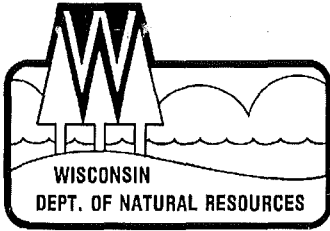


CR 94-11



George E. Meyer
Secretary

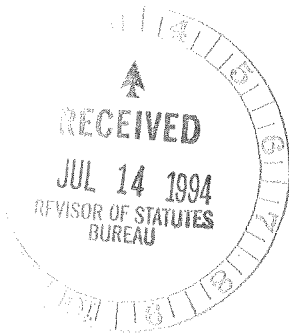
State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

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STATE OF WISCONSIN)
)
DEPARTMENT OF NATURAL RESOURCES) SS

TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETINGS:

I, George E. Meyer, 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. AM-55-93 was duly approved and adopted by this Department on May 26, 1994. 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 hereunto set my hand and affixed the official seal of the Department at the Natural Resources Building in the City of Madison, this 17th day of July, 1994.

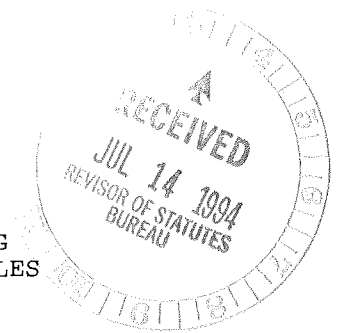
George E Meyer
George E. Meyer, Secretary

(SEAL)

10-1-94



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



.....
IN THE MATTER of **repealing** NR 406.04(1)(m)5., 407.03(1)(sm)5..
and 419.07(3)(b)(intro.) and (5)(a), **renumbering** .
NR 406.04(1)(m)6., 7. and 9., 407.03(1)(sm)6., 7. and 9., .
419.07(3)(a)5., (5)(d)2. to 5., and (7), **renumbering and** .
amending NR 406.04(1)(m)8., 10. and (note), 407.03(1)(sm)8., .
10. and (note) and 419.07(2)(a)(note) and (3)(a)4. and .
(b)1. and 2., **amending** NR 406.04(1)(m)(intro.) and 1. to 3., .
407.03(1)(sm)(intro.) and 1. to 3., 419.07(1)(note), .
(2)(title), (a)(intro.) and (b), (3)(a)(intro.) and 3., .
(4)(a) and (b) and (5)(c), **repealing and recreating** .
NR 419.07(2)(c)(intro.) and (6) and **creating** NR 419.02(8), .
419.07(2)(a)1. and 2 and (note), (3)(a)4. and 5., .
(4)(c)(intro.), 1. and 2., (4)(d) and (e), (5)(d)2., and (7) .
of the Wisconsin Administrative Code, pertaining to revisions.
of the rules regulating the remediation of contaminated water.
and soil. .
.....

AM-55-93

Analysis Prepared by the Department of Natural Resources

Authorizing statutes: ss. 144.31(1)(a), 144.38, 144.391(6) and 227.11(2)(a),
Stats.

Statutes interpreted: s. 144.31(1)(f), Stats. The State Implementation Plan
developed under that provision is revised.

Leaking underground storage tanks in the state are contaminating large quantities
of soil and water with organic compounds. This order revises current rules that
regulate the emissions of organic compounds to the atmosphere during the
remediation or "clean-up" of this contaminated soil and water.

The proposed revisions will exempt a greater number of soil and water
remediations from the need for permit review by Air Management. The remediations
will be allowed to proceed in a faster manner and administrative workload for
both the department and the regulated community will be reduced.

The revisions will also allow thermal evaporation units (asphalt plants), to
legally and economically remediate soils from small contamination sites.

