

## Chapter NR 460

### EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES-GENERAL PROVISIONS

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**NR 460.01 Applicability; purpose. c1d** APPLICABILITY. cad This chapter applies to the owner or operator of any facility affected by a standard promulgated by EPA under section 112 of the act c42 USC 7412d, except as otherwise specified in the appendices of this chapter and as provided in pars. cbd and cdd.

**Note:** The general provisions of this chapter eliminate the repetition of requirements applicable to all owners or operators affected by the national emission standards for hazardous air pollutants promulgated under 40 CFR part 63, which are commonly called MACT standards. These standards will regulate specific categories of stationary sources that emit, or have the potential to emit, one or more hazardous air pollutants listed pursuant to section 112 cbd of the Act c42 USC 7412 cdd. The department plans to group the source categories it regulates under chs. NR 460 to 469.

Some delay may occur between the promulgation of the federal standard in 40 CFR part 63 and subsequent promulgation of the standard in chs. NR 460 to 469. Permits under ch. NR 406 or 407 may, under s. 285.65, Stats., specify applicable requirements from 40 CFR part 63 and refer to applicable requirements in this chapter before the specific requirements for the source category can be promulgated in chs. NR 460 to 469.

To obtain the most current list of categories of sources to be regulated under section 112 of the Act c42 USC 7412d, or to obtain the most recent regulation promulgation schedule established pursuant to section 112 ced of the Act c42 USC 7412 cedd, contact the department[s Bureau of Air Management, PO Box 7921, Madison WI 53707, telephone number c608d 266-7718, or EPA[s Emissions Standards Division cMD-13d, U.S. EPA, Office of Air Quality Planning and Standards, Research Triangle Park NC 27711, telephone number c919d 541-2380.

cbd Special provisions in a relevant standard established under 40 CFR part 63 after March 16, 1994 shall supersede any conflicting provisions of this chapter.

**Note:** This paragraph addresses federal MACT standards that have not yet been promulgated by the department under chs. NR 460 to 469. Standards established under 40 CFR part 63 include a table that identifies special provisions which supersede the general provisions of 40 CFR part 63 Subpart A. This table in the federal standard will be used as a guide for identifying special provisions that supersede comparable provisions of this chapter.

ccd If the owner or operator of an existing source obtains a compliance date extension for the source in accordance with the provisions of 40 CFR part 63, Subpart D, the owner or operator shall comply with all requirements of this chapter except those requirements that are specifically overridden in the extension of the compliance for that source.

**Note:** Extensions under the early reduction program of 40 CFR part 63, Subpart D, are only available from EPA.

cdd This chapter does not apply to the owner or operator of any facility subject to the provisions of s. NR 468.20.

ced All references to 40 CFR part 60, 40 CFR part 61 and 40 CFR part 63 in this chapter mean those parts of the code of federal regulations as in effect on April 1, 2002, with the following exceptions:

1. In par. cbd, 40 CFR part 63 means that part as it exists on the effective date of the relevant federal standard, including future standards.

2. In the case of CFR appendices incorporated by reference in ch. NR 484, if a more recent date is specified in the applicable section of ch. NR 484, that date shall apply.

**c2d** PURPOSE. Chapters NR 460 to 469 are adopted to enable the department to implement and enforce standards for stationary sources promulgated by EPA under section 112 of the act c42 USC 7412d, as required by ss. 285.27 c2d and 285.65, Stats. This chapter is adopted under ss. 285.11, 285.13 and 285.17, Stats., to establish general provisions for notification, recordkeeping, monitoring and reporting requirements for sources of hazardous air contaminants.

**Note:** This chapter is based on federal regulations contained in 40 CFR part 63 subpart A as last revised on May 16, 2007. The chapter also reflects the federal authority delegation provisions of 40 CFR part 63 subpart E as last revised on September 14, 2000. In addition to meeting the requirements of this chapter, any major new or reconstructed source subject to a relevant standard under 40 CFR part 63 is required to obtain a construction permit under ch. NR 406 as indicated in s. NR 406.04 c2d cdd. Also, most other new or modified sources are required to submit an operation permit application before commencing operation under s. NR 407.04 c1d cbd 3.

**History:** Cr. Register, March, 1997, No. 495, eff. 4-1-97; am. c2d, Register, November, 1999, No. 527, eff. 12-1-99; CR 00-175: am. c1d ced cintro.d Register March 2002 No. 555, eff. 4-1-02.

**NR 460.02 Definitions.** For terms not defined in this section, the definitions contained in ch. NR 400 apply to the terms used in this chapter. In addition, the definitions in this section apply to the terms used in this chapter and, for terms not defined in chs. NR 462 to 464 and 466 to 469 or the subchapters of chs. NR 463 and 465, to the terms used in those chapters or subchapters as well. If this section defines a term which is also defined in ch. NR 400, the definition in this section applies in this chapter and in chs. NR 462 to 464 and 466 to 469 and the subchapters of chs. NR 463 and 465 rather than the definition in ch. NR 400, except that when one of those chapters or subchapters has its own definition of the term, that definition applies in that chapter or subchapter.

**c1d** XAffected sourceY means one of the following:

cad For each section 112 cdd c42 USC 7412 cddd standard for which the initial proposed rule is signed by the administrator on or before June 30, 2002, the stationary source, the group of stationary sources, or the portion of a stationary source that is regulated by a relevant standard or other requirement established pursuant to section 112 of the Act c42 USC 7412d. Each relevant standard in chs. NR 462 to 469 may further define the Xaffected sourceY for the purposes of that standard.

cbd For each standard published pursuant to section 112 cdd of the Act c42 USC 7412 cddd for which the initial proposed rule is signed by the administrator after June 30, 2002, the collection of equipment, activities, or both within a single contiguous area and under common control that is included in a section 112 cdd c42 USC 7412 cddd source category or subcategory for which a

section 112 cdd c42 USC 7412 cddd standard or other relevant standard is established pursuant to section 112 of the Act c42 USC 7412d.

**Note:** Each relevant standard will define the affected source as defined in sub. c1d unless the administrator finds that a different definition is warranted based on a published justification as to why this definition would result in significant administrative, practical or implementation problems and why the different definition would resolve those problems. The term affected source, as used in this chapter and chs. NR 462 to 469, is separate and distinct from any other use of that term in EPA or department regulations such as those implementing title IV of the Act or the Wisconsin acid rain control program. Affected source may be defined differently for 40 CFR part 63 than Xaffected facilityY and Xstationary sourceY in 40 CFR parts 60 and 61, respectively. The procedures for adopting an alternative definition of affected source apply to each section 112 cdd standard c42 USC 7412 cddd for which the initial proposed rule is signed by the administrator after June 30, 2002.

**c2d** XAlternative emission limitationY means conditions established pursuant to section 112 cid c5d or c6d of the act c42 USC 7412 cid c5d or c6dd by the department.

**c3d** XAlternative emission standardY means an alternative, at least equivalent means of emission limitation as determined by the administrator.

**Note:** The procedure under which approval of an alternative emission standard may be requested is given in 40 CFR 63.6 cgd.

**c4d** XAlternative test methodY means any method of sampling and analyzing for an air pollutant that has been demonstrated to the department[s satisfaction, using Method 301 in Appendix A of 40 CFR part 63, incorporated by reference in s. NR 484.04 c25d, to produce results adequate for the department[s determination of compliance when used in place of a test method specified in chs. NR 460 to 469.

**c5d** XArea sourceY means any stationary source of hazardous air pollutants that is not a major source as defined in this chapter or chs. NR 462 to 469.

**c5md** XCapture deviceY means a hood, enclosed room, floor sweep or other means of collecting solvent emissions or other pollutants into a duct so that the pollutant can be directed to a pollution control device such as an incinerator or carbon adsorber.

**c6d** XCommencedY means, with respect to construction or reconstruction of an affected source, that an owner or operator has undertaken a continuous program of construction or reconstruction or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or reconstruction.

**c7d** XCompliance dateY means the date by which an affected source is required to be in compliance with a relevant standard, limitation, prohibition, or any federally enforceable requirement established by the department under chs. NR 406, 407 or 460 to 469 pursuant to section 112 of the act c42 USC 7412d.

**c9d** XCompliance scheduleY means any of the following:

cad In the case of an affected source that is in compliance with all applicable requirements established under 40 CFR part 63, a statement that the source will continue to comply with the requirements.

cbd In the case of an affected source that is required to comply with applicable requirements by a future date, a statement that the source will meet the requirements on a timely basis and, if required by an applicable requirement, a detailed schedule of the dates by which each step toward compliance will be reached.

ccd In the case of an affected source not in compliance with all applicable requirements established under 40 CFR part 63, a schedule of remedial measures, including an enforceable sequence of actions or operations with milestones and a schedule for the submission of certified progress reports, where applicable, leading to compliance with a relevant standard, limitation, prohibition or any federally enforceable requirement established pursuant to section 112 of the act c42 USC 7412d for which the

affected source is not in compliance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the source is subject. Any schedule of compliance shall be supplemental to, and may not sanction noncompliance with, the applicable requirements on which it is based.

**c10d** XConstructionY means the on-site fabrication, erection or installation of an affected source. Construction does not include the removal of all equipment comprising an affected source from an existing location and reinstallation of the equipment at a new location.

**Note:** Section NR 460.05 c3md addresses source relocation.

**c11d** XContinuous emission monitoring systemY or XCEMSY means the total equipment that may be required to meet the data acquisition and availability requirements of 40 CFR part 63, used to sample, condition, if applicable, analyze and provide a record of emissions.

