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

The Wisconsin Natural Resources Board adopts an order to **repeal** NR 460.05(4)(c)2., 469.03(1)(c), (2)(b), and (4)(c) and 469.08(1)(c); to **amend** NR 460.05(4)(a)2., (c)1.(intro.), 3., 4., 5., and 9., 460.06(1)(b) and (c), 460.07(3)(a)3., 460.09(2)(b)1., 2., 4. and 5., and (4)(e)1. and 2., 469.01(1)(a), (c) and (d), 469.02(32), 469.03(3)(intro.) and (h), 469.04(1)(intro.) and (d), (2)(a)1. and (b)1., (3)(intro.) and (a)1. and (b)1., 469.05(intro.) and (10), 469.06(intro.) and (2)(intro.) and (g)(intro.), 469.09(1), (2) and (3)(intro.), 469.10(1)(intro.), 469.11(1)(intro.) and (3)(intro.) and 484.04(16) and to **create** NR 460.02(20m), 460.06(1)(d), 469.01(1)(e), (f) and (g), 469.02(1m), (8m), (9m), (35m), (40m) and (42m), 469.03(3)(i), (3m) and (7), 469.04(4), 469.06(2)(h) to (k), 469.073, 469.077, 469.08(4), 469.085, 469.09(6), (7) and (8), 469.10(1)(c) to (e), and 469.11(1)(f) and (g) and (5) relating to national emission standards for hazardous air pollutants (NESHAP) for halogenated solvent cleaners and the NESHAP general provisions.

AM-31-07

Summary Prepared by the Department of Natural Resources

Statutes interpreted: ss. 285.11(6) and 285.27(2)(a), Stats.

Statutory authority: ss. 227.11(2)(a), 227.14(1m)(a), 285.11(1) and 285.27(2)(a), Stats.

Explanation of agency authority: Sections 227.11(2)(a) and 285.11(1), Stats., expressly confer rule-making authority. Section 227.14(1m)(a) allows the use of the format of federal regulations in preparing a proposed state regulation if it is determined that all or part of a state environmental regulatory program is to be administered according to requirements which are identical to requirements specified for all or part of a federal environmental regulatory program. Section 285.27(2)(a), Stats., requires the Department to promulgate National Emission Standards for Hazardous Air Pollutants (NESHAP) by rule.

Related statute or rule: NESHAP regulations for other source categories are contained in chapters NR 460 to 469.

Plain language analysis: The USEPA published amendments to the NESHAP general provisions on April 20, 2006 (71 FR 20446) and on May 16, 2007 (72 FR 27437) and amendments to the NESHAP for halogen solvent cleaning operations on May 3, 2007 (72 FR 25138). The proposed rule incorporates all of these federal amendments into the Wisconsin Administrative Code.

Summary of, and comparison with, existing or proposed federal regulation: The proposed rule will incorporate existing federal amendments into existing state rules. The federal rules, as amended, are currently in effect, and emission sources are complying with them. Incorporation of the federal amendments into the existing state rules will make the state rules identical to the federal rules.

Comparison with similar rules in adjacent states: The federal NESHAP regulations for these source categories are in effect in every state in the nation, and all affected sources in any state are required to comply with the federal rules. The U.S. Environmental Protection Agency has delegated authority to many states to enforce the federal NESHAP regulations, which generally means that those states adopt the federal regulations as state regulations. Thus, the NESHAP regulations in adjacent states, if any, are identical to the federal regulations and the Wisconsin rules which this proposed action will amend.

Summary of factual data and analytical methodologies: Since the Department is merely adopting federal amendments to existing regulations, the Department has not compiled any factual data nor used any analytical methodologies. Documentation supporting the development and promulgation of the federal amendments can be found in the Federal Register citations given above or at the following web sites: http://www.epa.gov/ttn/atw/degrea/halopg.html and http://www.epa.gov/ttn/atw/gp/gppg.html.

Analysis and supporting documentation used to determine any effect on small business or in preparation of an economic impact report: No cost estimates and economic impact analyses were prepared by the Department. Cost estimates or economic impact analyses may have been prepared by the US Environmental Protection Agency and may be available at the web sites cited above.

Anticipated costs incurred by the private sector: Because the federal regulations, as amended, are in effect and all affected sources must comply with them, no additional costs will be incurred by the private sector as a result of the promulgation of these amendments.

Effect on small business: Because the federal regulations are in effect and all affected sources must comply with them, there will be no additional effect on small business as a result of the promulgation of the amendments to state rules.

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SECTION 1. NR 460.02(20m) is created to read:

NR 460.02(20m) "Force majeure" means, for purposes of s. NR 460.06, an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors or any entity controlled by the affected facility that prevents the owner or operator from complying with the regulatory requirement to conduct performance tests within the specified timeframe despite the affected facility's best efforts to fulfill the obligation.

Note: Examples of events included under this definition are acts of nature, acts of war or terrorism, equipment failure or safety hazard beyond the control of the affected facility.

SECTION 2. NR 460.05(4)(a)2. and (c)1.(intro.) are amended to read:

NR 460.05(4)(a)2. Malfunctions shall be corrected as soon as practicable after their occurrence ~~in accordance with the startup, shutdown and malfunction plan required in par. (c)~~. To the extent that an unexpected event arises during a startup, shutdown or malfunction, an owner or operator shall comply by minimizing emissions during any startup, shutdown and malfunction event consistent with safety and good air pollution control practices.

(c)1.(intro.) The owner or operator of an affected source shall develop ~~and implement~~ a written startup, shutdown and malfunction plan that meets the requirements of s. NR 439.11 and describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown and malfunction and a program of corrective action for malfunctioning process ~~and~~, air pollution control and monitoring equipment used to comply with the relevant standard. The startup, shutdown and malfunction plan does not need to address any scenario that would not cause the source to exceed an applicable emission limitation in the relevant standard. This plan shall be developed by the owner or operator by the source's compliance date for that relevant standard. The plan shall be designed to achieve all of the following:

SECTION 3. NR 460.05(4)(c)2. is repealed.

SECTION 4. NR 460.05(4)(c) 3., 4., 5. and 9. are amended to read:

NR460.05(4)(c)3. When actions taken by the owner or operator during a startup~~,~~ or shutdown, and the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards, or during a malfunction, including actions taken to correct a malfunction, are consistent with the procedures specified in the affected source's startup, shutdown and malfunction plan, the owner or operator shall keep records for that event which demonstrate that the procedures specified in the plan were followed. These records may take the form of a checklist, or other effective form of recordkeeping that confirms conformance with the startup, shutdown and malfunction plan and describes the actions taken for that event. In addition, the owner or operator shall keep records of these events as specified in s. NR 460.09(2), including records of the occurrence and duration of each startup~~,~~ or shutdown ~~or~~ , if the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards, and of the occurrence and duration of each malfunction of operation and each malfunction of the air pollution control and monitoring equipment. Furthermore, the owner or operator shall confirm that actions taken during the relevant reporting period during periods of startup, shutdown and malfunction were consistent with the affected source's startup,

shutdown and malfunction plan in the semiannual, or more frequent, startup, shutdown and malfunction report required in s. NR 460.09(4)(e).

4. If an action taken by the owner or operator during a startup, shutdown or malfunction, including an action taken to correct a malfunction, is not consistent with the procedures specified in the affected source's startup, shutdown and malfunction plan, and the source exceeds any applicable emission limitation in the relevant emission standard, then the owner or operator shall record the actions taken for that event and shall report the actions taken within 2 working days after commencing actions inconsistent with the plan, followed by a letter within 7 working days after the end of the event, in accordance with s. NR 460.09(4)(e), ~~including records of the occurrence and duration of each startup, shutdown or malfunction of operation and each malfunction of the air pollution control and monitoring equipment~~ unless the owner or operator makes alternative reporting arrangements in advance with the department.