SECTION 1. NR 406.04(1)(m)(intro.) and 1. to 3. are amended to read:

NR 406.04(1)(m)(intro.) The following procedures for the remediation of
soil or water contaminated with organic compounds, provided the potential
~~emissions of any hazardous air contaminants are below the levels specified in~~
sub. (2)(f) to emit, considering emission control devices, for any hazardous
air contaminant listed in Table 1 to Table 4 of s. NR 445.04 is not greater
than the emission rate listed in Table 1 to Table 4 of s. NR 445.04 for the
air contaminant at the respective stack height:

1. Landspreading of contaminated soil, including the agricultural landspreading of soil contaminated with pesticide or fertilizer;

2. Negative pressure venting of contaminated soil or bioremediation, provided the remediation is completed within 3 months or ~~total~~ the potential to emit organic compounds are emitted from the remediation site is at a rate of not more than 5.7 pounds per hour, considering emission control devices;

3. Pilot ~~tests~~ testing of a negative pressure venting systems system provided ~~those tests are completed within 8 hours of start up and the air flow rate during the pilot test does not exceed 100 standard cubic feet per minute~~ the testing is limited to a total withdrawal of not more than 150,000 standard cubic feet (scf) of air;

Note: The total withdrawal may be determined by the equation: Total withdrawal (scf) = hours of operation of pilot test (hr) × average flow rate in cubic feet per minute at standard conditions (scfm) × 60 min/hr. An example is: 10 hours of operation × 250 scfm × 60 min/hr = 150,000 scf. When testing at multiple flow rates, determine the withdrawal for each flow rate and sum the withdrawals for a total withdrawal.

SECTION 2. NR 406.04(1)(m)5. is repealed.

SECTION 3. NR 406.04(1)(m)6. and 7. are renumbered NR 406.04(1)(m)5. and 6.

SECTION 4. NR 406.04(1)(m)8. is renumbered NR 406.04(1)(m)7. and amended to read:

NR 406.04(1)(m)7. Installation and use of air strippers for treatment of contaminated water, provided the remediation is completed within 3 months or the potential to emit organic compounds from the remediation site is at a rate of not more than 5.7 pounds per hour, considering emission control devices;

SECTION 5. NR 406.04(1)(m)9. is renumbered NR 406.04(1)(m)8.

SECTION 6. NR 406.04(1)(m)10. and (note) are renumbered NR 406.04(1)(m)9. and (note) and amended to read:

NR 406.04(1)(m)9. Installation and use of any technique or device to remediate soil or water contaminated with organic compounds as part of ~~on-site~~ actions taken by EPA under the authority of the comprehensive environmental response compensation and liability act of 1980, ~~as amended~~, 42 USC 9601 et seq., by the department under the authority of s. 144.442 or 144.76, Stats., or by a responsible party in compliance with the requirements of an administrative order, consent decree or contract issued pursuant to the comprehensive environmental response compensation and liability act of 1980, 42 USC 9601 et seq., or s 144.442 or 144.76, Stats.

Note: Even though these sources are exempt from permit requirements, they are still subject to the ~~approval~~ notification requirements under s. NR 419.07(2).

SECTION 7. NR 407.03(1)(sm)(intro.) and 1. to 3. are amended to read:

NR 407.03(1)(sm)(intro.) The following procedures for the remediation of soil or water contaminated with organic compounds, provided the potential to emit, considering emission control devices, for any hazardous air contaminant listed in Table 1 to Table 4 of s. NR 445.04 is not greater than the emission rate listed in Table 1 to Table 4 of s. NR 445.04 for the air contaminant at the respective stack height:

1. ~~Landspreading, aeration or bioremediation~~ of contaminated soil⁺, including the agricultural landspreading of soil contaminated with pesticide or fertilizer;

2. Negative pressure venting of contaminated soil or bioremediation, provided the remediation is completed within 18 months or ~~total~~ the potential to emit organic compounds ~~are emitted~~ from the remediation site is at a rate of not more than 5.7 pounds per hour, considering emission control devices;

3. ~~Pilot tests~~ testing of a negative pressure venting ~~systems~~ system provided ~~those tests are completed within 8 hours of start up and the~~ air flow rate during the pilot test does not exceed 100 standard cubic feet

per minute the testing is limited to a total withdrawal of not more than 150,000 standard cubic feet (scf) of air;

Note: The total withdrawal may be determined by the equation: Total withdrawal (scf) = hours of operation of pilot test (hr) × average flow rate in cubic feet per minute at standard conditions (scfm) × 60 min/hr. An example is: 10 hours of operation × 250 scfm × 60 min/hr = 150,000 scf. When testing at multiple flow rates, determine the withdrawal for each flow rate and sum the withdrawals for a total withdrawal.