**c12d** XContinuous monitoring systemY or XCMSY means a continuous emission monitoring system, continuous opacity monitoring system, continuous parameter monitoring system, or other manual or automatic monitoring that is used for demonstrating compliance with an applicable regulation on a continuous basis.

**c13d** XContinuous opacity monitoring systemY or XCOMSY means a continuous monitoring system that measures the opacity of emissions.

**c14d** XContinuous parameter monitoring systemY means the total equipment that may be required to meet the data acquisition and availability requirements of 40 CFR part 63, used to sample, condition, if applicable, analyze and provide a record of process or control system parameters.

**c14md** XControl systemY means the combination of capture and control devices used to reduce emission of air contaminants.

**c15d** XEffective dateY means either of the following:

cad With regard to an emission standard established under 40 CFR part 63, the date of promulgation in the federal register of the standard.

cbd With regard to an alternative emission limitation or equivalent emission limitation determined by the administrator or the department, the date that the alternative emission limitation or equivalent emission limitation becomes effective according to the provisions of 40 CFR part 63 or chs. NR 460 to 469.

**c16d** XEmission standardY means a national standard, limitation, prohibition or other regulation promulgated in a subpart of 40 CFR part 63 or in chs. NR 460 to 469 pursuant to section 112 cdd, chd or cfd of the act c42 USC 7412 cdd, chd or cfdd.

**c17d** XEmissions averagingY means a way to comply with the emission limitations specified in a relevant standard, whereby an affected source, if allowed under a subpart of 40 CFR part 63, may create emission credits by reducing emissions from specific points to a level below that required by the relevant standard, and those credits are used to offset emissions from points that are not controlled to the level required by the relevant standard.

**c18d** XEquivalent emission limitationY means any maximum achievable control technology emission limitation or requirements which are applicable to a major source of hazardous air pollutants and are adopted by the department on a case-by-case basis, pursuant to section 112 cgd or cjd of the Act c42 USC 7412 cgd or cjdd.

**c19d** XExcess emissions and continuous monitoring system performance reportY means a report that shall be submitted periodically to the department by an affected source in order to provide data on its compliance with relevant emission limits, operat-

ing parameters, and the performance of its continuous parameter monitoring systems.

**c20d** XExisting sourceY means any affected source that is not a new MACT source.

**c20md** XForce majeureY 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.

**c21d** XFugitive emissionsY means those emissions from a stationary source that could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening. Under section 112 of the act **c42 USC 7412d**, all fugitive emissions are to be considered in determining whether a stationary source is a major source.

**c22d** XHazardous air pollutantY or XHAPY means any air pollutant included in the list in section 112 **cbd c1d** of the act **c42 USC 7412** **cbd c1d** as revised by **40 CFR part 63** subpart C.

**c22gd** XIntermediate alternative monitoringY means federally required monitoring with modifications that involve technology generally accepted by the scientific community as equivalent or better, that is applied on a site-specific basis and that may have the potential to decrease the stringency of the associated emission limitation or standard. Though site-specific, intermediate modifications of this sort may set a national precedent for a source category and may ultimately result in a revision to the federally required monitoring. Examples of intermediate modifications to monitoring include, but are not limited to:

**cad** Use of a continuous emission monitoring system in lieu of a parameter monitoring approach.

**cbd** Decreased frequency for non-continuous parameter monitoring or physical inspections.

**ccd** Changes to quality control requirements for parameter monitoring.

**cdd** Use of an electronic data reduction system in lieu of manual data reduction.

**c22rd** XIntermediate alternative test methodY means a federally enforceable test method with modifications that involve technology generally accepted by the scientific community as equivalent or better, that is applied on a site-specific basis and that may have the potential to decrease the stringency of the associated emission limitation or standard. Though site-specific, such intermediate modifications may set a national precedent for a source category and may ultimately result in a revision to the federally enforceable test method. In order to be approved, an intermediate modification shall be validated according to EPA Method 301 in Appendix A of **40 CFR part 63**, incorporated by reference in s. NR 484.04 c25d, to demonstrate that it provides equal or improved accuracy and precision. Examples of intermediate modifications to a test method include, but are not limited to:

**cad** Modifications to a test method[s] sampling procedure including substitution of sampling equipment that has been demonstrated for a particular sample matrix, and use of a different impinger absorbing solution.

**cbd** Changes in sample recovery procedures and analytical techniques, such as changes to sample holding times and use of a different analytical finish with proven capability for the analyte of interest.

**ccd** Combining a federally required method with another proven method for application to processes emitting multiple pollutants.

**c23d** XLesser quantityY means a quantity of a hazardous air pollutant that is or may be emitted by a stationary source that the administrator establishes in order to define a major source under an applicable subpart of **40 CFR part 63**.

**c23ed** XMajor alternative monitoringY means federally required monitoring with modifications that use technology or procedures not generally accepted by the scientific community, or that is an entirely new method. These major modifications to monitoring may be site-specific or may apply to one or more source categories and will almost always set a national precedent. Examples of major modifications to monitoring include, but are not limited to:

**cad** Use of a new monitoring approach developed to apply to a control technology not contemplated in the applicable regulation.

**cbd** Use of a predictive emission monitoring system in place of a required continuous emission monitoring system.

**ccd** Use of alternative calibration procedures that do not involve calibration gases or test cells.

**cdd** Use of an analytical technology that differs from that specified by a performance specification.

**ced** Decreased monitoring frequency for a continuous emission monitoring system, continuous opacity monitoring system, predictive emission monitoring system or continuous parameter monitoring system.

**cfd** Decreased monitoring frequency for a leak detection and repair program.

**cgd** Use of alternative averaging times for reporting purposes.

**c23md** XMajor alternative test methodY means a federally enforceable test method with modifications that use technology or procedures not generally accepted by the scientific community or that is an entirely new method. These major modifications to a test method may be site-specific, or may apply to one or more sources or source categories, and will almost always set a national precedent. In order to be approved, a major modification shall be validated according to EPA Method 301 in Appendix A of **40 CFR part 63**, incorporated by reference in s. NR 484.04 c25d. Examples of major modifications to a test method include, but are not limited to:

**cad** Use of an unproven analytical finish.

**cbd** Use of a method developed to fill a test method gap.

**ccd** Use of a new test method developed to apply to a control technology not contemplated in the applicable regulation.

**cdd** Combining 2 or more sampling or analytical methods, at least one being unproven, into one for application to processes emitting multiple pollutants.

**c23sd** XMajor changes to recordkeeping and reportingY means:

**cad** A modification to federally required recordkeeping or reporting that meets one of the following criteria:

1. May decrease the stringency of the required compliance and enforcement measures for the relevant standards.

2. May have national significance.

3. Is not site-specific.

**cbd** Examples of major changes to recordkeeping and reporting include, but are not limited to:

1. Decreases in the record retention for all records.

2. Waiver of all or most recordkeeping or reporting requirements.

3. Major changes to the contents of reports.

4. Decreases in the reliability of recordkeeping or reporting, such as manual recording of monitoring data instead of required automated or electronic recording or paper reports where electronic reporting may have been required.

**c24d** XMajor sourceY means any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants, unless the administrator establishes a lesser quantity, or in the case of radionuclides, different criteria from those specified in this definition.

**c24cd** XMalfunctionY means any sudden, infrequent and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

**c24ed** XMinor alternative monitoringY means:

cad Federally required monitoring with modifications that meet all of the following criteria:

1. Do not decrease the stringency of the compliance and enforcement measures for the relevant standard.
2. Have no national significance.
3. Are site-specific, made to reflect or accommodate the operational characteristics, physical constraints or safety concerns of an affected source.

cbd Examples of minor modifications to monitoring include, but are not limited to:

1. Modifications to a sampling procedure, such as use of an improved sample conditioning system to reduce maintenance requirements.
2. Increased monitoring frequency.
3. Modification of the environmental shelter to moderate temperature fluctuation and thus protect the analytical instrumentation.

**c24md** XMinor change to a test methodY means:

cad A modification to a federally enforceable test method that meets all of the following criteria:

1. Does not decrease the stringency of the emission limitation or standard.
2. Has no national significance.
3. Is site-specific, made to reflect or accommodate the operational characteristics, physical constraints or safety concerns of an affected source.

cbd Examples of minor changes to a test method include, but are not limited to:

1. Field adjustments in a test method[s] sampling procedure, such as a modified sampling traverse or location to avoid interference from an obstruction in the stack, increasing the sampling time or volume, use of additional impingers for a high moisture situation, accepting particulate emission results for a test run that was conducted with a lower than specified temperature, substitution of a material in the sampling train that has been demonstrated to be more inert for the sample matrix.

2. Changes in recovery and analytical techniques such as a change in quality control or quality assurance requirements needed to adjust for analysis of a certain sample matrix.

**c24sd** XMinor change to recordkeeping or reportingY means:

cad A modification to federally required recordkeeping or reporting that meets all of the following criteria:

1. Does not decrease the stringency of the compliance and enforcement measures for the relevant standards.
2. Has no national significance.
3. Is site-specific.

cbd Examples of minor changes to recordkeeping or reporting include, but are not limited to:

1. Changes to recordkeeping necessitated by alternatives to monitoring.
2. Increased frequency of recordkeeping or reporting, or increased record retention periods.
3. Increased reliability in the form of recording monitoring data, such as electronic or automatic recording as opposed to manual recording of monitoring data.
4. Changes related to compliance extensions granted pursuant to s. NR 460.05 c7d.
5. Changes to recordkeeping for good cause shown for a fixed short duration, such as facility shutdown.
6. Changes to recordkeeping or reporting that is clearly redundant with equivalent recordkeeping or reporting requirements.
7. Decreases in the frequency of reporting for area sources to no less than once a year, for good cause shown, or for major sources to no less than twice a year, for good cause shown.

