Form 1100-001
(R 9/07)

NATURAL RESOURCES BOARD AGENDA ITEM

Item No. 3.A.2

SUBJECT:
Request authorization for public hearing for Board Order AM-44-10, proposed rules affecting NR 400, 419, 421, 422, 423 and 439 pertaining to the correction of deficiencies identified by the U.S. Environmental Protection Agency (EPA).

FOR: JANUARY 2011 BOARD MEETING

TO BE PRESENTED BY: Joseph Hoch, Regional Pollutant and Mobile Source Section Chief

SUMMARY:

Section 182(b)(2) of the federal Clean Air Act (CAA) [42 USC 7511a(b)(2)] requires implementation of reasonably available control technology (RACT) for volatile organic compound (VOC) emission source categories in moderate or worse ozone nonattainment areas for which the U.S. EPA has published Control Techniques Guidelines (CTGs). In response to a March 17, 2008 notification from the U.S. EPA that the Department's VOC RACT rules were not consistent with certain CTGs, the Board adopted rules on March 25, 2009 with the intent of correcting the inconsistencies. The Bureau of Air Management understood that these rules would satisfy the federal requirements. However, on April 22, 2010, the U.S. EPA notified the Department that some inconsistencies remain in several VOC RACT rules.

Federally approved VOC RACT rules are required for Wisconsin's ozone state implementation plan (SIP) and are a prerequisite for redesignation of the state's remaining nonattainment areas for the 1997 8-hour ozone national ambient air quality standards (NAAQS). The counties of Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Washington and Waukesha constitute the current ozone nonattainment areas. In addition to a delay in the redesignation of these counties, an incomplete SIP could result in federal sanctions, including withholding of federal highway funds and the potential implementation of a federal air management plan.

In order to avoid federal sanctions and ensure timely redesignation of the state's remaining ozone nonattainment areas, the Department is proposing rule revisions for a portion of the current synthetic organic chemical manufacturing (SOCMI), industrial wastewater collection and treatment (IWCT) and industrial solvent cleaning VOC RACT rules. Numerous sectors within the coating and printing industries are affected by the proposed solvent cleaning rule changes. The Bureau of Air Management has convened stakeholder groups, including representatives from the potentially affected industrial sectors and the U.S. EPA, to discuss the need to revise the rules and the feasibility of complying with the proposed VOC RACT rule revisions.

RECOMMENDATION: That the Board authorize the Department to hold hearings on Board Order AM-44-10.

LIST OF ATTACHED MATERIALS:

No	☐	Fiscal Estimate Required	Yes	☒	Attached
No	☒	Environmental Assessment or Impact Statement Required	Yes	☐	Attached
No	☐	Background Memo	Yes	☒	Attached

APPROVED:

Bureau Director, John H. Melby, Jr — Date 12/30/10

Administrator, Suzanne A. Bangert — Date 1/3/10

Secretary, Cathy Stepp — Date 1/10/11

cc: Laurie Ross - AD/8
Marney Hoefer- LS/8
Department Rules Coordinator - LS/8
Tom Steidl- LS/8
Joseph Hoch- AM/7
Robert Eckdale - AM/7

CORRESPONDENCE/MEMORANDUM

State of Wisconsin

DATE: January 3, 2011

TO: Jonathan P. Ela, Chair
John W. Welter, Vice-Chair

FROM: Cathy Stepp, Secretary Matt Mowery for Cathy Stepp

SUBJECT: Background Memo for Public Hearing Authorization for Order AM-44-10, proposed rules affecting NR 400, 419, 421, 422, 423 and 439 pertaining to the correction of deficiencies identified by the U.S. Environmental Protection Agency (EPA).

Why Are These Rules Being Proposed?

Section 182(b)(2) of the federal Clean Air Act (CAA) [42 USC 7511a(b)(2)] requires implementation of reasonably available control technology (RACT) for volatile organic compound (VOC) emission source categories in moderate or worse ozone nonattainment areas for which the U.S. EPA has published Control Techniques Guidelines (CTGs). In response to a March 17, 2008 notification from the U.S. EPA that the Department's VOC RACT rules were not consistent with certain CTGs, the Board adopted rules on March 25, 2009 with the intent of correcting the inconsistencies. The Bureau of Air Management understood that these rules would satisfy the federal requirements. However, on April 22, 2010, the U.S. EPA notified the Department that some inconsistencies remain in several VOC RACT rules.

Federally approved VOC RACT rules are required for Wisconsin's ozone state implementation plan (SIP) and are a prerequisite for redesignation of the state's remaining nonattainment areas for the 1997 8-hour ozone national ambient air quality standards (NAAQS). The counties of Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Washington and Waukesha constitute the current ozone nonattainment areas. In addition to a delay in the redesignation of these counties, an incomplete SIP could result in federal sanctions, including withholding of federal highway funds and the potential implementation of a federal air management plan.

In order to avoid federal sanctions and ensure timely redesignation of the state's remaining ozone nonattainment areas, the Department is proposing rule revisions for a portion of the current synthetic organic chemical manufacturing (SOCMI), industrial wastewater collection and treatment (IWCT) and industrial solvent cleaning VOC RACT rules. These are the areas where the U.S. EPA identified inconsistencies.

Summary Of The Rule Deficiencies

The Bureau of Air Management has worked with staff at the U.S. EPA to better understand and clarify the VOC RACT rule deficiencies. Based on these discussions, some of the deficiencies have been resolved by clarifying our current rules and directing them to current rules that addressed their concerns. However, several deficiencies still remain and must be resolved to ensure consistency with current U.S. EPA CTGs. The applicable CTGs for the proposed rule revisions are listed in Table 1 of Appendix A.

The deficiencies identified by the U.S. EPA are related to the Department's industrial solvent cleaning VOC RACT rules, including the current recordkeeping requirements, work practices, exemptions and the

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VOC content limits for solvents and solvent solutions used in industrial solvent cleaning operations. In addition, deficiencies have been identified with the Department's IWCT VOC RACT rule, including the current applicability threshold, recordkeeping requirements and control requirements. Finally, deficiencies have been identified with the Department's SOCMI VOC RACT rule, including the current applicability threshold and list of distillation chemicals and reactor processes. A complete list of the specific rule deficiencies indentified by the U.S. EPA and potentially impacted administrative code sections is provided in Table 2 of Appendix A.

Summary Of The Rules

The Bureau of Air Management proposes to update the current VOC RACT rules based on identified deficiencies by the U.S. EPA. These rules apply in Wisconsin's seven moderate ozone nonattainment counties (Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Washington and Waukesha). The following is a short summary of the proposed rule provisions, referenced by the affected rule section.

NR 423.037: Industrial Cleaning Operations

The Department proposes to add the revised cleaning requirements to some of the category specific VOC RACT rules in NR 421 and 422. NR 423.037(2)(a) 4 will be modified to list these operations as exempt from the cleaning requirements since they will be regulated elsewhere. This is intended to consolidate the VOC RACT requirements for specific source categories into individual rules which will enhance understanding of the rules and simplify compliance for facilities.

Some of the current exemptions in NR 423.037(2) are not consistent with the U.S. EPA's CTG for industrial solvent cleaning. As a result, the Department proposes to remove several of these exemptions. However, some exemptions will be retained where category specific RACT rules already exist in NR 422 and where the industrial solvent cleaning requirements will be addressed in those rules.

Table 1 in NR 423.037(3), "VOC Content Limits for Solvents and Solvent Solutions Used in Industrial Cleaning Operations," must be modified to be consistent with the U.S. EPA's current CTG on industrial cleaning. The Department proposes to remove and revise several of the current limits.

NR 423.037(9): Recordkeeping Requirements

The proposed revision will clearly define the recordkeeping requirements consistent with the U.S. EPA's CTGs for industrial solvent cleaning. Monthly records of the gallons and VOC content of each cleaning solvent used will be required to determine whether the 3 tons on a 12 month rolling basis applicability threshold is exceeded. Category specific VOC RACT rules in NR 422 will also be revised to ensure consistent recordkeeping requirements for industrial solvent cleaning.

NR422.075(3), NR422.105(5) & NR422.115(5): Work Practices

The following portion of the current work practices: "(b) Close mixing vessels used for VOC-containing coatings and other materials except when in direct use," needs to be revised because "except when in direct use" could mean when mixing blades are in operation and the mixing

vessel should be closed. The proposed rules would be changed to the following: "(b) Close mixing and storage vessels used for VOC-containing coatings and other materials except when depositing or removing these materials."

NR 422.144 Letterpress Printing

This proposed rule applies VOC control to letterpress printing presses emitting 25 tons per year of VOC (maximum theoretical emissions) from heatset inks from the press dryer. In accordance with the CTG, the proposed rule contains emission limitation exemptions for up to 110 gallons of blanket or roller wash on a 12-consecutive month rolling basis, the printing of books on a heatset letterpress press and heatset letterpress presses with a maximum web width of up to 22 inches.

The proposed rule also contains VOC content limits for blanket or roller wash. The blanket or roller wash limits along with the solvent cleaning work practices portion of the proposed rule apply to facilities emitting 3 tons/year of uncontrolled VOC emissions from all letterpress printing presses and related letterpress cleaning activities at the facility. The proposed rule also addresses storage and disposal requirements, temperature monitoring requirements, control requirements, recordkeeping requirements, compliance testing and certification testing requirements. This proposed rule satisfies industrial solvent cleaning RACT requirements for letterpress printing.

NR 419.045 Industrial Wastewater Options

The majority of the uncontrolled VOC emissions from industrial wastewater sources, sources not classified in the U.S. EPA's CTG (i.e., non-CTG sources) and unregulated emissions from CTG sources, excluding those regulated under several specific subparts to the federal New Source Performance Standards (NSPS), are due to evaporation from waste streams when exposed to ambient air. Consequently, the primary VOC RACT requirements in the proposal to repeal and revise NR 419.045 largely consist of implementing technologies and work practice standards that would substantially suppress the exposure of VOC-laden waste streams to the ambient air. The detailed control requirements specifically target those process points where VOC exposure is greatest (i.e., drains, surface impoundments, oil-water separators, portable containers, wastewater tanks and treatment processes).

The proposed repeal and recreation of the industrial wastewater rule would also allow alternative control requirements to meet the VOC limitations. One alternative control method would involve venting the VOC emissions to a post-process control device (e.g., flare, incinerator) that would destroy VOC emissions from the affected processes. Each pollution control device would need to demonstrate that it would achieve a control efficiency of 95% by weight or greater of VOC emissions and may not emit VOC emissions measured to be greater than 500 parts per million (ppm).

NR 421.07 Synthetic Organic Chemical Manufacturing Industry

Changes are proposed to the applicability criteria for VOC requirements affecting the synthetic organic chemical manufacturing industry, to remove a VOC emission threshold, and clearly identify those chemicals, that if produced, will trigger the requirements. These proposed changes

are necessary to be consistent with the guidance provided by the U.S. EPA for this source category.

How Does This Proposal Affect Existing Policy?

The proposed rule revisions are necessary for the Department to meet the requirements under Section 182(b)(2) of the federal CAA. The proposed rule revisions are consistent with existing policy, which is to adopt and enforce all requirements applicable to Wisconsin under the CAA.

Has The Board Dealt With These Issues Before? If So, When And Why?

The Board approved adoption of Board Orders AM-19-08, AM-23-08 and AM-24-08 on March 25, 2009. Board Order AM-19-08 consisted of rules affecting NR 422 and 423 pertaining to VOC RACT sources engaged in solvent cleaning; lithographic printing; flexible package printing; flat wood panel coating; paper, film and foil coating; large appliance coating and metal furniture coating. Board Order AM-23-08 consisted of rules affecting NR 421 and 439 pertaining to establishing VOC emission control requirements for SOCMI facilities classified as major VOC sources in Wisconsin's ozone nonattainment areas. Board Order AM-24-08 consisted of rules affecting NR 419 and 484 pertaining to establishing VOC emission control requirements for IWCT operations for major VOC sources in Wisconsin's ozone nonattainment areas.

Who Will Be Impacted By The Proposed Rule? How Will They Be Impacted?

The Department expects that the biggest impact from the proposed industrial solvent cleaning rule changes are for those facilities that will be subject to revised VOC content limits for cleaning solvent or solvent solutions. The Department identified facilities located in the nonattainment counties that may be subject to the revised VOC content limits. These facilities included coating operations and printing operations. The potentially impacted coating operations include coating manufacturers, fabric and vinyl coating, can coating, coil coating and wood furniture coating. The potentially impacted printing operations include non-packaging flexographic printing, screen printing, electrostatic printing and letterpress printing. Initial stakeholder meetings were held with these groups in Milwaukee and Waukesha on October 20, 2010 and October 21, 2010, respectively, to discuss the proposed industrial cleaning solvent changes and the feasibility of facilities to comply with the revised VOC content limits. The U.S. EPA also participated in these stakeholder meetings. The results of the meetings were positive for the Department, the U.S. EPA and the industry groups. Several portions of the draft rules were modified based on feedback received from the meetings.

Several other operations will be subject to revised work practices and recordkeeping requirements for industrial solvent cleaning. The Department expects impacts from these proposed rule changes will be minimal.

The proposed rule changes affecting the industrial wastewater sources will require them to either employ specific work practice standards to substantially suppress the exposure of VOC-laden waste streams to the ambient air or vent the VOC emissions to a post-process control device (e.g., flare, incinerator) that would destroy these emissions. The Department expects the impact of these changes to be minimal. The rules changes affecting synthetic organic chemical manufacturing industries are relatively minor. The Department will remove a VOC emission threshold, and clearly identify those chemicals, that if produced, will trigger the requirements.

Information On Environmental Analysis

The Department has determined that these proposed rules represent a type III action under s. NR 150.03(3), and therefore do not need an environmental analysis.

Small Business Analysis

The Department does not believe that the proposed rule revisions will have a significant economic impact for individual small businesses. For industrial solvent cleaning operations, the applicability threshold is 3 tons on a 12 consecutive month rolling basis actual emissions from a facility with all control equipment inoperative. The Department believes that this threshold will not affect the majority of small businesses. Due to the nature and complexity of IWCT and SOCMI facilities it is highly unlikely that a small business, as defined in 227.114(1), Stats., would have an operation that triggers the emission reduction requirements for those source categories in the proposed rule.

APPENDIX A

TABLE 1: APPLICABLE U.S. EPA CTG DOCUMENTS FOR PROPOSED RULE REVISIONS

#	CTG Source Category
1.	Automobile and Light-Duty Truck Assembly Coatings
2.	Flat Wood Paneling Coatings
3.	Flexible Package Printing
4.	Industrial Cleaning Solvents
5.	Industrial Wastewater Collection and Treatment Operations
6.	Large Appliance Coatings
7.	Metal Furniture Coatings
8.	Miscellaneous Industrial Adhesives
9.	Miscellaneous Metal and Plastic Parts Coatings
10.	Offset Lithographic Printing and Letterpress Printing
11.	Paper, Film, and Foil Coatings
12.	Reactor Processes and Distillation Operations in SOCMI

TABLE 2: VOC RACT RULE DEFICIENCIES IDENTIFIED BY THE U.S. EPA

VOC RACT RULE: Industrial Solvent Cleaning		
DEFICIENCY: Recordkeeping requirements are not specific enough		
#	**Operation**	**Impacted Rule Section**
1.	Paper Coating	*NR 422.075(1)(a)*
2.	Furniture Metal Coating	*NR 422.105(1)*
3.	Surface Coating of Large Appliances	*NR 422.115(1)*
4.	Flat Wood Panel Coating	*NR 422.131(1)*
5.	Flexible Package Printing	*NR 422.141(1)(a)*
6.	Lithographic Printing	*NR 422.143(1)(a), 422.143(6) and 439.04(3)*
7.	Industrial Solvent Cleaning Operations	*NR 423.037(9)(a)*
VOC RACT RULE: Industrial Solvent Cleaning		
DEFICIENCY: Work practices are not consistent with the U.S. EPA CTGs		
#	**Operation**	**Impacted Rule Section**
1.	Paper Coating	*NR 422.075(3)(b)*
2.	Furniture Metal Coating	*NR 422.105(5)(b)*
3.	Surface Coating of Large Appliances	*NR 422.115(5)(b)*
VOC RACT RULE: Industrial Solvent Cleaning		
DEFICIENCY: Sufficient basis has not been provided for the following exemptions		
#	**Operation**	**Impacted Rule Section**
1.	Coating Manufacturing	*NR 421.06(2)(c) and 423.037(2)(a) 4.za*
2.	Automobile Refinishing Operations	*NR 422.095(6)*
3.	Screen Printing	*NR 422.145(2)(d)*
4.	Miscellaneous Metal Parts and Products	*NR 422.15(8)*
5.	Fire Truck and Emergency Response Vehicle Manufacturing	*NR 422.155(3)*
6.	Wood Furniture Coating	*NR 422.125 and 423.037(2)(a) 4.b*
7.	Film and Foil Coating	*NR 423.037(2)(a) 4.j*

8.	Fabric Coating	*NR 423.037(2)(a) 4.k*
9.	Plastic Parts and Products Coating	*NR 423.037(2)(a) 4.L*
10.	Fiberglass Boat Manufacturing	*NR 423.037(2)(a) 4.m*
11.	Miscellaneous Metal Parts and Products Coating	*NR 423.037(2)(a) 4.n*
12.	Miscellaneous Industrial Adhesive Usage, Excluding Application Equipment	*NR 423.037(2)(a) 4.o*
13.	Motor Vehicle and Mobile Equipment Assembly and Coating Operations	*NR 423.037(2)(a) 4.p*
14.	Resin Application Equipment Operation, Excluding Polyester Resin Application Equipment	*NR 423.037(2)(a) 4.t*
15.	Architectural Coating, Excluding Application Equipment	*NR 423.037(2)(a) 4.v*
16.	Metal Container and Closure Coating	*NR 423.037(2)(a) 4.w*
17.	Coil Coating	*NR 423.037(2)(a) 4.x*
18.	Magnet Wire Coating	*NR 423.037(2)(a) 4.y*
19.	Semiconductor Wafer Fabrication Operations	*NR 423.037(2)(a) 4.z*
20.	Ink and Adhesive Manufacturing	*NR 423.037(2)(a) 4.zb*
21.	Flexible and Rigid Disk Manufacturing	*NR 423.037(2)(a) 4.zc*
22.	Polyester Resin Operations, Excluding Application	*NR 423.037(2)(a) 4.zd*
23.	Letterpress Printing, Except Press Component Cleaning	*NR 423.037(2)(a) 5*
24.	Electrostatic Printing and Coating Application	*NR 423.037(2)(b) 2*
25.	Aggregate Use of Solvent and Solvent Solutions Below 55 Gallons During Any 12 Consecutive Months	*NR 423.037(2)(b) 4*
26.	Cleaning Which Uses Solvents or Solvent Solutions Containing No More Than 0.05 Kilograms of VOC Per Liter	*NR 423.037(2)(b) 4(g)*
VOC RACT RULE: Industrial Solvent Cleaning		
DEFICIENCY: Sufficient basis has not been provided for the following VOC content limits		
1.	Laminated Wood Products	*NR 423.037(3) Table 1 – (a)(3)*
2.	Screen Printing	*NR 423.037(3) Table 1 – (a)(5), (b)(4) and (d)(5)*
3.	Architectural Coatings	*NR 423.037(3) Table 1 – (c)(2)*
4.	Ultraviolet Coatings	*NR 423.037(3) Table 1 – (c)(3)*
5.	Flexible Package Printing	*NR 423.037(3) Table 1 – (d)(2)(a) and (b)*
6.	Letterpress Printing, On-Press Components Only	*NR 423.037(3) Table 1 – (d)(4)(a)and (b)*
VOC RACT RULE: IWCT [*NR 419*]		
1.	Applicability must be based on the combined emissions from all non-CTG sources (e.g. wastewater and batch) and exempt emissions from CTG sources	
2.	The control and recordkeeping requirements are too minimal	
VOC RACT RULE: SOCMI [*NR 421*]		
1.	The 100 tons per year applicability cutoff threshold must be replaced by the appropriate applicability criteria for all CTG categories	
2.	The list of distillation chemicals and reactor processes in NR 421.07(3) and NR 421.07(4), respectively, is much smaller than the list provided in the CTG	

Wisconsin Department of Administration
Division of Executive Budget and Finance
DOA-2048 (R10/2000)

Fiscal Estimate — 2010 Session

☒ Original ☐ Updated	LRB Number	Amendment Number if Applicable
☐ Corrected ☐ Supplemental	Bill Number	Administrative Rule Number NR 400, 419, 421, 422, 423 & 439

Subject

Fiscal estimate for Board Order AM-44-10, proposed rules affecting NR 400, 419, 421, 422, 423 and 439 pertaining to the correcting of deficiencies identified by the U.S. Environmental Protection Agency (EPA).

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 ☐ Increase Existing Revenues
☐ Decrease Existing Appropriation ☒ Decrease Existing Revenues
☐ Create New Appropriation

☐ 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
   ☐ School Districts ☐ WTCS Districts

Fund Sources Affected

☐ GPR ☐ FED ☒ PRO ☐ PRS ☐ SEG ☐ SEG-S

Affected Chapter 20 Appropriations

20.370 2 (bg) and 2 (bh)

Assumptions Used in Arriving at Fiscal Estimate

Rule Summary:
The Department has proposed to revise a portion of the state's volatile organic compound (VOC) reasonably available control technology (RACT) rules to address deficiencies identified by the U.S. EPA. Federally approved VOC RACT rules are required by the Clean Air Act and necessary for redesignation of the state's current nonattainment counties (Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Washington and Waukesha).

State Fiscal Impact:
The proposed rule revisions will not create a significant effect on state government because the majority of sources affected are already inspected, permitted and otherwise regulated by the Department. However, the Department estimates that the modifications to the industrial solvent cleaning rules will result in an estimated 75 tons per year (tpy) future reduction in reported VOC emissions. Therefore, the Department may lose up to $2,700 (75 tpy * $35.71/ton VOC) in emission fee revenue annually. The U.S. EPA control technology guidance (CTG) for industrial cleaning solvents estimates that there are 97 affected sources in Wisconsin with baseline VOC emissions from solvent use of 1,791 tpy. The Department concluded in Board Order AM-19-08 that implementation of recommendations in the industrial solvent cleaning CTG would result in an estimated 400 tpy future reduction in reported VOC emissions in Wisconsin. The proposed rule revisions to address the deficiencies identified by the U.S. EPA only affect approximately 18 of the 97 facilities identified in the CTG. This is based on the number of participants at stakeholder meetings held by the Department in Milwaukee and Waukesha. Therefore, the Department estimates that proposed rule revisions will result in an estimated 75 ton/year future reduction in reported VOC emissions.

