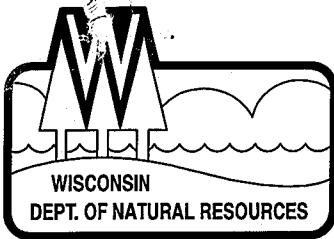


97-131

Clearinghouse Rule 97-131

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES



Tommy G. Thompson, Governor
George E. Meyer, Secretary

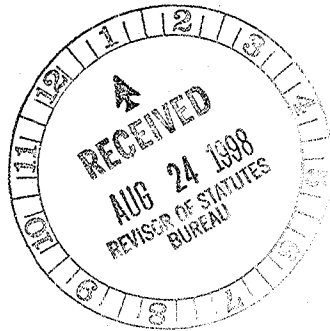
Box 7921
101 South Webster Street
Madison, Wisconsin 53707-7921
TELEPHONE 608-266-2621
FAX 608-267-3579
TDD 608-267-6897

STATE OF WISCONSIN)
) ss
DEPARTMENT OF NATURAL RESOURCES)

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-29-97 was duly approved and adopted by this Department on June 24, 1998. 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 19th day of August, 1998.



George E. Meyer
George E. Meyer, Secretary

(SEAL)

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

The Wisconsin Natural Resources Board adopts an order to renumber NR 485.04, Table 3, (1)(a) to (c), (2)(a) to (c) and (3)(a) to (c); to repeal and recreate NR 485.04, Table 1, (3); and to create NR 485.04, Table 1, (4) and (5), and Table 3, (1)(a), (2)(a) and (3)(a) relating to emission limitations for motor vehicles.

AM-29-97

Analysis Prepared by the Department of Natural Resources

Authorizing statutes: ss. 227.11(2)(a), 285.11(1) and 285.30(2), Stats.

Statutes interpreted: ss. 285.11(6) and 285.30(2), Stats. The State Implementation Plan developed under s. 285.11(6), Stats., is revised.

The proposed rule will relax or postpone for motor vehicles of model years 1990 and older the final phase of emission limitations in the original rule which specified emission limitations for enhanced motor vehicle emission inspections. These emission limitations, presented in Table 1 of s. NR 485.04, Wis. Adm. Code, are used in the state's motor vehicle emission inspection and maintenance (I/M) program which is operating in seven southeastern Wisconsin counties (Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Washington and Waukesha).

The original rule was adopted by the Natural Resources Board on August 18, 1995. It contained three increasingly restrictive phases of emission limitations, with the phases commencing on December 1, 1995; December 1, 1996; and December 1, 1997, respectively. On December 3, 1997, the Board adopted an emergency rule which implemented those emission limitations in the proposed rule which apply to emission inspections conducted between December 1, 1997 and November 30, 1998. This emergency rule remains in effect until May 30, 1998, but may be extended by up to 120 days by the Joint Committee for Review of Administrative Rules.

The proposed rule will relax the original rule's final phase of motor vehicle emission limitations for 1980 to 1986 model year light-duty vehicles (passenger cars), 1984 to 1986 model year light-duty trucks, and 1979 to 1986 model year heavy-duty trucks. For these vehicles the original rule's second phase limitations (those in effect from December 1, 1996, to November 30, 1997) will remain in effect for two more years (until November 30, 1999). Then, on December 1, 1999, limitations more restrictive than the original rule's second phase limitations but not as restrictive as the original rule's final limitations will go into effect.

Also, for the other 1990 and older model year vehicles subject to the I/M program, the proposed rule will postpone by one year (from December 1, 1997, to December 1, 1998) the effective date for the original rule's final phase of motor vehicle emission limitations. Limitations less restrictive than the original rule's final phase limitations will be in effect until December 1, 1998 as follows: For 1987 to 1990 model year vehicles, the limitations in effect from December 1, 1997, to November 30, 1998, will be more restrictive than the original rule's second phase limitations but not as restrictive as the original rule's final limitations; for the remaining vehicles in this category (1968 to 1979 model year light-duty vehicles, 1968 to 1983 model year

light-duty trucks, and 1968 to 1978 model year heavy-duty trucks), the original rule's second phase limitations will remain in effect through November 30, 1998.

Finally, the proposed rule will add to Table 3 of s. NR 485.04, Wis. Adm. Code, a new set of fast-pass emission limitations for each of the three measured air contaminants as follows: Fast-pass hydrocarbon limitations which apply to motor vehicles having composite hydrocarbon limitations in Table 1 of s. NR 485.04, Wis. Adm. Code, of at least 0.60 grams/mile but less than 0.80 grams/miles; fast-pass carbon monoxide limitations which apply to motor vehicles having composite carbon monoxide limitations in Table 1 of s. NR 485.04, Wis. Adm. Code, of at least 10.0 grams/mile but less than 15.0 grams/mile; fast-pass oxides of nitrogen limitations which apply to motor vehicles having composite oxides of nitrogen limitations in Table 1 of s. NR 485.04, Wis. Adm. Code, of at least 1.5 grams/mile but less than 2.0 grams/mile.