**c24wd** XMonitoringY means the collection and use of measurement data or other information to control the operation of a process or pollution control device or to verify a work practice standard relative to assuring compliance with applicable requirements. Monitoring is composed of 4 elements:

cad Indicators of performance—the parameters you measure or observe for demonstrating proper operation of the pollution control measures or compliance with the applicable emissions limitation or standard. Indicators of performance may include direct or predicted emissions measurements, including opacity, operational parametric values that correspond to process or control device and capture system efficiencies or emissions rates, and recorded findings of inspection of work practice activities, materials tracking, or design characteristics. Indicators may be expressed as a single maximum or minimum value; a function of process variables, for example, within a range of pressure drops; a particular operational or work practice status, for example, a damper position, completion of a waste recovery task, materials tracking; or an interdependency between 2 or among more than 2 variables.

cbd Measurement techniques—the means by which you gather and record information of or about the indicators of performance. The components of the measurement technique include the detector type, location and installation specifications, inspection procedures, and quality assurance and quality control measures. Examples of measurement techniques include continuous emission monitoring systems, continuous opacity monitoring systems, continuous parametric monitoring systems, and manual inspections that include making records of process conditions or work practices.

ccd Monitoring frequency—the number of times you obtain and record monitoring data over a specified time interval. Examples of monitoring frequencies include at least 4 points equally spaced for each hour for continuous emissions or parametric monitoring systems, at least every 10 seconds for continuous opacity monitoring systems, and at least once per operating day or week, month, etc. for work practice or design inspections.

**cdd** Averaging time—the period over which you average and use data to verify proper operation of the pollution control approach or compliance with the emissions limitation or standard. Examples of averaging time include a 3-hour average in units of the emissions limitation, a 30-day rolling average emissions value, a daily average of a control device operational parametric range, and an instantaneous alarm.

**c24yd** XNew affected sourceY means the collection of equipment, activities, or both within a single contiguous area and under common control that is included in a section 112 ccd source category or subcategory under section 112 of the Act [c42 USC 7412d](#) that is subject to a section 112 cdd or other relevant standard for new sources. This definition of new affected source, and the criteria to be utilized in implementing it, shall apply to each section 112 cdd standard for which the initial proposed rule is signed by the administrator after June 30, 2002. Each relevant standard will define the term new affected source, which will be the same as the affected source unless the administrator finds that a different collection is warranted based on consideration of factors including all of the following:

**cad** Emission reduction impacts of controlling individual sources versus groups of sources.

**cbd** Cost effectiveness of controlling individual equipment.

**ccd** Flexibility to accommodate common control strategies.

**cdd** Cost and benefits of emissions averaging.

**ced** Incentives for pollution prevention.

**cfid** Feasibility and cost of controlling processes that share common equipment, such as product recovery devices.

**cgd** Feasibility and cost of monitoring.

**chd** Other relevant factors.

**c25d** XNew MACT sourceY means any affected source the construction or reconstruction of which is commenced after the administrator first publishes in the federal register a proposed emission standard that would apply to the source under [40 CFR part 63](#).

**c26d** XOne-hour periodY, unless otherwise defined in an applicable subpart of [40 CFR part 63](#) or in an applicable provision of chs. [NR 460](#) to [469](#), means any 60-minute period commencing on the hour.

**c27d** XOpacityY means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background. For continuous opacity monitoring systems, opacity means the fraction of incident light that is attenuated by an optical medium.

**c28d** XPart 70 permitY means any permit issued, renewed or revised under ch. [NR 407](#) for a part 70 source as defined in s. [NR 407.02](#).

**c29d** XPerformance auditY means a procedure to analyze blind samples, the content of which is known by the department, simultaneously with the analysis of performance test samples in order to provide a measure of test data quality.

**c30d** XPerformance evaluationY means the conduct of relative accuracy testing, calibration error testing, and other measurements used in validating the continuous monitoring system data.

**c31d** XPerformance testY means the collection of data resulting from the execution of a test method, usually 3 emission test runs, used to demonstrate compliance with a relevant emission standard as specified in the performance test section of the relevant standard.

**c31gd** XPollution preventionY has the meaning given for Xsource reductionY in the Pollution Prevention Act [c42 USC 13102 c5dd](#). The definition is as follows:

**cad** XSource reductionY is any practice that does both of the following:

1. Reduces the amount of any hazardous substance, pollutant or contaminant entering any waste stream or otherwise released into the environment, including fugitive emissions, prior to recycling, treatment or disposal.

2. Reduces the hazards to public health and the environment associated with the release of the substances, pollutants or contaminants.

**cbd** The term Xsource reductionY includes equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training or inventory control.

**ccd** The term Xsource reductionY does not include any practice that alters the physical, chemical or biological characteristics or the volume of a hazardous substance, pollutant or contaminant through a process or activity which itself is not integral to and necessary for the production of a product or the providing of a service.

**c32d** XReconstructionY, unless otherwise defined in a relevant standard, means the replacement of components of an affected or a previously nonaffected source to such an extent that all of the following apply:

**cad** The fixed capital cost of the new components exceeds 50% of the fixed capital cost that would be required to construct a comparable new MACT source.

**cbd** It is technologically and economically feasible for the reconstructed source to meet the relevant standards established by the administrator or by the department pursuant to section 112 of the act [c42 USC 7412d](#). Upon reconstruction, an affected source, or a stationary source that becomes an affected source, is subject to relevant standards for new MACT sources, including compliance dates, irrespective of any change in emissions of hazardous air pollutants from that source.

**Note:** The question of whether a relocated source is reconstructed is addressed in s. [NR 460.05 c3md](#).

**c33d** XRegulation promulgation scheduleY means the schedule for the promulgation of emission standards under [40 CFR part 63](#), established by the administrator pursuant to section 112 ced of the act [c42 USC 7412 cedd](#) and published in the federal register.

**c34d** **cad** XRelevant standardY means any of the following established pursuant to section 112 of the Act [c42 USC 7412d](#) that applies to the collection of equipment, activities, or both regulated by the standard or limitation:

1. An emission standard.
2. An alternative emission standard.
3. An alternative emission limitation.
4. An equivalent emission limitation.

**cbd** A relevant standard may include or consist of a design, equipment, work practice or operational requirement, or other measure, process, method, system or technique, including prohibition of emissions, that the administrator or the department establishes for new or existing sources to which the standard or limitation applies. Every relevant standard established pursuant to section 112 of the Act [c42 USC 7412d](#) includes Subpart A of [40 CFR part 63](#), as provided by [40 CFR 63.1 cad c4d](#), and all applicable appendices of [40 CFR part 63](#) or other parts of title 40 of the Code of Federal Regulations that are referenced in that standard.

**c35d** XRunY means one of a series of emission or other measurements needed to determine emissions for a representative operating period or cycle as specified in chs. NR 460 to 469.

**c36d** XShutdownY means the cessation of operation of an affected source or portion of an affected source for any purpose.

**c37d** XSix-minute periodY means, with respect to opacity determinations, any one of the 10 equal parts of a 1-hour period.

**c37gd** XSource at a performance track member facilityY means a major or area source located at a facility which has been accepted by EPA for membership in its Performance Track Program and is still a member of the Program.

**Note:** The Performance Track Program is a voluntary program that encourages continuous environmental improvement through the use of environmental management systems, local community outreach, and measurable results. It is described on EPA's Web site at [www.epa.gov/performance-track](http://www.epa.gov/performance-track).

**c37rd** XStartupY means the setting in operation of an affected source or portion of an affected source for any purpose.

**c38d** XTest methodY or XmethodY means the validated procedure for sampling, preparing and analyzing for an air pollutant specified in a relevant standard as the performance test procedure. The test method may include methods described in an appendix of title 40 of the code of federal regulations which has been incorporated by reference in s. NR 484.04 for chs. NR 460 to 469, or methods validated for an application through procedures in Method 301 of Appendix A of 40 CFR part 63 which is incorporated by reference in s. NR 484.04 c25d.

**c38gd** XTitle V permitY means any permit issued, renewed or revised under ch. NR 407 for a part 70 source as defined in s. NR 407.02 c6d.

**c39d** XVisible emissionY means the observation of an emission of opacity or optical density above the threshold of vision.

**c40d** XWorking dayY has the meaning given for Xbusiness dayY in s. NR 400.02 c36md.

**c41d** XYouY or XyourY means the owner or operator of a facility that is subject to requirements under the chapter where the term is used.

**History:** Cr. Register, March, 1997, No. 495, eff. 4-1-97; CR 00-175: am. cintro.d, c5d and c22d, cr. c5md, c14md, c22gd, c22rd, c23ed, c23md, c23sd, c24ed, c24md and c24sd Register March 2002 No. 555, eff. 4-1-02; corrections in c4d and c38d made under s. 13.93 c2md cbd 7., Stats., Register March 2002 No. 555; CR 03-037: am. cintro.d Register March 2004 No. 579, eff. 4-1-04; CR 05-039: am. c1d, c6d, c10d, c15d ebd, c18d, c25d, c32d cintro.d, c34d cad cintro.d, ebd, and c36d, cr. c1d ebd, c24ed, c24wd, c24yd, c31gd, c37gd, c37rd and c40d, r. c8d Register February 2006 No. 602, eff. 3-1-06; CR 05-116: am. cintro.d, c1d cad and c5d, cr. c41d Register November 2006 No. 611, eff. 12-1-06; CR 04-023: am. cintro.d Register December 2008 No. 636, eff. 1-1-09; CR 07-105: cr. c20md Register December 2008 No. 636, eff. 1-1-09.