Private Sector Fiscal Impact:
The Department does not expect any large fiscal impacts to the private sector from the proposed revisions to the industrial solvent cleaning regulations. In fact, the U.S. EPA has stated in their industrial solvent cleaning CTG that affected sources may either incur minimal additional costs or realize a savings, depending primarily on facts such as how much they currently spend to operate with high-VOC content solvent. Based on Board Order AM-24-08, for the industrial wastewater facilities, if controls were necessary, they would largely be designed to reduce VOC emissions by restricting the waste stream's exposure to ambient air. This is accomplished by installing water seals at those process points (drains, junction boxes, man holes, etc.) where the waste stream is exposed to the ambient air. According to a report on industrial wastewater, there would be a cost (amortized over 10 years) between $1900 and $4300 per ton VOC reduction to install these control devices. However, the Department is not aware of any facilities that would be subject to these control requirements. The Department does not expect any large fiscal impacts to the private sector from the proposed rule revisions to the synthetic organic chemical manufacturing industry (SOCMI) because the rule changes are relatively minor.

Long-Range Fiscal Implications

Prepared By:	Telephone No.	Agency
Joseph Polasek	266-2794	Department of Natural Resources
Authorized Signature	Telephone No.	Date (mm/dd/ccyy)
	266-2794	12-30-10

Wisconsin Department of Administration
Division of Executive Budget and Finance
DOA-2047 (R10/2000)

Fiscal Estimate Worksheet — 2010 Session

Detailed Estimate of Annual Fiscal Effect

☒ Original	☐ Updated	LRB Number	Amendment Number if Applicable
☐ Corrected	☐ Supplemental	Bill Number	Administrative Rule Number NR 400, 419, 421, 422, 423 & 439

Subject

Fiscal estimate for Board Order AM-44-10, proposed rules affecting NR 400, 419, 421, 422, 423 and 439 pertaining to the correcting of deficiencies identified by the U.S. Environmental Protection Agency (EPA).

One-time Costs or Revenue Impacts for State and/or Local Government (do not include in annualized fiscal effect):

Annualized Costs:		Annualized Fiscal Impact on State Funds from:	
A. State Costs by Category		Increased Costs	Decreased Costs
State Operations — Salaries and Fringes		$	$ -
(FTE Position Changes)		(FTE)	(- FTE)
State Operations — Other Costs			-
Local Assistance			-
Aids to Individuals or Organizations			-
Total State Costs by Category		$	$ -
B. State Costs by Source of Funds		Increased Costs	Decreased Costs
GPR		$	$ -
FED			-
PRO/PRS			-
SEG/SEG-S			-
State Revenues	Complete this only when proposal will increase or decrease state revenues (e.g., tax increase, decrease in license fee, etc.)	Increased Revenue	Decreased Revenue
GPR Taxes		$	$ -
GPR Earned			-
FED			-
PRO/PRS			-
SEG/SEG-S			- 2,700
Total State Revenues		$	$ - 2,700

Net Annualized Fiscal Impact

	State	Local
Net Change in Costs	$	$
Net Change in Revenues	$ - $2700	$

Prepared By:	Telephone No.	Agency
Joe Polasek	266-2794	Department of Natural Resources
Authorized Signature	Telephone No.	Date (mm/dd/ccyy)
	266-2794	12-30-10

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

The Wisconsin Natural Resources Board proposes an order to **repeal** NR 419.02 (1), (6g), (6r), (10m), (14g), (15m), (19), (20) and (21); 422,02 (84m); 422,03 (3), (4), (4m), (6), (8) and (9); 422.095 (6); 422.132 (1) (a); 422.135 (1) (a); 423.037 (2) (a) 4. j., m., o., t., v., y., z., zb., zc. and zd., (b) 2. and 4., and (g), and (9) (b) 2. and 4. and (c) 1. and 3.; to **renumber** NR 422.127 (2) (intro.); 422.132 (1) (b) and (c); 422.15 (a) to (k); and 423.02 (1), (8), (8L), (8t), (9c), (9n) and (9r); to **renumber and amend** NR 422.05 (1); 422.06 (1); 422.08 (1); 422.085 (1); 422.09 (1); 422.095 (1); 422.125 (1); 422.132 (1) (intro.); 422.135 (1) (intro.); 422.14 (1); 432.145 (1); 422.15 (1) (intro.) and 422.155 (1); to **amend** NR 419,02 (22); 421.05 (1) (a) and (b) (intro.) and (3) (a) (intro.); 421.06 (1) (a) and (b) (intro.) and (3) (a) (intro.); 421.07 (1) (a) and (5); 422.02 (83); 422.03 (1); 422.083 (1) (a) and (b); 422.095 (2) (a); 422.135 (1) (b); 423.035 (4) (intro.) and (a); 423.037 (1), (2) (a) 1. and 4. b., d., e., g., i., k., w. and za., (3) Table 1, (4) (intro.) and (a), (5) and (9) (a); 439.04 (intro.); 439.06 (3) (b); 484.04 (13), (17), (19), (20) and (25); 484,05 (1); 484.06 (4) (e) and 484.11 (5) Table 9E; to **repeal and recreate** NR 419.045 and 422.145 (4); and to **create** NR 419.02 (1e), (1m), (1s), (3e), (3m), (3s), (6m), (7m), (8e), (10g), (10r), (11m), (12m), (14b), (14e), (14h), (14L), (14p), (14u), (14y), (15d), (15h), (18e), (18m), (18s) and (23); 421.02 (18m) and (23); 421.05 (1) (c), (2m), (3) (c), and (4); 421.06 (1) (c), (2m), (3) (c) and (4); 421.07 (1) (a) 1. and 2., (3) (a) 5. and (4) (a) 5.; 422.02 (90r); 422.05 (1) (a) 1. and 2. and (b), (1m), (3) and (4); 422.06 (1) (a) 1. and 2. and (b), (1m), (3) and (4); 422.08 (1) (a) 1. and 2. and (b), (1m), (3) and (4); 422.083 (1) (bm) and (3m); 422.085 (1) (a) and (b); 422.09 (1) (b) to (d) and (6); 422.095 (1) (b), (2) (c) to (i), and (7) and (8); 422.125 (1) (b) and (4m); 422.127 (2) (b) and (3m); 422.132 (1) (am) 1. and 2.; 422.135 (1) (am) 1. and 2.; 422.14 (1) (a) 1. and 2., (1m), (4) and (5); 422.144; 422.145 (1) (a) 1. and 2. and (b), (1m) and (2m); 422.15 (1) (am) 1. to 3., (bm) and (cm) (intro.) and (9); 422.155 (1) (a) 1. to 3., (b) and (5); 423.02 (2m), 423.037 (2) (a) 4. dm. and ze. to zj., (cg) and (cr) and (9) (c) 4. and 5.; 484.04 (20e) and (27s); 484.06 (4) (Note), (f) and (g); 484.10 (55b), (55bg) and (55br) and 484.11 (12); relating to the revision of the state's reasonably available control technology emission limitations for volatile organic compound to address deficiencies identified by the U.S. Environmental Protection Agency, and affecting small business.

AM-44-10

Analysis Prepared by the Department of Natural Resources

1. Statute interpreted: Section 285.11(1) and (6), Stats. The State Implementation Plan (SIP) developed under s. 285.11(6), Stats., is revised.

2. Statutory authority: Sections 227.11(2)(a) and 285.11(1) and (6), Stats.

3. Explanation of agency authority:

Section 227.11(2)(a), Stats., gives state agencies general rule-making authority. Section 285.11(1), Stats., gives the Department the authority to promulgate rules implementing and consistent with ch. 285, Stats. Section 285.11(6), Stats., requires the Department to develop a plan for the prevention, abatement and control of air pollution. The plan must conform to the Clean Air Act and federal regulations for ozone control. These proposed rule revisions are necessary for federal approval of Wisconsin's SIP and consistent with s. 285.11(6), Stats.

4. Related statute or rule: There are no related statutes that are not identified above.

5. Plain language analysis:

The Department is required to implement volatile organic compound (VOC) reasonably available control technology (RACT) regulations in moderate or worse ozone nonattainment areas to comply with the federal Clean Air Act. Wisconsin's moderate ozone nonattainment counties include Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Washington and Waukesha. VOC RACT rules were previously adopted by the Board on March 25, 2009 based on U.S. Environmental Protection Agency (EPA) Control Techniques Guideline (CTG) documents. The Bureau of Air Management understood that these rules would satisfy the federal requirements. However, on April 22, 2010, the U.S. EPA notified the Department of outstanding deficiencies. The U.S. EPA identified these deficiencies based on a comparison of the rules with their CTGs for various RACT categories.

Federally approved VOC RACT rules are required for Wisconsin's ozone SIP and are a prerequisite for redesignation of the state's remaining nonattainment areas for the 1997 8-hour ozone national ambient air quality standards (NAAQS) to attainment. The counties of Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Washington and Waukesha constitute the current ozone nonattainment areas. In addition to a delay in the redesignation of these counties, an incomplete SIP could result in federal sanctions, including withholding of federal highway funds and the potential implementation of a federal air management plan.

In order to avoid federal sanctions and ensure timely redesignation of the state's remaining ozone nonattainment areas, the Department is proposing rule revisions for a portion of the current synthetic organic chemical manufacturing (SOCMI), industrial wastewater collection and treatment (IWCT) and industrial solvent cleaning VOC RACT rules. The Bureau of Air Management has convened stakeholder groups, including representatives from the potentially affected industrial sectors and the U.S. EPA, to discuss the need to revise the rules and the feasibility of complying with the proposed revisions.

6. Summary of, and comparison with, existing or proposed federal regulation:

The Clean Air Act requires the Department to implement RACT for major VOC emission source categories in areas classified as moderate or worse for nonattainment of the ozone NAAQS. The U.S. EPA has published CTGs for several VOC RACT source categories. The Department is required to ensure the state's VOC RACT rules are consistent with these CTGs.

7. Comparison with similar rules in adjacent states (Illinois, Iowa, Michigan and Minnesota):

VOC RACT rules are only required in states that have areas classified as moderate or worse for the ozone NAAQS. Iowa and Minnesota have no nonattainment areas and Michigan does not have any areas that are classified as moderate or worse. Illinois is in a similar situation as Wisconsin. The U.S. EPA has identified deficiencies with Illinois' current VOC RACT rules and they must be corrected to meet the requirements of the Clean Air Act.

8. Summary of factual data and analytical methodologies used and how any related findings support the regulatory approach chosen:

The proposed rule revisions are based on the following U.S. EPA CTGs: (1) Automobile and Light-Duty Truck Assembly Coatings; (2) Flat Wood Paneling Coatings; (3) Flexible Package Printing; (4) Industrial Cleaning Solvents; (5) Industrial Wastewater Collection and Treatment Operations; (6) Large Appliance Coatings; (7) Metal Furniture Coatings; (8) Miscellaneous Industrial Adhesives; (9) Miscellaneous Metal and Plastic Parts Coatings; (10) Offset Lithographic Printing and Letterpress Printing; (11) Paper, Film, and Foil Coatings; and (12) Reactor Processes and Distillation Operations in SOCMI.

9. Analysis and supporting documents used to determine the effect on small business or in preparation of an economic impact report:

Based on the control requirements, the applicability threshold for the rules and the relatively small number of facilities that will be subject to revised VOC RACT rules, there should be minimal, if any, impact on small businesses.

An economic impact report was not requested.

10. Effect on small business:

The Department does not believe that the proposed rule revisions will have a significant economic impact for individual small businesses. For industrial solvent cleaning operations, the applicability threshold is 3 tons of actual VOC emissions from a facility on a 12 consecutive month rolling basis, with all control equipment inoperative. The Department believes that this threshold will not affect the majority of small businesses. Due to the nature and complexity of IWCT and SOCMI, facilities it is highly unlikely that a small business, as defined in 227.114(1), Stats., would have an operation that triggers the emission reduction requirements for those source categories in the proposed rule.

11. Agency contact person: Joseph Hoch; P.O. Box 7921, Madison, WI 53707-7921; Telephone number: (608) 267-7543; e-mail address: joseph.hoch@wisconsin.gov

12. Place where comments are to be submitted and deadline for submission:
Written comments may be submitted at the public hearings, by regular mail, fax or email to:
Joseph Hoch
Department of Natural Resources
Bureau of Air Management
PO Box 7921
Madison WI 53707
Fax: (608) 267-0560

Written comments may also be submitted to the Department using the Wisconsin Administrative Rules Internet Web site at http://adminrules.wisconsin.gov.

Hearing dates and the comment submission deadline are to be determined.

SECTION 1. NR 419.02 (1) is repealed.

SECTION 2. NR 419.02 (1e), (1m), (1s), (3e), (3m), and (3s) are created to read:

NR 419.02 (1e) "Affected residual" means any liquid or solid material containing affected VOC that is removed from a wastewater stream by a waste management unit or treatment process that does not destroy organic compounds.

Note: Examples of materials which are affected residuals from non-destructive wastewater management units are the organic layer and bottom residue removed by a decanter or organic-water

separator and the overheads from a steam stripper or air stripper. Examples of materials that are not affected residuals are silt; mud; leaves; bottoms from a steam stripper or air stripper; and sludge, ash, or other materials removed from wastewater being treated by destructive devices such as biological treatment units and incinerators.

(1m) "Affected VOC" means VOC with a Henry's law constant greater than or equal to 1.8×10^{-6} atm m^3/gmole fraction (0.1 y/x) at 25°C.

(1s) "Affected VOC wastewater stream" means a process wastewater stream from a process unit at an affected industrial category with either an annual average concentration of affected VOC greater than or equal to 10,000 parts per million by weight (ppmw) or an annual average concentration of affected VOC greater than or equal to 1,000 ppmw and an annual average flow rate greater than or equal to 10.0 liters per minute (2.64 gallons per minute), as determined in accordance with s. NR 419.045 (8) (b).The following are excluded from this definition:

(a) Maintenance wastewaters.

(b) Stormwater from segregated sewers.

(c) Water from fire-fighting and deluge systems, including testing of such systems.

(d) Spills.

(e) Water from safety showers.

(f) Samples necessary for the analytical method used.

(g) Equipment leaks.

(h) Wastewater drips from procedures such as disconnecting hoses after cleaning lines.

(i) Noncontact cooling water.

(3e) "Continuous seal" means a seal that forms a continuous closure that completely covers the space between the wall of a storage vessel and the edge of a floating roof.

(3m) "Continuously monitor and record" means to measure data values of a parameter at least once every 15 minutes and to record either each measured data value or block average values for a 15-minute or shorter time period. A block average value is the average of all measured data values during the

time period; or if data values are measured more frequently than once per minute, the average of measured data values taken at least once per minute during the time period.

(3s) "Control device" means any combustion device, recovery device for vapor vents, or recapture device. Control device includes absorbers, carbon adsorbers, condensers, incinerators, flares, boilers, and process heaters. A steam stripper's primary condenser is not a control device.

SECTION 3. NR 419.02 (6g) is repealed.

SECTION 4. NR 419.02 (6m) is created to read:

NR 419.02 (6m) "Cover" means a device or system which is placed on or over a waste management unit containing wastewater or residuals so that the entire surface area is enclosed to minimize emissions of affected VOC.

Note: Examples of covers include a fixed roof installed on a wastewater tank, a lid installed on a container, and an air-supported enclosure installed over a waste management unit.

SECTION 5. NR 419.02 (6r) is repealed.

SECTION 6. NR 419.02 (7m), (8e), and (10g) are created to read:

NR 419.02 (7m) "Fuel gas system" means the off-site and on-site piping and control system that gathers gaseous streams generated by on-site operations, which may be blended with other sources of gas, and transports the gaseous stream for use as fuel gas in combustion devices or in in-process combustion equipment such as furnaces and gas turbines, either singly or in combination.

(8e) "Individual drain system" means the stationary system used to convey wastewater streams or residuals to a waste management unit or to discharge or disposal. Individual drain system includes hard-piping, all process drains and junction boxes, together with their associated sewer lines and other junction boxes, manholes, sumps, and lift stations conveying wastewater streams or residuals. A segregated storm

water sewer system, which is a drain and collection system designed and operated for the sole purpose of collecting rainfall runoff at a facility, and which is segregated from all other individual drain systems, is excluded from this definition.

(10g) "Liquid-mounted seal" means a foam or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel or waste management unit and the floating roof with the seal mounted continuously around the circumference of the vessel or unit.

SECTION 7. NR 419.02 (10m) is repealed.

SECTION 8. NR 419.02 (10r), (11m), (12m), (14b), and (14e) are created to read:

NR 419.02 (10r) "Maintenance wastewater" means wastewater generated by the draining of process fluid from components in the process unit into an individual drain system prior to or during maintenance activities. Any generation of wastewater that is routine or is generated by designed manufacturing processes is not maintenance wastewater.

Note: Examples of activities that can generate maintenance wastewaters include descaling heat exchanger tubing bundles, cleaning distillation column traps, draining low legs and high point bleeds, draining pumps into an individual drain system and draining portions of the process unit for repair.

(11m) "Mechanical shoe seal" means metal sheets that are held vertically against the wall of the storage vessel by springs, weighted levers, or other mechanisms and connected to a floating roof by braces or other means. A flexible coated fabric spans the annular space between the metal sheet and the floating roof.

(12m) "Oil-water separator" or "organic-water separator" means a waste management unit, used to separate oil or organics from water. An oil-water or organic-water separator consists of not only the separation unit but also the forebay and other separator basins, skimmers, weirs, grit chambers, sludge hoppers, and bar screens that are located directly after the individual drain system and prior to additional treatment units such as an air flotation unit, clarifier, or biological treatment unit.

Note: Examples of an oil-water or organic-water separator include an American Petroleum Institute separator, parallel-plate interceptor, and corrugated-plate interceptor with the associated ancillary equipment.

(14b) "Pressure relief valve" means a valve used only to release an unplanned, non-routine discharge.

(14e) "Process unit" means the smallest set of process equipment that can operate independently and includes all operations necessary to achieve its process objective.

SECTION 9. NR 419.02 (14g) is repealed.

SECTION 10. NR 419.02 (14h), (14L), (14p), (14u), (14y), 15d), and (15h) are created to read:

NR 419.02 (14h) "Process wastewater" means wastewater which, during manufacturing or processing, comes into direct contact with, or results from, the production or use of any raw material, intermediate product, finished product, by-product, or waste product.

Note: Examples of process wastewater are product tank drawdown or feed tank drawdown; water formed during a chemical reaction or used as a reactant; water used to wash impurities from organic products or reactants; water used to cool or quench organic vapor streams through direct contact; and condensed steam from jet ejector systems pulling vacuum on vessels containing organics.

(14L) "Recapture device" means an individual unit of equipment capable of and used for the purpose of recovering chemicals for disposal, but not normally for recycling, reuse, or sale. For purposes of the monitoring, recordkeeping, and reporting requirements of this chapter, recapture devices are considered recovery devices.

Note: For example, a unit of equipment that would be considered a recapture device is one used for the recovery of chemicals for disposal. Recapture devices may include absorbers, carbon adsorbers, and condensers.

(14p) "Recovery device" means an individual unit of equipment capable of and normally used for

the purpose of recovering chemicals for fuel value, use, reuse or for sale for fuel value, use, or reuse.

Note: Examples of equipment that may be recovery devices include absorbers, carbon adsorbers, condensers, oil-water separators or organic-water separators, or organic removal devices such as decanters, strippers, or thin-film evaporation units.

(14u) "Single-seal system" means a floating roof having one continuous seal that completely covers the space between the wall of the storage vessel and the edge of the floating roof.

(14y) "Steam stripper" means a column, including associated stripper feed tanks, condensers, or heat exchangers, used to remove compounds from wastewater.

(15d) "Surface impoundment" means a waste management unit which is a natural topographic depression, manmade excavation, or diked area formed primarily of earthen materials, but which may be lined with manmade materials, which is designed to hold an accumulation of liquid wastes or waste containing free liquids. A surface impoundment is used for the purpose of treating, storing, or disposing of process wastewater or affected residuals, and is not an injection well.

Note: Examples of surface impoundments are equalization, settling, and aeration pits, ponds, and lagoons.

(15h) "Tank drawdown" means any material or mixture of materials discharged from a product tank, feed tank, or intermediate tank for the purpose of removing water or other contaminants from the tank.

SECTION 11. NR 419.02 (15m) is repealed.

SECTION 12. NR 419.02 (15p), (15t), (16m), (18e), (18m), and (18s) are created to read:

NR 419.02 (15p) "Temperature monitoring device" means equipment used to monitor temperature and having a minimum accuracy of either of the following:

(a) Plus or minus one per cent of the temperature being monitored expressed in degrees Celsius.

(b) Plus or minus 0.5°C, whichever number has the highest absolute value.

(15t) "Treatment process" means a specific technique, usually conducted in a tank, that removes or destroys the organics in a wastewater stream or affected residuals such as a steam stripping unit, thin-film evaporation unit, waste incinerator, biological treatment unit, or any other process applied to wastewater streams or affected residuals to comply with s. NR 419.045 (2) (g) or (3).

(16m) "Vapor-mounted seal" means a continuous seal that completely covers the annular space between the wall of the storage vessel or waste management unit and the edge of a floating roof and is mounted so that there is a vapor space between the stored liquid and the bottom of the seal.

(18e) "Waste management unit" means the equipment, structure, or device used to convey, store, treat, or dispose of wastewater streams or affected residuals. Equipment used for recovery is part of a process unit and is not a waste management unit.

Note: Examples of waste management units are wastewater tanks, surface impoundments, individual drain systems, and biological wastewater treatment units. Examples of equipment that may be considered waste management units are containers, air flotation units, oil-water separators and organic-water separators, and organic removal devices such as decanters, strippers, or thin-film evaporation units.

(18m) "Wastewater stream" means a stream that contains process wastewater.

(18s) "Wastewater tank" means a stationary waste management unit that is designed to contain an accumulation of process wastewater or affected residuals and is constructed primarily of non-earthen materials such as wood, concrete, steel, or plastic.

SECTION 13. NR 419.02 (19), (20), and (21) are repealed.

SECTION 14. NR 419.02 (22) is amended to read:

NR 419.02 (22) "Water seal" means any seal pot, p-leg trap, or other type of trap filled with a ~~liquid not containing organic compounds in order to create~~ water that creates a barrier between the ~~sewer~~ water level of the seal and the atmosphere. The water level of the seal must be maintained in the vertical leg of a drain in order to be considered a water seal.