As required under s. 285.30(2)(intro.), Stats., the proposed emission limitations are not more stringent than those required by federal law at the time of the vehicle's manufacture.

SECTION 1. NR 485.04, Table 1, (3) is repealed and recreated to read:

NR 485.04, Table 1, (3) MOTOR VEHICLES INSPECTED BETWEEN DECEMBER 1, 1997 AND NOVEMBER 30, 1998.

(a) *Light-Duty Vehicles.*

Model Years	Hydrocarbons (grams/mile)		Carbon Monoxide (grams/mile)		Oxides of Nitrogen (grams/mile)
	Composite	Phase 2	Composite	Phase 2	Composite
1996 and newer	0.60	0.40	10.0	8.0	1.5
1994-1995					
Tier 1 ¹	0.60	0.40	10.0	8.0	1.5
Not Tier 1 ¹	0.80	0.50	15.0	12.0	2.0
1991-1993	0.80	0.50	15.0	12.0	2.0
1987-1990	1.10	0.70	20.0	16.0	2.5
1983-1986	2.00	1.25	30.0	24.0	3.0
1981-1982	2.00	1.25	60.0	48.0	3.0
1980	2.00	1.25	60.0	48.0	6.0
1977-1979	7.50	5.00	90.0	72.0	6.0
1975-1976	7.50	5.00	90.0	72.0	9.0
1973-1974	10.0	6.00	150	120	9.0
1968-1972	10.0	6.00	150	120	10.0

(b) *Light-Duty Trucks with GVWR of 6,000 pounds or less.*

Model Years	Hydrocarbons (grams/mile)		Carbon Monoxide (grams/mile)		Oxides of Nitrogen (grams/mile)
	Composite	Phase 2	Composite	Phase 2	Composite
1996 and newer					
(≤3750 lbs LVW) ²	0.60	0.40	10.0	8.0	1.5
(>3750 lbs LVW) ²	0.80	0.50	13.0	10.0	1.8
1994-1995					
Tier 1 ³					
(≤3750 lbs LVW) ⁴	0.60	0.40	10.0	8.0	1.5
(>3750 lbs LVW) ⁴	0.80	0.50	13.0	10.0	1.8
Not Tier 1 ³	1.60	1.00	40.0	32.0	2.5
1991-1993	1.60	1.00	40.0	32.0	2.5
1988-1990	2.20	1.40	55.0	44.0	3.0
1987	2.20	1.40	55.0	44.0	5.5
1984-1986	3.20	2.00	80.0	64.0	7.0
1979-1983	7.50	5.00	100	80.0	7.0
1975-1978	8.00	5.00	120	96.0	9.0
1973-1974	10.0	6.00	150	120	9.0
1968-1972	10.0	6.00	150	120	10.0

(c) *Light-Duty Trucks with GVWR of 6,001 to 8,500 pounds and Heavy-Duty Vehicles with GVWR of 8,500 pounds or less.*

Model Years	Hydrocarbons (grams/mile)		Carbon Monoxide (grams/mile)		Oxides of Nitrogen (grams/mile)
	Composite	Phase 2	Composite	Phase 2	Composite
1997 and newer					
(≤5750 lbs ALVW) ⁵	0.80	0.50	13.0	10.0	1.8
(>5750 lbs ALVW) ⁵	0.80	0.50	15.0	12.0	2.0
1996					
Tier 1 ⁶					
(≤5750 lbs ALVW) ⁷	0.80	0.50	13.0	10.0	1.8
(>5750 lbs ALVW) ⁷	0.80	0.50	15.0	12.0	2.0
Not Tier 1 ⁶	1.60	1.00	40.0	32.0	3.5
1991-1995	1.60	1.00	40.0	32.0	3.5
1988-1990	2.20	1.40	55.0	44.0	4.0
1987	2.20	1.40	55.0	44.0	5.5
1984-1986	3.20	2.00	80.0	64.0	7.0
1979-1983	7.50	5.00	100	80.0	7.0
1975-1978	8.00	5.00	120	96.0	9.0
1973-1974	10.0	6.00	150	120	9.0
1968-1972	10.0	6.00	150	120	10.0

(d) *Heavy-Duty Vehicles with GVWR of 8,501 to 10,000 pounds.*

Model Years	Hydrocarbons (grams/mile)		Carbon Monoxide (grams/mile)		Oxides of Nitrogen (grams/mile)
	Composite	Phase 2	Composite	Phase 2	Composite
1998 and newer	2.00	1.25	30.0	24.0	4.0
1991-1997	2.00	1.25	40.0	32.0	5.0
1987-1990	2.40	1.50	55.0	44.0	7.0
1985-1986	5.00	3.10	80.0	64.0	8.0
1979-1984	7.50	5.00	100	80.0	8.0
1974-1978	10.0	6.00	150	120	10.0
1970-1973	10.0	6.00	175	140	10.0
1968-1969	20.0	12.5	200	160	15.0