**NR 460.03 Units and abbreviations.** The definitions contained in s. NR 400.03 apply to the abbreviations and symbols of units of measure used in chs. NR 460 to 469. In addition, the following definitions apply to the units and abbreviations used in chs. NR 460 to 469:

**c1d** System International units of measure:

cad MJ - megajoule =  $10^6$  joule

**c2d** Other units of measure:

cad cal - calorie

cbd g-eq - gram equivalent

ccd g-mole - gram mole

cdd K = 1,000

ced kcal - kilocalorie

cfid meq - milliequivalent

cgd ppb - parts per billion

chd ppbv - parts per billion by volume

cid ppbw - parts per billion by weight

cjd ppmw - parts per million by weight

ckd scf - cubic feet at standard conditions

cLd scfh - cubic feet at standard conditions per hour

cmd scm - cubic meter at standard conditions

cnd scmm - cubic meter at standard conditions per minute

cod sec - second

cpd std - at standard conditions

**c3d** Miscellaneous:

cad avg - average

cbd CEMS - continuous emission monitoring system

ccd CMS - continuous monitoring systems

cdd COMS - continuous opacity monitoring system

ced CPMS - continuous parameter monitoring system

cfid M - molar

cgd XPSY - performance specification

chd XSSMY - startup, shutdown or malfunction

cid XSSMPY - startup, shutdown and malfunction plan

**History:** Cr. Register, March, 1997, No. 495, eff. 4-1-97; CR 05-039: renum. c2d cnd, cod and c3d ced to be c2d cod, cpd and c3d cfd, cr. c2d cnd and c3d ced Register February 2006 No. 602, eff. 3-1-06; CR 05-116: cr. c3d cgd, chd and cid Register November 2006 No. 611, eff. 12-1-06.

**NR 460.04 Prohibited activities and circumvention.**

**c1d** PROHIBITED ACTIVITIES. cad No owner or operator subject to the provisions of chs. NR 460 to 469 may operate any affected source in violation of the requirements of chs. NR 460 to 469. Affected sources subject to and in compliance with either an extension of compliance or an exemption from compliance are not in violation of the requirements of chs. NR 460 to 469. An extension of compliance may be granted by the administrator under 40 CFR part 63, by the department or by the president under section 112 cid c4d of the Act c42 USC 7412 cid c4dd.

cbd No owner or operator subject to the provisions of chs. NR 460 to 469 may fail to keep records, notify, report or revise reports as required under chs. NR 460 to 469.

1. A part 70 permit has been issued to that source.

2. If a part 70 permit has been issued to that source, whether the permit has been revised or modified to incorporate the emission standard.

**c2d** CIRCUMVENTION. No owner or operator subject to the provisions of chs. NR 460 to 469 may build, erect, install or use any article, machine, equipment or process to conceal an emission that would otherwise constitute noncompliance with a relevant standard. Concealment includes, but is not limited to, all of the following:

cad The use of diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere.

cbd The use of gaseous diluents to achieve compliance with a relevant standard for visible emissions.

ccd Fragmentation after November 15, 1990 which divides ownership of an operation within the same facility among various owners where there is no real change in control. The owner and operator may not use fragmentation or phasing of reconstruction activities to avoid becoming subject to new source requirements.

**History:** Cr. Register, March, 1997, No. 495, eff. 4-1-97; CR 05-039: renum. c1d cad cintro.d to be c1d cad and am., r. c1d cad 1. to 3., ccd and cdd, am. c2d ccd Register February 2006 No. 602, eff. 3-1-06.

**NR 460.05 Compliance with standards and maintenance requirements.** **c1d** APPLICABILITY. cad The requirements in this section apply to the owner or operator of affected sources for which any relevant standard has been established pursuant to section 112 of the Act c42 USC 7412d and the applica-

bility of the requirements is set out in accordance with [40 CFR 63.1 cad c4d](#) unless one of the following applies:

1. The administrator or the department has granted an extension of compliance consistent with sub. [c7d](#).

2. The president of the United States has granted an exemption from compliance with any relevant standard in accordance with section 112 cid c4d of the Act [c42 USC 7412 cid c4dd](#).

**cbd** If an area source, that otherwise would be subject to an emission standard or other requirement established under [40 CFR part 63](#) or under chs. [NR 460 to 469](#) if it were a major source, subsequently increases its emissions of hazardous air pollutants, or its potential to emit hazardous air pollutants, such that the source is a major source, the source shall be subject to the relevant emission standard or other requirement.

**c2d COMPLIANCE DATES FOR NEW AND RECONSTRUCTED SOURCES.** **cad** Except as specified in pars. [ccd](#) and [cdd](#), the owner or operator of a new or reconstructed affected source for which construction or reconstruction commences after proposal of a relevant standard that has an initial startup before the effective date of a relevant standard established under [40 CFR part 63](#) pursuant to section 112 cdd, cfd or chd of the Act [c42 USC 7412 cdd, cfd or chdd](#) shall comply with the standard not later than the standard[s] effective date.

**cbd** Except as specified in pars. [ccd](#) and [cdd](#), the owner or operator of a new or reconstructed source that has an initial startup after the effective date of a relevant standard established under [40 CFR part 63](#) pursuant to section 112 cdd, cfd or chd of the act [c42 USC 7412 cdd, cfd or chdd](#) shall comply with the standard upon startup of the source.

**ccd** The owner or operator of an affected source for which construction or reconstruction is commenced after the proposal date of a relevant standard established under [40 CFR part 63](#) pursuant to section 112 cdd, cfd or chd of the act [c42 USC 7412 cdd, cfd or chdd](#) but before federal promulgation of the standard shall comply with the relevant emission standard not later than the date 3 years after the federal promulgation date if:

1. The promulgated standard, that is, the relevant standard, is more stringent than the proposed standard; for purposes of this subdivision, a finding that controls or compliance methods are Xmore stringentY shall include control technologies or performance criteria and compliance or compliance assurance methods that are different but are substantially equivalent to those required by the promulgated rule, as determined by the administrator or his or her authorized representative.

2. The owner or operator complies with the standard as proposed during the 3-year period immediately after the effective date.

**cdd** The owner or operator of an affected source for which construction or reconstruction is commenced after the proposal date of a relevant standard established pursuant to section 112 cdd of the Act [c42 USC 7412 cddd](#) but before the proposal date of a relevant standard established pursuant to section 112 cfd [c42 USC 7412 cfdd](#) may not be required to comply with the section 112 cfd emission standard until the date 10 years after the date construction or reconstruction is commenced, except that, if the section 112 cfd standard is promulgated more than 10 years after construction or reconstruction is commenced, the owner or operator shall comply with the standard as provided in pars. [cad](#) and [cbd](#).

**ced** The owner or operator of a new MACT source that is subject to the compliance requirements of par. [ccd](#) or [cdd](#) shall notify the department in accordance with s. [NR 460.08 c4d](#).

**cf** When an area source becomes a major source by the addition of equipment or operations that meet the definition of new

affected source in the relevant standard, the portion of the existing facility that is a new affected source shall comply with all requirements of that standard applicable to new MACT sources. The source owner or operator shall comply with the relevant standard upon startup.

**c3d COMPLIANCE DATES FOR EXISTING SOURCES.** **cad** After the effective date of a relevant standard established under [40 CFR part 63](#) pursuant to section 112 cdd or chd of the act [c42 USC 7412 cdd or chdd](#), the owner or operator of an existing source shall comply with the standard by the compliance date established in the applicable subparts of [40 CFR part 63](#).

**Note:** Except as otherwise provided for in section 112 of the act [c42 USC 7412d](#), the compliance date established for an existing source in an applicable subpart of [40 CFR part 63](#) will not exceed 3 years after the effective date of the standard.

**cbd** If an existing source is subject to a standard established under [40 CFR part 63](#) pursuant to section 112 cfd of the Act [c42 USC 7412 cfdd](#), the owner or operator shall comply with the standard by the date 90 days after the standard[s] effective date, or by the date specified in an extension granted to the source by the department under sub. [c7d ccd 2.](#), whichever is later.

**ccd** Except as provided in sub. [c2d cfd](#), the owner or operator of an area source that increases its emissions of, or its potential to emit, hazardous air pollutants such that the source becomes a major source shall be subject to relevant standards for existing sources. These sources shall comply by the date specified in the standards for existing area sources that become major sources. If no compliance date is specified in the standard, the source shall have a period of time to comply with the relevant emission standard that is equivalent to the compliance period specified in the relevant standard for sources in existence at the time the standard becomes effective.

**c3md DETERMINATION OF WHETHER A RELOCATED SOURCE IS RECONSTRUCTED OR EXISTING.** As indicated in s. [NR 460.02 c10d](#), the removal of all equipment comprising an affected source from an existing location and reinstallation of the equipment at a new location does not constitute construction. The owner or operator of an existing affected source that is relocated may elect not to reinstall minor ancillary equipment including, but not limited to, piping, ductwork and valves. However, removal and reinstallation of an affected source will be construed as reconstruction if it satisfies the criteria for reconstruction as defined in s. [NR 460.02 c32d](#). The costs of replacing minor ancillary equipment shall be considered in determining whether the existing affected source is reconstructed.

**c4d OPERATION AND MAINTENANCE REQUIREMENTS.** **cad General.** 1. At all times, including periods of startup, shutdown and malfunction, the owner or operator shall operate and maintain any affected source, including associated air pollution control and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown or malfunction, the general duty to minimize emissions requires that the owner or operator reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown or malfunction does not require the owner or operator to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether the operation and maintenance procedures are being used will be based on information available to the department, which may include monitoring results; review of operation and maintenance procedures, includ-

ing the startup, shutdown and malfunction plan required in par. [ccd](#); review of operation and maintenance records; and inspections of the source.