SECTION 15. NR 419.02 (23) is created to read:

NR 419.02 (23) "Wet weather retention basin" means an impoundment or tank that is used to store rainfall runoff that would exceed the capacity of the wastewater treatment system until it can be returned to the wastewater treatment system or, if the water meets the applicable discharge limits, discharged without treatment.

SECTION 16. NR 419.045 is repealed and recreated to read:

NR 419.045 Industrial wastewater operations. (1) APPLICABILITY AND EXEMPTIONS. (a) *Applicability.* This section applies to any facility that generates process wastewater and that meets all of the following criteria:

1. Is located in Milwaukee, Waukesha, Washington, Ozaukee, Racine, Kenosha, or Sheboygan county.

2. Has combined total maximum theoretical emissions of VOC equal to or greater than 100 tons per calendar year from all of the following:

a. Industrial wastewater sources (waste management units).

b. Any emissions unit that is not subject to an emission limitation under s. NR 419.05, 419.06, or 419.08; ch. NR 421, 422, or 423; or s. NR 424.04, or 424.05, except if the emissions unit is regulated under 40 CFR part 60, subpart BBB, III, NNN, or RRR, or 40 CFR part 63, subpart T.

3. Has any of the following operations:

a. As described by the four-digit industry codes 2821, 2823, 2824, 2865, or 2869 listed in the Standard Industrial Classification (SIC) Manual, 1987, incorporated by reference in s. NR 484.05 (1), for the organic chemicals, plastics, and synthetic fibers manufacturing industries.

b. As described by the four-digit industry codes 2833, 2834, or 2836 listed in the SIC Manual, 1987, for the pharmaceuticals manufacturing industry.

c. Pesticide manufacturing.

e. Hazardous waste treatment, storage, or disposal.

(b) *Exemptions.* 1. Wet weather retention basins are exempt from this section.

2. Any facility with an annual affected VOC loading in wastewater, as determined in accordance with sub. (8) (e), less than or equal to ten mega grams (11.03 tons) is exempt from the control requirements of sub. (2).

3. If compliance with the control requirements of sub. (2) would create a safety hazard in a waste management unit, the owner or operator may request the department exempt the waste management unit from the control requirements of sub. (2). The department, with written concurrence from EPA, may approve the request if it is justified by the likelihood and magnitude of the potential injury and if the department determines that reducing or eliminating the hazard is technologically or economically unreasonable.

(2) EMISSION CONTROL REQUIREMENTS. Except as provided in sub. (3), the owner or operator of a facility subject to this section shall comply with the control requirements of this subsection for any waste management unit that receives, manages, or treats an affected VOC wastewater stream or affected residual. The control requirements apply from the point where an affected VOC wastewater stream exits a process unit to the point the affected VOC wastewater stream, including any affected residual, is either returned to a process unit or treated in accordance with par. (g).

(a) *Drains.* For each individual drain system that receives or manages an affected VOC wastewater stream or an affected residual, the owner or operator shall either comply with subd. 1. or with subds. 2. to 6.

1. Operate and maintain a cover on each opening in the individual drain system, and if the cover is vented, route the vapors to a process or through a closed vent system to a control device and meet all of the following requirements:

a. Maintain the cover and all openings in a closed position at all times that an affected VOC wastewater stream or an affected residual is in the drain system except when it is necessary to use the opening for sampling or removal, or for equipment inspection, maintenance, or repair.

b. Design and operate the control device to reduce the affected VOC vented to the device by at least 90% by weight.

c. Design and operate the individual drain system to segregate the vapors within the system from other drain systems and the atmosphere.

2. Equip each drain with a water seal or a tightly fitting cap or plug.

3. If a water seal is used on a drain receiving an affected VOC wastewater stream or an affected residual, extend the pipe discharging the wastewater below the liquid surface in the water seal of the receiving drain, or install a flexible shield, or other enclosure which restricts wind motion across the open area between the pipe and the drain, that encloses the space between the pipe discharging the wastewater to the drain receiving the wastewater. A water seal which is used on a hub receiving a wastewater stream that is not an affected VOC wastewater stream or an affected residual for the purpose of eliminating cross ventilation to drains carrying an affected VOC wastewater stream or an affected residual is not required to have an extended subsurface discharging pipe or a flexible shield.

4. Equip each junction box with a tightly fitting solid cover that has no visible gaps, cracks, or holes and which is kept in place at all times except during inspection and maintenance.

5. If the junction box is vented, vent the box to a process or through a closed vent system to a control device that is designed and operated to reduce the VOC vented to it by at least 90% by weight, except that if the junction box is filled and emptied by gravity flow or is operated with no more than slight fluctuations in the liquid level, the owner or operator may vent the junction box to the atmosphere provided both of the following conditions are met:

a. The junction box has a vent pipe of at least 90 centimeters in length and no greater than 10.2 centimeters in nominal inside diameter.

b. Water seals are installed and maintained at all wastewater entrances to, or exits from, the junction box restricting ventilation in the individual drain system and between components in the individual drain system.

6. Ensure that each sewer line is not open to the atmosphere by covering or enclosing the line so that no visible gaps or cracks in joints, seals, or other emission interfaces are visible.

(b) *Surface impoundments.* For each surface impoundment that receives, manages, or treats an affected VOC wastewater stream or an affected residual, the owner or operator shall comply with either subd. 1. or 2.

1. Equip the surface impoundment with a cover and a closed vent system which routes the VOC vapors vented from the surface impoundment to a control device and meet all of the following requirements:

a. Maintain each opening in a closed position whenever an affected VOC wastewater stream or an affected residual is in the surface impoundment except when it is necessary to use the opening for sampling, removal, or for equipment inspection, maintenance, or repair.

b. Use the cover whenever an affected VOC wastewater stream or an affected residual is in the surface impoundment except during removal of treatment residuals in accordance with 40 CFR 268.4 or closure of the surface impoundment in accordance with 40 CFR 264.228.

c. Design and operate the control device to reduce the affected VOC vented to it by at least 90% by weight.

2. Equip the surface impoundment with a floating flexible membrane cover and meet all of the following requirements:

a. Design the flexible membrane cover to float on the liquid surface during normal operations, and to form a continuous barrier over the entire surface area of the liquid.

b. Fabricate the flexible membrane cover from a synthetic membrane material that is either a high density polyethylene with a thickness no less than 2.5 millimeters (100 mils) or a material, or a composite of different materials, determined to have both organic permeability properties that are equivalent to those of the high density polyethylene material, and chemical and physical properties that maintain the material integrity for the intended service life of the material.

c. Install the flexible membrane cover so that there are no visible cracks, holes, gaps, or other open spaces between cover section seams or between the interface of the cover edge and its foundation mountings.

d. Equip each opening in the flexible membrane cover with a closure device that is designed to operate so that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the cover opening and the closure device. Notwithstanding the requirements of this subd. 2. d., the flexible membrane cover may be equipped with one or more emergency cover drains for removal of stormwater. Each emergency cover drain shall be equipped with a slotted membrane fabric cover that covers at least 90% of the area of the opening or a flexible fabric sleeve seal.

e. Whenever an affected VOC wastewater stream or an affected residual is in the surface impoundment, the flexible membrane cover shall float on the liquid and each closure device shall be secured in the closed position. Closure devices may be opened or the flexible membrane cover may be removed to provide access to the surface impoundment for performing routine inspection, maintenance, or other activities needed for normal operations or to remove accumulated sludge or other residues from the bottom of the surface impoundment.

(c) *Oil-water separator*. For each oil-water separator that receives, manages, or treats an affected VOC wastewater stream or an affected residual, the owner or operator shall comply with either subd. 1. or 2.:

1. Equip the oil-water separator with a fixed roof and a closed vent system that route the vapors vented from the oil-water separator to a control device and meet all of the following requirements:

a. Maintain each opening in the fixed roof in a closed, sealed position at all times that the oil-water separator contains an affected VOC wastewater stream or an affected residual, except when it is necessary to use the opening for sampling or removal, or for equipment inspection, maintenance, or repair.

b. Design and operate the control device to reduce the VOC vented to it by at least 90% by weight.

2. Equip the oil-water separator with a floating roof that meets all of the following requirements:

a. Except as provided in this subd. 2. a., the floating roof shall have a closure device between the floating roof and the wall of the oil-water separator. For portions of the oil-water separator wbere it is infeasible to construct and operate a floating roof, such as over the weir mechanism, the owner or operator shall operate and maintain a fixed roof, closed vent system, and control device that meet the requirements specified in subd. 1.

b. The closure device shall consist of a primary seal and a secondary seal. The primary seal shall be a liquid-mounted seal or a mechanical shoe seal. The secondary seal shall be above the floating roof and cover the annular space between the floating roof and the wall of the separator.

c. The floating roof shall be floating on tbe liquid at all times and may not be resting on the roof supports, except during abnormal conditions such as low flow rate.

d. Each opening in the floating roof shall be equipped with a cover, seal or lid fitted with a gasket, which shall be maintained in the closed position at all times, except during inspection and maintenance. Notwithstanding the requirements of this subd. 2. d., the floating roof may be equipped with one or more emergency cover drains for removal of stormwater. Each emergency cover drain shall be equipped with a slotted membrane fabric cover that covers at least 90% of the area of the opening or a flexible fabric sleeve seal.

(d) *Portable containers.* For each portable container that receives, manages, or treats an affected VOC wastewater stream or an affected residual, the owner or operator shall operate and maintain a cover on the portable container according to all of the following requirements:

1. Maintain the cover in place and maintain all openings in a closed position at all times that an affected VOC wastewater stream or an affected residual is in the portable container, except when it is necessary to use the opening for filling, removal, inspection, sampling, or pressure relief events related to

safety considerations to prevent physical damage or permanent deformation of the portable container or cover.

2. For portable containers with a capacity greater than or equal to 110 gallons, use a submerged fill pipe when a container is being filled by pumping with an affected VOC wastewater stream or an affected residual. The submerged fill pipe outlet shall extend to no more than six inches or within two fill pipe diameters of the bottom of the container while the container is being filled.

3. During treatment of an affected VOC wastewater stream or an affected residual, including aeration, thermal or other treatment, in a portable container, whenever it is necessary for the container to be open, place the container within an enclosure with a closed-vent system that routes the VOC vapors vented from the container to a control device. The control device shall be designed and operated to reduce the VOC vented to it by at least 90% by weight.

(e) *Wastewater tanks.* For each wastewater tank that receives, manages, or treats an affected VOC wastewater stream or an affected residual, the owner or operator shall operate and maintain a fixed roof for the wastewater tank. However, if the wastewater tank is used for either heating wastewater or for treating by means of an exothermic reaction, or the contents of the tank is sparged, or the wastewater tank has a capacity equal to or greater than 40,000 gallons and the maximum vapor pressure of the stored material is equal to or greater than 1.5 pounds per square inch absolute, the owner or operator shall operate and maintain one of the emission control techniques described in subd. 1., 2., or 3.

1. A fixed roof and a closed-vent system that route the VOC vapors vented from the wastewater tank to a control device that complies with both of the following requirements:

a. Each opening in the fixed roof shall be maintained in a closed position at all times that the wastewater tank contains an affected VOC wastewater stream or an affected residual, except when it is necessary to use the opening for wastewater sampling, removal, or for equipment inspection, maintenance, or repair.

b. The control device shall be designed and operated to reduce the VOC vented to it by at least 90% by weight.

2. A fixed roof and an internal floating roof that meet all of the following requirements:

a. The internal floating roof shall be floating on the liquid surface at all times, except when the floating roof must be supported by the leg supports during initial fill, after the tank has been completely emptied and degassed, and when the tank is completely emptied before being subsequently refilled.

b. When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

c. The internal floating roof shall be equipped with a closure device between the wall of the tank and the roof edge. The closure device shall consist of a liquid-mounted seal, or a metallic shoe seal, or two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous seals.

d. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off of, or is being landed on, the roof leg supports.

e. Each opening in a noncontact internal floating roof, except for automatic bleeder vents (vacuum breaker vents) and rim space vents, is to provide a projection below the liquid surface.

f. Each opening in the internal floating roof, except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains, shall be equipped with a cover or lid. The cover or lid shall be equipped with a gasket.

g. Each penetration of the internal floating roof for the purposes of sampling shall be a sample well. Each sample well shall have a slit fabric cover that covers at least 90% of the opening.

h. Each automatic bleeder vent shall be fitted with a gasket.

i. Each rim space vent shall be fitted with a gasket.

j. Each penetration of the internal floating roof that allows for passage of a ladder shall have a sliding cover fitted with a gasket.

k. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a sliding cover fitted with a gasket.

L. Each cover or lid on any opening in the internal floating roof shall be closed so that there are no visible gaps, except when the cover or lid must be open for access. Covers on each access hatch and each gauge float well shall be bolted or fastened to be air-tight when they are closed. Rim space vents are to be set to open only when the internal floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

3. An external floating roof that meets all of the following requirements:

a. Each external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device shall consist of two seals, one above the other. The lower seal (primary seal) shall be either a metallic shoe seal or a liquid-mounted seal. The upper seal (secondary seal) shall be a rim-mounted or shoe-mounted seal.

b. Except during inspections, both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

c. Except for automatic bleeder vents (vacuum breaker vents) and rim space vents, each opening in the noncontact external floating roof shall provide a projection below the liquid surface.

d. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof shall be equipped with a cover, seal or lid fitted with a gasket and which shall be maintained in a closed position so there are no visible gaps at all times, except when the cover or lid must be open for access. Covers on each access hatch and each gauge float well shall be bolted or fastened to be air-tight when they are closed.

e. Automatic bleeder vents shall be closed at all times when the roof is floating, except when the roof is being floated off of, or is being landed on, the roof leg supports.

f. Rim space vents shall be set to open only when the roof is being floated off of the roof leg supports or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

g. Automatic bleeder vents and rim space vents shall be fitted with a gasket.

h. Each roof drain that empties into the stored liquid shall be provided with a slotted membrane fabric cover that covers at least 90% of the area of the opening.

i. Each unslotted guide pole well shall have a sliding cover fitted with a gasket or a flexible fabric sleeve seal.

j. Each unslotted guide pole shall have a cap fitted with a gasket on the end of the pole, which is closed at all times except when gauging the liquid level or taking liquid samples.

k. Each slotted guide pole well shall have a sliding cover fitted with a gasket or a flexible fabric sleeve seal.

L. Each slotted guide pole shall have a float fitted with a gasket or other device that closes off the liquid surface from the atmosphere.

m. Each gauge hatch or sample well shall have a cover fitted with a gasket which is closed at all times except when the hatch or well must be open for access.

n. The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during any period of an initial fill, after the tank has been completely emptied and degassed, or when the tank is completely emptied before being subsequently refilled.

o. When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

(f) *Treatment processes.* For each treatment process managing an affected VOC wastewater stream or an affected residual, the owner or operator shall comply with the requirements as specified in this paragraph. Once an affected VOC wastewater stream or an affected residual has been treated in accordance with the requirements of this paragraph, the affected VOC wastewater stream or the affected residual is no longer subject to the requirements of this subsection.

1. Each component of the treatment process shall meet the applicable requirements of pars. (a) to (e).

2. Gases vented from a treatment process shall be routed by means of a closed vent system to a control device which is designed and operated to reduce the VOC vented to it by at least 90% by weight. Vents from anaerobic biological treatment processes may be routed through hard-piping to a fuel gas system.

3. For each of the affected VOC wastewater streams that are treated in a nonbiological treatment process, or a combination of nonbiological treatment processes, the owner or operator shall, by removal or destruction, reduce the mass flow rate of affected VOC by 90% or more while reducing the affected VOC concentration to less than 1,000 parts per million by weight. Dilution may not be used to achieve compliance with this subdivision. This requirement does not apply to affected wastewater or affected residuals that comply with the requirements for Resource Conservation and Recovery Act (RCRA) (42 USC 6921 to 6939e) treatment options specified in subd. 6.

4. The owner or operator using a closed biological treatment process for at least one affected VOC wastewater stream shall reduce the mass flow rate for all affected VOC from all wastewater streams entering the biological treatment process by at least 90%.

5. The owner or operator shall operate and maintain a steam stripper that meets all of the following requirements:

a. Minimum active column height of five meters.

b. Countercurrent flow configuration with a minimum of ten actual trays.

c. Minimum steam flow rate of 0.04 kilograms of steam per liter of wastewater feed within the column.

d. Minimum wastewater feed temperature to the steam stripper of 95°C, or minimum column operating temperature of 95°C.

e. Maximum liquid loading of 67,100 liters per hour per square meter.

f. Operate at nominal atmospheric pressure.

6. The owner or operator may elect to treat the affected VOC wastewater stream or affected residual in a unit identified in, and complying with any of the following RCRA treatment options:

a. The affected VOC wastewater stream or affected residual is discharged to a hazardous waste incinerator for which the owner or operator has been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 264, subpart O, or has certified compliance with the interim status requirements of 40 CFR part 265, subpart O.

b. The affected VOC wastewater stream or affected residual is discharged to a process heater or boiler burning hazardous waste for which the owner or operator has either been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 266, subpart H, or has certified compliance with the interim status requirements of 40 CFR part 266, subpart H.

c. The affected VOC wastewater stream or affected residual is discharged to an underground injection well for which the owner or operator has been issued a final permit under 40 CFR part 270 or 40 CFR part 144 and complies with the requirements of 40 CFR part 122. The owner or operator shall comply with all applicable requirements of this subsection prior to the point where the wastewater enters the underground portion of the injection well.

7. For each affected residual, the owner or operator shall control for air emissions by complying with one of the following requirements:

a. Recycle the affected residual to a production process on-site or transfer the affected residual off-site for the purpose of recycling. Once an affected residual is returned to a production process, the affected residual is no longer subject to this subsection.

b. Return the affected residual to the treatment process.

c. Treat the affected residual to destroy the total combined mass flow rate of affected VOC by 99% or more in a nonbiological treatment process.

d. Comply with the requirements for treatment options specified in subd. 6.

(3) ALTERNATIVE METHODS OF CONTROL. The following alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this section may be utilized if approved by the department with written concurrence from EPA.

(a) As an alternative to the control requirements of sub. (2), the owner or operator of waste management units may elect to ensure that the overall control of VOC emissions at the facility from wastewater from affected industrial categories is at least 90% less than the 2011 calendar year baseline emissions for VOC emissions to the ambient air from process wastewater, provided that adequate documentation is submitted to the department which supports the accuracy of the calendar year baseline emissions and the following requirements are met:

1. To qualify for the control option available under this paragraph, the owner or operator of a waste management unit shall submit a control plan to the department which demonstrates that the overall control of VOC emissions at the facility from wastewater from affected industrial categories will be at least 90% less than the calendar year baseline emissions. Any control plan submitted shall be approved by the department in writing before the owner or operator may use the control option available under this paragraph for compliance. At a minimum, the control plan shall include the applicable emissions units' identification; the facility identification number; the calendar year baseline emission rates of VOC from wastewater from affected industrial categories consistent with the calendar year baseline emissions; a plot plan showing the location, the emissions units' identification, and facility identification number associated with a waste management unit; the VOC emission rates for each emissions unit for the preceding calendar year; and an explanation of the recordkeeping procedure and calculations which will be used to demonstrate compliance. The VOC emission rates shall be calculated in a manner consistent with the calendar year baseline emissions.

2. The owner or operator shall submit an annual report no later than March 31 of each calendar year to the department which demonstrates that the overall control of VOC emissions from wastewater from affected industrial categories during the preceding calendar year is at least 90% less than the baseline emissions. At a minimum, the report shall include the facility identification number; the emissions units' identification; the throughput of wastewater from affected industrial categories; a plot plan showing the location; the emissions units' identification; and the facility identification number associated with waste management units; and the VOC emission rates for the preceding calendar year.

The emission rates for the preceding calendar year shall be calculated in a manner consistent with the calendar year baseline emissions.

3. All control plans and reports shall include documentation that the overall reduction of VOC emissions from wastewater from affected industrial categories continues to be at least 90% less than the calendar year baseline emissions. The emission rates shall be calculated in a manner consistent with the calendar year baseline emissions.

(b) The owner or operator of an affected industrial category which is subject to and complies with the provisions of 40 CFR part 63, subpart G, subpart JJJ, or subpart FFFF, or any other emission standard promulgated under 40 CFR part 63 that references the wastewater control requirements set forth in 40 CFR part 63, subpart G, shall be deemed to be in compliance with this section, provided that all of the following are met:

1. The term "affected VOC" is substituted each place that 40 CFR part 63, subpart G, subpart JJJ, and subpart FFFF, and any other 40 CFR part 63 emission standard references the term "organic hazardous air pollutant" or "organic HAP".

2. For affected VOC not specifically listed in table 9 of 40 CFR part 63, subpart G, the corresponding fraction removed value shall be based on one of the following:

a. The procedures in 40 CFR part 60, appendix J as proposed on December 9, 1998 in the Federal Register.

b. An assigned value of 0.99.

c. Use of WATER9, Version 2.0, a wastewater treatment model, incorporated by reference in s. NR 484.06 (4) (f).

3. Before implementing the option available under this paragraph, the owner or operator provides written notice of the intent to utilize this option to the department.

(4) INSPECTION AND MONITORING. The owner or operator of a waste management unit that is subject to requirements under sub. (2) or (3) shall comply with the following inspection and monitoring requirements, except that an owner and operator subject to and in compliance with a subpart in 40 CFR

part 63 as provided in sub. (3)(b), may comply with the inspection, monitoring, and record keeping requirements of that subpart instead of the requirements of this subsection.

(a) All seals, covers, closed vent systems, and other equipment used to comply with sub. (2) or (3) shall be visually inspected for leaks and improper conditions semiannually and upon repair as specified in this paragraph. If any seal, cover, closed vent system, or other equipment is found to have a leak or be in improper condition, the equipment shall be repaired as soon as possible, but no later than 15 calendar days after detection, unless the repair or correction is technically infeasible without requiring a process unit shutdown, in which case the repair or correction shall be made during the next process unit shutdown.

1. For a wastewater tank equipped with a fixed roof and vapor control system, visually inspect the fixed roof, openings, and the closed vent system for leaks, except for a cover and closed vent system maintained under negative pressure, and take correction action.

2. For a wastewater tank equipped with an internal or external floating roof, visually inspect for and correct the following improper conditions:

a. Leaving open any access door or other opening when the door or opening is not in use.

b. The floating roof is not resting on either the surface of the liquid or on the leg supports.

c. There is stored liquid on the floating roof.

d. A rim seal is detached from the floating roof.

e. There are holes, tears, cracks, or gaps in the rim seal or seal fabric of the floating roof.

f. There are visible gaps between the seal of an internal floating roof and the wall of the wastewater tank.

g. Where a metallic shoe seal is used on an external floating roof, one end of the metallic shoe does not extend into the stored liquid or one end of the metallic shoe does not extend a minimum vertical distance of 61 centimeters above the surface of the stored liquid.

h. A gasket, joint, lid, cover, or door has a crack or gap, or is broken.