5. The owner or operator shall maintain at the affected source a current startup, shutdown and malfunction plan and shall make the plan available upon request for inspection and copying by the department. In addition, if the startup, shutdown and malfunction plan is subsequently revised as provided in subd. 8., the owner or operator shall maintain at the affected source each previous version of the startup, shutdown and malfunction plan, and shall make each previous version available for inspection and copying by the department for a period of 5 years after revision of the plan. If at any time after adoption of a startup, shutdown and malfunction plan the affected source ceases operation or is otherwise no longer subject to the provisions of 40 CFR part 63, the owner or operator shall retain a copy of the most recent plan for 5 years from the date the source ceases operation or is no longer subject to 40 CFR part 63 and shall make the plan available upon request for inspection and copying by the department. The department may at any time request in writing that the owner or operator submit a copy of any startup, shutdown and malfunction plan, or a portion of the plan, which is maintained at the affected source or in the possession of the owner or operator. Upon receipt of a request, the owner or operator shall promptly submit a copy of the requested plan, or a portion of the plan, to the department. ~~The department shall request that the owner or operator submit a particular startup,~~

~~shutdown and malfunction plan, or a portion of the plan, whenever a member of the public submits a specific and reasonable request to examine or to receive a copy of that plan or portion of the plan.~~ The owner or operator may elect to submit the required copy of any startup, shutdown and malfunction plan to the department in an electronic format. If the owner or operator claims that any portion of a startup, shutdown and malfunction plan is confidential business information entitled to protection from disclosure under 114 (c) of the Act (42 USC 7414(c)) or 40 CFR 2.301, the material which is claimed as confidential shall be clearly designated in the submission.

9. The title V permit for an affected source shall require that the owner or operator ~~adopt~~ develop a startup, shutdown and malfunction plan which conforms to the provisions of this chapter, ~~and that the owner or operator operate and maintain the source in accordance with the procedures specified in the current startup, shutdown and malfunction plan.~~ but may do so by citing the relevant chapter or the relevant parts of this subsection. However, any revisions made to the startup, shutdown and malfunction plan in accordance with the procedures established by this chapter may not be deemed to constitute permit revisions under ch. NR 406 or 407 and the elements of the startup, shutdown and malfunction plan may not be considered an applicable requirement as defined in ss. NR 406.02 and 407.02. Moreover, none of the procedures specified by the startup, shutdown and malfunction plan for an affected source shall be deemed to fall within the permit shield provision in section 504(f) of the Act (42 USC 7661c(f)).

SECTION 5. NR 460.06(1)(b) and (c) are amended to read:

NR 460.06(1)(b) ~~If~~ Except as provided in par.(d), if required to do performance testing by a relevant standard, and unless a waiver of performance testing is obtained under this section or the conditions of sub. (5) apply, the owner or operator of the affected source shall perform the tests within 180 days of the compliance date.

(c) ~~When~~ Except as provided in par.(d), when an emission standard promulgated under 40 CFR part 63 is more stringent than the standard as proposed, the owner or operator of a new or reconstructed source subject to that standard for which construction or reconstruction is commenced between the proposal and promulgation dates of the standard shall comply with

performance testing requirements within 180 days after the standard's effective date, or within 180 days after startup of the source, whichever is later. If the promulgated standard is more stringent than the proposed standard, the owner or operator may choose to demonstrate compliance with either the proposed or the promulgated standard. If the owner or operator chooses to comply with the proposed standard initially, the owner or operator shall conduct a second performance test within 3 years and 180 days after the effective date of the standard, or after startup of the source, whichever is later, to demonstrate compliance with the promulgated standard.

SECTION 6. NR 460.06(1)(d) is created to read:

NR 460.06(1)(d) If a force majeure is about to occur, occurs or has occurred for which the affected owner or operator intends to assert a claim of force majeure all of the following apply:

1. The owner or operator shall notify the department in writing as soon as practicable following the date the owner or operator first knew, or, through due diligence, should have known that the event may cause or caused a delay in testing beyond the regulatory deadline specified in pars. (b) and (c), chs. NR 462 to 469 or a permit, but the notification shall occur before the performance test deadline unless the initial force majeure or a subsequent force majeure event delays the notice, in which case the notification shall occur as soon as practicable.

2. The owner or operator shall provide to the department a written description of the force majeure event and a rationale for attributing the delay in testing beyond the regulatory deadline to the force majeure, describe the measures taken or to be taken to minimize the delay and identify a date by which the owner or operator proposes to conduct the performance test. The performance test shall be conducted as soon as practicable after the force majeure occurs.

3. The decision as to whether or not to grant an extension to the performance test deadline is solely within the discretion of the department. The department shall notify the owner or operator in writing of approval or disapproval of the request for an extension as soon as practicable.

4. Until an extension of the performance test deadline has been approved by the department under subd. 3., the owner or operator of the affected facility remains strictly subject to the requirements of chs. NR 460 to 469 and all applicable permits.

SECTION 7. NR 460.07(3)(a)3. is amended to read:

NR 460.07(3)(a)3. The owner or operator of an affected source shall develop ~~and implement~~ a written startup, shutdown and malfunction plan for CMS as specified in s. NR 460.05(4)(c).

SECTION 8. NR 460.09(2)(b)1., 2., 4. and 5. are amended to read

NR 460.09(2)(b)1. The occurrence and duration of each startup~~,~~ or shutdown ~~or malfunction of the process equipment~~ when the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards.

2. The occurrence and duration of each malfunction of operation, that is process equipment, or the required air pollution control and monitoring equipment.

4.a. Actions taken during periods of startup~~,~~ or shutdown ~~and malfunction, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation,~~ when the source exceeded applicable emission limitations in a relevant standard and when the actions taken are different from the procedures specified in the affected source's startup, shutdown and malfunction plan, required in s. NR 460.05(4)(c).

b. Actions taken during periods of malfunction, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation, when the actions taken are different from the procedures specified in the affected source's startup, shutdown and malfunction plan required in s. NR 460.05(4)(c).

5. All information necessary, including actions taken, to demonstrate conformance with the affected source's startup, shutdown and malfunction plan, required in s. NR 460.05(4)(c), when all actions taken during periods of startup~~,~~ or shutdown, and the startup or shutdown

causes the source to exceed any applicable emission limit in the relevant emission standards, and all actions taken during periods of malfunction, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation, are consistent with the procedures specified in the plan. The information needed to demonstrate conformance with the startup, shutdown and malfunction plan may be recorded using a checklist or some other effective form of recordkeeping, in order to minimize the recordkeeping burden for conforming events.