2. Malfunctions shall be corrected as soon as practicable after their occurrence. 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.

3. Operation and maintenance requirements established pursuant to section 112 of the act [c42 USC 7412d](#) are enforceable independent of emissions limitations or other requirements in relevant standards.

*ccd Startup, shutdown and malfunction plan.* 1. The owner or operator of an affected source shall develop 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, 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:

a. Ensure that, at all times, the owner or operator operates and maintains each affected source, including associated air pollution control and monitoring equipment, in a manner which satisfies the general duty to minimize emissions established by par. [cad 1](#).

b. Ensure that owners or operators are prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of hazardous air pollutants.

c. Reduce the reporting burden associated with periods of startup, shutdown and malfunction, including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation.

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 c2d](#), including records of the occurrence and duration of each startup or shutdown, 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 c4d ced](#).

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 c4d ced](#), 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 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 ccd of the Act [c42 USC 7414 cddd](#) or [40 CFR 2.301](#), the material which is claimed as confidential shall be clearly designated in the submission.

6. To satisfy the requirements of this section to develop a startup, shutdown and malfunction plan, the owner or operator may use the affected source[s] standard operating procedures manual, or an occupational safety and health administration or other plan, provided the alternative plans meet all the requirements of this section and are made available for inspection or submitted when requested by the department.

7. Based on the results of a determination made under par. [cad 1](#)., the department may require that an owner or operator of an affected source make changes to the startup, shutdown and malfunction plan for that source. The department shall require appropriate revisions to a startup, shutdown and malfunction plan, if the department finds that the plan does any of the following:

a. Does not address a startup, shutdown or malfunction event that has occurred.

b. Fails to provide for the operation of the source, including associated air pollution control and monitoring equipment, during a startup, shutdown or malfunction event in a manner consistent with the general duty to minimize emissions established by par. [cad 1](#).



c. Does not provide adequate procedures for correcting malfunctioning process and air pollution control and monitoring equipment as quickly as practicable.

d. Includes an event that does not meet the definition of startup, shutdown or malfunction listed in s. NR 460.02 c37rd, c36d and c24cd, respectively.

8. The owner or operator may periodically revise the startup, shutdown and malfunction plan for the affected source as necessary to satisfy the requirements of 40 CFR part 63 or to reflect changes in equipment or procedures at the affected source. Unless the department provides otherwise, the owner or operator may make the revisions to the startup, shutdown and malfunction plan without prior approval by the administrator or the department. However, each revision to a startup, shutdown and malfunction plan shall be reported in the semiannual report required by s. NR 460.09 c4d ced. If the startup, shutdown and malfunction plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the startup, shutdown and malfunction plan at the time the owner or operator developed the plan, the owner or operator shall revise the startup, shutdown and malfunction plan within 45 days after the event to include detailed procedures for operating and maintaining the source during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control and monitoring equipment. In the event that the owner or operator makes any revision to the startup, shutdown and malfunction plan which alters the scope of the activities at the source which are deemed to be a startup, shutdown or malfunction, or otherwise modifies the applicability of any emission limit, work practice requirement, or other requirement in a standard established under 40 CFR part 63, the revised plan may not take effect until after the owner or operator has provided a written notice describing the revision to the department.

9. The title V permit for an affected source shall require that the owner or operator develop a startup, shutdown and malfunction plan which conforms to the provisions of this chapter, 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 cfd of the Act c42 USC 7661c cfdd.

**c5d COMPLIANCE WITH NONOPACITY EMISSION STANDARDS.** The nonopacity emission standards in 40 CFR part 63 or in chs. NR 460 to 469 shall apply at all times except during periods of startup, shutdown and malfunction, and as otherwise specified in an applicable subpart of 40 CFR part 63 or in an applicable provision of chs. NR 460 to 469. If a startup, shutdown or malfunction of one portion of an affected source does not affect the ability of particular emission points within other portions of the affected source to comply with the nonopacity emission standards set forth in this chapter, then those emission points shall still be required to comply with the nonopacity emission standards in 40 CFR part 63 or in chs. NR 460 to 469.

**c6d COMPLIANCE WITH OPACITY AND VISIBLE EMISSION STANDARDS.** cad *Applicability.* The opacity and visible emission standards in 40 CFR part 63 and in chs. NR 460 to 469 shall apply at all times except during periods of startup, shutdown and malfunction, and as otherwise specified in an applicable subpart

of 40 CFR part 63 or in an applicable provision of chs. NR 460 to 469. If a startup, shutdown or malfunction of one portion of an affected source does not affect the ability of particular emission points within other portions of the affected source to comply with the opacity and visible emission standards in 40 CFR part 63 or in chs. NR 460 to 469, then those emission points shall still be required to comply with the opacity and visible emission standards in 40 CFR part 63 or in chs. NR 460 to 469.

cbd *Methods for determining compliance.* 1. a. Whenever a continuous opacity monitoring system cCOMSd is required to be installed to determine compliance with numerical opacity emission standards in 40 CFR part 63 and in chs. NR 460 to 469, compliance with opacity emission standards in 40 CFR part 63 and in chs. NR 460 to 469 shall be determined by using the results from the COMS.

b. Whenever an opacity emission test method is not specified, compliance with opacity emission standards in 40 CFR part 63 and in chs. NR 460 to 469 shall be determined by conducting observations in accordance with Method 9 in Appendix A of 40 CFR part 60, incorporated by reference in s. NR 484.04 c13d, or the method specified in par. cfd 2.

c. Whenever a visible emission test method is not specified, compliance with visible emission standards in 40 CFR part 63 and in chs. NR 460 to 469 shall be determined by conducting observations in accordance with Method 22 in Appendix A of 40 CFR part 60, incorporated by reference in s. NR 484.04 c13d.

2. If an affected source undergoes opacity or visible emission testing at startup to obtain an operation permit under ch. NR 407, the results of the testing may be used to demonstrate compliance with a relevant standard if all of the following occur:

a. The opacity or visible emission test was conducted within a reasonable amount of time before a performance test is required to be conducted under the relevant standard.

b. The opacity or visible emission test was conducted under representative operating conditions for the source.

c. The opacity or visible emission test was conducted and the resulting data were reduced using EPA-approved test methods and procedures, as specified in s. NR 460.06 c4d.

d. The opacity or visible emission test was appropriately quality-assured, as specified under s. NR 460.06 c2d.

ccd *Notification of opacity or visible emission observations.* The owner or operator of an affected source shall notify the department in writing of the anticipated date for conducting opacity or visible emission observations in accordance with s. NR 460.08 c6d, if the observations are required for the source by a relevant standard.

cdd *Conduct of opacity or visible emission observations.* When a relevant standard under 40 CFR part 63 includes an opacity or visible emission standard, the owner or operator of an affected source shall comply with the following:

1. For the purpose of demonstrating initial compliance, opacity or visible emission observations shall be conducted concurrently with the initial performance test required in s. NR 460.06 unless one of the following conditions applies:

a. If no performance test under s. NR 460.06 is required, opacity or visible emission observations shall be conducted within 60 days after achieving the maximum production rate at which a new or reconstructed source will be operated, but not later than 120 days after initial startup of the source, or within 120 days after the effective date of the relevant standard in the case of new MACT sources that start up before the standard[s] effective date. If no performance test under s. NR 460.06 is required, opacity or visible emission observations shall be con-

ducted within 120 days after the compliance date for an existing or modified source.

b. If visibility or other conditions prevent the opacity or visible emission observations from being conducted concurrently with the initial performance test required under s. NR 460.06, or within the time period specified in subd. 1. a., the source[s] owner or operator shall reschedule the opacity or visible emission observations as soon after the initial performance test, or time period, as possible, but not later than 30 days thereafter, and shall advise the department of the rescheduled date. The rescheduled opacity or visible emission observations shall be conducted, to the extent possible, under the same operating conditions that existed during the initial performance test conducted under s. NR 460.06. The visible emissions observer shall determine whether visibility or other conditions prevent the opacity or visible emission observations from being made concurrently with the initial performance test in accordance with procedures contained in Method 9 or Method 22 in Appendix A of 40 CFR part 60, incorporated by reference in s. NR 484.04 c13d.

2. For the purpose of demonstrating initial compliance, the minimum total time of opacity observations shall be 3 hours, 30 6-minute averages, for the performance test or other required set of observations, including fugitive-type emission sources subject only to an opacity emission standard.

3. The owner or operator of an affected source to which an opacity or visible emission standard in 40 CFR part 63 applies shall conduct opacity or visible emission observations in accordance with the provisions of this section, record the results of the evaluation of emissions, and report to the department the opacity or visible emission results in accordance with the provisions of s. NR 460.09 c4d.

4. Opacity readings of portions of plumes that contain condensed, uncombined water vapor may not be used for purposes of determining compliance with opacity emission standards.

*ced Availability of records.* The owner or operator of an affected source shall make available, upon request by the department, records that the department deems necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible emission observer certification.

*cid Use of a continuous opacity monitoring system.* 1. The owner or operator of an affected source required to use a continuous opacity monitoring system cCOMSd shall record the monitoring data produced during a performance test required under s. NR 460.06 and shall furnish the department a written report of the monitoring results in accordance with the provisions of s. NR 460.09 c5d cdd.