3. For a surface impoundment, visually inspect the cover and all openings for leaks, except for a cover and closed vent system maintained under negative pressure, and take corrective action.

4. For a surface impoundment, visually inspect for and correct the following improper conditions:

a. Leaving open any access hatch or other opening when the hatch or opening is not in use.

b. A joint, lid, cover, or door has a crack or gap, or is broken.

5. For a portable container, visually inspect the cover and all openings for leaks and take corrective action.

6. For a portable container that is located within an enclosure that is vented by means of a closed vent system to a control device, visually inspect the enclosure and closed vent system for leaks, except for an enclosure and closed vent system maintained under negative pressure, and take corrective action.

7. For a portable container, visually inspect for and correct the following improper conditions:

a. Leaving open any access hatch or other opening when the hatch or opening is not in use.

b. A cover or door has a gap or crack, or is broken.

8. For an individual drain system, visually inspect for and correct the following improper conditions:

a. A joint, lid, cover, or door has a gap, crack, or hole or is broken.

b. Leaving open any access hatch or other opening when the hatch or opening is not in use for sampling or removal, or for equipment inspection, maintenance, or repair.

c. Sufficient water is not present to properly maintain integrity of water seals.

d. Drains using tightly-fitted caps or plugs have caps and plugs that are not in place or not properly installed.

e. Junction boxes do not have covers in place or covers have visible gaps, cracks, or holes.

f. Unburied portion of sewer lines have cracks or gaps.

9. For a junction box vented to a process or through a closed vent system to a control device, visually inspect for and correct leaks in the closed vent system.

10. For oil-water separators, visually inspect fixed roof and all openings for leaks and take corrective action.

11. For oil-water separators, visually inspect for and correct the following improper conditions:

a. Leaving open any access door or other opening when the door or opening is not in use, or not equipping the door or opening with a gasket.

b. The floating roof is not resting on either the surface of the liquid or on the leg supports.

c. There is stored liquid on the floating roof.

d. A rim seal is detached from the floating roof.

e. There are holes, tears, or other open spaces in the rim seal or seal fabric of the floating roof.

f. A gasket, joint, lid, cover, or door has a gap or crack, or is broken.

(c) For a wastewater tank or oil-water separator equipped with an external floating roof having primary and secondary seals used to comply with sub. (2) or (3), the secondary seal shall be inspected for seal gaps and repaired as follows:

1. The secondary seal shall be measured for seal gaps annually and after repair as follows:

a. The width of any seal gap is the distance between the seal and the tank wall and shall be determined by using probes of various widths to accurately measure the actual distance from the seal to the tank wall.

b. The area of any seal gap shall be determined by multiplying the width of the seal gap, as determined in subd. 1. a., by the circumferential length of the gap.

c. The total seal gap area is the accumulated area of all gaps which are greater than 0.125 inch in width.

2. The accumulated area of gaps that exceed 0.125 inch in width between the secondary seal and tank wall may not exceed 1.0 square inch per foot (21 square centimeters per meter) of tank diameter.

3. If the seal gap requirement of subd. 2. is not being met, the secondary seal shall be repaired or replaced within 45 days after detection of the improper seal gap unless the repair or correction is

technically infeasible without requiring a process unit shutdown, in which case the repair or correction shall be made at the next process unit shutdown.

(d) The following records shall be maintained on leaks, improper conditions, and improper seal gaps:

1. The date on which a leak, improper condition, or improper seal gap is discovered.

2. The date on which a first attempt at repair was made to correct the leak or improper condition.

3. The date on which a leak, improper condition, or improper seal gap is repaired.

(e) 1. Monitors shall be installed and maintained to measure operational parameters of any emission control device or other device installed to comply with sub. (2) or (3). Monitoring parameters shall be sufficient to demonstrate proper functioning of the devices to design specifications. Except as provided in subd. 2., the following monitoring and data recording shall be performed as applicable:

a. For an enclosed non-catalytic combustion device, continuously monitor and record the temperature of the gas stream either in the combustion chamber or immediately downstream before any substantial heat exchange.

b. For a catalytic incinerator, continuously monitor and record the temperature of the gas stream immediately before and after the catalyst bed.

c. For a condenser, continuously monitor and record the temperature of the gas stream at the condenser exit.

d. For a carbon adsorber, continuously monitor and record the VOC concentration of exhaust gas stream to determine if breakthrough has occurred. If the carbon adsorber does not regenerate the carbon bed directly in the control device, that is, a carbon canister is used, the exhaust gas stream shall be monitored daily or at intervals no greater than 20% of the design replacement interval, whichever is greater. As an alternative to conducting daily monitoring, the carbon may be replaced with fresh carbon at a regular predetermined time interval that is less than the carbon replacement interval that is determined by the maximum design flow rate and the VOC concentration in the gas stream vented to the carbon adsorber.

e. For a flare, meet the requirements specified in 40 CFR 60.18 (b).

f. For a steam stripper, continuously monitor and record the steam flow rate, the wastewater feed mass flow rate, and either the wastewater feed temperature, or the column operating temperature as measured in the column top tray liquid phase at the downcomer.

g. For vapor control systems other than those specified in subds. 1. a. to 1. f., continuously monitor and record the appropriate operating parameters.

2. In lieu of the monitoring in subd 1., other monitoring may be approved or required by the department with written concurrence from EPA.

(f) For a closed-vent system that is used to comply with sub. (2) or (3), and that is designed to operate at a pressure below atmospheric pressure, the closed-vent system shall be equipped with at least one pressure gauge or other pressure measurement device that can be read from a readily accessible location to verify that negative pressure is being maintained in the closed-vent system when the control device is operating.

(5) APPROVED TEST METHODS. Compliance with the emission specifications, vapor control system efficiency, and certain control requirements, inspection requirements, and exemption criteria of subs. (2) to (4) and (1) (b), relating to control requirements, alternate control requirements, inspection and monitoring requirements, and exemptions, shall be determined by applying one or more of the test methods and procedures, as appropriate, in this subsection. Minor modifications to test methods and procedures may be used, if approved by the department with written concurrence from EPA. Test methods other than those specified in this subsection may be used if validated by Method 301 in 40 CFR part 63, Appendix A, incorporated by reference in s. NR 484.04 (25). The test methods are:

(a) Methods 1, 2, 3 and 4, incorporated by reference in s. NR 484.04 (13), for determining gas flow rates, as necessary.

(b) Methods 18, 25, 25A, or 25B in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04 (13), for determining organic compound emission concentrations or emission rates.

(c) 1. For control devices other than flares, the VOC control efficiency shall be determined in accordance with s. NR 439.07, where the flow rate and VOC concentration of the inlet and outlet gas streams of the control device are measured as specified under pars. (a) and (b).

2. For flares, the performance test requirements of 40 CFR 60.18 (b) shall apply. Compliance with the requirements of 40 CFR 60.18 (b) will be considered to represent 98% control of the VOC in the flare inlet.

(d) ASTM D323-99a, D2879-97, D4953-06, D5190-07, or D5191-10b , adjusted for actual storage temperature in accordance with American Petroleum institute publication 2517, incorporated by reference in s. NR 484.11 (5), for the measurement of vapor pressure. The ASTM methods are incorporated by reference in s NR 484.10 (6), (39m), (55b), (55bg), and (55br), respectively .

(e) Method 21 in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04 (17), for monitoring a carbon canister in accordance with subd. (4) (e) 1. d.

(f) For determining the VOC concentration of wastewater samples, any of the methods in subds. 1. to 6., except that in the event of any conflicts, subd. 6. shall take precedence.

1. Method 5030B followed by Method 8015B with a DB-5 boiling point (or equivalent column), and flame ionization detector, with the detector calibrated with benzene as required by 40 CFR part 261. Methods 5030B and 8015B are published in EPA Publication SW-846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", incorporated by reference in s. NR 484.06 (4) (e).

2. Methods 3810, 5030B followed by 8021B, 8260B, and 9060 as required by 40 CFR part 261, as published in EPA Publication SW-846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", incorporated by reference in s. NR 484.06 (4) (e).

3. Methods 602, 624, 625, 1624B, 1625B of 40 CFR part 136, Appendix A, incorporated by reference in s. NR 484.04 (27s)

4. Method 305 of 40 CFR part 63, Appendix A, incorporated by reference in s. NR 484.04 (25).

5. Method 5310(B) in Standard Methods for the Examination of Water and Wastewater, 20th Edition, 1998, incorporated by reference in s. NR 484.11 (12).

6. Method 25D in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04 (20e). In the event of any conflict, Method 25D takes precedence.

(g) The measurement of wastewater flow rate shall be determined with flow measurement devices. Flow rate measurements shall be taken at the same time as the concentration measurements.

(6) COMPLIANCE SCHEDULE. The owner or operator of any facility subject to this section shall do all of the following:

(a) Notify the department's bureau of air management in writing by 60 days after the effective date of this section ... [LRB insert date] that the facility is subject to the requirements of this section. The notification shall provide the name and location of the affected facility.

(b) Achieve final compliance with the requirements of this section no later than 18 months after the effective date of this section ... [LRB insert date].

(7) RECORDKEEPING. The owner or operator of a facility subject to this section shall do all of the following:

(a) Maintain complete and up-to-date records needed to demonstrate compliance with sub. (2) or (3) which are sufficient to demonstrate the characteristics of wastewater streams and the qualification for any exemptions claimed under sub. (1) (b).

(b) Maintain records of the results of any inspection or monitoring conducted in accordance with sub. (4). Records shall be sufficient to demonstrate proper functioning of applicable control equipment to design specifications to ensure compliance with sub. (2) or (3).

(c) Maintain records of the results of any testing conducted in accordance with sub. (5).

(d) Maintain all records at the facility for at least five years and make all records available upon request to EPA and the department.

(8) DETERMINATION OF WASTEWATER CHARACTERISTICS. The determination of the characteristics of a wastewater stream for purposes of this section shall be made as follows:

(a) The characteristics shall be determined at a location between the point where the process wastewater exits a process unit and before the process wastewater is exposed to the atmosphere, treated

for VOC removal, or mixed with another wastewater stream. For wastewater streams at a facility meeting the applicability requirements under sub. (1) (a) 1. and 2. and which, prior to the effective date of this section ...[LRB insert date], were either actually being mixed, or construction had commenced which would result in the wastewater streams being mixed, the mixing does not establish a limit on where the characteristics may be determined.

(b) The flow rate of a wastewater stream shall be determined on the basis of an annual average by one of the following methods:

1. The highest annual quantity of wastewater managed, based on historical records for the most recent five years of operation, or for the entire time the wastewater stream has existed if less than five years, but at least one year.

2. The maximum design capacity of the waste management unit.

3. The maximum design capacity to generate wastewater of the process unit generating the wastewater stream.

4. Measurements that are representative of the actual, normal wastewater generation rates.

(c) The VOC concentration of a wastewater stream shall be determined on the basis of a flow-weighted annual average by one of the methods in this paragraph, or by a combination of the methods. If the department determines, with written concurrence from EPA, that the VOC concentration cannot be adequately determined by the method in subd.1. or 2., the VOC concentration shall be determined in accordance with subd. 3., or by a combination of the methods in subds. 1., 2., and 3. VOC with a Henry's Law Constant less than 1.8×10^{-6} atm-m^3/mole (0.1 y/x) at 25°C may not be included in the determination of VOC concentration.

1. Sufficient information to document the VOC concentration.

Note: Examples of sufficient information include material balances, records of chemical purchases, or previous test results.

2. Sufficient information to demonstrate that the bench-scale or pilot-scale test concentration data are representative of the actual VOC concentration.

3. Collect a minimum of three representative samples from the wastewater stream and determine the affected VOC concentration for each sample in accordance with sub. (5). The affected VOC concentration of the wastewater stream shall be the flow-weighted average of the individual samples.

(d) The annual affected VOC loading in wastewater for a wastewater stream shall be the annual average flow rate determined in par. (b) multiplied by the annual average affected VOC concentration determined in par. (c).

(e) The annual VOC loading in wastewater for a facility shall be the sum of the annual VOC loading in wastewater for each affected VOC wastewater stream.

(9) MAINTENANCE WASTEWATER REQUIREMENTS. Each owner or operator of a source subject to this section shall comply with the following requirements for maintenance wastewaters containing volatile organic compounds:

(a) The owner or operator shall prepare a description of maintenance procedures for management of wastewaters generated from the emptying and purging of equipment in the process during temporary shutdowns for inspections, maintenance, and repair and during periods which are not shutdowns. The descriptions shall specify all of the following:

1. The process equipment or maintenance tasks that are anticipated to create wastewater during maintenance activities.

2. The procedures that will be followed to properly manage the wastewater and control VOC emissions to the atmosphere.

3. The procedures to be followed when clearing materials from the process equipment.

(b) The owner or operator shall modify and update the information required by par. (a) as needed following each maintenance procedure based on the actions taken and the wastewaters generated in the preceding maintenance procedure.

(c) The owner or operator shall maintain a record of the information required under this subsection.

SECTION 17. NR 421.02 (18m) and (23) are created to read:

NR 421.02 (18m) "Tote tank" means any transportable container used to convey coatings, inks, adhesives, or any other related materials, with a capacity equal to or greater than 209 liters (55 gallons).

(23) "Wipe cleaning" means cleaning which utilizes a material such as a rag wetted with a solvent, prior to a physical rubbing process to remove contaminants from surfaces.

SECTION 18. NR 421.05 (1) (a) and (b) (intro.) are amended to read:

NR 421.05 (1) (a) Effective October 1, 1986, ~~this section applies~~ subs. (2) and (3) (a) and (b) apply to reaction tanks, thinning tanks, blending tanks and other process vessels used in any synthetic resin manufacturing facility which has maximum theoretical emissions of VOCs from the processes greater than or equal to 100 tons per year and which is located in the county of Kenosha, Milwaukee, Ozaukee, Racine, Washington or Waukesha.

(b) (intro.) Effective January 1, 1994, ~~this section applies~~ subs. (2) and (3)(a) and (b) apply to reaction tanks, thinning tanks, blending tanks and other process vessels used in any synthetic resin manufacturing facility which has maximum theoretical emissions of VOCs from the processes greater than or equal to one of the following:

SECTION 19. NR 421.05 (1) (c) and (2m) are created to read:

NR 421.05 (1) (c) Subsections (2m), (3)(c) and (4) apply to facilities with synthetic resin manufacturing operations as described in par. (a) located in the county of Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Washington, or Waukesha if VOC emissions from all industrial cleaning operations, before consideration of controls, equal or exceed 3 tons per year on a 12 consecutive month rolling basis.

(2m) INDUSTRIAL CLEANING OPERATIONS. (a) The owner or operator of a facility subject to this subsection shall use at least one of the following methods when cleaning mixing vats, high dispersion mills, grinding mills, tote tanks, and roller mills, except as provided in par. (b):

1. Use a solvent or solvent solution that either contains less than 0.20 kilograms of VOC per liter

(1.67 pounds per gallon) or has a VOC composite partial vapor pressure of less than of equal to 8 mm of Hg at 20°C. The solvent or solvent solution shall be collected and stored in closed containers.

2. Implement the following work practices:

a. Maintain the equipment being cleaned as leak free.

b. Drain VOC-containing cleaning materials from the cleaned equipment upon completion of cleaning.

c. Store or dispose of VOC-containing cleaning materials, including waste solvent, in a manner that will prevent evaporation into the atmosphere.

d. Store all VOC-containing cleaning materials in closed containers.

3. Collect and vent the emissions from equipment cleaning to an emission control system that has an overall control efficiency of 80% or more on a mass basis. If incineration is used to control emissions, at least 90% of the organic carbon shall be oxidized to carbon dioxide.

4. Use no more than 228 liters (60 gallons) of virgin solvent per month. Solvent or solvent solution that is reused or recycled (either onsite or offsite), for further use in equipment cleaning or the manufacture of coating is not included in this limit.

(b) The owner or operator of a facility engaged in wipe cleaning using a solvent or solvent solution may not do either of the following:

1. Use open containers for the storage or disposal of cloth or paper impregnated with solvent or solvent solution that is used for cleanup, or coating removal.

2. Store solvent or solvent solutions for cleanup or coating removal in open containers.

SECTION 20. NR 421.05 (3) (a) (intro.) is amended to read:

NR 421.05 (3) COMPLIANCE SCHEDULE. (a) (intro.) This ~~subsection applies~~ paragraph and par. (b) apply only to a synthetic resin manufacturing facility which is in existence on January 1, 1994 and which meets one of the following criteria:

SECTION 21. NR 421.05 (3) (c) and (4) are created to read:

NR 421.05 (3) (c) The owner or operator of a synthetic resin manufacturing facility subject to sub. (2m) shall achieve final compliance with sub. (2m) no later than 12 months after the effective date of this paragraph ... [LRB insert date].

(4) RECORDKEEPING. In addition to the applicable recordkeeping requirements in s. NR 439.04, the owner or operator of any synthetic resins manufacturing facility shall collect and record the applicable information specified in this subsection. The information shall be maintained at the facility for a minimum of 5 years and shall be made available to an authorized department representative at any time during normal working hours.

(a) Except as provided in par. (b), any owner or operator of a facility subject to sub. (2m) shall record the following for each solvent or solvent solution used as appropriate:

1. Total volume of virgin solvent used per month.

2. VOC content in kilograms per liter or pounds per gallon.

3. VOC composite partial vapor pressure in mm of Hg at 20°C.

(b) The provisions of par. (a) do not apply to solvent or solvent solution which is used to clean or flush a mill or vat during the manufacture of a synthetic resin and which is subsequently incorporated into the same batch.

SECTION 22. NR 421.06 (1) (a) and (b) (intro.) are amended to read:

NR 421.06 (1) (a) Effective October 1, 1986, ~~this section applies~~ subs. (2) and (3)(a) and (b) apply to pigment dispersion chambers, thinning tanks, tinting, straining, blending tanks and other process vessels used in any coatings manufacturing facility which has maximum theoretical emissions of VOCs from the processes greater than or equal to 100 tons per year and which is located in the county of Kenosha, Milwaukee, Ozaukee, Racine, Washington or Waukesha.

(b) (intro.) Effective January 1, 1994, ~~this section applies~~ subs. (2) and (3)(a) and (b) apply to pigment dispersion chambers, thinning tanks, tinting, straining, blending tanks and other process vessels

used in any coatings manufacturing facility which has maximum theoretical emissions of VOCs from the processes greater than or equal to one of the following:

SECTION 23. NR 421.06 (1) (c) and (2m) are created to read:

NR 421.06 (1) (c) Subsections (2m), (3) (c) and (4) apply to facilities with coatings manufacturing operations as described in par. (a) located in the county of Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Washington, or Waukesha if VOC emissions from all industrial cleaning operations, before consideration of controls, equal or exceed 3 tons per year on a 12 consecutive month rolling basis.

(2m) INDUSTRIAL CLEANING OPERATIONS. (a) The owner or operator of a facility subject to this subsection shall use at least one of the following methods when cleaning mixing vats, high dispersion mills, grinding mills, tote tanks, and roller mills, except as provided in par.(b):

1. Use a solvent or solvent solution that either contains less than 0.20 kilograms of VOC per liter (1.67 pounds per gallon) or has a VOC composite partial vapor pressure of less than of equal to 8 mm of Hg at 20°C. The solvent or solvent solution shall be collected and stored in closed containers.

2. Implement the following work practices:

a. Maintain the equipment being cleaned as leak free.

b. Drain VOC-containing cleaning materials from the cleaned equipment upon completion of cleaning.

c. Store or dispose of VOC-containing cleaning materials, including waste solvent, in a manner that will prevent evaporation into the atmosphere.

d. Store all VOC-containing cleaning materials in closed containers.

3. Collect and vent the emissions from equipment cleaning to an emission control system that has an overall control efficiency of 80% or more on a mass basis. If incineration is used to control emissions, at least 90% of the organic carbon shall be oxidized to carbon dioxide.

4. Use no more than 228 liters (60 gallons) of virgin solvent per month. Solvent or solvent solution that is reused or recycled (either onsite or offsite), for further use in equipment cleaning or the

manufacture of coating is not included in this limit.

(b) The owner or operator of a facility engaged in wipe cleaning using a solvent or solvent solution may not do either of the following:

1. Use open containers for the storage or disposal of cloth or paper impregnated with solvent or solvent solution that is used for cleanup, or coating removal.

2. Store solvent or solvent solutions for cleanup or coating removal in open containers.

SECTION 24. NR 421.06 (3) (a) (intro.) is amended to read:

NR 421.06 (3) COMPLIANCE SCHEDULE. (a) (intro.) This ~~subsection applies~~ paragraph and par. (b) apply only to a coatings manufacturing facility which is in existence on January 1, 1994 and which meets one of the following criteria:

SECTION 25. NR 421.06 (3) (c) and (4) are created to read:

NR 421.06 (3) (c) The owner or operator of a coatings manufacturing facility subject to sub. (2m) shall achieve final compliance with sub. (2m) no later than 12 months after the effective date of this paragraph ... [LRB insert date].

(4) RECORDKEEPING. In addition to the applicable recordkeeping requirements in s. NR 439.04, the owner or operator of any coatings manufacturing facility shall collect and record the applicable information specified in this subsection. The information shall be maintained at the facility for a minimum of 5 years and shall be made available to an authorized department representative at any time during normal working hours.

(a) Except as provided in par. (b), any owner or operator of a facility subject to sub. (2m) shall record the following for each solvent or solvent solution used as appropriate:

1. Total volume of virgin solvent used per month.

2. VOC content in kilograms per liter or pounds per gallon.

3. VOC composite partial vapor pressure in mm of Hg at 20°C.

(b) The provisions of par. (a) do not apply to solvent or solvent solution which is used to clean or flush a mill or vat during the manufacture of a coating and which is subsequently incorporated into the same batch.