SECTION 9. NR 460.09(4)(e)1. and 2. are amended to read:

NR 460.09(4)(e)1. `Periodic reports.' If actions taken by an owner or operator during a startup~~,~~ or shutdown of an affected source, and the startup or shutdown causes the source to exceed any applicable emission limit in the relevant emission standards, or during a malfunction of an affected source, including actions taken to correct a malfunction, are consistent with the procedures specified in the source's startup, shutdown and malfunction plan as required in s. NR 460.05(4)(c), the owner or operator shall state the information in a startup, shutdown and malfunction report. ~~The report shall identify any instance where any action taken by an owner or operator during a startup, shutdown or malfunction, including actions taken to correct a malfunction, is not consistent with the affected source's startup, shutdown and malfunction plan, but the source does not exceed any applicable emission limitation in the relevant emission standard.~~ Actions taken to minimize emissions during startups, shutdowns and malfunctions shall be summarized in the report and may be done in checklist form. If actions taken are the same for each event, only one checklist is necessary. The report shall also include the number, duration and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. Reports shall only be required if a startup~~,~~ or shutdown caused the source to exceed any applicable emission limitation in the relevant emission standards or if a malfunction occurred during the reporting period. The startup, shutdown and malfunction report shall consist of a letter, containing the name, title and signature of the owner or operator or other responsible official who

is certifying its accuracy, that shall be submitted to the department semiannually, or on a more frequent basis if specified otherwise in a relevant standard or as established otherwise in the source's part 70 permit. The startup, shutdown and malfunction report shall be delivered or postmarked by the 30th day following the end of each calendar half, or other calendar reporting period, as appropriate. If the owner or operator is required to submit excess emissions and continuous monitoring system performance, or other periodic, reports under 40 CFR part 63 or chs. NR 460 to 469, the startup, shutdown and malfunction reports required under this subsection may be submitted simultaneously with the excess emissions and continuous monitoring system performance or other reports. If startup, shutdown and malfunction reports are submitted with excess emissions and continuous monitoring system performance or other periodic reports, and the owner or operator receives approval to reduce the frequency of reporting for the latter under sub. (5), the frequency of reporting for the startup, shutdown and malfunction reports also may be reduced if the department does not object to the intended change. The procedures to implement the allowance in the preceding sentence shall be the same as the procedures specified in sub. (5)(c).

2. `Immediate reports.' Notwithstanding the allowance to reduce the frequency of reporting for periodic startup, shutdown and malfunction reports under subd. 1., any time an action taken by an owner or operator during a startup~~,~~ or shutdown that caused the source to exceed any applicable emission limitation in the relevant emission standards or during a malfunction, including actions taken to correct a malfunction, is not consistent with the procedures specified in the affected source's startup, shutdown and malfunction plan, ~~and the source exceeds any applicable emission limitation in the relevant emission standard,~~ the owner or operator shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan followed by a letter within 7 working days after the end of the event. The immediate report required under this subdivision shall consist of a telephone call or facsimile (FAX) transmission to the department within 2 working days after commencing actions inconsistent with the plan, and it shall be followed by a letter, delivered or postmarked within 7 working days after the end of the event, that contains the name, title~~,~~ and signature of the owner

or operator or other responsible official who is certifying its accuracy, explaining the circumstances of the event, the reasons for not following the startup, shutdown and malfunction plan, ~~and~~ describing all excess emissions or parameter monitoring exceedances or both which are believed to have occurred, or could have occurred in the case of malfunctions, and actions taken to minimize emissions in conformance with s. NR 460.05(4)(a)1.

SECTION 10. NR 469.01(1)(a), (c) and (d) are amended to read:

NR 469.01 Applicability; purpose. (1) APPLICABILITY. (a) This chapter applies to each individual batch vapor, in-line vapor, in-line cold and batch cold solvent cleaning machine that uses any ~~halogenated HAP~~ solvent containing methylene chloride (CAS No. 75–09–2), perchloroethylene (CAS No. 127–18–4), trichloroethylene (CAS No. 79–01–6), 1,1,1-trichloroethane (CAS No. 71–55–6), carbon tetrachloride (CAS No. 56–23–5) or chloroform (CAS No. 67–66–3), or any combination of these halogenated HAP solvents, in a total concentration greater than 5% by weight, as a cleaning or drying agent~~, and to their owners and operators~~. The concentration of these solvents may be determined using Method 18 in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04(16), material safety data sheets, or engineering calculations. ~~Cleaning operations not involving solvent cleaning machines, such as wipe cleaning or using a spray cleaner,~~ Wipe cleaning activities, such as using a rag containing halogenated solvent or a spray cleaner containing halogenated solvent are not covered under the provisions of this chapter.

(c) ~~The~~ Except as provided in par. (e), the owner or operator of each solvent cleaning machine subject to this chapter that commences construction or reconstruction after November 29, 1993, shall achieve compliance with the provisions of this chapter ~~by April 1, 1997, or~~ , except for s. NR 469.085, immediately upon startup~~, whichever is later~~.

(d) ~~The~~ Except as provided in par. (e), the owner or operator of each solvent cleaning machine subject to this chapter ~~on which~~ that commenced construction or reconstruction ~~commenced~~ on or before November 29, 1993, shall achieve compliance with the provisions of this chapter, except for s. NR 469.085, no later than December 2, 1997~~, except that for any~~

~~machine on which construction or reconstruction was commenced on or before November 29, 1993, that does not use halogenated HAP solvent on December 2, 1994, the owner or operator shall, if the machine begins use of halogenated HAP solvent after December 2, 1994, achieve compliance with the provisions of this chapter no later than December 2, 1997, or 60 days after commencing use of halogenated HAP solvent covered under this chapter, whichever is later~~.

SECTION 11. NR 469.01(1)(e), (f) and (g) are created to read:

NR 469.01(1)(e) Each continuous web cleaning machine subject to this chapter shall be in compliance with the provisions of this chapter, except for s. NR 469.085, no later than December 2, 1999.

(f) If you are an owner or operator of an area source subject to this chapter, you are exempt from the obligation to obtain a permit under ch. NR 407, provided you are not required to obtain a permit under s. NR 407.01(1) for a reason other than your status as an area source under this chapter. Notwithstanding the previous sentence, you shall continue to comply with the provisions of this chapter applicable to area sources.

(g) The compliance date for the requirements in s. NR 469.085 depends on the date that construction or reconstruction of the affected facility commences. For purposes of this paragraph, “affected facility” means all solvent cleaning machines, except solvent cleaning machines used in the manufacture and maintenance of aerospace products, solvent cleaning machines used in the manufacture of narrow tubing and continuous web cleaning machines, located at a major source that are subject to the facility-wide limits in Table 8 of s. NR 469.085(2)(b), and for area sources, “affected facility” means all solvent cleaning machines, except cold batch cleaning machines, located at an area source that are subject to the facility-wide limits in Table 8 of s. NR 469.085(2)(b). The compliance dates for the requirements of s. NR 469.085 are as follows:

1. Each affected facility that was constructed or reconstructed on or before August 17, 2006, shall be in compliance with the provisions of this chapter no later than May 3, 2010.

2. Each affected facility that was constructed or reconstructed on or after August 17, 2006, shall be in compliance with the provisions of this chapter on May 3, 2007 or immediately upon startup, whichever is later.

SECTION 12. NR 469.02(1m), (8m) and (9m) are created to read:

NR 469.02(1m) “Air knife system” means a device that directs forced air at high pressure, high volume or a combination of high pressure and high volume through a small opening directly at the surface of a continuous web part. The purpose of this system is to remove the solvent film from the surfaces of the continuous web part.

(8m) “Combined squeegee and air-knife system” means a system consisting of a combination of a squeegee system and an air-knife system within a single enclosure.

(9m) “Continuous web cleaning machine” means a solvent cleaning machine in which parts such as film, coils, wire and metal strips are cleaned at speeds typically in excess of 11 feet per minute. Parts are generally uncoiled, cleaned such that the same part is simultaneously entering and exiting the solvent application area of the solvent cleaning machine and then recoiled or cut. For the purposes of this chapter, all continuous web cleaning machines are considered to be a subset of in-line solvent cleaning machines.