2. Whenever an opacity emission test method has not been specified in an applicable subpart of 40 CFR part 63 or in an applicable provision of chs. NR 460 to 469, or an owner or operator of an affected source is required to conduct observations according to Method 9 of Appendix A of 40 CFR part 60, incorporated by reference in s. NR 484.04 c13d, the owner or operator may submit, for compliance purposes, COMS data results produced during any performance test required under s. NR 460.06 in lieu of Method 9 data. If the owner or operator elects to submit COMS data for compliance with the opacity emission standard, he or she shall notify the department of that decision, in writing, simultaneously with the notification under s. NR 460.06 c2d of the date the performance test is scheduled to begin. Once the owner or operator of an affected source has notified the department to that effect, the COMS data results will be used to determine opacity compliance during subsequent performance tests required under s. NR 460.06, unless the owner or operator noti-

fies the department in writing to the contrary not later than with the notification under s. NR 460.06 c2d of the date the subsequent performance test is scheduled to begin.

3. For the purposes of determining compliance with the opacity emission standard during a performance test required under s. NR 460.06 using COMS data, the COMS data shall be reduced to 6-minute averages over the duration of the mass emission performance test.

4. The owner or operator of an affected source using a COMS for compliance purposes is responsible for demonstrating the performance evaluation requirements of s. NR 460.07 c5d have been met, the COMS has been properly maintained, operated and data quality-assured, as specified in s. NR 460.07 c3d and c4d, and the resulting data have not been altered in any way.

5. Except as provided in subd. 2., the results of continuous monitoring by a COMS that indicate that the opacity at the time visual observations were made was not in excess of the emission standard are probative but not conclusive evidence of the actual opacity of an emission, provided that the affected source proves that, at the time of the alleged violation, the instrument used was properly maintained, as specified in s. NR 460.07 c3d, and met Performance Specification 1 in Appendix B of 40 CFR part 60, incorporated by reference in s. NR 484.04 c21d, and that the resulting data have not been altered in any way.

*cgd Finding of compliance.* The department shall make a finding concerning an affected source[s] compliance with an opacity or visible emission standard upon obtaining all the compliance information required by the relevant standard, including the written reports of the results of the performance tests required by s. NR 460.06, the results of Method 9 of Appendix A of 40 CFR part 60, incorporated by reference in s. NR 484.04 c13d, or another required opacity or visible emission test method, the observer certification required by par. ced, and the continuous opacity monitoring system results, whichever are applicable, and any information available to the department needed to determine whether proper operation and maintenance practices are being used.

**c7d** EXTENSION OF COMPLIANCE WITH EMISSION STANDARDS. *cad* Until a compliance date extension has been granted by the administrator or the department under this subsection or 40 CFR 63.6 cid, the owner or operator of an affected source subject to the requirements of this section shall comply with all applicable requirements of 40 CFR part 63 and chs. NR 460 to 469.

*cbd* Pursuant to section 112 cid c6d of the act c42 USC 7412 cid c6dd, if the owner or operator of an existing source has installed BACT, as defined in section 169 c3d of the act c42 USC 7479 c3dd, or technology required to meet a LAER, as defined in section 171 of the act c42 USC 7501d, prior to the promulgation of an emission standard in 40 CFR part 63 applicable to the source and the same pollutant or stream of pollutants controlled pursuant to the BACT or LAER installation, the department may grant the owner or operator an extension of the compliance date with the emission standard that will apply until the date 5 years after the date on which the installation was achieved, as determined by the department.

**Note:** BACT and LAER are more broadly defined under s. 285.01 c12d and c23d, Stats.

*ccd* 1. a. The owner or operator of an existing source who is unable to comply with a relevant standard established under 40 CFR part 63 pursuant to section 112 cdd of the act c42 USC 7412 cddd may request that the department grant an extension allowing the source up to one additional year to comply with the standard, if the additional period is necessary for the installation of controls. The owner or operator of an affected source who has requested a compliance date extension under this subsection or 40

CFR 63.6 cid and who is otherwise required to obtain a part 70 permit shall apply for the permit or apply to have the source[s] part 70 permit revised to incorporate the conditions of the compliance date extension. The conditions of a compliance date extension granted under this subsection will be incorporated into the affected source[s] part 70 permit.

**Note:** Under 40 CFR 63.6 cid c4d cid cAd, the administrator may provide an additional extension of up to 3 years for mining waste operations, if the 1-year extension of the compliance date is insufficient to dry and cover mining waste in order to reduce emissions of any hazardous air pollutant.

b. Any request under this subsection for an extension of compliance with a relevant standard shall be submitted in writing to the department no later than 120 days prior to the affected source[s] compliance date, as specified in subs. c2d and c3d, except as provided for in subd. 1. c. Non-frivolous requests submitted under this subsection will stay the applicability of the rule as to the emission points in question until the time the request is granted or denied. A denial will be effective as of the date of denial. Emission standards established under 40 CFR part 63 may specify alternative dates for the submittal of requests for an extension of compliance if alternatives are appropriate for the source categories affected by those standards.

c. An owner or operator may submit a compliance extension request after the date specified in subd. 1. b, provided the need for the compliance extension arose after that date, and before the otherwise applicable compliance date, and the need arose due to circumstances beyond reasonable control of the owner or operator. This request shall include, in addition to the information required in par. ced 1., a statement of the reasons additional time is needed and the date when the owner or operator first learned of the problems. Non-frivolous requests submitted under this subsection will stay the applicability of the rule as to the emission points in question until the time the request is granted or denied. A denial will be effective as of the original compliance date.

2. The owner or operator of an existing source unable to comply with a relevant standard established under 40 CFR part 63 pursuant to section 112 cfd of the Act c42 USC 7412 cfd may request that the department grant an extension allowing the source up to 2 years after the standard[s] effective date to comply with the standard. The department may grant an extension if it finds that the additional period is necessary for the installation of controls and that steps will be taken during the period of the extension to assure that the health of persons will be protected from imminent endangerment. Any request for an extension of compliance with a relevant standard under this subsection shall be submitted in writing to the department not later than 90 calendar days after the effective date of the relevant standard.

cdd The owner or operator of an existing source that has installed BACT or technology required to meet LAER, as specified in par. cbd, prior to the promulgation of a relevant emission standard in 40 CFR part 63 may request that the department grant an extension allowing the source 5 years from the date on which the installation was achieved, as determined by the department, to comply with the standard. Any request for an extension of the compliance date for a relevant standard under this subsection shall be submitted in writing to the department not later than 120 days after the promulgation date of the standard. The department may grant an extension if it finds that the installation of BACT or technology to meet LAER controls the same pollutant or stream of pollutants that would be controlled at that source by the relevant emission standard.

ced The request for a compliance date extension under par. ccd shall include all of the following information:

1. A description of the controls to be installed to comply with the standard.

2. A compliance schedule, including the date by which each step toward compliance will be reached. At a minimum, the list of dates shall include all of the following:

a. The date by which on-site construction, installation of emission control equipment or a process change is planned to be initiated.

b. The date by which final compliance is to be achieved.

cemd The request for a compliance extension under par. cdd shall include all information needed to demonstrate to the department[s] satisfaction that the installation of BACT or technology to meet LAER controls the same pollutant or stream of pollutants that would be controlled at that source by the relevant emission standard.

cfd Advice on requesting an extension of a compliance date may be obtained from the department.

cgd Based on the information provided in any request made under pars. ccd to cemd, or other information, the department may grant an extension of the compliance date for an emission standard, as specified in pars. ccd and cdd.

chd An extension shall be in writing and shall do all of the following:

1. Identify each affected source covered by the extension.

2. Specify the termination date of the extension.

3. Specify the dates by which steps toward compliance are to be taken, if appropriate.

4. Specify other applicable requirements to which the compliance extension applies, such as performance tests.

5. Specify any additional conditions that the department deems necessary to assure any of the following:

a. Under par. ccd, the installation of the necessary controls and protection of human health during the extension period.

b. Under par. cdd, the proper operation and maintenance of the installed controls during the extension period.

cid The owner or operator of an existing source that has been granted a compliance date extension under par. cgd may be required to submit to the department progress reports indicating whether the steps toward compliance outlined in the compliance schedule have been reached. The contents of the progress reports and the dates by which they shall be submitted shall be specified in the written compliance date extension granted under par. chd.

cjd 1. The department shall notify the owner or operator in writing of approval or intention to deny approval of a request for an extension of compliance within 30 calendar days after receipt of sufficient information to evaluate a request submitted under par. ccd 1. or cdd. The department shall notify the owner or operator in writing of the status of the application, that is, whether the application contains sufficient information to make a determination within 30 calendar days after receipt of the original application and within 30 calendar days after receipt of any supplementary information that is submitted. The 30-day approval or denial period shall begin after the owner or operator has been notified in writing that the application is complete.

2. When notifying the owner or operator that an application is not complete, the department shall specify the information needed to complete the application and provide notice of opportunity for the applicant to present, in writing, within 30 calendar days after notification of the incomplete application, additional information or arguments to the department to enable further action on the application.

3. Before denying any request for a compliance date extension, the department shall notify the owner or operator in writing of the department[s] intention to issue the denial, together with all of the following:

a. Notice of the information and findings on which the intended denial is based.

b. Notice of opportunity for the owner or operator to present in writing, within 15 calendar days after notification of the intended denial, additional information or arguments to the department before further action on the request.

4. The department[s] final determination to deny any request for an extension shall be in writing and shall set forth the specific grounds on which the denial is based. The final determination shall be made within 30 calendar days after presentation of additional information or argument, if the application is complete, or within 30 calendar days after the final date specified for the presentation if no presentation is made.

ckd 1. The department shall notify the owner or operator in writing of approval or intention to deny approval of a request for a compliance date extension within 30 calendar days after receipt of sufficient information to evaluate a request submitted under par. ccd 2. The 30-day approval or denial period will begin after the owner or operator has been notified in writing that the application is complete. The department shall notify the owner or operator in writing of the status of the application, that is, whether the application contains sufficient information to make a determination, within 15 calendar days after receipt of the original application and within 15 calendar days after receipt of any supplementary information that is submitted.