SECTION 26. NR 421.07 (1) (a) is amended to read:

NR 421.07 (1) (a) This section applies to the owner or operator of any facility that is located in the county of Milwaukee, Waukesha, Washington, Ozaukee, Racine, Kenosha, or Sheboygan, and that ~~has maximum theoretical emissions of VOCs greater than or equal to 100 tons per year from~~ operates an air oxidation unit ~~processes or from~~ , distillation ~~operations and~~ operation, or reactor process, as those activities are defined in ss. NR 440.675 (2) (c), 440.686 (2) (e) and 440.705 (2) (o), respectively~~.~~ , to produce any chemical as a product, coproduct, byproduct, or intermediate that is identified as follows:

SECTION 27. NR 421.07 (1) (a) 1. and 2., (3) (a) 5., and (4) (a) 5. are created to read:

NR 421.07 (1) (a) 1. For any reactor process or distillation operation, any chemical listed in Table A-1 of Appendix A of Control of Volatile Organic Compound Emissions from Reactor Processes and Distillation Operations Processes in the Synthetic Organic Chemical Manufacturing Industry, EPA-450/4-91-031, incorporated by reference in s. NR 484.06 (4) (g), for which an x appears in the column titled Reactor and distillation CTG.

2. For any oxidation unit, any chemical listed in s. NR 440.675 (8).

(3) (a) 5. Notwithstanding s. NR 440.686 (8), the chemicals affected by this section are those identified in sub. (1) (a) 1.

(4) (a) 5. Notwithstanding s. NR 440.705 (8), the chemicals affected by this section are those identified in sub. (1) (a) 1.

SECTION 28. NR 421.07 (5) is amended to read:

NR 421.07 (5) COMPLIANCE EMISSION TESTING. The owner ~~of~~ or operator of a facility

subject to this section shall conduct compliance emission testing in accordance with s. NR 439.075 (2) (c) 3. j.

SECTION 29. NR 422.02 (83) is amended to read:

NR 422.02 (83) "Screen printing unit" means a printing application station and its associated flashoff area, ovens or dryers, conveyors or other equipment operating as part of the screen printing process. ~~Screen reclamation is~~ Industrial cleaning operations, including screen reclamation, are considered to be part of the screen printing process.

SECTION 30. NR 422.02 (84) is repealed.

SEXTION 31. NR 422.02 (90r) is created to read:

NR 422.02 (90r) "Sterilization indicating ink" means an ink that changes color to indicate that sterilization has occurred.

SECTION 32. NR 422.03 (1) is amended to read:

NR 422.03 (1) Any surface coating process line which meets the specific applicability requirements of ~~ss. NR 422.04 to 422.09 and 422.10 to 422.155~~ s. NR 422.07, 422.10, 422.11, 422.12, or 422.13 within a facility when actual emissions of VOCs from all surface coating process lines meeting the same applicability requirements within the facility are never greater than 6.8 kilograms (15 pounds) in any one day with all emission control equipment inoperative.

SECTION 33. NR 422.03 (2) is repealed.

SECTION 34. NR 422.03 (3) is amended to read:

NR 422.03 (3) Surface coating facilities as described under ~~ss. NR 422.05 to 422.08, 422.09,~~

~~422.10 to 422.13, 422.15 and 422.155~~ s. NR 422.07, 422.10, 422.11, 422.12, or 422.13 which are located outside the counties of Brown, Calumet, Dane, Dodge, Door, Fond du Lac, Jefferson, Kenosha, Kewaunee, Manitowoc, Milwaukee, Outagamie, Ozaukee, Racine, Rock, Sheboygan, Walworth, Washington, Waukesha and Winnebago and which have total emissions of VOCs from the facility, with all emission control equipment inoperative, of less than 100 tons per year.

SECTION 35. NR 422.03 (4), (4m), (6), (8), and (9) are repealed.

SECTION 36. NR 422.05 (1) is renumbered NR 422.05 (1) (a) (intro.), and as renumbered is amended read:

NR 422.05 (1) APPLICABILITY. (a) (intro.) ~~This section applies, subject to the provisions of s. NR 425.03,~~ Subsections (2) and (4) apply to coating applicators and ovens of sheet, can or end coating lines involved in sheet basecoat (exterior and interior) and overvarnish; 2−piece can exterior (basecoat and overvarnish); 2− and 3−piece can interior body spray; 2−piece can exterior end (spray or roll coat); 3−piece can side−seam spray and end sealing compound operations~~. This section does not apply to sources exempted under s. NR 422.03.~~ at a facility that is either of the following:

SECTION 37. NR 422.05 (1) (a) 1. and 2. and (b), (1m), (3), and (4) are created to read:

NR 422.05 (1) (a) 1. Located in the county of Brown, Calumet, Dane, Dodge, Door, Fond du Lac, Jefferson, Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Outagamie, Racine, Rock, Sheboygan, Walworth, Washington, Waukesha, or Winnebago and which has VOC emissions from all can coating lines at the facility, before consideration of controls, exceeding 6.8 kilograms (15 pounds) in any one day.

2. Located outside of the counties of Brown, Calumet, Dane, Dodge, Door, Fond du Lac, Jefferson, Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Outagamie, Racine, Rock, Sheboygan, Walworth, Washington, Waukesha, and Winnebago and which has total VOC emissions from the facility, before consideration of controls, equal to or exceeding 100 tpy.

(b) Except as provided in sub. (1m), subs. (3) and (4) apply to a facility with coating operations as described in par. (a) and which is located in the county of Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Washington, or Waukesha if VOC emissions from all industrial cleaning operations, before consideration of controls, equal or exceed 3 tons per year on a 12 consecutive month rolling basis.

(1m) EXEMPTIONS. If any exemption in this subsection is based on an exemption threshold and that threshold is exceeded, the exemption will no longer apply to the facility. The following exemptions are applicable to various provisions of this section:

(a) Subsection (3) does not apply to the stripping of cured coatings or cured inks.

(b) Subsection (3) does not apply to industrial adhesives or adhesive primers.

(c) Subsection (3) (a) does not apply to cleaning conducted in conjunction with performance laboratory tests on coatings or inks; research and development programs; and laboratory tests in quality assurance laboratories.

(d) Subsection (3) (a) and (e) do not apply to cleaning with aerosol products if 160 fluid ounces or less of VOC-containing aerosol products are used per day for industrial cleaning operations per facility.

(e) Subsection (3) (a), (d), (e) and (f) do not apply to digital printing.

(f) Subsection (3) (e) does not apply to cleaning with solvents or solvent solutions in spray bottles or containers described in subd. (3) (b) 2.

(g) Subsection (3) (e) does not apply to the cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems that are programmed to spray into a closed container.

(h) Subsection (3) does not apply to facilities using less than a total of 1.5 gallons per day of VOC-containing solvents and solvent solutions to clean sterilization indicating ink application equipment.

(3) INDUSTRIAL CLEANING OPERATIONS. On and after 12 months after the effective date of this subsection ...[LRB insert date], the owner or operator of a facility subject to this subsection shall meet the requirements of this subsection:

(a) *Solvent and solvent solution requirements.* Except as provided under par. (d), no owner or operator of a facility may cause, allow or permit the use of a solvent or solvent solution for industrial

cleaning operations unless the VOC content of the solvent or solvent solution is less than or equal to the applicable VOC content listed in Table 1 for the respective cleaning operation. For the purposes of this subsection, VOC content shall have the meaning given in s. NR423.02(11r).

Table 1
VOC Content Limits for Solvents and Solvent Solutions Used in Industrial Cleaning Operations

Cleaning Activity	VOC Content of Solvent or Solvent Solution in kilograms per liter (pounds per gallon)
1. Product cleaning or surface preparation during manufacturing process	0.05 (0.42)
2. Repair cleaning or maintenance cleaning	0.05 (0.42)
3. Cleaning of coatings (excluding adhesives) application equipment	
a. General	0.05 (0.42)
b. Heptane-containing end sealant application equipment lines	0.70 (5.8)
4. Cleaning of ink application equipment	
a. General	0.05 (0.42)
b. Metal can identification ink application equipment	0.89 (7.4)

(b) *Cleaning devices and methods requirements.* Except as provided under par. (d), the owner or operator of a facility shall employ the following cleaning devices or methods when using solvents or solvent solutions:

1. Physically rub a surface with a porous applicator such as a rag, paper, sponge or a cotton swab moistened with solvent or solvent solution.

2. Closed containers or hand held spray bottles from which solvents or solvent solutions are applied without a propellant-induced force.

3. Cleaning equipment which has a solvent or solvent solution container that is closed during cleaning operations, except when depositing and removing objects to be cleaned, and is closed during non-operation with the exception of maintenance and repair to the cleaning equipment itself.

4. A remote reservoir cleaner operated in compliance with all of the following requirements:

a. Solvent vapors are prevented from escaping from the solvent or solvent solution container by using devices such as a cover or a valve when the remote reservoir is not being used, cleaned or repaired.

b. Flow is directed in a manner that prevents solvent or solvent solution from splashing outside of

the remote reservoir cleaner.

c. The cleaner is not used for cleaning porous or absorbent materials, such as cloth, leather, wood or rope.

d. Only solvent or solvent solution containers free of all liquid leaks are used. Auxiliary equipment, such as pumps, pipelines or flanges, may not have any liquid leaks, visible tears or cracks. Any liquid leak, visible tear or crack detected shall be repaired within one calendar day, or the leaking section of the remote reservoir cleaner shall be drained of all solvents or solvent solutions and shut down until it is replaced or repaired.

5. A non-atomized flow method where the used solvents or solvent solutions are collected in a container or a collection system which is closed, except for the solvent or solvent solution collection openings that may be open when filling or emptying, or the opening caused by use of a pressure relief valve.

6. A flushing method where the used solvents or solvent solutions are discharged into a container which is closed, except for the solvent or solvent solution collection openings that may be open when filling or emptying, or the opening caused by use of a pressure relief valve. The discharged solvents or solvent solutions shall be collected into containers without atomizing into the open air.

(c) *Storage and disposal.* The owner or operator of a facility shall store all solvents or solvent solutions used in industrial cleaning operations in non-absorbent, non-leaking containers which shall be kept covered except when filling or emptying. Cloth and paper moistened with solvents or solvent solutions shall be stored in covered, non-absorbent, non-leaking containers.

(d) *Control equipment.* In lieu of complying with the requirements in pars. (a) and (b), the owner or operator of a facility may use a VOC emission control system to control VOC emissions from the industrial cleaning operations at the facility provided one of the following requirements is met:

1. The emission control system has a minimum overall emission reduction efficiency of 85% for VOC emissions, as determined in accordance with s. NR 439.06 (3) (am).

2. The emission control system has a minimum VOC capture efficiency of 90% and an output of

VOC emissions of less than 50 ppm calculated as carbon, not including methane and ethane, with no dilution, as determined in accordance with s. NR 439.06 (3) (a).

(e) *General prohibitions.* The owner or operator of a facility may not atomize any solvent or solvent solution unless the resulting VOC emissions are controlled by an air pollution control system that meets one of the requirements of par. (d).

(f) *Alternative compliance option.* In lieu of complying with the requirements in par. (a), the owner or operator of a facility may use solvents or solvent solutions for industrial cleaning operations which have a VOC composite partial vapor pressure that is less than or equal to the applicable VOC composite partial vapor pressure listed in Table 2 for the respective cleaning operation.

Table 2
VOC Composite Partial Vapor
Pressure for Solvents and Solvent Solutions Used in Industrial Cleaning Operations

Cleaning Activity	VOC Composite Partial Vapor Pressure for Solvents and Solvent Solutions in mm of Hg at 20°C
1. Product cleaning or surface preparation during manufacturing process	8.0
2. Repair cleaning or maintenance cleaning	8.0
3. Cleaning of coatings (excluding adhesives) application equipment	
a. General	8.0
b. Heptane-containing end sealant application equipment lines	10.0
4. Cleaning of ink application equipment	8.0

(4) RECORDKEEPING. In addition to the applicable recordkeeping requirements in s. NR 439.04, the owner or operator of any can coating line shall collect and record the applicable information specified in this subsection. The information shall be maintained at the facility for a minimum of 5 years and shall be made available to a department representative at any time during normal working hours. The information required is:

(a) For each operation that is exempt under sub. (1m) (d), the daily quantity in fluid ounces of VOC-containing aerosol product used for industrial cleaning operations.

(b) For each operation that is exempt under sub. (1m) (h), the daily quantity in gallons of VOC-containing solvents or solvent solutions used to clean sterilization indicating ink application equipment.

(c) For each operation that is subject to sub. (3), the following information as appropriate:

1. The name and identification of each cleaning material and the associated solvent cleaning activity.

2. The VOC content of each cleaning material, in pounds per gallon of material as employed, or the VOC composite partial vapor pressure of the solvents or solvent solutions used in industrial cleaning operations.

3. For any operation subject to par. (3) (d), the results of any testing conducted as required under par. (3) (d).

SECTION 38. NR 422.06 (1) is renumbered to NR 422.06 (1) (a) (intro.), and as renumbered is amended to read:

NR 422.06 (1) APPLICABILITY. (a) (intro.) ~~This section applies, subject to the provisions of s. NR 425.03,~~ Subsections (2) and (4) apply to the coating applicators, ovens and quench areas of coil coating lines involved in prime and topcoat or single coat operations~~. This section does not apply to sources exempted under s. NR 422.03.~~ at a facility that is either of the following:

SECTION 39. NR 422.06 (1) (a) 1. and 2. and (b), (1m), (3) and (4) are created to read:

NR 422.06 (1) (a) 1. Located in the county of Brown, Calumet, Dane, Dodge, Door, Fond du Lac, Jefferson, Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Outagamie, Racine, Rock, Sheboygan, Walworth, Washington, Waukesha or Winnebago, and which has VOC emissions from all coil coating lines at the facility, before consideration of controls, exceeding 6.8 kilograms (15 pounds) in any one day.

2. Located outside of the counties of Brown, Calumet, Dane, Dodge, Door, Fond du Lac, Jefferson, Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Outagamie, Racine, Rock, Sheboygan, Walworth, Washington, Waukesha, and Winnebago, and which has total VOC emissions from the facility, before consideration of controls, equal to or exceeding 100 tpy.

(b) Except as provided in sub. (1m), subs. (3) and (4) apply to a facility with coating operations as

described in par. (a) and which is located in the county of Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Washington, or Waukesha if VOC emissions from all industrial cleaning operations, before consideration of controls, equal or exceed 3 tons per year on a 12 consecutive month rolling basis.

(1m) EXEMPTIONS. If any exemption in this subsection is based on an exemption threshold and that threshold is exceeded, the exemption will no longer apply to the facility. The following exemptions are applicable to various provisions of this section:

(a) Subsection (3) does not apply to the stripping of cured coatings or cured inks.

(b) Subsection (3) does not apply to industrial adhesives or adhesive primers.

(c) Subsection (3) (a) does not apply to cleaning conducted in conjunction with performance laboratory tests on coatings or inks; research and development programs; and laboratory tests in quality assurance laboratories.

(d) Subsection (3) (a) and (e) do not apply to cleaning with aerosol products if 160 fluid ounces or less of VOC-containing aerosol products are used per day for industrial cleaning operations per facility.

(e) Subsection (3) (a), (d), (e) and (f) do not apply to digital printing.

(f) Subsection (3) (e) does not apply to cleaning with solvents or solvent solutions in spray bottles or containers described in subd. (3) (b) 2.

(g) Subsection (3) (e) does not apply to the cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems that are programmed to spray into a closed container.

(3) INDUSTRIAL CLEANING OPERATIONS. On and after 12 months after the effective date of this subsection ...[LRB insert date], the owner or operator of a facility subject to this subsection shall meet the requirements of this subsection.

(a) *Solvent and solvent solution requirements.* Except as provided under par. (d), no owner or operator of a facility may cause, allow or permit the use of a solvent or solvent solution for industrial cleaning operations unless the VOC content of the solvent or solvent solution is less than or equal to 0.05 kilograms of VOC per liter (0.42 pounds per gallon). For the purposes of this subsection, VOC content shall be defined as in s. NR423.02 (11r).

(b) *Cleaning devices and methods requirements*. Except as provided under par. (d), the owner or operator of a facility shall employ the following cleaning devices or methods when using solvents or solvent solutions:

1. Physically rub a surface with a porous applicator such as a rag, paper, sponge or a cotton swab moistened with solvent or solvent solution.

2. Closed containers or hand held spray bottles from which solvents or solvent solutions are applied without a propellant-induced force.

3. Cleaning equipment which has a solvent or solvent solution container that is closed during cleaning operations, except when depositing and removing objects to be cleaned, and is closed during non-operation with the exception of maintenance and repair to the cleaning equipment itself.

4. A remote reservoir cleaner operated in compliance with all of the following requirements:

a. Solvent vapors are prevented from escaping from the solvent or solvent solution container by using devices such as a cover or a valve when the remote reservoir is not being used, cleaned or repaired.

b. Flow is directed in a manner that prevents solvent or solvent solution from splashing outside of the remote reservoir cleaner.

c. The cleaner is not used for cleaning porous or absorbent materials, such as cloth, leather, wood or rope.

d. Only solvent or solvent solution containers free of all liquid leaks are used. Auxiliary equipment, such as pumps, pipelines or flanges, may not have any liquid leaks, visible tears or cracks. Any liquid leak, visible tear or crack detected shall be repaired within one calendar day, or the leaking section of the remote reservoir cleaner shall be drained of all solvents or solvent solutions and shut down until it is replaced or repaired.

5. A non-atomized flow method where the used solvents or solvent solutions are collected in a container or a collection system which is closed, except for the solvent or solvent solution collection openings that may be open when filling or emptying, or the opening caused by use of a pressure relief valve.

6. A flushing method where the used solvents or solvent solutions are discharged into a container which is closed, except for the solvent or solvent solution collection openings that may be open when filling or emptying, or the opening caused by use of a pressure relief valve. The discharged solvents or solvent solutions shall be collected into containers without atomizing into the open air.

(c) *Storage and disposal.* The owner or operator of a facility shall store all solvents or solvent solutions used in industrial cleaning operations in non-absorbent, non-leaking containers which shall be kept covered except when filling or emptying. Cloth and paper moistened with solvents or solvent solutions shall be stored in covered, non-absorbent, non-leaking containers.

(d) *Control equipment.* In lieu of complying with the requirements in pars. (a) and (b), the owner or operator of a facility may use a VOC emission control system to control VOC emissions from the industrial cleaning operations at the facility provided one of the following requirements is met:

1. The emission control system has a minimum overall emission reduction efficiency of 85% for VOC emissions,5 as determined in accordance with s. NR 439.06 (3) (am).

2. The emission control system has a minimum VOC capture efficiency of 90% and an output of VOC emissions of less than 50 ppm calculated as carbon, not including methane and ethane, with no dilution, as determined in accordance with s. NR 439.06 (3) (a).

(e) *General prohibitions.* The owner or operator of a facility may not atomize any solvent or solvent solution unless the resulting VOC emissions are controlled by an air pollution control system that meets one of the requirements of par. (d).

(f) *Alternative compliance option.* In lieu of complying with the requirements in par. (a), the owner or operator of a facility may use solvents or solvent solutions for industrial cleaning operations which have a VOC composite partial vapor pressure of less than or equal to 8 mm of Hg at 20°C.

(4) RECORDKEEPING. In addition to the applicable recordkeeping requirements in s. NR 439.04, the owner or operator of any coil coating line shall collect and record the applicable information specified in this subsection. The information shall be maintained at the facility for a minimum of 5 years and shall be made available to a department representative at any time during normal working hours. The

information required is:

(a) For each operation that is exempt under sub. (1m) (d), the daily quantity in fluid ounces of VOC-containing aerosol product used for industrial cleaning operations.

(b) For each operation that is subject to sub. (3), the following information as appropriate:

1. The name and identification of each cleaning material and the associated solvent cleaning activity.

2. The VOC content of each cleaning material, in pounds per gallon of material, as employed or the VOC composite partial vapor pressure of the solvents or solvent solutions used in industrial cleaning operations.

3. For any operation subject to par. (3)(d), the results of any testing conducted as required under par. (3)(d).

SECTION 40. NR 422.08 (1) is renumbered to NR 422.08 (1) (a) (intro.), and as renumbered is amended to read:

NR 422.08 (1) APPLICABILITY. (a) (intro.) ~~This section applies, subject to the provisions of s. NR 425.03~~ Subsections (2) and (4) apply to the coating applicators, including ~~but not limited to~~ blade, roll, rotogravure or dip coaters, and drying ovens of fabric and vinyl coating lines~~. This section does not apply to sources exempted under s. NR 422.03.~~ at a facility that is either of the following:

SECTION 41. NR 422.08 (1) (a) 1. and 2. and (b), and (1m), (3) and (4) are created to read:

NR 422.08 (1) (a) 1. Located in the county of Brown, Calumet, Dane, Dodge, Door, Fond du Lac, Jefferson, Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Outagamie, Racine, Rock, Sheboygan, Walworth, Washington, Waukesha or Winnebago, and which has VOC emissions from all fabric and vinyl coating lines at the facility, before consideration of controls, exceeding 6.8 kilograms (15 pounds) in any one day.

2. Located outside of the counties of Brown, Calumet, Dane, Dodge, Door, Fond du Lac,

Jefferson, Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Outagamie, Racine, Rock, Sheboygan, Walworth, Washington, Waukesha, and Winnebago, and which has total VOC emissions from the facility, before consideration of controls, equal to or exceeding 100 tpy.

(b) Except as provided in sub. (1m), subs. (3) and (4) apply to a facility with coating operations as described in par. (a) located in the county of Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Washington, or Waukesha if VOC emissions from all industrial cleaning operations, before consideration of controls, equal or exceed 3 tons per year on a 12 consecutive month rolling basis.

(1m) EXEMPTIONS. If any exemption in this subsection is based on an exemption threshold and that threshold is exceeded, the exemption will no longer apply to the facility. The following exemptions are applicable to various provisions of this section:

(a) Subsection (3) does not apply to the stripping of cured coatings or cured inks.

(b) Subsection (3) does not apply to industrial adhesives or adhesive primers.

(c) Subsection (3) (a) does not apply to cleaning conducted in conjunction with performance laboratory tests on coatings or inks; research and development programs; and laboratory tests in quality assurance laboratories.

(d) Subsection (3) (a) and (e) do not apply to cleaning with aerosol products if 160 fluid ounces or less of VOC-containing aerosol products are used per day for industrial cleaning operations per facility.

(e) Subsection (3) (a), (d), (e) and (f) do not apply to digital printing.

(f) Subsection (3) (e) does not apply to cleaning with solvents or solvent solutions in spray bottles or containers described in subd. (3) (b) 2.

(g) Subsection (3) (e) does not apply to the cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems that are programmed to spray into a closed container.

(3) INDUSTRIAL CLEANING OPERATIONS. On and after 12 months after the effective date of this subsection ...[LRB insert date], the owner or operator of a facility subject to this subsection shall meet the requirements of this subsection.