(e) *Heavy-Duty Vehicles with GVWR greater than 10,000 pounds.*

Model Years	Hydrocarbons (grams/mile)		Carbon Monoxide (grams/mile)		Oxides of Nitrogen (grams/mile)
	Composite	Phase 2	Composite	Phase 2	Composite
1998 and newer	3.50	2.00	60.0	48.0	7.0
1991-1997	3.50	2.00	70.0	56.0	9.0
1987-1990	4.50	2.80	100	80.0	13.0
1985-1986	10.0	6.00	160	128	16.0
1979-1984	11.5	7.00	180	145	16.0
1974-1978	13.0	8.00	200	160	20.0
1970-1973	13.0	8.00	225	180	20.0
1968-1969	24.0	15.0	250	200	30.0

SECTION 2. NR 485.04, Table 1, (4) and (5) are created to read:

NR 485.04, Table 1, (4) MOTOR VEHICLES INSPECTED BETWEEN DECEMBER 1, 1998 AND NOVEMBER 30, 1999.

(a) *Light-Duty Vehicles.*

Model Years	Hydrocarbons (grams/mile)		Carbon Monoxide (grams/mile)		Oxides of Nitrogen (grams/mile)
	Composite	Phase 2	Composite	Phase 2	Composite
1996 and newer	0.60	0.40	10.0	8.0	1.5
1994-1995					
Tier 1 ¹	0.60	0.40	10.0	8.0	1.5
Not Tier 1 ¹	0.80	0.50	15.0	12.0	2.0
1987-1993	0.80	0.50	15.0	12.0	2.0
1983-1986	2.00	1.25	30.0	24.0	3.0
1981-1982	2.00	1.25	60.0	48.0	3.0
1980	2.00	1.25	60.0	48.0	4.0
1977-1979	3.00	2.00	65.0	52.0	4.0
1975-1976	3.00	2.00	65.0	52.0	6.0
1973-1974	7.00	4.50	120	96.0	6.0
1968-1972	7.00	4.50	120	96.0	7.0

(b) *Light-Duty Trucks with GVWR of 6,000 pounds or less.*

Model Years	Hydrocarbons (grams/mile)		Carbon Monoxide (grams/mile)		Oxides of Nitrogen (grams/mile)
	Composite	Phase 2	Composite	Phase 2	Composite
1996 and newer					
(≤3750 lbs LVW) ²	0.60	0.40	10.0	8.0	1.5
(>3750 lbs LVW) ²	0.80	0.50	13.0	10.0	1.8
1994-1995					
Tier 1 ³					
(≤3750 lbs LVW) ⁴	0.60	0.40	10.0	8.0	1.5
(>3750 lbs LVW) ⁴	0.80	0.50	13.0	10.0	1.8
Not Tier 1 ³	1.60	1.00	40.0	32.0	2.5
1988-1993	1.60	1.00	40.0	32.0	2.5
1987	1.60	1.00	40.0	32.0	4.5
1984-1986	3.20	2.00	70.0	56.0	4.5
1979-1983	3.40	2.00	70.0	56.0	4.5
1975-1978	4.00	2.50	80.0	64.0	6.0
1973-1974	7.00	4.50	120	96.0	6.0
1968-1972	7.00	4.50	120	96.0	7.0

(c) *Light-Duty Trucks with GVWR of 6,001 to 8,500 pounds and Heavy-Duty Vehicles with GVWR of 8,500 pounds or less.*

Model Years	Hydrocarbons (grams/mile)		Carbon Monoxide (grams/mile)		Oxides of Nitrogen (grams/mile)
	Composite	Phase 2	Composite	Phase 2	Composite
1997 and newer					
(≤5750 lbs ALVW) ⁵	0.80	0.50	13.0	10.0	1.8
(>5750 lbs ALVW) ⁵	0.80	0.50	15.0	12.0	2.0
1996					
Tier 1 ⁶					
(≤5750 lbs ALVW) ⁷	0.80	0.50	13.0	10.0	1.8
(>5750 lbs ALVW) ⁷	0.80	0.50	15.0	12.0	2.0
Not Tier 1 ⁶	1.60	1.00	40.0	32.0	3.5
1988-1995	1.60	1.00	40.0	32.0	3.5
1987	1.60	1.00	40.0	32.0	4.5
1984-1986	3.20	2.00	70.0	56.0	4.5
1979-1983	3.40	2.00	70.0	56.0	4.5
1975-1978	4.00	2.50	80.0	64.0	6.0
1973-1974	7.00	4.50	120	96.0	6.0
1968-1972	7.00	4.50	120	96.0	7.0

(d) *Heavy-Duty Vehicles with GVWR of 8,501 to 10,000 pounds.*

Model Years	Hydrocarbons (grams/mile)		Carbon Monoxide (grams/mile)		Oxides of Nitrogen (grams/mile) Composite
	Composite	Phase 2	Composite	Phase 2	
1998 and newer	2.00	1.25	30.0	24.0	4.0
1991-1997	2.00	1.25	40.0	32.0	5.0
1987-1990	2.00	1.25	40.0	32.0	6.0
1985-1986	5.00	3.10	80.0	64.0	8.0
1979-1984	7.50	5.00	100	80.0	8.0
1974-1978	10.0	6.00	150	120	10.0
1970-1973	10.0	6.00	175	140	10.0
1968-1969	20.0	12.5	200	160	15.0