SECTION 13. NR 469.02(32) is amended to read:

NR 469.02(32) "Part" means any object that is cleaned in a solvent cleaning machine. Parts include~~, but are not limited to,~~ discrete parts, assemblies, sets of parts and ~~continuous~~ parts cleaned in a continuous web cleaning machine, including continuous sheets of metal or film.

SECTION 14. NR 469.02(35m), (40m) and (42m) are created to read.

NR 469.02(35m) “Remote reservoir continuous web cleaning machine” means a continuous web cleaning machine in which there is no exposed solvent sump. In these units, the solvent is pumped from an enclosed chamber and is typically applied to the continuous web part

through a nozzle or series of nozzles. The solvent then drains from the part and is collected and recycled through the machine, allowing no solvent to pool in the work or cleaning area.

(40m) “Squeegee system” means a system that uses a series of pliable surfaces to remove the solvent film from the surfaces of the continuous web part. These pliable surfaces, called squeegees, are typically made of rubber or plastic media, and need to be periodically replaced to ensure continued proper function.

(42m) “Superheated part technology” means a system that is part of the continuous web process that heats the continuous web part either directly or indirectly to a temperature above the boiling point of the cleaning solvent. This could include a process step, such as a tooling die that heats the part as it is processed, as long as the part remains superheated through the cleaning machine.

SECTION 15. NR 469.03(1)(c), (2)(b), and (4)(c) are repealed.

SECTION 16. NR 469.03 (3)(intro.) and (h) are amended to read:

NR 469.03(3)(intro.) Each owner or operator of a batch cold solvent cleaning machine complying with sub. (1)(b) or (2)(a) shall comply with the work and operational ~~practices~~ practice requirements specified in pars. (a) to ~~(h)~~ (i), as applicable.

(h) ~~Sponges~~ Except as provided in par. (i), sponges, fabric, wood and paper products may not be cleaned.

SECTION 17. NR 469.03(3)(i), (3m) and (7) are created to read:

NR 469.03(3)(i) The prohibition in par. (h) does not apply to the cleaning of porous materials that are part of polychlorinated biphenyl (PCB) laden transformers if those transformers are handled throughout the cleaning process and disposed of in compliance with an approved PCB disposal permit issued in accordance with the Toxic Substances Control Act (15 USC 2605).

(3m) Each owner or operator subject to the requirements of sub. (3)(a) to (h) may request to use measures other than those described in sub. (3)(a) to (h). The owner or operator shall

demonstrate to the department that the alternative measures will result in equivalent or better emissions control compared to the measures described in sub. (3)(a) to (h).

Note: For example, storing solvent and solvent-laden materials in an enclosed area that is ventilated to a solvent recovery or destruction device may be considered an acceptable alternative.

(7) Each owner or operator of a batch cold cleaning machine shall submit an initial notification report as described in s. NR 469.12(1) and an initial statement of compliance as described in s. NR 469.12(2).

SECTION 18. NR 469.04(1)(intro.) and (d), (2)(a)1. (including Note) and (b)1. (including Note), (3)(intro.), (a)1. (including Note) and (b)1. (including Note) are amended to read:

NR 469.04(1)(intro.) Except as provided in s. NR 469.08 for all cleaning machines, each owner or operator of a solvent cleaning machine subject to the provisions of this chapter shall ensure that each existing or new batch vapor or in-line solvent cleaning machine subject to the provisions of this chapter conforms to the design requirements specified in pars. (a) to (g). The owner of operator of a continuous web cleaning machine shall comply with the requirements of s. NR 469.073 or 469.077, as appropriate, in lieu of complying with this paragraph.

(d) Each vapor cleaning machine shall be equipped with a device that shuts off the sump heat if the sump liquid solvent level drops to the sump heater coils. This requirement does not apply to a vapor cleaning machine that uses steam to heat the solvent.

(2)(a)1. Employ one of the control combinations listed in Table 1 or other equivalent methods of control determined using the procedures in sub. (4).

[**Drafter's Note:** No amendments to Table 1 are made.]

Note: ~~Carbon adsorption units may present cross-media impacts. For example, spent carbon beds may have to be disposed of as hazardous waste (see chs. NR 610 and 615)~~ Unlike most of the control techniques available for complying with this rule, carbon adsorbers are not considered to be a pollution prevention measure. Use of such units may impose additional cost and burden for a number of reasons. First, carbon adsorption units are generally more expensive than other controls listed in the options. Second, these units may present cross-media impacts such as effluent discharges if not properly operated and maintained, and spent carbon beds have to be disposed of as hazardous waste. When making decisions about what controls to install on halogenated solvent cleaning machines to meet the

requirements of this rule, all of these factors should be weighed and pollution prevention measures are encouraged wherever possible.

(b)1. Employ one of the control combinations listed in Table 2 or other equivalent methods of control determined using the procedures in sub. (4).

[**Drafter's Note:** No amendments to Table 2 are made.]

Note: ~~Carbon adsorption units may present cross-media impacts. For example, spent carbon beds may have to be disposed of as hazardous waste (see chs. NR 610 and 615)~~ Unlike most of the control techniques available for complying with this rule, carbon adsorbers are not considered to be a pollution prevention measure. Use of such units may impose additional cost and burden for a number of reasons. First, carbon adsorption units are generally more expensive than other controls listed in the options. Second, these units may present cross-media impacts such as effluent discharges if not properly operated and maintained, and spent carbon beds have to be disposed of as hazardous waste. When making decisions about what controls to install on halogenated solvent cleaning machines to meet the requirements of this rule, all of these factors should be weighed and pollution prevention measures are encouraged wherever possible.

(3)(intro.) Except as provided in s. NR 469.08 for all cleaning machines, each owner or operator of an in-line cleaning machine shall comply with par. (a) or (b), as appropriate. The owner of operator of a continuous web cleaning machine shall comply with the requirements of s. NR 469.073 or 469.077,as appropriate, in lieu of complying with this section.

(a)1. Employ one of the control combinations listed in Table 3 or other equivalent methods of control determined using the procedures in sub. (4).

[**Drafter's Note:** No amendments to Table 3 are made.]

Note: ~~Carbon adsorption units may present cross-media impacts. For example, spent carbon beds may have to be disposed of as hazardous waste (see chs. NR 610 and 615)~~ Unlike most of the control techniques available for complying with this rule, carbon adsorbers are not considered to be a pollution prevention measure. Use of such units may impose additional cost and burden for a number of reasons. First, carbon adsorption units are generally more expensive than other controls listed in the options. Second, these units may present cross-media impacts such as effluent discharges if not properly operated and maintained, and spent carbon beds have to be disposed of as hazardous waste. When making decisions about what controls to install on halogenated solvent cleaning machines to meet the requirements of this rule, all of these factors should be weighed and pollution prevention measures are encouraged wherever possible.

(b)1. Employ one of the control combinations listed in Table 4 or other equivalent methods of control determined using the procedures in sub. (4).

[**Drafter's Note:** No amendments to Table 4 are made.]

Note: ~~Carbon adsorption units may present cross-media impacts. For example, spent carbon beds may have to be disposed of as hazardous waste (see chs. NR 610 and 615)~~ Unlike most of the control techniques available for complying with this rule, carbon adsorbers are not considered to be a pollution prevention measure. Use of such units may impose additional cost and burden for a number of reasons. First, carbon adsorption units are generally more expensive than other controls listed in the options. Second, these units may present cross-media impacts such as effluent discharges if not properly operated and maintained, and spent carbon beds have to be disposed of as hazardous waste. When making decisions about what controls to install on halogenated solvent cleaning machines to meet the requirements of this rule, all of these factors should be weighed and pollution prevention measures are encouraged wherever possible.

