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 \_\_\_\_\_

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

By \_\_\_\_\_  
George E. Meyer, Secretary

(SEAL)

FISCAL ESTIMATE  
DOA-2048 (R 11/90)

ORIGINAL  
 CORRECTED  
 UPDATED  
 SUPPLEMENTAL

LRB or Bill No./Adm. Rule No.  
Chs. NR 140 & 149, Wis. Adm. Code  
Amendment No. if Applicable

Subject  
Amendments to ch. NR 140 (Groundwater Quality) and ch. NR 149 (Laboratory Certification and Registration)

Fiscal Effect

State:  No State Fiscal Effect

Check columns below only if bill makes a direct appropriation or affects a sum sufficient appropriation

- Increase Existing Appropriation
- Decrease Existing Appropriation
- Create New Appropriation
- Increase Existing Revenues
- Decrease Existing Revenues

Increase Costs - May be possible to Absorb Within Agency's Budget  Yes  No

Decrease Costs

Local:  No local government costs

- 1.  Increase Costs  
 Permissive  Mandatory
- 2.  Decrease Costs  
 Permissive  Mandatory

- 3.  Increase Revenues  
 Permissive  Mandatory
- 4.  Decrease Revenues  
 Permissive  Mandatory

5. Types of Local Governmental Units Affected:
- Towns
  - Villages
  - Cities
  - Counties
  - Others Sanitary Districts
  - School Districts
  - VTAE Districts

Fund Sources Affected

GPR  FED  PRO  PRS  SEG  SEG-S

Affected Ch. 20 Appropriations

Assumptions Used in Arriving at Fiscal Estimate

Chapter NR 140, Wis. Adm. Code, was adopted in 1985 and established groundwater quality standards and created a framework for implementation of the standards by the Department. This amendment to NR 140 would establish standards for 13 substances, modify the standards for 10 substances, clarify laboratory definitions, procedures and reporting requirements, add Chemical Abstract Service (CAS) registry numbers to substances in Table 1 of ch. NR 140, and add temporary exemption language for recirculation, infiltration or injection as part of a remedial response. For 6 of the substances for which the standards would be revised, the standards would be lowered (made more stringent). The standards for the other 4 substances would be raised.

Chapter NR 140 already contains groundwater standards for 88 substances of health concern and 8 substances of welfare concern. Regulated facilities, practices and activities which are the sources of the substances for which standards are proposed are, for the most part, the same sources for which standards already exist. Consequently, there should be few cases where the proposed standards would be exceeded and the existing standards are not exceeded. Adoption of these standards would ensure a uniform response to comply with the standards. Additional monitoring costs to the regulated community should be small. Some of the proposed standards are for substances for which facilities are already monitoring. Workload of state agencies should not change substantially. The Department believes it is unlikely that there will be additional costs to state and local government resulting from adoption of the proposed groundwater standards.

Groundwater standards would be lowered for the herbicide dinoseb. There may be more monitoring for this substance and possible use restrictions by the Department of Agriculture, Trade and Consumer Protection if it is found extensively in groundwater.

The temporary exemption language to allow infiltration or injection of contaminated groundwater and remedial material as part of a remedial response is anticipated to speed up some soil and groundwater clean-ups and provide remediation cost savings in some cases.

Laboratories certified or registered under ch. NR 149, Wis. Adm. Code, would be required to determine limit of detection and limit of quantitation for analyses performed. There may be additional costs to these laboratories for data reporting, but the costs are anticipated to be minor.

- continued on attached page -

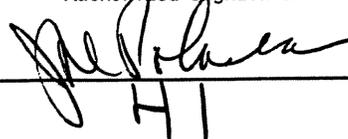
Long-Range Fiscal Implications

None

Agency/Prepared by: (Name & Phone No.)

David Lindorff (266-9265)  
Natural Resources

Authorized Signature/Telephone No.

  
HI

6-2794

Date

02/13/95

Assumptions used in Arriving at Fiscal Estimate. Continued

Laboratories certified or registered under ch. NR 149, Wis. Adm. Code, would be required to determine 1) limit of detection and quantitation for analyses performed and 2) qualify or rerun samples that fail method blank criteria. Currently, the rule requires that the limits of detection and quantitation be determined when requested. These two proposed rule changes may or may not have a fiscal impact on laboratories. For those laboratories with good quality control and housekeeping practices the costs will be little to none. Many laboratories use Laboratory Information Manage System (LIMS) software that is commercially available. This software has the capability of reporting the required data. When a laboratory fails the criteria for methods blanks the laboratory can qualify the data or rerun the samples in the batch. Qualifying the data is a less costly option than rerunning the samples. The method blank criteria will help protect facility owners from false positives, thereby reducing their costs in taking corrective action when the laboratory has a method blank problem resulting in a high bias on sample results.

These requirements will assist in leveling the playing field for analytical laboratories. Those laboratories with poor quality control and housekeeping practices will need to improve. It is very difficult to estimate what the costs will be to the laboratories for the reasons given above. These procedures (limit of detection & method blank criteria) have been available since 1984 and 1990. Therefore, these procedures are not new to many laboratories currently certified by the State of Wisconsin.