(e) *Heavy-Duty Vehicles with GVWR greater than 10,000 pounds.*

Model Years	Hydrocarbons (grams/mile)		Carbon Monoxide (grams/mile)		Oxides of Nitrogen (grams/mile) Composite
	Composite	Phase 2	Composite	Phase 2	
1998 and newer	3.50	2.00	60.0	48.0	7.0
1991-1997	3.50	2.00	70.0	56.0	9.0
1987-1990	3.50	2.00	70.0	56.0	11.0
1985-1986	10.0	6.00	150	120	16.0
1979-1984	11.5	7.00	150	120	16.0
1974-1978	13.0	8.00	150	120	20.0
1970-1973	13.0	8.00	175	140	20.0
1968-1969	24.0	15.0	200	160	30.0

(5) MOTOR VEHICLES INSPECTED ON AND AFTER DECEMBER 1, 1999.

(a) *Light-Duty Vehicles.*

Model Years	Hydrocarbons (grams/mile)		Carbon Monoxide (grams/mile)		Oxides of Nitrogen (grams/mile) Composite
	Composite	Phase 2	Composite	Phase 2	
1996 and newer	0.60	0.40	10.0	8.0	1.5
1994-1995					
Tier 1 ¹	0.60	0.40	10.0	8.0	1.5
Not Tier 1 ¹	0.80	0.50	15.0	12.0	2.0
1987-1993	0.80	0.50	15.0	12.0	2.0
1983-1986	1.30	0.80	20.0	16.0	2.5
1981-1982	1.50	0.95	45.0	36.0	2.5
1980	1.50	0.95	45.0	36.0	4.0
1977-1979	3.00	2.00	65.0	52.0	4.0
1975-1976	3.00	2.00	65.0	52.0	6.0
1973-1974	7.00	4.50	120	96.0	6.0
1968-1972	7.00	4.50	120	96.0	7.0

(b) *Light-Duty Trucks with GVWR of 6,000 pounds or less.*

Model Years	Hydrocarbons (grams/mile)		Carbon Monoxide (grams/mile)		Oxides of Nitrogen (grams/mile)
	Composite	Phase 2	Composite	Phase 2	Composite
1996 and newer					
(≤3750 lbs LVW) ²	0.60	0.40	10.0	8.0	1.5
(>3750 lbs LVW) ²	0.80	0.50	13.0	10.0	1.8
1994-1995					
Tier 1 ³					
(≤3750 lbs LVW) ⁴	0.60	0.40	10.0	8.0	1.5
(>3750 lbs LVW) ⁴	0.80	0.50	13.0	10.0	1.8
Not Tier 1 ³	1.60	1.00	40.0	32.0	2.5
1988-1993	1.60	1.00	40.0	32.0	2.5
1987	1.60	1.00	40.0	32.0	4.5
1984-1986	2.40	1.50	60.0	48.0	4.5
1979-1983	3.40	2.00	70.0	56.0	4.5
1975-1978	4.00	2.50	80.0	64.0	6.0
1973-1974	7.00	4.50	120	96.0	6.0
1968-1972	7.00	4.50	120	96.0	7.0

(c) *Light-Duty Trucks with GVWR of 6,001 to 8,500 pounds and Heavy-Duty Vehicles with GVWR of 8,500 pounds or less.*

Model Years	Hydrocarbons (grams/mile)		Carbon Monoxide (grams/mile)		Oxides of Nitrogen (grams/mile)
	Composite	Phase 2	Composite	Phase 2	Composite
1997 and newer					
(≤5750 lbs ALVW) ⁵	0.80	0.50	13.0	10.0	1.8
(>5750 lbs ALVW) ⁵	0.80	0.50	15.0	12.0	2.0
1996					
Tier 1 ⁶					
(≤5750 lbs ALVW) ⁷	0.80	0.50	13.0	10.0	1.8
(>5750 lbs ALVW) ⁷	0.80	0.50	15.0	12.0	2.0
Not Tier 1 ⁶	1.60	1.00	40.0	32.0	3.5
1988-1995	1.60	1.00	40.0	32.0	3.5
1987	1.60	1.00	40.0	32.0	4.5
1984-1986	2.40	1.50	60.0	48.0	4.5
1979-1983	3.40	2.00	70.0	56.0	4.5
1975-1978	4.00	2.50	80.0	64.0	6.0
1973-1974	7.00	4.50	120	96.0	6.0
1968-1972	7.00	4.50	120	96.0	7.0