2. When notifying the owner or operator that an application is not complete, the department shall specify the information needed to complete the application and provide notice of opportunity for the applicant to present, in writing, within 15 calendar days after notification of the incomplete application, additional information or arguments to the department to enable further action on the application.

3. Before denying any request for a compliance date extension, the department shall notify the owner or operator in writing of the department[s] intention to issue the denial, together with all of the following:

a. Notice of the information and findings on which the intended denial is based.

b. Notice of opportunity for the owner or operator to present in writing, within 15 calendar days after notification of the intended denial, additional information or arguments to the department before further action on the request.

4. A final determination to deny any request for an extension shall be in writing and shall set forth the specific grounds on which the denial is based. The final determination shall be made within 30 calendar days after presentation of additional information or argument, if the application is complete, or within 30 calendar days after the final date specified for the presentation if no presentation is made.

cLd The department may terminate an extension of compliance at an earlier date than specified if any specification under par. chd 3. or 4. is not met.

1. Upon making a determination to terminate, the department shall notify, in writing, the owner or operator of the department[s] determination to terminate, together with both of the following:

a. Notice of the reason for termination.

b. Notice of opportunity for the owner or operator to present in writing, within 15 calendar days after notification of the determination to terminate, additional information or arguments to the department before further action on the termination.

2. A termination of an extension of compliance shall be in writing and shall set forth the specific grounds on which the termination is based. The termination shall be made within 30 calendar days after presentation of additional information or arguments, or within 30 calendar days after the final date specified for the presentation if no presentation is made.

**History:** Cr. Register, March, 1997, No. 495, eff. 4-1-97; corrections in c4d ccd 4., c6d cbd 1. b. and c., cdd 1. b., cfd 2., 5., and cgd made under s. 13.93 c2md cbd 7., Stats., Register March 2002 No. 555; CR 05-039: am. c1d cad cintro.d, c2d cad, ccd 1., cdd, cfd, c3d cbd, c4d cad 1., 2., ccd 1., 3. to 6., 7. cintro.d, b., c., and 8., c5d, c6d cad, c7d ccd 1. b., 2., cjd 1. and cLd, r. and recr. c1d cad 1. and 2., renum. c3d ccd 1., c7d ccd 2. b. and d. to be c3d ccd, c7d ccd 2. a. and b. and am. c3d ccd and c7d ccd 2. a., r. c3d ccd 2., c4d cbd, c7d ccd 2. a. and c., 3. and 4., cr. c3md, c4d ccd 7. d. and 9., c7d ccd 1. c., cLd 1. and 2., Register February 2006 No. 602, eff. 3-1-06; CR 07-105: am. c4d cad 2., ccd 1. cintro.d, 3. to 5., 9., r. c4d ccd 2. Register December 2008 No. 636, eff. 1-1-09.

**NR 460.06 Performance testing requirements. c1d** APPLICABILITY AND PERFORMANCE TEST DATES. cad Unless otherwise specified, this section applies to the owner or operator of an affected source required to do performance testing, or another form of compliance demonstration, under a relevant standard.

cbd Except as provided in par. cdd, 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. c5d apply, the owner or operator of the affected source shall perform the tests within 180 days of the compliance date.

ccd Except as provided in par. cdd, 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.

cdd 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. cbd and ccd, 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 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 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.

**c2d DEPARTMENT OVERSIGHT OF PERFORMANCE TESTING.** Performance tests shall be conducted in accordance with s. NR 439.07 c2d to c4d and c6d.

**c3d PERFORMANCE TESTING FACILITIES.** If required to do performance testing, the owner or operator of each new MACT source and, at the request of the department, the owner or opera-

tor of each existing source, shall provide all of the following performance testing facilities:

cad Sampling ports adequate for test methods applicable to the source. This includes all of the following:

1. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures.

2. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

cbd Safe sampling platforms.

ccd Safe access to sampling platforms.

cdd Utilities for sampling and testing equipment.

ced Any other facilities that the department deems necessary for safe and adequate testing of a source.

**c4d CONDUCT OF PERFORMANCE TESTS.** cad Performance tests shall be conducted under such conditions as the department specifies to the owner or operator based on normal, representative performance of the affected source. Operations during periods of startup, shutdown and malfunction do not constitute representative conditions for the purpose of a performance test, nor will emissions in excess of the level of the relevant standard during periods of startup, shutdown and malfunction be considered a violation of the relevant standard unless otherwise specified in the relevant standard or a determination of noncompliance is made under s. NR 460.05 c4d. Upon request, the owner or operator shall make available to the department such records as may be necessary to determine the conditions of performance tests.

cbd Performance tests shall be conducted and data shall be reduced in accordance with the test methods and procedures in this section, in each relevant standard, and, if required, in applicable appendices of parts 51, 60, 61 and 63 of title 40 of the code of federal regulations, incorporated by reference in s. NR 484.04 c9d, c13d, c21d, c23d and c25d, unless any of the following actions is taken:

1. The department specifies or approves, in specific cases, the use of a test method with minor changes in methodology. Changes may be approved in conjunction with approval of the site-specific test plan specified in sub. c2d.

2. The department approves the use of an intermediate change or alternative, or the administrator approves the use of a major change or alternative to a test method, the results of which the department or administrator has determined to be adequate for indicating whether a specific affected source is in compliance.

**Note:** Under 40 CFR 63.91 cgd only EPA can approve major alternatives to test methods.

3. The department approves shorter sampling times or smaller sample volumes when necessitated by process variables or other factors.

4. The department waives the requirement for performance tests because the owner or operator of an affected source has demonstrated by other means to the department[s satisfaction that the affected source is in compliance with the relevant standard.

ccd Unless otherwise specified in a relevant standard or test method, each performance test shall consist of 3 separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the relevant standard. For the purpose of determining compliance with a relevant standard, the arithmetic mean of the results of the 3 runs shall apply. Upon receiving approval from the department, results of a test run may be replaced with results of an additional test run in the event that any of the following occurs:

1. A sample is accidentally lost after the testing team leaves the site.

2. Conditions occur in which one of the 3 runs must be discontinued because of forced shutdown.
3. Extreme meteorological conditions occur.
4. Other circumstances occur that are beyond the owner or operator[s] control.

**c5d USE OF AN ALTERNATIVE TEST METHOD.** cad Until authorized to use an intermediate or major change or alternative to a test method, the owner or operator of an affected source remains subject to the requirements of this section and the relevant standard.

**Note:** Under 40 CFR 63.91 cgd only EPA can approve major alternatives to test methods.

cbd The owner or operator of an affected source required to do performance testing by a relevant standard may use an alternative test method from that specified in the standard provided that the owner or operator does all of the following:

1. Notifies the department of his or her intention to use an alternative test method at least 60 days before the performance test is scheduled to begin.
2. Uses Method 301 in Appendix A of 40 CFR part 63, incorporated by reference in s. NR 484.04 c25d, to validate the alternative test method. This may include the use of specific procedures of Method 301 if use of the procedures is sufficient to validate the alternative test method.
3. Submits the results of the Method 301 validation process along with the notification of intention and the justification for not using the specified test method. The owner or operator may submit the information required in this subsection well in advance of the deadline specified in subd. 1. to ensure a timely review by the administrator or the department in order to meet the performance test date specified in this section or the relevant standard.

ccd The department shall determine whether the owner or operator[s] validation of the proposed alternative test method is adequate and issue an approval or disapproval of the alternative test method. If the owner or operator intends to demonstrate compliance by using an alternative to any test method specified in the relevant standard, the owner or operator is authorized to conduct the performance test using an alternative test method after the department approves the use of the alternative method. However, the owner or operator is authorized to conduct the performance test using an alternative method in the absence of notification of approval or disapproval 45 days after submission of the request to use an alternative method and the request satisfies the requirements in par. cbd. The owner or operator is authorized to conduct the performance test within 60 calendar days after authorization to demonstrate compliance using an alternative test method. Notwithstanding the requirements in the preceding 3 sentences, the owner or operator may proceed to conduct the performance test as required in this section, without the department[s] prior approval of the site-specific test plan, if the owner or operator subsequently chooses to use the specified testing and monitoring methods instead of an alternative.

cdd If the department finds reasonable grounds to dispute the results obtained by an alternative test method for the purposes of demonstrating compliance with a relevant standard, the department may require the use of a test method specified in a relevant standard.

ced If the owner or operator uses an alternative test method for an affected source during a required performance test, the owner or operator of the source shall continue to use the alternative test method for subsequent performance tests at that affected source until he or she receives approval from the department to use another test method as allowed under this subsection.

cfđ Neither the validation and approval process nor the failure to validate an alternative test method shall abrogate the owner or operator[s] responsibility to comply with the requirements of 40 CFR part 63 or chs. NR 460 to 469.

**c6d DATA ANALYSIS, RECORDKEEPING, AND REPORTING.** cad Unless otherwise specified in a relevant standard or test method, or as otherwise approved by the department in writing, results of a performance test shall include the analysis of samples, determination of emissions and raw data. A performance test is XcompletedY when field sample collection is terminated. The owner or operator of an affected source shall report the results of the performance test to the department before the close of business on the 60th day following the completion of the performance test, unless specified otherwise in a relevant standard or as approved otherwise in writing by the department. The results of the performance test shall be submitted as part of the notification of compliance status required under s. NR 460.08 c8d. The owner or operator shall send the results of the performance test to the department.

cbd For a minimum of 5 years after a performance test is conducted, the owner or operator shall retain and make available, upon request, for inspection by the department the records or results of the performance test and other data needed to determine emissions from an affected source.