SECTION 19. NR 469.04(4) is created to read:

NR 469.04(4) Upon written application, the administrator may approve the use of equipment or procedures after they have been satisfactorily demonstrated to be equivalent, in terms of reducing emissions of methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride or chloroform to the atmosphere, to those prescribed for compliance within a specified paragraph of this chapter. The application shall contain a complete description of the equipment or procedure and the proposed equivalency testing procedure and the date, time and location scheduled for the equivalency demonstration.

SECTION 20. NR 469.05(intro.) and (10) are amended to read:

NR 469.05(intro.) Except as provided in s. NR 469.08 for all cleaning machines, each owner or operator of an existing or new batch vapor or in-line solvent cleaning machine shall meet all of the following required work and operational practices, as applicable~~:~~. The owner or operator of a continuous web cleaning machine shall comply with the requirements of s. NR 469.073 or 469.077,as appropriate, in lieu of complying with this section.

(10) Each operator of a solvent cleaning machine shall complete and ~~correctly answer each question in~~ pass the applicable sections of the test of solvent cleaning ~~operating~~ procedures in Table 5 if requested during an inspection by the department.

SECTION 21. NR 469.06(intro.) and (2)(intro.) and (g)(intro.) are amended to read:

NR 469.06(intro.) Each owner or operator of a solvent cleaning machine complying with ~~either~~ s. NR 469.04(2) or (3) or s. NR 469.073 or 469.077 shall comply with the requirements specified in this section.

(2)(intro.) Determine during each monitoring period whether each control device used to comply with these standards meets the requirements specified in pars. (a) to ~~(g)~~ (k).

(g)(intro.) If a carbon adsorber in conjunction with a lip exhaust or other exhaust internal to the cleaning machine is used to comply with these standards, the owner or operator shall comply with the following requirements:

SECTION 22. NR 469.06(2)(h) to (k) are created to read:

NR 469.06(2)(h) If a superheated part system is used to comply with the standards for continuous web cleaning machines in s. NR 469.073, the owner or operator shall ensure that the temperature of the continuous web part is at least 10 degrees Fahrenheit above the solvent boiling point while the part is traveling through the cleaning machine.

(i) If a squeegee system is used to comply with the continuous web cleaning requirements of s. NR 469.073(3)(c) or 469.077(2)(a), the owner or operator shall comply with the following requirements:

1. Determine the appropriate maximum product throughput for the squeegees used in the squeegee system, as described in s. NR 469.09(6).

2. Conduct the weekly monitoring required by s. NR 469.10(1)(c). Record the results required by s. NR 469.11(1)(f).

3. Calculate the total amount of continuous web product processed since the squeegees were replaced and compare to the maximum product throughput for the squeegees.

4. Ensure squeegees are replaced at or before the maximum product throughput is attained.

5. Redetermine the maximum product throughput for the squeegees if any solvent film is visible on the continuous web part immediately after it exits the cleaning machine.

(j) If an air knife system is used to comply with the continuous web cleaning requirements of s. NR 469.073(3)(c) or 469.077(2)(a), the owner or operator shall comply with the following requirements:

1. Determine the air knife parameter and parameter value that demonstrate to the department's satisfaction that the air knife is properly operating. An air knife is properly operating if no visible solvent film remains on the continuous web part after it exits the cleaning machine.

2. Maintain the selected air knife parameter value at the level determined in s. NR 469.04(1).

3. Conduct the weekly monitoring required by s. NR 466.10(1)(c).

4. Redetermine the proper air knife parameter value if any solvent film is visible on the continuous web part immediately after it exits the cleaning machine.

(k) If a combination squeegee and air knife system is used to comply with the continuous web cleaning requirements of s. NR 469.073(3)(c) or 469.077(2)(a), the owner or operator shall comply with the following requirements:

1. Determine the system parameter and value that demonstrate to the department's satisfaction that the system is properly operating.

2. Maintain the selected parameter value at the level determined in s. NR 469.04(1).

3. Conduct the weekly monitoring required by s. NR 469.10(1)(c).

4. Redetermine the proper parameter value if any solvent film is visible on the continuous web part immediately after it exits the cleaning machine.

SECTION 23. NR 469.073 is created to read:

NR 469.073 Control device and operational requirements for continuous web cleaning machines. Except as provided in ss. NR 469.077 and 469.08 for remote reservoir continuous web cleaning machines, each owner or operator of a continuous web cleaning machine shall comply with subs. (1) to (4) for each continuous web cleaning machine.

(1) Except as provided in sub. (2), install, maintain and operate one of the following control combinations on each continuous web cleaning machine:

(a) For each existing continuous web cleaning machine, the following control combinations are allowed:

1. Superheated vapor or superheated part technology and a freeboard ratio of 1.0 or greater.

2. Freeboard refrigeration device and a freeboard ratio of 1.0 or greater.

3. Carbon adsorption system meeting the requirements of s. NR 469.06(2)(g).

(b) For each new continuous web cleaning machine, the following control combinations are allowed:

1. Superheated vapor or superheated part technology and a freeboard refrigeration device.

2. A freeboard refrigeration device and a carbon adsorber meeting the requirements of s. NR 469.06(2)(g).

3. Superheated vapor or superheated part technology and a carbon adsorber meeting the requirements of s. NR 469.06(2)(g).

(2) If a carbon adsorber system can be demonstrated to the department's satisfaction to have an overall solvent control efficiency (capture efficiency and removal efficiency) of 70% or greater, this system is equivalent to the options in this section.

(3) In lieu of complying with the provisions of s. NR 469.04(1), the owner or operator of a continuous web cleaning machine shall comply with the following provisions:

(a) Each cleaning machine shall meet one of the following control equipment or technique requirements:

1. An idling and downtime mode cover, as described in s. NR 469.05(1)(a), that may be readily opened or closed; that completely covers the cleaning machine openings when in place and is free of cracks, holes and other defects. A continuous web part that completely occupies an entry or exit port when the machine is idle is considered to meet this requirement.

2. A reduced room draft as described in s. NR 469.06(2)(b).

3. Gasketed or leakproof doors that separate both the continuous web part feed reel and take-up reel from the room atmosphere if the doors are checked according to the requirements of s. NR 469.06(2)(c).

4. A cleaning machine that is demonstrated to the department's satisfaction to be under negative pressure during idling and downtime and is vented to a carbon adsorption system that meets the requirements of either s. NR 469.06(2)(g) or sub. (2).

(b) Each continuous web cleaning machine shall have a freeboard ratio of 0.75 or greater unless that cleaning machine is a remote reservoir continuous web cleaning machine.

(c) Each cleaning machine shall have an automated parts handling system capable of moving parts or parts baskets at a speed of 3.4 meters per minute or less from the initial loading of parts through removal of cleaned parts, unless the cleaning machine is a continuous web cleaning machine that has a squeegee system or air knife system installed, maintained and operated on the continuous web cleaning machine meeting the requirements of s. NR 469.06.

(d) Each vapor cleaning machine shall be equipped with a device that shuts off the sump heat if the sump liquid solvent level drops to the sump heater coils. This requirement does not apply to a vapor cleaning machine that uses steam to heat the solvent.

(e) Each vapor cleaning machine shall be equipped with a vapor level control device that shuts off sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser.