(d) *Heavy-Duty Vehicles with GVWR of 8,501 to 10,000 pounds.*

Model Years	Hydrocarbons (grams/mile)		Carbon Monoxide (grams/mile)		Oxides of Nitrogen (grams/mile)
	Composite	Phase 2	Composite	Phase 2	Composite
1998 and newer	2.00	1.25	30.0	24.0	4.0
1991-1997	2.00	1.25	40.0	32.0	5.0
1987-1990	2.00	1.25	40.0	32.0	6.0
1985-1986	3.50	2.00	60.0	48.0	7.0
1979-1984	6.00	4.00	80.0	64.0	7.0
1974-1978	10.0	6.00	150	120	10.0
1970-1973	10.0	6.00	175	140	10.0
1968-1969	20.0	12.5	200	160	15.0

(e) *Heavy-Duty Vehicles with GVWR greater than 10,000 pounds.*

Model Years	Hydrocarbons (grams/mile)		Carbon Monoxide (grams/mile)		Oxides of Nitrogen (grams/mile)
	Composite	Phase 2	Composite	Phase 2	Composite
1998 and newer	3.50	2.00	60.0	48.0	7.0
1991-1997	3.50	2.00	70.0	56.0	9.0
1987-1990	3.50	2.00	70.0	56.0	11.0
1985-1986	6.00	4.00	80.0	64.0	13.0
1979-1984	7.00	4.50	100	80.0	13.0
1974-1978	13.0	8.00	150	120	20.0
1970-1973	13.0	8.00	175	140	20.0
1968-1969	24.0	15.0	200	160	30.0

¹ Upon written department approval granted to DOT, the emission limitations for "Not Tier 1" may be applied to all 1994-1995 model year light-duty vehicles. (Note: On January 7, 1998, the department issued to DOT written approval for this use of the "Not Tier 1" emission limitations until November 30, 1999.)

² Upon written department approval granted to DOT, the emission limitations for ">3750 lbs LVW" may be applied to all 1996 model year and newer light-duty trucks with GVWR of 6,000 pounds or less.

³ Upon written department approval granted to DOT, the emission limitations for "Not Tier 1" may be applied to all 1994-1995 model year light-duty trucks with GVWR of 6,000 pounds or less. (Note: On January 7, 1998, the department issued to DOT written approval for this use of the "Not Tier 1" emission limitations until November 30, 1999.)

⁴ Upon written department approval granted to DOT, the emission limitations for ">3750 lbs LVW" may be applied to all 1994-1995 model year light-duty trucks with GVWR of 6,000 pounds or less which are certified to meet Tier 1 emission standards.

⁵ Upon written department approval granted to DOT, the emission limitations for ">5750 lbs ALVW" may be applied to all 1997 model year and newer light-duty trucks with GVWR of 6,001 to 8,500 pounds and to all 1997 model year and newer heavy-duty vehicles with GVWR of 8,500 pounds or less.

⁶ Upon written department approval granted to DOT, the emission limitations for "Not Tier 1" may be applied to all 1996 model year light-duty trucks with GVWR of 6,001 to 8,500 pounds and to all 1996 model

year heavy-duty vehicles with GVWR of 8,500 pounds or less. (Note: On January 7, 1998, the department issued to DOT written approval for this use of the "Not Tier 1" emission limitations until November 30, 1999.)

⁷ Upon written department approval granted to DOT, the emission limitations for ">5750 lbs ALVW" may be applied to all 1996 model year light-duty trucks with GVWR of 6,001 to 8,500 pounds which are certified to meet Tier 1 emission standards and to all 1996 model year heavy-duty vehicles with GVWR of 8,500 pounds or less which are certified to meet Tier 1 emission standards.

SECTION 3. NR 485.04, Table 3, (1)(a) to (c), (2)(a) to (c) and (3)(a) to (c) are renumbered (1)(b) to (d), (2)(b) to (d) and (3)(b) to (d), respectively.

SECTION 4. NR 485.04, Table 3, (1)(a), (2)(a) and (3)(a) are created to read:

NR 485.04, Table 3, (1)(a) *Motor vehicles having composite hydrocarbon emission limitations in Table 1 of at least 0.60 grams/mile but less than 0.80 grams/mile.*