SECTION 8. NR 407.03(1)(sm)5. is repealed.

SECTION 9. NR 407.03(1)(sm)6. and 7. are renumbered NR 407.03(1)(sm)5. and 6.

SECTION 10. NR 407.03(1)(sm)8. is renumbered NR 407.03(1)(sm)7. and amended to read:

NR 407.03(1)(sm)7. Installation and use of air strippers for treatment of contaminated water, provided the remediation is completed within 18 months or the potential to emit organic compounds from the remediation site is at a rate of not more than 5.7 pounds per hour, considering emission control devices;

SECTION 11. NR 407.03(1)(sm)9. is renumbered NR 407.03(1)(sm)8.

SECTION 12. NR 407.03(1)(sm)10 is renumbered NR 407.03(1)(sm)9. and amended to read:

NR 407.03(1)(sm)9. Installation and use of any technique or device to remediate soil or water contaminated with organic compounds as part of ~~on-site~~ actions taken by EPA under the authority of the comprehensive environmental response compensation and liability act of 1980, ~~as amended,~~ 42 USC 9601 et seq., by the department under the authority of s. 144.442 or 144.76, Stats., or by a responsible party in compliance with the requirements of an administrative order, consent decree or contract issued pursuant to the

comprehensive environmental response compensation and liability act of 1980,
42 USC 9601 et seq., or s. 144.442 or 144.76, Stats.

Note: Even though these sources are exempt from permit requirements, they are still subject to the ~~approval~~ notification requirements under s. NR 419.07(2).

SECTION 13. NR 419.02(8) is created to read:

NR 419.02(8) "Virgin petroleum liquid" means crude petroleum, petroleum, condensate and any finished or intermediate products manufactured in or extracted in a petroleum refinery or in a similar facility. Virgin petroleum liquids include gasoline, diesel fuel, kerosene, distillate fuel oils, residual fuel oils, or other products produced through distillation of petroleum or through redistillation, cracking, extraction or reforming of unfinished petroleum derivatives.

SECTION 14. NR 419.07(1)(note) and (2)(title) and (a)(intro.) are amended to read:

NR 419.07(1) Note: Certain contaminated soils and water are hazardous wastes. Due to the "mixture", ~~and~~ "derived from", and "contained in" rules found in ch. NR 605, soils and water contaminated by listed hazardous waste under s. NR 605.09(2), Table II or III, are also hazardous wastes. In addition, any residue or contaminated soil, water or other debris resulting from the cleanup of a spill of any material listed in Table IV or V of s. NR 605.09(3) is a listed hazardous waste. Soils, water or other debris may also be considered hazardous waste when they exhibit a hazardous characteristic under one of the test procedures of s. NR 605.08, including the ~~state extraction procedure toxicity test or under the federal~~ toxicity characteristic leaching procedure test. Contaminated soils and water must be evaluated for the applicability of hazardous waste management rules (chs. NR 600 to 685). The requirements in chs. NR 600 to 685 for the treatment, ~~handling and~~ storage or disposal of hazardous waste must be followed if the contaminated soil or water is hazardous waste.

(2)(title) SOIL AND WATER REMEDIATION PROCEDURE NOTIFICATION AND APPROVAL. (a)(intro.) Except as provided in sub. (3), no person may use any procedure to remediate soil or water contaminated with organic compounds unless the person has submitted a complete soil or water remediation ~~application~~ notification form to the department's bureau of air management ~~and~~

~~has received approval under this subsection.~~ Notification shall be postmarked or delivered as follows:

SECTION 15. NR 419.07(2)(a)1. and 2. and (note) are created to read:

NR 419.07(2)(a)1. As soon as possible, but no later than the next working day following commencement of remediation, for virgin petroleum liquid spills for which remediation begins within 48 hours of the spill.

2. At least 10 business days prior to commencement of remediation for any other project.

Note: For remediation projects other than virgin petroleum contamination projects, department approval may be required.