(f) Each vapor cleaning machine shall have a primary condenser.

(g) Each cleaning machine that uses a lip exhaust or any other exhaust within the solvent cleaning machine shall be designed and operated to route all collected solvent vapors through a properly operated and maintained carbon adsorber that meets the requirements of either s. NR 469.06(2)(g) or sub. (2).

(4) In lieu of complying with the provisions of s. NR 469.05, the owner or operator of a continuous web cleaning machine shall comply with the following provisions:

(a) Control air disturbances across the cleaning machine openings by incorporating one of the following control equipment or techniques:

1. Covers to each solvent cleaning machine shall be in place during the idling mode and during the downtime mode unless either the solvent has been removed from the machine or maintenance or monitoring is being performed that requires the covers in place. A continuous web part that completely occupies an entry or exit port when the machine is idle is considered to meet this requirement.

2. A reduced room draft as described in s. NR 469.06(2)(b).

3. Gasketed or leakproof doors or covers that separate both the continuous web part feed reel and take-up reel from the room atmosphere if the doors are checked according to the requirements of s. NR 469.06(2)(c).

4. A cleaning machine that is demonstrated to the department's satisfaction to be under negative pressure during idling and downtime and is vented to a carbon adsorption system that meets either the requirements of s. NR 469.06(2)(g) or sub. (2).

(b) Any spraying operations shall be conducted in a section of the solvent cleaning machine that is not directly exposed to the ambient air, such as a baffled or enclosed area of the solvent cleaning machine, or within a machine having a door or cover that meets the requirements of par. (a)3.

(c) During startup of each vapor cleaning machine, the primary condenser shall be turned on before the sump heater.

(d) During shutdown of each vapor cleaning machine, the sump heater shall be turned off and the solvent vapor layer allowed to collapse before the primary condenser is turned off.

(e) When solvent is added to or drained from any solvent cleaning machine, the solvent shall be transferred using threaded or other leak proof couplings, and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface.

(f) Each solvent cleaning machine and associated controls shall be maintained as recommended by the manufacturers of the equipment or using alternative maintenance practices that have been demonstrated to the department's satisfaction to achieve the same or better results as those recommended by the manufacturer.

(g) Waste solvent, still bottoms, sump bottoms and waste absorbent materials used in the cleaning process for continuous web cleaning machines shall be collected and stored in waste containers. The closed containers may contain a device that would allow pressure relief, but would not allow liquid solvent to drain from the container.

(h) Except as provided in par. (i), sponges, fabric, wood, and paper products may not be cleaned.

(i) The prohibition in par. (h) does not apply to absorbent materials that are used as part of the cleaning process of continuous web cleaning machines, including rollers and roller covers.

SECTION 24. NR 469.077 is created to read:

NR 469.077 Control device and operational requirements for remote reservoir continuous web cleaning machines. Except as provided in s. NR 469.08, each owner or operator of a remote reservoir continuous web cleaning machine shall comply with subs. (1) to (4).

(1) Except as provided in sub. (2), install, maintain and operate one of the following controls on each new remote reservoir continuous web cleaning machine.

(a) Superheated vapor or superheated part technology.

(b) A carbon adsorber meeting the requirements of s. NR 469.06(2)(g).

(c) If a carbon adsorber system can be demonstrated to the department's satisfaction to have an overall solvent control efficiency (capture efficiency and removal efficiency) of 70% or greater, this system is equivalent to the options in pars. (a) and (b).

(2) In lieu of complying with the provisions of s. NR 469.04(1), the owner or operator of a remote reservoir continuous web cleaning machine shall comply with the following provisions:

(a) Each cleaning machine shall have an automated parts handling system capable of moving parts or parts baskets at a speed of 3.4 meters per minute or less from the initial loading of parts through removal of cleaned parts, unless the cleaning machine is a continuous web cleaning machine that has a squeegee system or air knife system installed, maintained and operated on the continuous web cleaning machine meeting the requirements of s. NR 469.06.

(b) Each vapor cleaning machine shall be equipped with a device that shuts off the sump heat if the sump liquid solvent level drops to the sump heater coils.

(c) Each vapor cleaning machine shall be equipped with a vapor level control device that shuts off sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser.

(d) Each vapor cleaning machine shall have a primary condenser.

(e) Each cleaning machine that uses a lip exhaust or any other exhaust within the solvent cleaning machine shall be designed and operated to route all collected solvent vapors through a properly operated and maintained carbon adsorber that meets the requirements of either s. NR 469.06(2)(g) or 469.073(2).

(3) In lieu of complying with the provisions of s. NR 469.05, the owner or operator of a remote reservoir continuous web cleaning machine shall comply with the following provisions:

(a) Any spraying operations shall be conducted in a section of the solvent cleaning machine that is not directly exposed to the ambient air, such as a baffled or enclosed area of the solvent cleaning machine, or in a machine having a door or cover that meets the requirements of s. NR 469.073(4)(a)3.

(b) During startup of each vapor cleaning machine, the primary condenser shall be turned on before the sump heater.

(c) During shutdown of each vapor cleaning machine, the sump heater shall be turned off and the solvent vapor layer allowed to collapse before the primary condenser is turned off.

(d) When solvent is added to or drained from any solvent cleaning machine, the solvent shall be transferred using threaded or other leak proof couplings, and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface.

(e) Each solvent cleaning machine and associated controls shall be maintained as recommended by the manufacturers of the equipment or using alternative maintenance practices that have been demonstrated to the department’s satisfaction to achieve the same or better results as those recommended by the manufacturer.

(f) Waste solvent, still bottoms, sump bottoms and waste absorbent materials used in the cleaning process for continuous web cleaning machines shall be collected and stored in waste containers. The closed containers may contain a device that would allow pressure relief, but would not allow liquid solvent to drain from the container.

(g) Except as provided in par. (h), sponges, fabric, wood and paper products may not be cleaned.

(h) The prohibition in par. (g) does not apply to absorbent materials that are used as part of the cleaning process of continuous web cleaning machines, including rollers and roller covers.

SECTION 25. NR 469.08(4) is created to read:

NR 469.08(4) As an alternative to meeting the requirements in ss. NR 469.04 to 469.077, each owner or operator of a continuous web cleaning machine may demonstrate an overall cleaning system control efficiency of 70% or greater using the procedures in s. NR 469.09(7). This demonstration may be made for either a single cleaning machine or for a solvent cleaning system that contains one or more cleaning machines and ancillary equipment, such as storage tanks and distillation units. If the demonstration is made for a cleaning system, the facility shall identify any modifications required to the procedures in s. NR 469.09(7) and they shall be approved by the department.

SECTION 26. NR 469.08(1)(c) is repealed.

SECTION 27. NR 469.085 is created to read:

NR 469.085 Facility-wide standards. (1) Each owner or operator of an affected facility shall comply with the requirements specified in this section. For purposes of this section, “affected facility” means all solvent cleaning machines, except solvent cleaning machines used in the manufacture and maintenance of aerospace products, solvent cleaning machines used in the manufacture of narrow tubing, and continuous web cleaning machines, located at a major source that are subject to the facility-wide limits in sub. (2)(b), and for area sources, “affected facility”

means all solvent cleaning machines, except cold batch cleaning machines, located at an area source that are subject to the facility-wide limits in sub. (2)(b).

(2)(a) Each owner or operator of an affected facility shall maintain a log of solvent additions and deletions for each solvent cleaning machine.