Second	Composite (grams)	Phase 2 (grams)	Second	Composite (grams)	Phase 2 (grams)
30	0.031	N/A	83	0.082	N/A
31	0.032	N/A	84	0.083	N/A
32	0.032	N/A	85	0.084	N/A
33	0.034	N/A	86	0.085	N/A
34	0.035	N/A	87	0.086	N/A
35	0.037	N/A	88	0.087	N/A
36	0.038	N/A	89	0.088	N/A
37	0.038	N/A	90	0.089	N/A
38	0.039	N/A	91	0.090	N/A
39	0.040	N/A	92	0.090	N/A
40	0.041	N/A	93	0.091	N/A
41	0.042	N/A	94	0.092	0.000
42	0.043	N/A	95	0.093	0.000
43	0.043	N/A	96	0.093	0.000
44	0.044	N/A	97	0.094	0.000
45	0.049	N/A	98	0.097	0.000
46	0.050	N/A	99	0.099	0.000
47	0.052	N/A	100	0.101	0.000
48	0.055	N/A	101	0.103	0.000
49	0.058	N/A	102	0.103	0.000
50	0.059	N/A	103	0.103	0.000
51	0.060	N/A	104	0.103	0.000
52	0.060	N/A	105	0.105	0.000
53	0.061	N/A	106	0.107	0.000
54	0.062	N/A	107	0.108	0.000
55	0.062	N/A	108	0.114	0.000
56	0.063	N/A	109	0.115	0.004
57	0.065	N/A	110	0.116	0.004
58	0.068	N/A	111	0.116	0.005
59	0.069	N/A	112	0.117	0.006
60	0.070	N/A	113	0.117	0.006
61	0.070	N/A	114	0.118	0.006
62	0.071	N/A	115	0.122	0.007
63	0.071	N/A	116	0.128	0.007
64	0.071	N/A	117	0.135	0.008
65	0.071	N/A	118	0.140	0.009
66	0.072	N/A	119	0.144	0.009
67	0.072	N/A	120	0.145	0.009
68	0.073	N/A	121	0.147	0.010
69	0.074	N/A	122	0.149	0.010
70	0.074	N/A	123	0.151	0.010
71	0.075	N/A	124	0.153	0.011
72	0.075	N/A	125	0.154	0.011
73	0.076	N/A	126	0.156	0.011
74	0.076	N/A	127	0.157	0.011
75	0.077	N/A	128	0.158	0.012
76	0.077	N/A	129	0.159	0.012
77	0.077	N/A	130	0.160	0.012
78	0.077	N/A	131	0.161	0.013
79	0.079	N/A	132	0.161	0.013
80	0.080	N/A	133	0.161	0.014
81	0.081	N/A	134	0.162	0.014
82	0.082	N/A	135	0.163	0.014

Second	Composite (grams)	Phase 2 (grams)
136	0.165	0.014
137	0.166	0.014
138	0.167	0.014
139	0.167	0.015
140	0.168	0.015
141	0.168	0.015
142	0.169	0.015
143	0.170	0.016
144	0.170	0.016
145	0.171	0.016
146	0.172	0.017
147	0.172	0.017
148	0.173	0.017
149	0.173	0.017
150	0.174	0.018
151	0.174	0.018
152	0.175	0.018
153	0.175	0.018
154	0.176	0.018
155	0.176	0.019
156	0.177	0.019
157	0.177	0.020
158	0.178	0.021
159	0.178	0.021
160	0.179	0.022
161	0.188	0.024
162	0.196	0.027
163	0.201	0.029
164	0.210	0.031
165	0.213	0.032
166	0.219	0.040
167	0.226	0.047
168	0.228	0.047
169	0.229	0.050
170	0.229	0.055
171	0.230	0.059
172	0.233	0.062
173	0.237	0.064
174	0.246	0.067
175	0.255	0.071
176	0.257	0.074
177	0.259	0.078
178	0.263	0.080
179	0.269	0.081
180	0.271	0.084
181	0.275	0.086
182	0.280	0.088
183	0.283	0.090
184	0.288	0.097
185	0.290	0.100
186	0.292	0.100
187	0.294	0.101
188	0.295	0.101

Second	Composite (grams)	Phase 2 (grams)
189	0.297	0.105
190	0.301	0.107
191	0.305	0.111
192	0.308	0.114
193	0.313	0.118
194	0.314	0.122
195	0.315	0.125
196	0.316	0.128
197	0.320	0.128
198	0.323	0.129
199	0.325	0.129
200	0.328	0.130
201	0.331	0.132
202	0.333	0.135
203	0.335	0.137
204	0.339	0.138
205	0.344	0.140
206	0.348	0.141
207	0.352	0.142
208	0.356	0.143
209	0.358	0.144
210	0.361	0.145
211	0.363	0.149
212	0.366	0.151
213	0.367	0.154
214	0.368	0.156
215	0.369	0.157
216	0.370	0.160
217	0.370	0.161
218	0.371	0.161
219	0.372	0.161
220	0.373	0.163
221	0.373	0.164
222	0.376	0.166
223	0.381	0.168
224	0.387	0.169
225	0.387	0.171
226	0.391	0.174
227	0.394	0.175
228	0.395	0.176
229	0.396	0.177
230	0.397	0.177
231	0.398	0.177
232	0.399	0.178
233	0.400	0.178
234	0.401	0.178
235	0.403	0.178
236	0.403	0.178
237	0.403	0.178
238	0.404	0.178
239	0.404	0.179

(2)(a) Motor vehicles having composite carbon monoxide emission limitations in Table 1 of at least 10.0 grams/mile but less than 15.0 grams/mile.