SECTION 16. NR 419.07(2)(a)(note) is renumbered 419.07(2)(c)3.(note) and amended to read:

NR 419.07(2)(c)3. Note: This rule only addresses the remediation notification submittal and approval requirements of the bureau of air management. ~~Approval~~ Remediation notification submittal or remediation approval may be required by other bureaus in the department ~~including the bureau of solid and hazardous waste management as well.~~

SECTION 17. NR 419.07(2)(b) is amended to read:

NR 419.07(2)(b) The department's bureau of air management ~~shall~~ may approve, conditionally approve or deny ~~the application~~ approval for a remediation project described in the notification required in par. (a) ~~within 5 business days of receipt of a complete application~~ 2.

SECTION 18. NR 419.07(2)(c)(intro.) is repealed and recreated to read:

NR 419.07(2)(c)(intro.) The remediation may commence if the requirements in par. (a) are met and if the remediation project:

SECTION 19. NR 419.07(2)(c)2. and 3. are amended to read:

NR 419.07(2)(c)2. Will not ~~be~~ cause emissions in such quantity, concentration or duration as to be injurious to human health; and

3. Will not ~~be~~ cause emissions in quantities which will substantially contribute to the exceeding of an ambient air quality standard, or ambient air increment, ~~or~~ cause air pollution.

SECTION 20. NR 419.07(3)(a)(intro.) is renumbered 419.07(3)(intro.) and amended to read:

NR 419.07(3) EXEMPTIONS.(intro.) Any person using one of the procedures listed in this ~~paragraph~~ subsection is exempt from the requirement to ~~apply for and obtain a remediation procedure approval~~ submit a remediation notification form under sub. (2) and is exempt from the emission limits specified in sub. (4) except those contained in ch. NR 445:

SECTION 21. NR 419.07(3)(a)1. to 5. are renumbered 419.07(3)(a) to (c), (f) and (g), and (c) and (f), as renumbered, are amended to read:

NR 419.07(3)(c) Installation and use of any technique or device to remediate soil or water contaminated with organic compounds as part of ~~on-site~~ actions taken by EPA under the authority of the comprehensive environmental response compensation and liability act of 1980, ~~as amended,~~ 42 USC 9601 et seq.

(f) Pilot ~~tests~~ testing of a negative pressure venting ~~systems~~ system provided ~~those tests are completed within 8 hours of~~ start-up and the air flow rate during the pilot test does not exceed 100- standard cubic feet per minute the testing is limited to a total withdrawal of not more than 150,000 standard cubic feet (scf) of air.

Note: The total withdrawal may be determined by the equation: Total withdrawal (scf) = hours of operation of pilot test (hr) × average flow rate in cubic feet per minute at standard conditions (scfm) × 60 min/hr. An example is: 10 hours of operation × 250 scfm × 60 min/hr = 150,000 scf. When testing at multiple flow rates, determine the withdrawal for each flow rate and sum the withdrawals for a total withdrawal.

SECTION 22. NR 419.07(3)(b)(intro.) is repealed.

SECTION 23. NR 419.07(3)(b)1. and 2. are renumbered 419.07(3)(d) and (e) and, as renumbered, are amended to read:

NR 419.07(3)(d) Landfilling of contaminated soil ~~or~~.

(e) Landspreading of contaminated soil, including the agricultural landspreading of soil contaminated with pesticide or fertilizer.

SECTION 24. NR 419.07(4)(a) and (b) are amended to read:

NR 419.07(4)(a) An owner or operator of a soil or water remediation project shall treat or dispose of soil or water contaminated with organic compounds in a manner ~~approved by the department~~ which minimizes the emission of organic compounds.

(b) The organic compound emissions from the remediation of soil or water may not exceed 9.0 pounds of organic compounds per hour and any specific limit in ch. NR 445, except as specified in par. (c).

SECTION 25. NR 419.07(4)(c) to (e) are created to read:

NR 419.07(4)(c)(intro.) When remediating soil or water, thermal evaporation units shall meet the following organic compounds emissions limits until April 15, 1995. Thereafter thermal evaporation units shall meet the organic compounds emissions limit in par. (b) when remediating soil or water. Organic compounds emissions shall be calculated per par. (d).

1. 9.0 pounds per hour with a total of not more than 2 tons per calendar month and 16 tons per year for any facility located in Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington or Waukesha county.