(b) Each owner or operator of an affected facility shall ensure that the total emissions of perchloroethylene (PCE), trichloroethylene (TCE) and methylene chloride (MC) used at the affected facility are equal to or less than the applicable facility-wide 12-month rolling total emission limit presented in Table 8 as determined using the procedures in sub. (3). Equation 9, where the facility emissions of PCE and TCE are weighted according to their carcinogenic potency relative to that of MC, shall be used for multiple solvents.

$$WE = (PCE \times A) + (TCE \times B) + MC \qquad \text{Equation 9}$$

where:

WE is the weighted 12-month rolling total emissions in kg (lbs)

PCE is the 12-month rolling total PCE emissions from all solvent cleaning machines at the facility in kg (lbs)

TCE is the 12-month rolling total TCE emissions from all solvent cleaning machines at the facility in kg (lbs)

MC is the 12-month rolling total MC emissions from all solvent cleaning machines at the facility in kg (lbs)

A is the carcinogenic potency of PCE relative to the carcinogenic potency of MC, and is equal to 12.5

B is the carcinogenic potency of TCE relative to the carcinogenic potency of MC, and is equal to 4.25

Table 8—Facility-wide Emission Limits for Facilities With Solvent Cleaning Machines

Solvents emitted	Facility-wide annual emission limits in kg—for general population degreasing machines	Facility-wide annual emission limit in kg for military depot maintenance facilities
PCE only[a]	4,800	8,000
TCE only	14,100	23,500
MC only	60,000	100,000
Multiple solvents—Calculate the MC-weighted emissions using equation 9	60,000	100,000

[a]PCE emission limit calculated using the unit risk estimate (URE) for PCE calculated by the California EPA Office of Environmental Health Hazard Assessment and listed in their Toxicity Criteria Database, which is accessible at www.oehha.ca.gov/risk/ChemicalDB/start.asp.

(3) Each owner or operator of an affected facility shall, on the first operating day of every month, demonstrate compliance with the applicable facility-wide emission limit on a 12-month rolling total basis using the procedures in pars. (a) to (e). For purposes of this subsection, "each solvent cleaning machine" means each solvent cleaning machine that is part of an affected facility regulated by this section.

(a) Each owner or operator of an affected facility shall, on the first operating day of every month, ensure that each solvent cleaning machine system contains only clean liquid solvent. This includes fresh unused solvent, recycled solvent and used solvent that has been cleaned of soiled materials. A fill line shall be indicated during the first month the measurements are made. The solvent level within the machine shall be returned to the same fill-line each month, immediately prior to calculating monthly emissions as specified in pars. (b) and (c). The solvent cleaning machine does not have to be emptied and filled with fresh unused solvent prior to the calculations.

(b) Each owner or operator of an affected facility shall, on the first operating day of the month, using the records of all solvent additions and deletions for the previous month, determine solvent emissions (E_{unit}) from each solvent cleaning machine using equation 10:

$$E_{unit} = SA_i - LSR_i - SSR_i \qquad \text{Equation 10}$$

where:

E_{unit} is the total halogenated HAP solvent emissions from the solvent cleaning machine during the most recent month i, (kilograms of solvent per month)

SA_i is the total amount of halogenated HAP liquid solvent added to the solvent cleaning machine during the most recent month i, (kilograms of solvent per month)

LSR_i is the total amount of halogenated HAP liquid solvent removed from the solvent cleaning machine during the most recent month i, (kilograms of solvent per month)

SSR_i is the total amount of halogenated HAP solvent removed from the solvent cleaning machine in solid waste, obtained as described in par. (c), during the most recent month i, (kilograms of solvent per month)

(c) Each owner or operator of an affected facility shall, on the first operating day of the month, determine SSR_i using the method specified in subds. 1. and 2.

1. From tests conducted using EPA reference method 25d, incorporated by reference in s. NR 484.04(25).

2. By engineering calculations included in the compliance report.

(d) Each owner or operator of an affected facility shall, on the first operating day of the month, after 12 months of emissions data are available, determine the 12-month rolling total emissions, ET_{unit}, for the 12-month period ending with the most recent month using equation 11:

$$ET_{unit} = \sum_{j=1}^{12} E_{unit} \qquad \text{Equation 11}$$

where:

ET_{unit} is the total halogenated HAP solvent emissions over the preceding 12 months, (kilograms of solvent emissions per 12-month period)

E_{unit} is the halogenated HAP solvent emissions for each month (j) for the most recent 12 months (kilograms of solvent per month)

(e) Each owner or operator of an affected facility shall, on the first operating day of the month, after 12 months of emissions data are available, determine the 12-month rolling total emissions, $ET_{facility}$, for the 12-month period ending with the most recent month using equation 12:

$$ET_{facility} = \sum_{j=1}^{i} ET_{unit} \qquad \text{Equation 12}$$

where:

$ET_{facility}$ is the total halogenated HAP solvent emissions over the preceding 12 months for all cleaning machines at the facility (kilograms of solvent emissions per 12-month period)

ET_{unit} is the total halogenated HAP solvent emissions over the preceding 12 months for each unit, j (kilograms of solvent emissions per 12-month period)

i is the total number of units at the facility

(4) If the applicable facility-wide emission limit presented in Table 8 is not met, an exceedance has occurred. All exceedances shall be reported as required in s. NR 469.12(8).

(5) Each owner or operator of an affected facility shall maintain records specified in pars. (a) to (c) either in electronic or written form for a period of 5 years. For purposes of this subsection, “each solvent cleaning machine” means each solvent cleaning machine that is part of an affected facility regulated by this section.

(a) The dates and amounts of solvent that are added to each solvent cleaning machine.

(b) The solvent composition of wastes removed from each solvent cleaning machine as determined using the procedure described in sub. (3)(c).

(c) Calculation sheets showing how monthly emissions and the 12-month rolling total emissions from each solvent cleaning machine were determined, and the results of all calculations.

(6) Each owner or operator of an affected facility shall submit an initial notification report to the department no later than May 3, 2010. This report shall include the information specified in pars. (a) to (e).

(a) The name and address of the owner or operator of the affected facility.

(b) The physical location of the solvent cleaning machines that are part of an affected facility regulated by this section.

(c) A brief description of each solvent cleaning machine at the affected facility including machine type (batch vapor, batch cold, vapor in-line or cold in-line), solvent to air interface area and existing controls.

(d) The date of installation for each solvent cleaning machine.

(e) An estimate of annual halogenated HAP solvent consumption for each solvent cleaning machine.

(7) Each owner or operator of an affected facility shall submit to the department an initial statement of compliance on or before May 3, 2010. The statement shall include the information specified in pars. (a) to (c).

(a) The name and address of the owner or operator of the affected facility.

(b) The physical location of each solvent cleaning machine that is part of an affected facility regulated by this section.

(c) The results of the first 12-month rolling total emissions calculation.

(8) Each owner or operator of an affected facility shall submit a solvent emission report every year. The solvent emission report can be combined with the annual report required in s. NR 469.12(6) into a single report for each facility. The solvent emission report shall contain the information specified in pars. (a) and (b).

(a) The average monthly solvent consumption for the affected facility in kilograms per month.

(b) The 12-month rolling total solvent emission estimates calculated each month using the method as described in sub. (3).

SECTION 28. NR 469.09(1), (2) and (3)(intro.) are amended to read:

NR 469.09 Test methods. (1) ~~Each~~ Except as provided in subs. (6) and (7) for continuous web cleaning machines, each owner or operator of a batch vapor or in-line solvent cleaning machine complying with an idling emission limit standard in s. NR 469.04(2)(a)2. or (b)2.

or (3)(a)2. or (b)2. shall determine the idling emission rate of the solvent cleaning machine using Method 307 in Appendix A of 40 CFR part 63, incorporated by reference in s. NR 484.04.