(a) *Solvent and solvent solution requirements.* Except as provided under par. (d), no owner or

operator of a facility may cause, allow or permit the use of a solvent or solvent solution for industrial cleaning operations unless the VOC content of the solvent or solvent solution is less than or equal to 0.05 kilograms of VOC per liter (0.42 pounds per gallon). For the purposes of this subsection, VOC content shall be defined as in s. NR423.02 (11r).

(b) *Cleaning devices and methods requirements.* Except as provided under par. (d), the owner or operator of a facility shall employ the following cleaning devices or methods when using solvents or solvent solutions:

1. Physically rub a surface with a porous applicator such as a rag, paper, sponge or a cotton swab moistened with solvent or solvent solution.

2. Closed containers or hand held spray bottles from which solvents or solvent solutions are applied without a propellant-induced force.

3. Cleaning equipment which has a solvent or solvent solution container that is closed during cleaning operations, except when depositing and removing objects to be cleaned, and is closed during non-operation with the exception of maintenance and repair to the cleaning equipment itself.

4. A remote reservoir cleaner operated in compliance with all of the following requirements:

a. Solvent vapors are prevented from escaping from the solvent or solvent solution container by using devices such as a cover or a valve when the remote reservoir is not being used, cleaned or repaired.

b. Flow is directed in a manner that prevents solvent or solvent solution from splashing outside of the remote reservoir cleaner.

c. The cleaner is not used for cleaning porous or absorbent materials, such as cloth, leather, wood or rope.

d. Only solvent or solvent solution containers free of all liquid leaks are used. Auxiliary equipment, such as pumps, pipelines or flanges, may not have any liquid leaks, visible tears or cracks. Any liquid leak, visible tear or crack detected shall be repaired within one calendar day, or the leaking section of the remote reservoir cleaner shall be drained of all solvents or solvent solutions and shut down until it is replaced or repaired.

5. A non-atomized flow method where the used solvents or solvent solutions are collected in a container or a collection system which is closed, except for the solvent or solvent solution collection openings that may be open when filling or emptying, or the opening caused by use of a pressure relief valve.

6. A flushing method where the used solvents or solvent solutions are discharged into a container which is closed, except for the solvent or solvent solution collection openings that may be open when filling or emptying, or the opening caused by use of a pressure relief valve. The discharged solvents or solvent solutions shall be collected into containers without atomizing into the open air.

(c) *Storage and disposal.* The owner or operator of a facility shall store all solvents or solvent solutions used in industrial cleaning operations in non-absorbent, non-leaking containers which shall be kept covered except when filling or emptying. Cloth and paper moistened with solvents or solvent solutions shall be stored in covered, non-absorbent, non-leaking containers.

(d) *Control equipment.* In lieu of complying with the requirements in pars. (a) and (b), the owner or operator of a facility may use a VOC emission control system to control VOC emissions from the industrial cleaning operations at the facility provided one of the following requirements is met:

1. The emission control system has a minimum overall emission reduction efficiency of 85% for VOC emissions, as determined in accordance with s. NR 439.06 (3) (am).

2. The emission control system has a minimum VOC capture efficiency of 90% and an output of VOC emissions of less than 50 ppm calculated as carbon, not including methane and ethane, with no dilution, as determined in accordance with s. NR 439.06 (3) (a).

(e) *General prohibitions.* The owner or operator of a facility may not atomize any solvent or solvent solution unless the resulting VOC emissions are controlled by an air pollution control system that meets one of the requirements of par. (d).

(f) *Alternative compliance option.* In lieu of complying with the requirements in par. (a), the owner or operator of a facility may use solvents or solvent solutions for industrial cleaning operations which have a VOC composite partial vapor pressure of less than or equal to 8 mm of Hg at 20°C.

(4) RECORDKEEPING. In addition to the applicable recordkeeping requirements in s. NR 439.04, the owner or operator of any fabric and vinyl coating line shall collect and record the applicable information specified in this subsection. The information shall be maintained at the facility for a minimum of 5 years and shall be made available to a department representative at any time during normal working hours. The information required is:

(a) For each operation that is exempt under sub. (1m) (d), the daily quantity in fluid ounces of VOC-containing aerosol product used for industrial cleaning operations.

(b) For each operation that is subject to sub. (3), the following information as appropriate:

1. The name and identification of each cleaning material and the associated solvent cleaning activity.

2. The VOC content of each cleaning material, in pounds per gallon of material, as employed or the VOC composite partial vapor pressure of the solvents or solvent solutions used in industrial cleaning operations.

3. For any operation subject to par. (3) (d), the results of any testing conducted as required under par. (3) (d).

SECTION 42. NR 422.083 (1) (a) and (b) are amended to read:

NR 422.083 (1) (a) Except as provided in sub. (4), ~~this section applies~~ subsections (3) and (4) apply to plastic parts coating at facilities which are located in the county of Kenosha, Milwaukee, Ozaukee, Racine, Washington, or Waukesha ~~county~~ and which have maximum theoretical emissions of VOCs from the facility, excluding any maximum theoretical emissions of VOCs specifically subject to s. NR 419.05, 419.06 or 419.08, ch. NR 420 or 421, ss. NR 422.05 to 422.08 or 422.085 to 422.17, or s. NR 423.03, 423.035, 423.05, 424.04 or 424.05, of 25 tons per year or more.

(b) Except as provided in sub. (4), ~~this section applies~~ subsections (3) and (4) apply to plastic parts coating at facilities that are located in the county of Kewaunee, Manitowoc, or Sheboygan ~~county~~ and which have maximum theoretical emissions of VOCs from the facility, excluding any maximum

theoretical emissions of VOCs specifically subject to s. NR 419.05, 419.06 or 419.08, ch. NR 420 or 421, ss. NR 422.05 to 422.08 or 422.085 to 422.17, or s. NR 423.03, 423.035, 423.05, 424.04 or 424.05, of 100 tons per year or more.

SECTION 43. NR 422.083 (1) (bm) and (3m) are created to read:

NR 422.083 (1) (bm) Subsection (3m) applies to the owner or operator of a plastic parts coating line located at a facility in the county of Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Washington, or Waukesha if VOC emissions from all plastic parts coating operations and related cleaning activities at the facility, before consideration of controls, equal or exceed 3 tons on a 12 consecutive month rolling basis.

(3m) CLEANING MATERIAL WORK PRACTICES. On and after 12 months after the effective date of this subsection ...[LRB insert date], the owner or operator of a facility subject to this section shall do all of the following:

(a) Store all VOC-containing cleaning materials and shop towels used for cleaning in closed containers.

(b) Ensure that storage containers used for VOC-containing materials are kept closed at all times except when depositing or removing material.

(c) Convey VOC-containing cleaning materials in closed containers or pipes.

(d) Minimize spills of VOC-containing cleaning materials.

(e) Minimize emissions of VOC during cleaning of coating application, storage, mixing, and conveying equipment by ensuring that cleaning is performed without atomizing any VOC-containing cleaning material and that the used material is captured and contained.

SECTION 44. NR 422.085 (1) is renumbered NR 422.085 (1) (intro.), and as renumbered is amended read:

NR 422.085 (1) APPLICABILITY. (intro.) Effective February 1, 1987, this section applies to

coating applications at leather coating facilities. ~~This section does not apply to sources exempted under s. NR 422.03 (6).~~ which are either of the following:

SECTION 45. NR 422.085 (1) (a) and (b) are created to read:

NR 422.085 (1) (a) Located in the county of Kenosha, Milwaukee, Ozaukee, Racine, Washington, or Waukesha, and which have maximum theoretical emissions of VOC from the facility greater than or equal to 25 tons per year.

(b) Located in the county of Door, Kewaunee, Manitowoc, Sheboygan, or Walworth, and which have maximum theoretical emissions of VOC from the facility greater than or equal to 100 tons per year.

SECTION 46. NR 422.09 (1) is renumbered NR 422.09 (1) (a) and as renumbered is amended to read:

NR 422.09 (1) (a) This section applies~~, subject to the provisions of s. NR 425.03 (6),~~ to the application areas, flashoff areas and ovens of automobile and light-duty truck manufacturing plants involved in prime, topcoat and final repair coating of metallic front end and main body parts at any facility located in the county of Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Washington, or Waukesha if VOC emissions from the prime, topcoat and final repair coating and related cleaning activities at the facility, before consideration of controls, equal or exceed 3 tons per year on a 12 consecutive month rolling basis. ~~This section does not apply to the coating of wheels, trunk interiors, steering columns or nonmetallic parts; to sealers or nonpriming anti-rust coatings; or to sources exempted under s. NR 422.03.~~

SECTION 47. NR 422.09 (1) (b) to (d) and (6) are created to read:

NR 422.09 (1) (b) Subsections (2) to (5) apply to the coating operations described in par. (a) at any automobile and light-duty truck manufacturing facility located in the county of Brown, Calumet, Dane, Dodge, Door, Fond du Lac, Jefferson, Kewaunee, Manitowoc, Outagamie, Rock, Walworth, and Winnebago if VOC emissions from all coating operations described in par. (a) at the facility, before

consideration of controls, equal or exceed 6.8 kilograms (15 pounds) in any one day.

(c) Subsections (2) to (5) apply to coating operations as described in par. (a) at any automobile and light-duty truck manufacturing facility not subject to par. (a) or (b) if total VOC emissions from the facility, before consideration of controls, equal or exceed 100 tpy.

(d) Subsections (2) to (5) do not apply to the coating of wheels, trunk interiors, steering columns, or nonmetallic parts; sealers; nonpriming anti-rust coatings; or processes, coatings, or inks described in s. NR 422.03 (5) and (7).

(6) WORK PRACTICES. On or after 12 months after the effective date of this subsection ...[LRB insert date], the owner or operator of a facility subject to this section shall do all of the following:

(a) Minimize VOC emissions from cleaning of storage, mixing and conveying equipment.

(b) Develop and implement a work practice plan to minimize VOC emissions from cleaning and purging of equipment associated with all coating operations. The plan shall specify practices and procedures for the following operations, at a minimum:

1. Vehicle body wiping.

2. Coating line purging.

3. Flushing of coating systems.

4. Cleaning of spray booth grates.

5. Cleaning of spray booth walls.

6. Cleaning of spray booth equipment.

7. Cleaning of external spray booth areas.

SECTION 48. NR 422.095 (1) is renumbered NR 422.095 (1) (a) and as renumbered is amended to read:

NR 422.095 (1) (a) ~~This section applies~~ Subsections (3) to (5) apply to automobile refinishing operations performed in the following types of facilities in the counties of Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington and Waukesha: auto body and repair shops; production paint shops; new and used motor vehicle dealer repair and paint shops; fleet operator

repair and paint shops; and any facility which coats vehicles and is classified under standard industrial classification code 7532, as described in the Standard Industrial Classification Manual, 1987, incorporated by reference in s. NR 484.05 (1), including dock repair of imported vehicles and dealer repair of vehicles damaged in transit.

SECTION 49. NR 422.095 (1) (b) is created to read:

NR 422.095 (1) (b) Subsections (7) and (8) apply to the owner or operator of a facility specified in par. (a) which is located in the county of Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Washington or Waukesha if VOC emissions from all industrial cleaning operations associated with automobile refinishing operations at the facility, before consideration of controls, equal or exceed 3 tons on a 12 consecutive month rolling basis.

SECTION 50. NR 422.095 (2) (a) is amended to read:

NR 422.095 (2) (a) Automobile refinishing operations at facilities which use less than 20 gallons per year of coatings are exempt from the equipment requirements in ~~subs.~~ sub. (5) ~~and (6) (c)~~.

SECTION 51. NR 422.095 (2) (c) to (i) are created to read:

NR 422.095 (2) (c) Subsection (7) does not apply to the stripping of cured coatings or cured inks.

(d) Subsection (7) does not apply to industrial adhesives or adhesive primers.

(e) Subsection (7) (a) does not apply to cleaning conducted in conjunction with performance laboratory tests on coatings or inks; research and development programs; and laboratory tests in quality assurance laboratories.

(f) Subsection (7) (a) and (e) do not apply to cleaning with aerosol products if 160 fluid ounces or less of VOC-containing aerosol products are used per day for industrial cleaning operations per facility.

(g) Subsection (7) (a), (d), (e) and (f) do not apply to digital printing.

(h) Subsection (7) (e) does not apply to cleaning with solvents or solvent solutions in spray

bottles or containers described in subd. (7) (b) 2.

(i) Subsection (7) (e) does not apply to the cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems that are programmed to spray into a closed container.

SECTION 52. NR 422.095 (6) is repealed.

SECTION 53. NR 422.095 (7) and (8) are created to read:

NR 422.095 (7) INDUSTRIAL CLEANING OPERATIONS. On and after 12 months after the effective date of this subsection ...[LRB insert date], the owner or operator of a facility subject to this subsection shall meet the requirements of this subsection.

(a) *Solvent and solvent solution requirements.* Except as provided under par. (d), no owner or operator of a facility may cause, allow or permit the use of a solvent or solvent solution for industrial cleaning operations unless the VOC content of the solvent or solvent solution is less than or equal to 0.05 kilograms of VOC per liter (0.42 pounds per gallon). For the purposes of this subsection, VOC content shall be defined as in s. NR423.02 (11r).

(b) *Cleaning devices and methods requirements.* Except as provided under par. (d), the owner or operator of a facility shall employ the following cleaning devices or methods when using solvents or solvent solutions:

1. Physically rub a surface with a porous applicator such as a rag, paper, sponge or a cotton swab moistened with solvent or solvent solution.

2. Closed containers or hand held spray bottles from which solvents or solvent solutions are applied without a propellant-induced force.

3. Cleaning equipment which has a solvent or solvent solution container that is closed during cleaning operations, except when depositing and removing objects to be cleaned, and is closed during non-operation with the exception of maintenance and repair to the cleaning equipment itself.

4. A remote reservoir cleaner operated in compliance with all of the following requirements:

a. Solvent vapors are prevented from escaping from the solvent or solvent solution container by using devices such as a cover or a valve when the remote reservoir is not being used, cleaned or repaired.

b. Flow is directed in a manner that prevents solvent or solvent solution from splashing outside of the remote reservoir cleaner.

c. The cleaner is not used for cleaning porous or absorbent materials, such as cloth, leather, wood or rope.

d. Only solvent or solvent solution containers free of all liquid leaks are used. Auxiliary equipment, such as pumps, pipelines or flanges, may not have any liquid leaks, visible tears or cracks. Any liquid leak, visible tear or crack detected shall be repaired within one calendar day, or the leaking section of the remote reservoir cleaner shall be drained of all solvents or solvent solutions and shut down until it is replaced or repaired.

5. A non-atomized flow method where the used solvents or solvent solutions are collected in a container or a collection system which is closed, except for the solvent or solvent solution collection openings that may be open when filling or emptying, or the opening caused by use of a pressure relief valve.

6. A flushing method where the used solvents or solvent solutions are discharged into a container which is closed, except for the solvent or solvent solution collection openings that may be open when filling or emptying, or the opening caused by use of a pressure relief valve. The discharged solvents or solvent solutions shall be collected into containers without atomizing into the open air.

(c) *Storage and disposal.* The owner or operator of a facility shall store all solvents or solvent solutions used in industrial cleaning operations in non-absorbent, non-leaking containers which shall be kept covered except when filling or emptying. Cloth and paper moistened with solvents or solvent solutions shall be stored in covered, non-absorbent, non-leaking containers. Waste paint, spent solvent and sludge from spray gun cleaners or in-house distillation units shall be stored in closed containers until properly disposed. Proper disposal includes releasing wastes to a reclaiming or hazardous waste management facility licensed under ch. NR 670, or recycling with an in-house distillation unit.

(d) *Control equipment.* In lieu of complying with the requirements in pars. (a) and (b), the owner or operator of a facility may use a VOC emission control system to control VOC emissions from the industrial cleaning operations at the facility provided one of the following requirements is met:

1. The emission control system has a minimum overall emission reduction efficiency of 85% for VOC emissions, as determined in accordance with s. NR 439.06(3)(am).

2. The emission control system has a minimum VOC capture efficiency of 90% and an output of VOC emissions of less than 50 ppm calculated as carbon, not including methane and ethane, with no dilution, as determined in accordance with s. NR 439.06(3)(a).

(e) *General prohibitions.* The owner or operator of a facility may not atomize any solvent or solvent solution unless the resulting VOC emissions are controlled by an air pollution control system that meets one of the requirements of par. (d).

(f) *Alternative compliance option.* In lieu of complying with the requirements in par. (a), the owner or operator of a facility may use solvents or solvent solutions for industrial cleaning operations which have a VOC composite partial vapor pressure of less than or equal to 8 mm of Hg at 20°C.

(8) RECORDKEEPING. In addition to the applicable recordkeeping requirements in s. NR 439.04, the owner or operator of any automobile refinishing operation shall collect and record the applicable information specified in this subsection. The information shall be maintained at the facility for a minimum of 5 years and shall be made available to a department representative at any time during normal working hours. The information required is:

(a) For each operation that is exempt under sub. (2) (h), the daily quantity in fluid ounces of VOC-containing aerosol product used for industrial cleaning operations.

(b) For each operation that is subject to sub. (7), the following information as appropriate:

1. The name and identification of each cleaning material and the associated solvent cleaning activity.

2. The VOC content of each cleaning material, in pounds per gallon of material, as employed or the VOC composite partial vapor pressure of the solvents or solvent solutions used in industrial cleaning

operations.

3. For any operation subject to par. (7) (d), the results of any testing conducted as required under par. (7) (d).

SECTION 54. NR 422.125 (1) is renumbered NR 422.125 (1) (a), and as renumbered is amended to read;

NR 422.125 (1) (a) This section applies to the wood furniture finishing operations of any wood furniture manufacturing facility which is located in the county of Kenosha, ~~Kewaunee, Manitowoc,~~ Milwaukee, Ozaukee, Racine, Sheboygan, Washington or Waukesha, and whose maximum theoretical emissions of VOCs from all wood furniture finishing operations at the facility, including any related cleaning activities, is greater than or equal to 25 tons per year.

SECTION 55. NR 422.125 (1) (b) and (4m) are created to read:

NR 422.125 (1) (b) This section applies, except for sub. (4m), to any wood furniture manufacturing facility which is located in the county of Kewaunee or Manitowoc, and whose maximum theoretical emissions of VOCs from all wood furniture finishing operations at the facility is greater than or equal to 25 tons per year.

(4m) CLEANING MATERIAL WORK PRACTICES. On and after 12 months after the effective date of this subsection ...[LRB insert date], the owner or operator of a facility subject to this subsection shall do all of the following:

(a) Use cleaning materials containing no more than 8.0% by weight VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal or plastic filters.

(b) Store VOC-containing cleaning materials in closed containers.

(c) Collect all VOC-containing cleaning material used to clean spray guns and spray gun lines in a container and keep the container covered except when adding or removing material.

(d) Control emissions of VOC-containing cleaning material from washoff operations by doing

both of the following:

1. Equipping the tank used for washoff operations with a cover and keeping the cover closed whenever the tank is not being used.

2. Minimizing dripping by tilting or rotating the part to drain as much cleaning material as possible into the tank.

(e) Use strippable spray booth materials containing no more than 0.8 pound of VOC per pound of solids, as applied.

SECTION 56. NR 422.127 (2) (intro.) is renumbered NR 422.127 (2) (a) (intro.).

SECTION 57. NR 422.127 (2) (b) and (3m) are created to read:

NR 422.127 (2) (b) The cleaning material work practice requirements in sub. (3m) do not apply to any of the following:

1. A facility which is located outside the counties of Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Washington, and Waukesha.

2. A facility which is located in the county of Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Washington, or Waukesha and which has VOC emissions from all industrial cleaning operations associated with use of adhesives or adhesive primers and related cleaning activities at the facility, before consideration of controls, less than 3 tons on a 12 consecutive month rolling basis.

(3m) CLEANING MATERIAL WORK PRACTICES. On and after 12 months after the effective date of this subsection ...[LRB insert date], the owner or operator of a facility subject to this subsection shall do all of the following:

(a) Store all VOC-containing cleaning materials and shop towels used for cleaning in closed containers.

(b) Ensure that storage containers used for VOC-containing materials are kept closed at all times except when depositing or removing material.

(c) Convey VOC-containing cleaning materials in closed containers or pipes.

(d) Minimize spills of VOC-containing cleaning materials.

(e) Minimize emissions of VOC during cleaning of coating application, storage, mixing, and conveying equipment by ensuring that cleaning is performed without atomizing any VOC-containing cleaning material and that the used material is captured and contained.

SECTION 58. NR 422.132 (1) (intro.) is renumbered NR 422.132 (1) (am) (intro.), and as renumbered is amended to read:

NR 422.132 (1) APPLICABILITY. (am) (intro.) Except as provided in ~~pars. (a) to (e)~~ par. (bm), this section applies to the wood entry or passage door coating lines of any wood entry or passage door coating facility~~. This section does not apply to any~~ that is either of the following:

SECTION 59. NR 422.132 (1) (a) is repealed.

SECTION 60. NR 422.132 (1) (am) 1. and 2. and (bm)(intro.) are created to read:

NR 422.132 (1) (am) 1. Located in the county of Kenosha, Milwaukee, Ozaukee, Racine, Washington, or Waukesha and which has maximum theoretical emissions of VOC from all wood entry or passage door coating at the facility greater than or equal to 25 tons per year.

2. Located in the county of Kewaunee, Manitowoc, or Sheboygan and which has maximum theoretical emissions of VOC from all wood entry or passage door coating at the facility greater than or equal to 100 tons per year.

(bm) (intro.) This section does not apply to either of the following:

SECTION 61. NR 422.132 (1) (b) and (c) are renumbered NR 422.132 (1) (bm) 1. and 2.

SECTION 62. NR 422.135 (1) (intro.) is renumbered NR 422.135 (1) (am) (intro.), and as renumbered is

amended to read:

NR 422.135 (1) APPLICABILITY. (am) (intro.) Except as provided in ~~pars. (a) and~~ par. (b), this section applies to molded wood parts or products coating lines of any molded wood parts or products coating facility~~. This section does not apply to~~ that is either of the following:

SECTION 63. NR 422.135 (1) (a) is repealed.

SECTION 64. NR 422.135 (1) (am) 1. and 2. are created to read:

NR 422.135 (1) (am) 1. Located in the county of Kenosha, Milwaukee, Ozaukee, Racine, Washington, or Waukesha and which has maximum theoretical emissions of VOC from all wood entry or passage door coating at the facility greater than or equal to 25 tons per year.

2. Located in the county of Kewaunee, Manitowoc, or Sheboygan and which has maximum theoretical emissions of VOC from all wood entry or passage door coating at the facility greater than or equal to 100 tons per year.