2. 300 pounds per day with a total of not more than 2 tons per calendar month and 16 tons per year for any facility located in any other county.

(d) The organic compound emissions for pars. (b) and (c) are determined by averaging the contaminant concentrations in all samples of the contaminated soil or water analyzed and multiplying that average by the total amount of

soil or water to be remediated. If in any sample there is no contamination detected, the detection level of the test method is used for the contaminant concentration in that sample.

(e) The organic compound emissions determined for pars. (b) and (c) may be reduced by any control method approved by the bureau of air management.

Note: Control methods may include but are not limited to stack test results, afterburners, carbon absorption units, etc.

SECTION 26. NR 419.07(5)(a) is repealed.

SECTION 27. NR 419.07(5)(c) is amended to read:

NR 419.07(5)(c) Fuel requirements. A thermal evaporation unit may not be used to remediate ~~soils~~ soil or water contaminated with organic compounds containing aromatic hydrocarbons while using a fuel which is contaminated with chlorinated organic compounds unless an air pollution control permit has been issued to the source allowing it to use the fuel contaminated with chlorinated organic compounds while remediating ~~soils~~ soil or water contaminated with aromatic hydrocarbons.

SECTION 28. NR 419.07(5)(d)2. to 5. are renumbered 419.07(5)(d)3. to 6.

SECTION 29. NR 419.07(5)(d)2. is created to read:

NR 419.07(5)(d)2. If an asphalt plant has had more than one compliance test during the last 5 calendar years, the results of the most recent test will be used for purposes of demonstrating compliance with this section.

SECTION 30. NR 419.07(6) is repealed and recreated to read:

NR 419.07(6) TESTING REQUIREMENTS. (a) Testing of emissions from facilities or procedures used to remediate soil or water contaminated with organic compounds shall be conducted using test methods approved in advance by the department's bureau of air management. Testing shall be scheduled and reported as follows:

1. Emissions from the negative pressure venting of contaminated soil shall be conducted according to the following schedules:

a. Total organic compound emissions shall be tested once each day for the first 3 days of operation; weekly for the next 3 weeks; and monthly thereafter.

b. When a substance listed in Table 3 of s. NR 445.04 is present in the contaminated soil, testing for the Table 3 substances shall be done once during the first 3 days of operation, once during the third week of operation, and once every 6 months thereafter. For soil contaminated with more than one Table 3 air contaminant, the department's bureau of air management may approve the testing of certain Table 3 substances that act as indicators for other Table 3 substances present in the soil.

Note: For example, for soils contaminated only with virgin petroleum liquids, benzene is the Table 3 air contaminant of primary concern. Benzene testing alone would satisfy this subdivision.

2. Any facility or procedure used to remediate soil or water contaminated with organic compounds, except for negative pressure venting, may be required to test the emissions from the remediation according to a schedule determined by the department's bureau of air management.

3. Additional testing may be required by the department.

4. The first quarter results of any testing shall be submitted to the department's bureau of air management within 60 days following the end of the first quarter.

5. The testing required under this paragraph may only be modified or discontinued with written approval from the department's bureau of air management.

Note: Continued testing may be required by other bureaus in the department.

(b) Testing of contaminated soil or water required by the department shall be conducted by the owner of the contaminated soil or water or by the owner's representative.

SECTION 31. NR 419.07(7) is renumbered 419.07(8).

SECTION 32. NR 419.07(7) is created to read:

NR 419.07(7) RECORDKEEPING REQUIREMENTS. (a) An owner or operator of a facility or procedure used to remediate contaminated soil or water shall:

1. Meet the recordkeeping requirements listed in s. NR 439.04(1) and (2).
2. Maintain records for 3 years quantifying the year-to-date weight of s. NR 445.04 Table 3 substances contained in soil or water remediated for which testing was required under sub. (6).
3. Maintain records of calculations and amounts of soil or water remediated for 3 years.
4. Meet permit recordkeeping conditions specified in air pollution control permits.

The foregoing rule was approved and adopted by the State of Wisconsin Natural Resources Board on May 26, 1994.

The rule shall take effect 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 7/7/94.

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

By George E Meyer
George E. Meyer, Secretary

(SEAL)