Second	Composite (grams)	Phase 2 (grams)
30	0.173	N/A
31	0.193	N/A
32	0.209	N/A
33	0.213	N/A
34	0.213	N/A
35	0.214	N/A
36	0.225	N/A
37	0.240	N/A
38	0.259	N/A
39	0.268	N/A
40	0.269	N/A
41	0.271	N/A
42	0.276	N/A
43	0.278	N/A
44	0.279	N/A
45	0.289	N/A
46	0.336	N/A
47	0.371	N/A
48	0.383	N/A
49	0.386	N/A
50	0.388	N/A
51	0.393	N/A
52	0.399	N/A
53	0.408	N/A
54	0.421	N/A
55	0.422	N/A
56	0.423	N/A
57	0.425	N/A
58	0.431	N/A
59	0.463	N/A
60	0.468	N/A
61	0.468	N/A
62	0.468	N/A
63	0.475	N/A
64	0.479	N/A
65	0.486	N/A
66	0.500	N/A
67	0.515	N/A
68	0.516	N/A
69	0.519	N/A
70	0.526	N/A
71	0.529	N/A
72	0.531	N/A
73	0.533	N/A
74	0.535	N/A
75	0.538	N/A
76	0.543	N/A
77	0.547	N/A
78	0.550	N/A
79	0.553	N/A
80	0.553	N/A
81	0.555	N/A
82	0.556	N/A

Second	Composite (grams)	Phase 2 (grams)
83	0.557	N/A
84	0.559	N/A
85	0.561	N/A
86	0.566	N/A
87	0.568	N/A
88	0.571	N/A
89	0.575	N/A
90	0.577	N/A
91	0.582	N/A
92	0.583	N/A
93	0.583	N/A
94	0.586	0.000
95	0.587	0.000
96	0.589	0.000
97	0.599	0.000
98	0.613	0.000
99	0.627	0.000
100	0.648	0.000
101	0.665	0.000
102	0.687	0.000
103	0.728	0.000
104	0.791	0.000
105	0.793	0.000
106	0.799	0.000
107	0.822	0.000
108	0.855	0.000
109	0.897	0.042
110	0.899	0.043
111	0.910	0.059
112	0.935	0.067
113	0.967	0.070
114	0.969	0.073
115	0.984	0.079
116	1.004	0.083
117	1.015	0.086
118	1.016	0.088
119	1.020	0.089
120	1.035	0.092
121	1.046	0.097
122	1.050	0.102
123	1.051	0.116
124	1.053	0.120
125	1.058	0.127
126	1.075	0.130
127	1.086	0.131
128	1.090	0.131
129	1.092	0.132
130	1.092	0.133
131	1.093	0.133
132	1.109	0.134
133	1.131	0.138
134	1.131	0.139
135	1.131	0.148

Second	Composite (grams)	Phase 2 (grams)
136	1.133	0.154
137	1.134	0.160
138	1.136	0.163
139	1.138	0.166
140	1.139	0.171
141	1.139	0.174
142	1.139	0.177
143	1.139	0.180
144	1.139	0.185
145	1.139	0.186
146	1.139	0.186
147	1.139	0.186
148	1.139	0.187
149	1.139	0.188
150	1.139	0.191
151	1.139	0.197
152	1.139	0.198
153	1.141	0.199
154	1.153	0.200
155	1.209	0.201
156	1.426	0.211
157	1.460	0.248
158	1.543	0.260
159	1.668	0.339
160	1.856	0.364
161	2.095	0.387
162	2.412	0.456
163	2.730	0.687
164	3.032	0.768
165	3.183	0.908
166	3.208	1.126
167	3.223	1.238
168	3.233	1.314
169	3.426	1.433
170	3.535	1.513
171	3.741	1.583
172	3.926	1.623
173	4.063	1.699
174	4.227	1.801
175	4.414	2.038
176	4.505	2.058
177	4.587	2.146
178	4.668	2.200
179	4.743	2.212
180	4.807	2.228
181	5.031	2.281
182	5.101	2.383
183	5.189	2.564
184	5.421	2.716
185	5.489	2.749
186	5.663	2.802
187	5.747	2.879
188	5.884	2.974

Second	Composite (grams)	Phase 2 (grams)
189	5.969	3.005
190	6.005	3.043
191	6.116	3.129
192	6.171	3.150
193	6.233	3.156
194	6.297	3.163
195	6.367	3.194
196	6.407	3.227
197	6.437	3.247
198	6.463	3.265
199	6.494	3.291
200	6.535	3.311
201	6.556	3.353
202	6.585	3.416
203	6.637	3.443
204	6.705	3.486
205	6.763	3.523
206	6.848	3.556
207	6.875	3.607
208	6.908	3.625
209	6.951	3.694
210	6.988	3.727
211	7.051	3.729
212	7.136	3.754
213	7.249	3.805
214	7.250	3.868
215	7.251	3.889
216	7.270	3.913
217	7.320	3.992
218	7.371	4.007
219	7.434	4.094
220	7.451	4.122
221	7.455	4.131
222	7.462	4.145
223	7.466	4.171
224	7.468	4.189
225	7.502	4.193
226	7.532	4.201
227	7.532	4.216
228	7.532	4.240
229	7.552	4.240
230	7.579	4.241
231	7.581	4.247
232	7.581	4.268
233	7.592	4.274
234	7.603	4.296
235	7.604	4.297
236	7.607	4.297
237	7.608	4.297
238	7.613	4.310
239	7.622	4.343

(3)(a) Motor vehicles having composite oxides of nitrogen emission limitations in Table 1 of at least 1.5 grams/mile but less than 2.0 grams/mile.