SECTION 65. NR 422.135 (1) (b) is amended to read:

NR 422.135 (b) ~~The~~ This section does not apply to the use of topcoats which are applied as a stripe not more than 1/2 inch in width to croquet balls and whose use in aggregate never exceeds 500 gallons per year, as applied.

SECTION 66. NR 422.14 (1) is renumbered NR 422.14 (1) (a) (intro.), and as renumbered is amended to read:

NR 422.14 (1) APPLICABILITY. (a) (intro.) ~~This section applies, subject to the provisions of s. NR 425.03,~~ Subsections (2), (3), and (5) apply to the printing lines of all packaging rotogravure, publication rotogravure, and flexographic printing facilities~~. This section does not apply to sources exempted under s. NR 422.03.~~ that are either of the following:

SECTION 67. NR 422.14 (1) (a) 1. and 2. and (1m), (4) and (5) are created to read:

NR 422.14 (1) (a) 1. Located in the county of Kenosha, Milwaukee, Ozaukee, Racine, Washington, or Waukesha and which have maximum theoretical emissions of VOC from the facility greater than or equal to 25 tons per year.

2. Located outside of the counties of Kenosha, Milwaukee, Ozaukee, Racine, Washington, and Waukesha and which have maximum theoretical emissions of VOC from the facility greater than or equal to 100 ton per year.

(1m) EXEMPTIONS. If any exemption in this subsection is based on an exemption threshold and that threshold is exceeded, the exemption will no longer apply to the facility. The following exemptions are applicable to various provisions of this section:

(a) Subsection (4) does not apply to the stripping of cured coatings or cured inks.

(b) Subsection (4) does not apply to industrial adhesives or adhesive primers.

(c) Subsection (4) (a) does not apply to cleaning conducted in conjunction with performance laboratory tests on coatings or inks; research and development programs; and laboratory tests in quality assurance laboratories.

(d) Subsection (4) (a) and (e) do not apply to cleaning with aerosol products if 160 fluid ounces or less of VOC-containing aerosol products are used per day for industrial cleaning operations per facility.

(e) Subsection (4) (a), (d), (e) and (f) do not apply to digital printing.

(f) Subsection (4) (e) does not apply to cleaning with solvents or solvent solutions in spray bottles or containers described in subd. (4) (b) 2.

(g) Subsection (4) (e) does not apply to the cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems that are programmed to spray into a closed container.

(4) INDUSTRIAL CLEANING OPERATIONS. On and after 12 months after the effective date of this subsection ...[LRB insert date], the owner or operator of a facility subject to this subsection shall meet the requirements of this subsection:

(a) *Solvent and solvent solution requirements.* Except as provided under par. (d), no owner or operator of a facility may cause, allow or permit the use of a solvent or solvent solution for industrial cleaning operations unless the VOC content of the solvent or solvent solution is less than or equal to the applicable VOC content listed in Table 1 for the respective cleaning operation. For the purposes of this subsection, VOC content shall be defined as in s. NR423.02 (11r).

Table 1
VOC Content Limits for Solvents and Solvent Solutions Used in Industrial Cleaning Operations

Cleaning Activity	VOC Content of Solvent or Solvent Solution in kilograms per liter (pounds per gallon)
1. Product cleaning or surface preparation during manufacturing process	0.05 (0.42)
2. Repair cleaning or maintenance cleaning	0.05 (0.42)
3. Cleaning of ink application equipment	
a. Non-packaging flexographic	0.05 (0.42)
b. Publication rotogravure	0.10 (0.83)

(b) *Cleaning devices and methods requirements.* Except as provided under par. (d), the owner or operator of a facility shall employ the following cleaning devices or methods when using solvents or solvent solutions:

1. Physically rub a surface with a porous applicator such as a rag, paper, sponge or a cotton swab moistened with solvent or solvent solution.

2. Closed containers or hand held spray bottles from which solvents or solvent solutions are applied without a propellant-induced force.

3. Cleaning equipment which has a solvent or solvent solution container that is closed during cleaning operations, except when depositing and removing objects to be cleaned, and is closed during non-operation with the exception of maintenance and repair to the cleaning equipment itself.

4. A remote reservoir cleaner operated in compliance with all of the following requirements:

a. Solvent vapors are prevented from escaping from the solvent or solvent solution container by

using devices such as a cover or a valve when the remote reservoir is not being used, cleaned or repaired.

b. Flow is directed in a manner that prevents solvent or solvent solution from splashing outside of the remote reservoir cleaner.

c. The cleaner is not used for cleaning porous or absorbent materials, such as cloth, leather, wood or rope.

d. Only solvent or solvent solution containers free of all liquid leaks are used. Auxiliary equipment, such as pumps, pipelines or flanges, may not have any liquid leaks, visible tears or cracks. Any liquid leak, visible tear or crack detected shall be repaired within one calendar day, or the leaking section of the remote reservoir cleaner shall be drained of all solvents or solvent solutions and shut down until it is replaced or repaired.

5. A non-atomized flow method where the used solvents or solvent solutions are collected in a container or a collection system which is closed, except for the solvent or solvent solution collection openings that may be open when filling or emptying, or the opening caused by use of a pressure relief valve.

6. A flushing method where the used solvents or solvent solutions are discharged into a container which is closed, except for the solvent or solvent solution collection openings that may be open when filling or emptying, or the opening caused by use of a pressure relief valve. The discharged solvents or solvent solutions shall be collected into containers without atomizing into the open air.

(c) *Storage and disposal.* The owner or operator of a facility shall store all solvents or solvent solutions used in industrial cleaning operations in non-absorbent, non-leaking containers which shall be kept covered except when filling or emptying. Cloth and paper moistened with solvents or solvent solutions shall be stored in covered, non-absorbent, non-leaking containers.

(d) *Control equipment.* In lieu of complying with the requirements in pars. (a) and (b), the owner or operator of a facility may use a VOC emission control system to control VOC emissions from the industrial cleaning operations at the facility provided one of the following requirements is met:

1. The emission control system has a minimum overall emission reduction efficiency of 85% for

VOC emissions, as determined in accordance with s. NR 439.06 (3) (am).

2. The emission control system has a minimum VOC capture efficiency of 90% and an output of VOC emissions of less than 50 ppm calculated as carbon, not including methane and ethane, with no dilution, as determined in accordance with s. NR 439.06 (3) (a).

(e) *General prohibitions*. The owner or operator of a facility may not atomize any solvent or solvent solution unless the resulting VOC emissions are controlled by an air pollution control system that meets one of the requirements of par. (d).

(f) *Alternative compliance option*. In lieu of complying with the requirements in par. (a), the owner or operator of a facility may use solvents or solvent solutions for industrial cleaning operations which have a VOC composite partial vapor pressure of less than or equal to 8 mm of Hg at 20°C.

(5) RECORDKEEPING. In addition to the applicable recordkeeping requirements in s. NR 439.04, the owner or operator of any packaging rotogravure, publication rotogravure or flexographic printing facility shall collect and record the applicable information specified in this subsection. The information shall be maintained at the facility for a minimum of 5 years and shall be made available to a department representative at any time during normal working hours. The information required is:

(a) For each operation that is exempt under sub. (1m) (d), the daily quantity in fluid ounces of VOC-containing aerosol product used for industrial cleaning operations.

(b) For each operation that is subject to sub. (4), the following information as appropriate:

1. The name and identification of each cleaning material and the associated solvent cleaning activity.

2. The VOC content of each cleaning material, in pounds per gallon of material, as employed or the VOC composite partial vapor pressure of the solvents or solvent solutions used in industrial cleaning operations.

3. For any operation subject to par. (4) (d), the results of any testing conducted as required under par. (4) (d).

SECTION 68. NR 422.144 is created to read:

NR 422.144 **Letterpress printing.** (1) APPLICABILITY. (a) This section applies to the owner or operator of a printing facility that operates a letterpress printing press in the county of Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Washington, or Waukesha if actual VOC emissions from all letterpress printing presses, including related letterpress cleaning activities at the facility, before consideration of controls, equal or exceed 3 tons on a 12 consecutive month rolling basis. When determining the VOC emissions for applicability under this paragraph, the VOC emissions from the cleaning of electronic components of a letterpress printing press, pre-press and post-press cleaning operations and the use of janitorial supplies used to clean around a letterpress printing press are excluded. The VOC emissions from solvents used in cold cleaners are excluded for applicability purposes.

Note: Janitorial supplies are cleaners, such as detergent-based products, used to clean the floor or for other general cleaning purposes, for example, areas not contaminated with spilled ink.

(b) To determine VOC emissions under par. (a), the VOC content of a letterpress ink shall be multiplied by 0.8 for a heatset ink, or multiplied by 0.05 for a non-heatset ink, to account for VOC retention on the substrate.

(2) RETENTION FACTORS AND CAPTURE EFFICIENCIES. For purposes of determining VOC emissions from letterpress printing operations, the following retention factors and capture efficiencies may be used:

(a) A 20% VOC retention factor for heatset petroleum oil inks printed on absorptive substrates, meaning 80% of the VOC in the ink is emitted during the printing process and is available for capture and control by an add-on pollution control device.

(b) A 95% VOC retention factor for sheet-fed and non-heatset web petroleum oil inks printed on absorptive substrates, meaning 5% of the VOC in the ink is emitted during the printing process.

(c) A 50% VOC retention factor for cleaning solution in shop towels where the composite partial vapor pressure of the VOC in the cleaning solution is less than 10 mm of Hg at 20°C (68°F) and the cleaning solution and contaminated shop towels are kept in closed containers, meaning 50% of the VOC

used on the shop towels is emitted during the cleaning process.

(d) A 100% VOC capture efficiency for inks. All the VOC in the ink that is not retained is assumed to be volatilized in the press dryer. Capture efficiency testing for heatset dryers is not required if it is demonstrated that pressure in the dryer is negative relative to the surrounding press room and the airflow is into the dryer.

(e) A 40% VOC capture efficiency for automatic blanket or roller wash where the VOC composite partial vapor pressure of the blanket or roller wash is less than 10 mm of Hg at 20°C (68°F).

(3) EXEMPTIONS. The following exemptions apply to letterpress printing operations in Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Washington and Waukesha counties:

(a) Up to 110 gallons of blanket or roller wash, on a 12-consecutive month rolling basis, which do not meet the low VOC composite partial vapor pressure or low VOC content requirements as stated in this section, are exempt from the requirements of this section.

(b) The printing of books on a heatset letterpress press is exempt from the requirements of sub. (4)(a).

(c) Heatset letterpress presses with a maximum web width of up to 22 inches are exempt from the requirements of sub. (4)(a).

(4) EMISSION LIMITATIONS. (a) *Dryer exhaust.* 1. On and after [12 months after the effective date of this section...LRB insert date], no owner or operator of a heatset web letterpress printing press may operate, or cause, allow or permit the operation of a letterpress press that has maximum theoretical emissions of VOCs, from the dryer, equal to or greater than 25 tons per year from heatset inks, unless the owner or operator installs and operates an emission control device and meets the applicable emission limitation as follows:

a. If the emission control device was first installed prior to [the effective date of this section...LRB insert date], the owner or operator shall reduce VOC emissions from the letterpress press dryer exhaust by 90% by weight as carbon, minus methane and ethane, or maintain a maximum dryer exhaust outlet VOC concentration of 120 ppmv, as carbon, minus methane and ethane.

b. If the emission control device was first installed after [the effective date of this section...LRB insert date], the owner or operator shall reduce VOC emissions from the letterpress press dryer exhaust by 95% by weight as carbon, minus methane and ethane, or maintain a maximum dryer exhaust outlet VOC concentration of 120 ppmv, as carbon, minus methane and ethane.

Note: With regard to use of the phrase "first installed" in this paragraph, the first installation date for a control device does not change if the device is later moved to a new location. For example, if a brand new control device first installed in 1992 is moved to a new location in 1998, the first installation date is still 1992.

2. If a combined dryer and control device is a part of the press design, a 100% capture at the control inlet may be assumed for purposes of meeting the emission reduction limits in subd. 1.

(b) *Blanket or roller wash.* Except as provided in sub. (3)(a), on and after May 1, 2012, no owner or operator of a letterpress printing press may use, or cause, allow or permit the use of a blanket or roller wash with a VOC composite vapor pressure of greater than or equal to 10 mm of Hg at 68°F or greater than or equal to 70% by weight.

(5) WORK PRACTICES. (a) On and after [the effective date of this section...LRB insert date], the owner or operator of a letterpress press subject to this subsection shall store all solvents, solvent solutions and any applicator moistened with solvents or solvent solutions that are used in cleaning operations related to letterpress printing in covered non-absorbent, non-leaking containers, except when filling or emptying the container.

(6) RECORDKEEPING REQUIREMENTS. In addition to the applicable recordkeeping requirements in s. NR 439.04, the owner or operator of any letterpress printing press shall collect and record the applicable information specified in this subsection. The information shall be maintained at the facility for a minimum of 5 years and shall be made available to a department representative at any time during normal working hours. The information required is:

(a) For a heatset web letterpress printing press using a control device, for each day of operation:

1. Control device monitoring data in accordance with s. NR 439.055.

2. A log of the operating time for the control device, control device monitoring equipment, and the associated printing line or operation.

3. A maintenance log for the control device and control device monitoring equipment detailing all routine and non-routine maintenance performed and including the dates and duration of any outages.

(b) For each blanket or roller wash, the percent by weight VOC content as applied or the composite partial vapor pressure, as appropriate, in measurement units consistent with the applicable emission limitation.

(c) For each month of operation, the volume of all blanket or roller wash used which does not meet either of the emission limitations in sub. (4)(b).

(7) COMPLIANCE TESTING. (a) The owner or operator of a heatset web letterpress printing press shall demonstrate compliance with the appropriate destruction efficiency or emission rate in sub. (4)(a) by performing compliance emission tests on each control device. The initial emission tests shall be performed by the compliance deadline in sub. (8)(a)1. or (b)1. or 2. Each emission test shall follow the methods and procedures listed in s. NR 439.07. Method 25 or 25A in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04(19) and (20), shall be used to determine the VOC concentration at the sampling points. When determining the VOC concentration, the probe shall be heated during testing to at least the exhaust gas stream temperature.

(b) The owner or operator of a heatset web letterpress printing press shall perform the compliance emission tests required under par. (a) according to one of the following applicable test schedules:

1. Any facility with allowable VOC emissions from letterpress printing presses of 100 tons or more per year shall perform an emission test which demonstrates compliance with sub. (4)(a) every 24 months. Each biennial test shall be performed within 90 days of the anniversary date of the initial emission test.

2. Any facility with allowable VOC emissions from letterpress printing presses of less than 100 tons per year shall perform an emission test which demonstrates compliance with sub. (4)(a) every 48 months. Each test shall be performed within 90 days of the anniversary date of the initial emission test.

(c) The VOC content of heatset web, sheet-fed and cold set web letterpress inks and blanket or roller wash shall be determined by Method 24 of 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04(13).

(8) COMPLIANCE SCHEDULE AND CERTIFICATION REQUIREMENTS. (a) *Existing sources.* 1. The owner or operator of a letterpress printing press shall comply with the applicable emission limitations for the dryer exhaust in sub. (4)(a) by [12 months after the effective of this section...LRB insert date].

2. The owner or operator of a heatset web letterpress printing press shall submit to the department, no later than July 1, 2012, written certification that the press is in compliance with the applicable requirements of subs. (4) and (5) and shall provide a demonstration of compliance in accordance with subs. (6) and (7). A compliance emission test performed in accordance with s. NR 439.07 no more than 2 years prior to the compliance deadline, which demonstrates compliance with sub. (4)(a), is acceptable as a demonstration of compliance in accordance with sub. (7).

(b) *New sources* 1. The owner or operator of a heatset web letterpress printing press which is installed after May 1, 2012 shall perform a compliance emission test within 180 days after installation of the press and shall submit to the department no later than 60 days after the test written certification that the press is in compliance with the applicable requirements of subs. (4) and (5) and a demonstration of compliance in accordance with subs. (6) and (7).

2. The owner or operator of any letterpress printing press, other than a heatset web press, which is installed after May 1, 2012 shall submit to the department, no later than 180 days after installation of the press, written certification that the press is in compliance with the applicable requirements of subs. (4) and (5) and a demonstration of compliance in accordance with subs. (6) and (7).

SECTION 69. NR 422.145 (1) is renumbered NR 422.145 (1) (a) (intro.), and as renumbered is amended to read:

NR 422.145 (1) APPLICABILITY. (a) (intro.) ~~This section applies to all screen printing units at~~

~~screen printing facilities which are not exempt facilities under s. NR 422.03 (4m).~~ Subsections (2), (3) (a), and (4) apply to all screen printing units at screen printing facilities that are either of the following:

SECTION 70. NR 422.145 (1) (a) 1. and 2., (b), (1m) and (2m) are created to read:

NR 422.145 (1) (a) 1. Located in the county of Kenosha, Milwaukee, Ozaukee, Racine, Washington, or Waukesha and which have maximum theoretical emissions of VOCs from all screen printing units at the facility equal to or greater than 25 tons per year.

2. Located in the county of Kewaunee, Manitowoc, or Sheboygan and which have maximum theoretical emissions of VOCs from all screen printing units at the facility equal to or greater than 100 tons per year.

(b) Except as provided in sub. (1m), subs. (2m), (3) (b), and (4) apply to the owner or operator of a screen printing facility located in the county of Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Washington, or Waukesha if VOC emissions from all industrial cleaning operations, before consideration of controls, equal or exceed 3 tons per year on a 12 consecutive month basis.

(1m) EXEMPTIONS. If any exemption in this subsection is based on an exemption threshold and that threshold is exceeded, the exemption will no longer apply to the facility. The following exemptions are applicable to various provisions of this section:

(a) Subsection (2m) does not apply to the stripping of cured coatings or cured inks.

(b) Subsection (2m) does not apply to industrial adhesives or adhesive primers.

(c) Subsection (2m) (a) does not apply to cleaning conducted in conjunction with performance laboratory tests on coatings or inks; research and development programs; and laboratory tests in quality assurance laboratories.

(d) Subsection (2m) (a) and (e) do not apply to cleaning with aerosol products if 160 fluid ounces or less of VOC-containing aerosol products are used per day for industrial cleaning operations, per facility.

(e) Subsection (2m) (a), (d), (e) and (f) do not apply to digital printing.

(f) Subsection (2m) (e) does not apply to cleaning with solvents or solvent solutions in spray bottles or containers described in subd. (2m) (b) 2.

(g) Subsection (2m) (e) does not apply to the cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems that are programmed to spray into a closed container.

(2m) INDUSTRIAL CLEANING OPERATIONS. (a) *Solvent and solvent solution requirements.* Except as provided under par. (d), no owner or operator of a facility may cause, allow or permit the use of a solvent or solvent solution for industrial cleaning operations unless the VOC content of the solvent or solvent solution is less than or equal to the applicable VOC content listed in Table 1 for the respective cleaning operation. For the purposes of this subsection, VOC content shall be defined as in s. NR 423.02(11r).

Table 1
VOC Content Limits for Solvents and Solvent Solutions Used in Industrial Cleaning Operations

Cleaning Activity	VOC Content of Solvent or Solvent Solution in kilograms per liter (pounds per gallon)
1. Product cleaning or surface preparation during manufacturing process	0.05 (0.42)
2. Repair cleaning or maintenance cleaning	0.50 (4.2)
3. Cleaning of ink application equipment	0.50 (4.2)

(b) *Cleaning devices and methods requirements.* Except as provided under par. (d), the owner or operator of a facility shall employ the following cleaning devices or methods when using solvents or solvent solutions:

1. Physically rub a surface with a porous applicator such as a rag, paper, sponge or a cotton swab moistened with solvent or solvent solution.

2. Closed containers or hand held spray bottles from which solvents or solvent solutions are applied without a propellant-induced force.

3. Cleaning equipment which has a solvent or solvent solution container that is closed during cleaning operations, except when depositing and removing objects to be cleaned, and is closed during

non-operation with the exception of maintenance and repair to the cleaning equipment itself.

4. A remote reservoir cleaner operated in compliance with all of the following requirements:

a. Solvent vapors are prevented from escaping from the solvent or solvent solution container by using devices such as a cover or a valve when the remote reservoir is not being used, cleaned or repaired.

b. Flow is directed in a manner that prevents solvent or solvent solution from splashing outside of the remote reservoir cleaner.

c. The cleaner is not used for cleaning porous or absorbent materials, such as cloth, leather, wood or rope.

d. Only solvent or solvent solution containers free of all liquid leaks are used. Auxiliary equipment, such as pumps, pipelines or flanges, may not have any liquid leaks, visible tears or cracks. Any liquid leak, visible tear or crack detected shall be repaired within one calendar day, or the leaking section of the remote reservoir cleaner shall be drained of all solvents or solvent solutions and shut down until it is replaced or repaired.

5. A non-atomized flow method where the used solvents or solvent solutions are collected in a container or a collection system which is closed, except for the solvent or solvent solution collection openings that may be open when filling or emptying, or the opening caused by use of a pressure relief valve.

6. A flushing method where the used solvents or solvent solutions are discharged into a container which is closed, except for the solvent or solvent solution collection openings that may be open when filling or emptying, or the opening caused by use of a pressure relief valve. The discharged solvents or solvent solutions shall be collected into containers without atomizing into the open air.

(c) *Storage and disposal.* The owner or operator of a facility shall store all solvents or solvent solutions used in industrial cleaning operations in non-absorbent, non-leaking containers which shall be kept covered except when filling or emptying. Cloth and paper moistened with solvents or solvent solutions shall be stored in covered, non-absorbent, non-leaking containers.

(d) *Control equipment.* In lieu of complying with the requirements in pars. (a) and (b), the owner

or operator of a facility may use a VOC emission control system to control VOC emissions from the industrial cleaning operations at the facility provided one of the following requirements is met:

1. The emission control system has a minimum overall emission reduction efficiency of 85% for VOC emissions, as determined in accordance with s. NR 439.06(3)(am).

2. The emission control system has a minimum VOC capture efficiency of 90% and an output of VOC emissions of less than 50 ppm calculated as carbon, not including methane and ethane, with no dilution, as determined in accordance with s. NR 439.06(3)(a).

(e) *General prohibitions.* The owner or operator of a facility may not atomize any solvent or solvent solution unless the resulting VOC emissions are controlled by an air pollution control system that meets one of the requirements of par. (d).

(f) *Alternative compliance option.* In lieu of complying with the requirements in par. (a), the owner or operator of a facility may use solvents or solvent solutions for industrial cleaning operations which have a VOC composite partial vapor pressure of less than or equal to 8 mm of Hg at 20°C.