(2) ~~Each~~ Except as provided in sub. (7) for continuous web cleaning machines, each owner or operator of a batch vapor or in-line solvent cleaning machine complying with s. NR 469.08 shall on the first operating day of every month ensure that the solvent cleaning machine system contains only clean liquid solvent as defined in s. NR 469.02(5). A fill line shall be indicated during the first month the measurements are made. The solvent level within the machine shall be returned to the same fill line each month, immediately prior to calculating monthly emissions as specified in sub. (3). The solvent cleaning machine does not have to be emptied and filled with fresh unused solvent prior to the calculations.

(3)(intro.) ~~Each~~ Except as provided in subs. (6) and (7) for continuous web cleaning machines, each owner or operator of a batch vapor or in-line solvent cleaning machine complying with s. NR 469.08(1)(a) or (b) shall on the first operating day of the month comply with the requirements specified in pars. (a) to (c).

SECTION 29. NR 469.09(6), (7) and (8) are created to read:

NR 469.09(6) Each owner or operator of a continuous web cleaning machine using a squeegee system to comply with s. NR 469.073(3) shall determine the maximum product throughput using the method in this subsection. The maximum product throughput for each squeegee type used at a facility shall be determined prior to December 2, 1999, the compliance date for these units.

(a) Conduct daily visual inspections of the continuous web part. This monitoring shall be conducted at the point where the continuous web part exits the squeegee system. It is not necessary for the squeegees to be new at the time monitoring is begun if the following 2 conditions are met:

1. The continuous web part leaving the squeegee system has no visible solvent film.

2. The amount of continuous web that has been processed through the squeegees since the last replacement is known.

(b) Continue daily monitoring until a visible solvent film is noted on the continuous web part.

(c) Determine the length of continuous web product that has been cleaned using the squeegee since it was installed.

(d) The maximum product throughput for the purposes of this chapter is equal to the time it takes to clean 95% of the length of product determined in par. (c). This time period, in days, may vary depending on the amount of continuous web product cleaned each day.

(7) Each owner or operator of a continuous web cleaning machine demonstrating compliance with the alternative standard of s. NR 469.08(4) shall, on the first day of every month, ensure that the solvent cleaning machine contains only clean liquid solvent. A fill-line shall be indicated during the first month the measurements are made. The solvent level with the machine shall be returned to the same fill-line each month, immediately prior to calculating overall cleaning system control efficiency emissions as specified in sub. (8). The solvent cleaning machine does not need to be emptied and filled with fresh unused solvent prior to the calculation.

(8) Each owner or operator of a continuous web cleaning machines complying with s. NR 469.08(4) shall, on the first operating day of the month, determine the overall cleaning system control efficiency (E_o) for the previous month using equation 8 and the records of all solvent additions, solvent deletions and solvent recovered from the carbon adsorption system for the previous monthly reporting period required under s. NR 469.11(5).

$$E_o = R_i \Big/ \left(R_i + Sa_i - SSR_i\right) \qquad \text{Equation 8}$$

where:

E_o is the overall cleaning system control efficiency

R_i is the total amount of halogenated HAP liquid solvent recovered from the carbon adsorption system and recycled to the solvent cleaning system during the most recent monthly reporting period, i, kilograms of solvent per month

Sa_i is the total amount of halogenated HAP liquid solvent added to the solvent cleaning system during the most recent monthly reporting period, i, kilograms of solvent per month

SSR_i is the total amount of halogenated HAP solvent removed from the solvent cleaning system in solid waste, obtained as described in sub. (3)(b), during the most recent monthly reporting period, i, kilograms of solvent per month

SECTION 30. NR 469.10(1)(intro.) is amended to read:

NR 469.10(1)(intro.) Except as provided in sub. (7), each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the equipment standards in s. NR 469.04(2)(a)1. or (b)1. or (3)(a)1. or (b)1. shall conduct monitoring and record the results on a weekly basis for the control devices, as appropriate, specified in pars. (a) ~~and (b)~~ to (e).

SECTION 31. NR 469.10(1)(c) to (e) are created to read:

NR 469.10(1)(c) If a squeegee system, air knife system or combination squeegee and air knife system is used to comply with the requirements of s. NR 469.073 or 469.077, the owner or operator shall visually inspect the continuous web part exiting the solvent cleaning machine to ensure that no solvent film is visible on the part.

(d) Except as provided in par. (e), if a superheated part system is used to comply with the requirements of s. NR 469.073 or 469.077, the owner or operator shall use a thermometer, thermocouple or other temperature measurement device to measure the temperature of the continuous web part while it is in the solvent cleaning machine. The measurement may also be taken at the exit of the solvent cleaning machine.

(e) As an alternative to complying with par. (d), the owner or operator may provide data, sufficient to satisfy the department, that demonstrate that the part temperature remains above the boiling point of the solvent at all times that the part is within the continuous web solvent cleaning machine. These data could include design and operating conditions such as information supporting any exothermic reaction inherent in the processing.

SECTION 32. NR 469.11(1)(intro.) is amended to read:

NR 469.11(1)(intro.) Each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the provisions of ss. NR 469.04 to ~~469.07~~ 469.077 shall maintain all of the records, in written or electronic form, specified in pars. (a) to ~~(e)~~ (g), for the lifetime of the machine.

SECTION 33. NR 469.11(1)(f) and (g) are created to read:

NR 469.11(1)(f) If a squeegee system is used to comply with these standards, records of the test required by s. NR 469.10(6) to determine the maximum product throughput for the squeegees and records of both the weekly monitoring required by s. NR 469.10(1)(c) for visual inspection and the length of continuous web product cleaned during the previous week.

(g) If an air knife system or a combination squeegee and air knife system is used to comply with these standards, records of the determination of the proper operating parameter and parameter value for the air knife system.

SECTION 34. NR 469.11(3)(intro.) is amended to read:

NR 469.11(3)(intro.) ~~Each~~ Except as provided in sub. (5) for continuous web cleaning machines, each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the provisions of s. NR 469.08 shall maintain the records specified in pars. (a) to (c), either in electronic or written form, for a period of 5 years.

SECTION 35. NR 469.11(5) is created to read:

NR 469.11(5) Each owner or operator of a continuous web cleaning machine complying with the provisions of s. NR 469.08(4) shall maintain the following records in either electronic or written form for a period of 5 years.

(a) The dates and amounts of solvent that are added to the solvent cleaning machine.

(b) The dates and amounts of solvent that are recovered from the desorption of the carbon adsorber system.

(c) The solvent composition of wastes removed from each cleaning machine as determined using the procedures in s. NR 469.09(3)(b).

(d) Calculation sheets showing the calculation and results of determining the overall cleaning system control efficiency as required by s. NR 469.09.

SECTION 36. NR 484.04(16) in Table 2 is amended to read:

CFR Appendix Referenced		Title	Incorporated by Reference For
NR 484.04			
(16)	40 CFR part 60 Appendix A, Method 18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography	NR 400.02(77) NR 422.142(5)(a) NR 469.01(1)(a)

SECTION 37. 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 38. BOARD ADOPTION. This rule was approved and adopted by the State of Wisconsin Natural Resources Board on August 13, 2008.

Dated at Madison, Wisconsin _____.

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

By_____
Matthew J. Frank, Secretary

(SEAL)