Second	Composite (grams)	Second	Composite (grams)
30	0.084	83	0.358
31	0.088	84	0.362
32	0.094	85	0.368
33	0.108	86	0.374
34	0.116	87	0.374
35	0.120	88	0.374
36	0.122	89	0.374
37	0.122	90	0.374
38	0.124	91	0.374
39	0.124	92	0.374
40	0.126	93	0.374
41	0.130	94	0.374
42	0.138	95	0.374
43	0.156	96	0.374
44	0.164	97	0.374
45	0.172	98	0.374
46	0.180	99	0.376
47	0.186	100	0.382
48	0.192	101	0.394
49	0.192	102	0.412
50	0.200	103	0.434
51	0.206	104	0.452
52	0.218	105	0.462
53	0.232	106	0.478
54	0.236	107	0.492
55	0.240	108	0.496
56	0.246	109	0.498
57	0.250	110	0.498
58	0.254	111	0.506
59	0.254	112	0.514
60	0.256	113	0.518
61	0.258	114	0.522
62	0.260	115	0.530
63	0.262	116	0.538
64	0.264	117	0.540
65	0.266	118	0.540
66	0.268	119	0.540
67	0.270	120	0.546
68	0.276	121	0.548
69	0.282	122	0.556
70	0.288	123	0.562
71	0.294	124	0.568
72	0.300	125	0.570
73	0.302	126	0.570
74	0.302	127	0.570
75	0.306	128	0.570
76	0.312	129	0.570
77	0.324	130	0.570
78	0.326	131	0.570
79	0.330	132	0.570
80	0.336	133	0.570
81	0.348	134	0.570
82	0.354	135	0.570

Second	Composite (grams)
136	0.580
137	0.588
138	0.592
139	0.598
140	0.612
141	0.628
142	0.636
143	0.644
144	0.652
145	0.654
146	0.656
147	0.658
148	0.660
149	0.662
150	0.664
151	0.666
152	0.670
153	0.672
154	0.676
155	0.678
156	0.682
157	0.690
158	0.708
159	0.734
160	0.758
161	0.780
162	0.796
163	0.820
164	0.860
165	0.888
166	0.916
167	0.960
168	0.986
169	1.006
170	1.050
171	1.110
172	1.126
173	1.136
174	1.150
175	1.160
176	1.168
177	1.174
178	1.194
179	1.212
180	1.232
181	1.252
182	1.272
183	1.294
184	1.314
185	1.336
186	1.374
187	1.402
188	1.426

Second	Composite (grams)
189	1.448
190	1.466
191	1.486
192	1.510
193	1.538
194	1.566
195	1.592
196	1.610
197	1.634
198	1.650
199	1.676
200	1.704
201	1.734
202	1.748
203	1.758
204	1.758
205	1.760
206	1.762
207	1.772
208	1.786
209	1.800
210	1.810
211	1.820
212	1.844
213	1.866
214	1.896
215	1.916
216	1.946
217	1.966
218	1.980
219	1.998
220	2.006
221	2.018
222	2.020
223	2.026
224	2.034
225	2.036
226	2.036
227	2.036
228	2.036
229	2.036
230	2.036
231	2.036
232	2.038
233	2.038
234	2.038
235	2.038
236	2.038
237	2.038
238	2.038
239	2.038

The foregoing rule was approved and adopted by the State of Wisconsin Natural Resources Board on June 24, 1998.

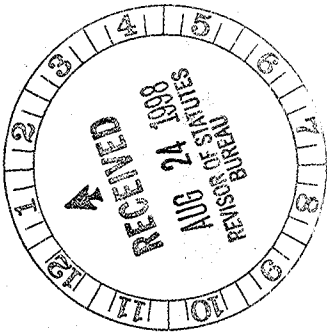
The rule shall take effect the first day of the month following publication in the Wisconsin administrative register as provided in s. 227.22(2)(intro.); Stats.

Dated at Madison, Wisconsin August 19, 1998.

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

By George E. Meyer
George E. Meyer, Secretary

(SEAL)





State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor
George E. Meyer, Secretary

Box 7921
101 South Webster Street
Madison, Wisconsin 53707-7921
TELEPHONE 608-266-2621
FAX 608-267-3579
TDD 608-267-6897

August 19, 1998

Mr. Gary L. Poulson
Assistant Revisor of Statutes
131 West Wilson Street - Suite 800
Madison, WI

Gary
Dear Mr. Poulson:

Enclosed are two copies, including one certified copy, of State of Wisconsin Natural Resources Board Order No. AM-29-97. These rules were reviewed by the Assembly Committee on Environment and the Senate Committee on Environment and Energy 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,

George
George E. Meyer
Secretary

Enc.