SECTION 71. NR 422 145 (4) is repealed and recreated to read:

NR 422.145 (4) RECORDKEEPING. In addition to the applicable recordkeeping requirements in s. NR 439.04, the owner or operator of any screen printing facility shall collect and record the applicable information specified in this subsection. The information shall be maintained at the facility for a minimum of 5 years and shall be made available to a department representative at any time during normal working hours. The information required is:

(a) For each operation that is exempt under sub. (1m) (d), the daily quantity in fluid ounces of VOC-containing aerosol product used for industrial cleaning operations.

(b) For each operation that is subject to sub. (2m), the following information as appropriate:

1. The name and identification of each cleaning material and the associated solvent cleaning activity.

2. The VOC content of each cleaning material, in pounds per gallon of material, as employed or

the VOC composite partial vapor pressure of the solvents or solvent solutions used in industrial cleaning operations.

3. For any operation subject to sub. (2m) (d), the results of any testing conducted as required under sub. (2m) (d).

SECTION 72. NR 422.15 (1) (intro.) is renumbered NR 422.15 (1) (am) (intro.), and as renumbered is amended to read:

NR 422.15 (1) APPLICABILITY. (am) (intro.) ~~This section applies, subject to the provisions of s. NR 425.03,~~ Except as provided in par. (cm), subs. (2) to (8) apply to all coating line application areas, conveyors, flashoff areas, drying areas, forced air driers and ovens of any industry categorized under the 2–digit major groups of 33 to 39 as described in the Standard Industrial Classification Manual, 1987, incorporated by reference in s. NR 484.05 (1), which are involved in the surface coating of miscellaneous metal parts and products ~~with the following exceptions~~ in the following counties and at the respective emission thresholds:

SECTION 73. NR 422.15 (1) (am) 1. to 3., (bm), and (cm) (intro.) are created to read:

NR 422.15 (1) (am) 1. Any facility located in the county of Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Washington, or Waukesha and which has VOC emissions, before consideration of controls, from all miscellaneous metal parts and products coating lines are greater than 6.8 kilograms (15 pounds) in any one day.

2. Any facility located in the county of Brown, Calumet, Dane, Dodge, Door, Fond du Lac, Jefferson, Outagamie, Rock, or Winnebago and which has VOC emissions, before consideration of controls, from all miscellaneous metal parts and products coating lines, is greater than or equal to 10 tons per year.

3. Any facility located outside the counties of Brown, Calumet, Dane, Dodge, Door, Fond du Lac, Jefferson, Kenosha, Kewaunee, Manitowoc, Milwaukee, Outagamie, Ozaukee, Racine, Rock, Sheboygan,

Walworth, Washington, Waukesha, and Winnebago and which has total emissions of VOC from the facility, before consideration of controls, of greater than or equal to 100 tons per year.

(bm) Subsection (9) applies to any facility with coating operations as described in par. (am) which is located in the county of Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Washington, or Waukesha if VOC emissions from all coating operations, including related cleaning activities, before consideration of controls, equal or exceed 3 tons per year on a 12 consecutive month rolling basis.

(cm) (intro.) The following activities, materials, and coating lines are exempt from this section:

SECTION 74. NR 422.15 (a) to (k) are renumbered NR 422.15 (1) (cm) 1. to 8.

SECTION 75. NR 422.15 (9) is created to read:

NR 422.15 (9) WORK PRACTICES. On and after 12 months after the effective date of this subsection ...[LRB insert date], the owner or operator of a facility subject to this subsection shall do all of the following:

(a) Store all VOC-containing cleaning materials and shop towels used for cleaning in closed containers.

(b) Ensure that storage containers used for VOC-containing materials are kept closed at all times except when depositing or removing material.

(c) Convey VOC-containing cleaning materials in closed containers or pipes.

(d) Minimize spills of VOC-containing cleaning materials.

(e) Minimize emissions of VOC during cleaning of coating application, storage, mixing, and conveying equipment by ensuring that cleaning is performed without atomizing any VOC-containing cleaning material and that the used material is captured and contained.

SECTION 76. NR 422.155 (1) is renumbered NR 422.15 (1) (a) (intro.), and as renumbered is amended to read:

NR 422.155 (1) APPLICAILITY (a) (intro.) ~~This section applies~~ Subsections (2) to (4) apply to coating operations of fire truck and emergency response vehicle manufacturing, where meeting applicable emission limits in s. NR 422.15 is not technologically or economically feasible and where total facility production of fire trucks and emergency response vehicles is less than 35 vehicles per day, in the following counties and at the respective emission thresholds:

SECTION 77. NR 422.155 (1) (a) 1. to 3. and (b) and (5) are created to read:

NR 422.155 (1) (am) 1. Any facility located in the county of Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Washington, or Waukesha and which has VOC emissions, before consideration of controls, from all coating operations of fire truck and emergency response vehicle manufacturing are greater than 6.8 kilograms (15 pounds) in any one day.

2. Any facility located in the county of Brown, Calumet, Dane, Dodge, Door, Fond du Lac, Jefferson, Outagamie, Rock, or Winnebago and which has VOC emissions, before consideration of controls, from all coating operations of fire truck and emergency response vehicle manufacturing, is greater than or equal to 10 tons per year.

3. Any facility located outside the counties of Brown, Calumet, Dane, Dodge, Door, Fond du Lac, Jefferson, Kenosha, Kewaunee, Manitowoc, Milwaukee, Outagamie, Ozaukee, Racine, Rock, Sheboygan, Walworth, Washington, Waukesha, and Winnebago and which have total emissions of VOC from the facility, before consideration of controls, of greater than or equal to 100 tons per year.

(b) Subsection (5) applies to any facility with coating operations as described in par. (a) which is located in the county of Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Washington, or Waukesha if VOC emissions from all fire truck and emergency response vehicle manufacturing coating operations, including related cleaning activities, before consideration of controls, equal or exceed 3 tons per year on a 12 consecutive month rolling basis.

(5) WORK PRACTICES. On and after 12 months after the effective date of this subsection ...[LRB insert date], the owner or operator of a facility subject to this subsection shall do all of the

following:

(a) Store all VOC-containing cleaning materials and shop towels used for cleaning in closed containers.

(b) Ensure that storage containers used for VOC-containing materials are kept closed at all times except when depositing or removing material.

(c) Convey VOC-containing cleaning materials in closed containers or pipes.

(d) Minimize spills of VOC-containing cleaning materials.

(e) Minimize emissions of VOC during cleaning of coating application, storage, mixing, and conveying equipment by ensuring that cleaning is performed without atomizing any VOC-containing cleaning material and that the used material is captured and contained.

SECTION 78. NR 423.02 (1), (8), (8L), (8t), (9c), (9n), and (9r) are renumbered NR 400.02 (26m), (86m), (93m), (107m). (133e), (133m), and (133s).

SECTION 79. NR 423.02 (2m) is created to read:

NR 423.02 (2m) "Digital printing" means the transfer of electronic files directly from a computer to an electronically driven output device that prints the image directly on the selected substrate. Printing using home and office equipment is excluded from this definition.

SECTION 79m. NR 423.035 (4) (intro.) and (a) are amended to read:

NR 423.035 (4)) (intro.) CLEANING DEVICES AND METHODS REQUIREMENTS. Except as provided under sub. (6), on or after January 1, 2002, the owner or operator of a facility shall employ ~~one or more of~~ the following cleaning devices or methods when using solvents or solvent solutions:

(a) Physically ~~rubbing~~ rub a surface with a porous applicator such as a rag, paper, sponge or a cotton swab moistened with solvent or solvent solution.

SECTION 80. NR 423.037 (1) and (2) (a) 1. and 4. b. and d. are amended to read:

NR 423.037 (1) On and after ~~May 1, 2010~~ 12 months after the effective date of this subsection ...[LRB insert date], except as provided in sub. (9) (a), this section applies to industrial cleaning operations at facilities that are located in Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Washington or Waukesha county and having actual VOC emissions from industrial cleaning operations equal to or exceeding 3 tons on a 12 consecutive month rolling basis from the facility with all control equipment inoperative.

(2) (a) 1. Operations regulated under s. ~~NR 421.06(2)(c), 422.075(3), 422.095(6), 422,105(4), 422,115(4), 422.131(3), 422.141(3), 422.142(2)(c), 422.143(4), 422.145(2)(d), 422.15(8), 422.155(3)~~ NR 422.127 (3m) or 423.03.

4. b. Wood furniture and products coating~~, excluding laminated wood products~~.

d. ~~Flexible package~~ Non-packaging flexographic printing, excluding industrial adhesives and adhesive primers use.

SECTION 81. NR 423.037 (2) (a) 4. dm. is created to read:

NR 423.037 (2) (a) 4. dm. Packaging flexographic printing.

SECTION 82. NR 423.037 (2) (a) 4. e., g., and i. are amended to read:

NR 423.037 (2) (a) 4. e. Lithographic printing, excluding industrial adhesives and adhesive primers use.

g. ~~Surface coating of large appliances~~ Large appliance coating.

i. Paper, film and foil coating.

SECTION 83. NR 423.037 (2) (a) 4. j. is repealed.

SECTION 84. NR 423.037 (2) (a) 4. k. is amended to read:

NR 423.037 (2) (a) 4. k. Fabric and vinyl coating, excluding industrial adhesives and adhesive primers use.

SECTION 85. NR 423.037 (2) (a) 4. m., o., t., and v. are repealed.

SECTION 91. NR 423.037 (2) (a) 4. w. is amended to read:

NR 423.037 (2) (a) 4. w. ~~Metal container and closure~~ Can coating, excluding industrial adhesives and adhesive primers use.

SECTION 86. NR 423.037 (2) (a) 4. y. and z. are repealed.

SECTION 87. NR 423.037 (2) (a) 4. za. is amended to read:

NR 423.037 (2) (a) 4. za. Coating manufacturing, excluding industrial adhesives and adhesive primers use.

SECTION 88. NR 423.037 (2) (a) 4. zb., zc., and zd. are repealed.

SECTION 89. NR 423.037 (2) (a) 4. ze., zf., zg., zh., zi., and zj. are created to read:

NR 423.037 (2) (a) 4. ze. Screen printing, excluding industrial adhesives and adhesive primers use.

zf. Letterpress printing, excluding industrial adhesives and adhesive primers use.

zg. Non-packaging rotogravure printing, excluding industrial adhesives and adhesive primers use.

zh. Packaging rotogravure printing

zi. Automobile refinishing, excluding industrial adhesives and adhesive primers use.

zj. Synthetic resins manufacturing, excluding industrial adhesives and adhesive primers use.

SECTION 90. NR 423.037 (2) (a) 5. is repealed.

SECTION 91. NR 423.037 (2) (b) 2. and 4. are repealed.

SECTION 92. NR 423.037 (2) (cg) and (cr) are created to read:

NR 423.037 (2) (cg) Subsections (3), (6), (7), and (8) do not apply to digital printing.

(cr) Subsections (3), (4), (6), (8), and (9) (c) do not apply to industrial adhesives and adhesive primers use.

SECTION 93. NR 423.037 (2) (g) is repealed.

SECTION 94. Table 1 in NR 423.037 (3) is amended to read:

NR 423.037 (3) Table 1

Table 1
VOC Content Limits for Solvents and Solvent Solutions Used in Industrial Cleaning Operations

Cleaning Activity	VOC Content of Solvent or Solvent Solution in kilograms per liter (pounds per gallon)
(a) Product cleaning during manufacturing process or surface preparation for coating, adhesive or ink application	
1. General	0.05 (0.42)
2. Electrical apparatus components and electronic components	
a. General	0.10 (0.83)
b. Cables	0.40 (3.3)
c. Touch-up performed on printed circuit boards where surface mounted devices have already been attached	0.80 (6.7)
~~3. Laminated wood products – removal of contact adhesives~~	
~~a. General~~	~~0.46 (3.8)~~
~~b. Polyvinylchloride surfaces~~	~~0.70 (5.8)~~
4. Medical devices and pharmaceuticals	0.80 (6.7)
~~5. Screen printing – removal of adhesives from plastic substrates~~	~~0.77 (6.4)~~
(b) Repair and maintenance cleaning	
1. General	0.05 (0.42)
2. Electrical apparatus components and electronic components	
a. General	0.10 (0.83)
b. Cables	0.40 (3.3)
3. Medical devices and pharmaceuticals	

a. Tools, equipment and machinery	0.80 (6.7)
b. General work surfaces	0.60 (5.0)
~~4. Screen printing - removal of oils and adhesives from cutting dies~~	~~0.55 (4.6)~~
5. Ink and adhesive manufacturing	0.20 (1.7)
(c) Cleaning of coatings (excluding adhesives) application equipment ~~or adhesives application equipment~~	0.05 (0.42)
~~1. General~~	~~0.05 (0.42)~~
~~2. Architectural coatings~~	~~0.95 (7.9)~~
~~3. Ultraviolet coatings~~	~~0.80 (6.7)~~
(d) Cleaning of ink application equipment	
1. General	0.05 (0.42)
~~2. Flexographic printing - excluding packaging~~	
~~a. General~~	~~0.05 (0.42)~~
~~b. Plastics, coated papers and metal foils~~	~~0.89 (7.4)~~
~~3. Rotogravure printing - publication~~	~~0.10 (0.83)~~
~~4. Letterpress printing~~	
~~a. On-press components~~	~~*~~
~~b. Removable press components~~	~~0.05 (0.42)~~
~~5. Screen printing~~	~~0.77 (6.4)~~
6. Ultraviolet ink application equipment ~~(except screen printing)~~	0.65 (5.4)
(e) Cleaning of polyester resin application equipment	0.05 (0.42)

~~* A maximum VOC content of 30% by weight.~~

[Drafter's note: The asterisk shown in the right-hand column of the table above for par. (d) 4. a. is struck out, although it may appear to be underscored]

SECTION 95. NR 423.037 (4) (intro.) and (a), (5) and (9) (a) are amended to read:

NR 423.037 (4) (intro.) (4) CLEANING DEVICES AND METHODS REQUIREMENTS. Except as provided under sub. (6), by November 1, 2009, the owner or operator of a facility shall employ ~~one or more of~~ the following cleaning devices or methods when using solvents or solvent solutions:

(a) Physically ~~rubbing~~ rub a surface with a porous applicator such as a rag, paper, sponge or a cotton swab moistened with solvent or solvent solution.

(5) STORAGE ~~AND~~, DISPOSAL, AND TRANSPORT. The owner or operator of a facility shall store all solvents or solvent solutions used in industrial cleaning operations in non-absorbent, non-leaking containers which shall be kept covered except when filling or emptying. Cloth and paper moistened with solvents or solvent solutions shall be stored in covered, non-absorbent, non-leaking containers. VOC-containing cleaning materials shall be conveyed in closed containers or pipes.

(9) (a) To determine applicability under sub. (1), each owner or operator of an industrial cleaning

operation at a facility located in Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Washington or Waukesha county shall maintain records of actual ~~daily~~ monthly emissions of VOCs from industrial cleaning operations from the facility with all control equipment inoperative.

SECTION 96. NR 423.037 (9) (b) 2. and 4. and (c) 1. and 3. are repealed.

SECTION 97. NR 423.037 (9) (c) 4. and 5. are created to read:

NR 423.037 (9) (c) 4. The name and identification of each cleaning material and the associated solvent cleaning activity.

5. The VOC content, based upon Method 24, incorporated by reference in s. NR 484 etc., of each cleaning material, in pounds per gallon of material, as employed or the VOC composite partial vapor pressure of the solvents or solvent solutions used in industrial cleaning operations.

SECTION 98. NR 439.04 (intro.) is amended to read:

NR 439.04 (intro.) Any owner or operator of a coating or printing line or operation that is exempt from the emission limitations of ~~ss. NR 422.05 to 422.14, 422.15 or 422.155~~ s. NR 422.07, 422.10, 422.11, 422.12, or 422.13, under s. NR 422.03, or ~~is exempt from the emission limitations of s. NR 422.145 under s. NR 422.03 (4m) (b) or (c)~~ of a facility whose VOC emissions are below an applicability threshold of any section of ch. NR 422, shall collect and record the following information as appropriate to support the exemption:

SECTION 99. NR 439.06 (3) (b) is amended to read:

NR 439.06 (3) (b) Method 24 or 24A in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04 (13), shall be used to determine the organic solvent content, the volume of solids, the weight of solids, the water content and the density of surface coatings ~~and~~, inks, and cleaning materials.

SECTION 100. NR 484.04 (13), (17), (19), and (20) in Table 2 are amended to read:

NR 484.04

	CFR Appendix Referenced	Title	Incorporated by Reference For
(13)	40 CFR part 60 Appendix A	Test Methods	NR 400.02(131) NR 419.045 (5) (a) and (b) NR 428.25 (1) (b) 4. NR 439 NR 460 to 469
(17)	40 CFR part 60 Appendix A, Method 21	Determination of Volatile Organic Compounds Leaks	NR 419.045 (5) (e) NR 420.02 (39m) NR 421.02 (21) NR 421.05 (2) (e) NR 421.06 (2) (e)
(19)	40 CFR part 60 Appendix A, Method 25	Determination of Total Gaseous Nonmethane Organic Emissions as Carbon	NR 422.142(5)(a) ~~NR 419.045(2) (a)2.~~
(20)	40 CFR part 60 Appendix A, Method 25A	Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer	NR 422.142(5)(a) ~~NR 419.045(2) (a)2.~~

SECTION 101. NR 484.04 (20e) in Table 2 is created to read:

NR 484.04

	CFR Appendix Referenced	Title	Incorporated by Reference For
(20e)	40 CFR part 60 Appendix A, Method 25D	Determination of the Volatile Organic Concentration of Waste Samples	NR 419.045 (5) (f) 6.

SECTION 102. NR 484.04 (25) in Table 2 is amended to read:

NR 484.04

	CFR Appendix Referenced	Title	Incorporated by Reference For
(25)	40 CFR part 63, Appendix A	Test Methods	NR 400.02 (131) NR 419.045 (5) (f) 4. NR 439 NR 460 to 469

SECTION 103. NR 484.04 (27s) in Table 2 is created to read:

NR 484.04

	CFR Appendix Referenced	Title	Incorporated by Reference For
(27s)	40 CFR part 136, Appendix A	Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater	NR 419.045 (5) (f) 3.

SECTION 104. NR 484.05 (1) in Table 3 is amended to read:

NR 484.05

	Document Reference	Document Title	Incorporated by Reference For
(1)	NTIS Order No. PB 87-100012	Standard Industrial Classification Manual, 1987	NR 400.02 (74) NR 400.02 (86) NR 400.02 (91) NR 400.02 (149) NR 405.02 (8) NR 406.02 (1) NR 407.02 (3) NR 407.02 (4) (intro.) NR 407.05 (4) (b) NR 408.02 (5) NR 410.02 (4) NR 419.045 (1) (a) 3. NR 421.02 (3) NR 421.02 (17) NR 422.02 (112) NR 422.095 (1) NR 422.15 (1) (intro.) NR 437.07 (2) (a) 4. NR 438.02 (1) NR 445.11 (1) (intro.) NR 465.02 (51)

SECTION 105. NR 484.06 (4) (e) in Table 4D is amended to read:

NR 484.06 (4)

Document Number	Title	Incorporated by Reference For
(e) EPA,SW—846	Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, September 1986, as amended by Updates I	NR 419.045 (5) (f) 1. and 2. NR 462 Table 6 NR 463.22 (16)

(July 1992), II (September 1994), IIA (August 1993), IIB (January 1995), III (December 1996), IIIA (April 1998) and IIIB (November 2004)

SECTION 106. NR 484.06 (4) (Note) and (f) and (g) in Table 4D are created to read:

NR 484.06 (4) **(Note)** The wastewater treatment model listed in par. (f), along with supporting documentation, may be downloaded for personal use from http://www.epa.gov/ttnchie1/software/water/index.html. EPA contact information is also listed at this internet site.

Document Number	Title	Incorporated by Reference For
(f) N/A	WATER9, Version 2.0	NR 419.045 (3) (b) 2. c.
(g) EPA-450/4-91-031	Control of Volatile Organic Compound Emissions from Reactor Processes and Distillation Operations Processes in the Synthetic Organic Chemical Manufacturing Industry	NR 421.07 (1) (a) 1.

SECTION 107. NR 484.10 (6) and (39m) in Table 5 are amended to read:

NR 484.10

Standard Number		Standard Title	Incorporated by Reference For
(6)	ASTM D323-99a	Standard Test Method for Vapor Pressure of Petroleum Products (Reid Method)	NR 419.045 (5) (d) NR 420.02 (31)
(39m)	ASTM D2879-97	Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope	NR 419.045 (5) (d) NR 422.142 (5) (d)

SECTION 108. NR 484.10 (55b), (55bg) and (55br) in Table5 are created to read:

NR 484.10

Standard Number	Standard Title	Incorporated by Reference For
(55b) ASTM D4953-06	Standard Test Method for Vapor Pressure of Gasoline and Gasoline-Oxygenate Blends (Dry Method)	NR 419.045 (5) (d)
(55bg) ASTM D5190-07	Standard Test Method for Vapor Pressure of Petroleum Products (Automatic Method)	NR 419.045 (5) (d)
(55br) ASTM D5191-10b	Standard Test Method for Vapor Pressure of Petroleum Products (Mini Method)	NR 419.045 (5) (d)

SECTION 109. Table 6E in NR 484.11 (5) is amended to read:

NR 484.11 (5)

Document Number	Title	Incorporated by Reference For
Publication 2517	Evaporative Loss from External Floating Roof Tanks, 3rd edition, February 1989	NR 419.045 (5) (d) NR 420.02 (33) NR 420.03 (3) (c)

SECTION 110. NR 484.11 (12) is created to read:

NR 484.11 (12) The following document is a joint publication of the American Public Health Association, the American Water Works Association, and the Water Environment Federation.

Note: Copies may be purchased for personal use from:
APHA
Publications Sales
PO Box 933019
Atlanta, GA 31193-3019
Telephone: (888) 361-2742
Website: http://www.apha.org/publications/pubscontact/

Table 6L
APHA Document Reference

Document Number	Title	Incorporated by Reference For
N/A	Standard Methods for the Examination of Water and Wastewater, 20th Edition, 1998	NR 419.045 (5) (f) 5.

SECTION 111. EFFECTIVE DATE. This rule 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.

SECTION 112. BOARD ADOPTION. This rule was approved and adopted by the State of Wisconsin Natural Resources Board on _____.

Dated at Madison, Wisconsin _____.

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

By_____
Cathy Stepp, Secretary