**c7d WAIVER OF PERFORMANCE TESTS.** cad Until a waiver of a performance testing requirement has been granted by the department under this subsection, the owner or operator of an affected source remains subject to the requirements of this section.

cbd Individual performance tests may be waived upon written application to the department if, in the department[s] judgment, the source is meeting the relevant standards on a continuous basis, or the source is being operated under a compliance date extension, or the owner or operator has requested a compliance date extension and the department is still considering that request.

ccd 1. If a request is made for a compliance date extension under s. NR 460.05 c7d, the application for a waiver of an initial performance test shall accompany the information required for the request for an extension. If no extension is requested or if the owner or operator has requested an extension and the department is still considering that request, the application for a waiver of an initial performance test shall be submitted at least 60 days before the performance test.

2. If an application for a waiver of a subsequent performance test is made, the application may accompany any required compliance progress report, compliance status report, or excess emissions and continuous monitoring system performance report, but it shall be submitted at least 60 days before the performance test.

3. Any application for a waiver of a performance test shall include information justifying the owner or operator[s] request for a waiver, such as the technical or economic infeasibility, or the impracticality, of the affected source performing the required test.

cdd The department shall approve or deny a request for a waiver of a performance test made under par. ccd when it does whichever of the following applies:

1. Approves or denies a compliance date extension under s. NR 460.05 c7d cgd to cLd.
2. Responds to a site-specific test plan under sub. c2d.
3. Makes a determination of compliance following the submission of a required compliance status report or excess emissions and continuous monitoring systems performance report.
4. Makes a determination of suitable progress towards compliance following the submission of a compliance progress report.

ced Approval of any waiver granted under this section may not in any way prohibit the department from later canceling the waiver. The cancellation shall be made only after notice is given to the owner or operator of the affected source.

**History:** Cr. Register, March, 1997, No. 495, eff. 4-1-97; CR 00-175: am. c4d cbd cintro.d, 1. and 2., c5d cad, cbd 3. and ccd, renum. c4d cbd 3. and 4. to be c4d cbd 4. and 5. and am., cr. c4d cbd 3. and c5d cbd 4. Register March 2002 No. 555, eff. 4-1-02; correction in c5d cbd 2. made under s. 13.93 c2md cbd 7., Stats., Register March 2002 No. 555; CR 05-039: renum. c1d cbd cintro.d and 7. and c4d cbd 4. and 5. to be c1d cbd and ccd and c4d cbd 3. and 4. and am., r. c1d cbd 1. to 6., c4d cbd 3. and c5d cbd 4., am. c4d cbd 1., 2., c5d cad, cbd 1., 2., and ccd, Register February 2006 No. 602, eff. 3-1-06; CR 07-105: am. c1d cbd and ccd, cr. c1d cdd Register December 2008 No. 636, eff. 1-1-09; corrections in c1d cdd 1. and 2. made under 13.92 c4d cbd 4., Stats., Register December 2008 No. 636.

**NR 460.07 Monitoring requirements. c1d** APPLICABILITY. cad 1. Unless otherwise specified in a relevant standard, this section applies to the owner or operator of an affected source required to do monitoring under that standard.

2. Relevant standards established under 40 CFR part 63 or chs. NR 460 to 469 will specify monitoring systems, methods or procedures, monitoring frequency and other pertinent requirements for sources regulated by those standards. This section specifies general monitoring requirements such as those governing the conduct of monitoring and requests to use alternative monitoring methods. In addition, this section specifies detailed requirements that apply to affected sources required to use CMS under a relevant standard.

cbd For the purposes of 40 CFR part 63 and in chs. NR 460 to 469, all continuous monitoring systems required under relevant standards shall be subject to the provisions of this section upon federal promulgation of performance specifications for continuous monitoring systems as specified in the relevant standard or otherwise by the department.

ccd Additional monitoring requirements for control devices used to comply with provisions in relevant standards of 40 CFR part 63 are specified in s. NR 460.10.

**c2d** CONDUCT OF MONITORING. cad Except as provided in par. camd, monitoring shall be conducted as set forth in this section and the relevant standards unless the department or the administrator does any of the following:

1. Specifies or approves the use of minor changes in methodology for the specified monitoring requirements and procedures.
2. Approves the use of an intermediate or major change or alternative to any monitoring requirements or procedures.

camd Owners or operators with flares subject to s. NR 460.10 c2d are not subject to the requirements of this section unless otherwise specified in the relevant standard.

cbd 1. When the emissions from 2 or more affected sources, are combined before being released to the atmosphere, the owner or operator may install an applicable continuous monitoring system for each emission stream or for the combined emissions streams, provided the monitoring is sufficient to demonstrate compliance with the relevant standard.

2. If the relevant standard is a mass emission standard and the emissions from one affected source are released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system at each emission point unless the installation of fewer systems is any of the following:

- a. Approved by the department.
- b. Provided for in a relevant standard.

**Note:** For example, instead of requiring that a CMS be installed at each emission point before the emissions from those points are channeled to a common control device, the standard specifies that only one CMS is required to be installed at the vent of the control device.

ccd When more than one continuous monitoring system is used to measure the emissions from one affected source, the owner or operator shall report the results as required for each continuous monitoring system. However, when one continuous monitoring system is used as a backup to another continuous monitoring system, the owner or operator shall report the results from the continuous monitoring system used to meet the monitoring requirements of 40 CFR part 63. If both continuous monitoring systems are used during a particular reporting period to meet the monitoring requirements of 40 CFR part 63, then the owner or operator shall report the results from each continuous monitoring system for the relevant compliance period.

**c3d** OPERATION AND MAINTENANCE OF CONTINUOUS MONITORING SYSTEMS. cad The owner or operator of an affected source shall maintain and operate each CMS as specified in this section, or in a relevant standard, and in a manner consistent with good air pollution control practices.

1. The owner or operator of an affected source shall maintain and operate each CMS as specified in s. NR 460.05 c4d cad.

2. The owner or operator shall keep the necessary parts for routine repairs of the affected CMS equipment readily available.

3. The owner or operator of an affected source shall develop a written startup, shutdown and malfunction plan for CMS as specified in s. NR 460.05 c4d ccd.

cbd 1. All CMS shall be installed such that representative measurements of emissions or process parameters from the affected source are obtained. In addition, CEMS shall be located according to procedures contained in the applicable performance specifications.

2. Unless the individual standard states otherwise, the owner or operator shall ensure the read out, which is the portion of the CMS that provides a visual display or record, or other indication of operation, from any CMS required for compliance with the emission standard is readily accessible on site for operational control or inspection by the operator of the equipment.

ccd All CMS shall be installed, operational and the data verified as specified in the relevant standard either prior to or in conjunction with the conduct of performance tests under s. NR 460.06. Verification of operational status shall, at a minimum, include completion of the manufacturer[s] written specifications or recommendations for installation, operation and calibration of the system.

cdd Except for system breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero low-level and high-level calibration drift adjustments, all CMS, including COMS and CEMS, shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

1. All COMS shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

2. All CEMS for measuring emissions other than opacity shall complete a minimum of one cycle of operation, which includes sampling, analyzing and data recording, for each successive 15-minute period.

ced Unless otherwise approved by the department, minimum procedures for COMS shall include a method for producing a simulated zero opacity condition and an upscale high-level opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Procedures shall provide a system check of all the analyzer[s] internal optical surfaces and all electronic circuitry, including the lamp and photodetector assembly normally used in the measurement of opacity.

cfb The owner or operator of a CMS that is not a CPMS, which is installed in accordance with the provisions of 40 CFR part 63 and the applicable CMS performance specifications, shall check the zero low-level and high-level calibration drifts at least once daily in accordance with the written procedure specified in the performance evaluation plan developed under sub. c5d ccd 1. and 2. The zero low-level and high-level calibration drifts shall be adjusted, at a minimum, whenever the 24-hour zero low-level drift exceeds 2 times the limits of the applicable performance specifications in the relevant standard. The system shall allow the amount of excess zero low-level and high-level drift measured at the 24-hour interval checks to be recorded and quantified, whenever specified. For COMS, all optical and instrumental surfaces exposed to the effluent gases shall be cleaned prior to performing the zero low-level and high-level drift adjustments; the optical surfaces and instrumental surfaces shall be cleaned when the cumulative automatic zero compensation, if applicable, exceeds 4% opacity. The CPMS shall be calibrated prior to use for the purposes of complying with this section. The CPMS shall be checked daily for indication that the system is responding. If the CPMS system includes an internal system check, results shall be recorded and checked daily for proper operation.

cgd 1. A CMS is out of control if any of the following occurs:

a. The zero low-level, mid-level, if applicable, or high-level calibration drift exceeds 2 times the applicable calibration drift specification in the applicable performance specification or in the relevant standard.

b. The CMS fails a performance test audit, including a cylinder gas audit, relative accuracy audit, relative accuracy test audit or linearity test audit.

c. The COMS calibration drift exceeds 2 times the limit in the applicable performance specification in the relevant standard.

2. When the CMS is out of control, the owner or operator of the affected source shall take the necessary corrective action and shall repeat all necessary tests which indicate that the system is out of control. The owner or operator shall take corrective action and conduct retesting until the performance requirements are below the applicable limits. The beginning of the out-of-control period is the hour the owner or operator conducts a performance check, such as calibration drift, that indicates an exceedance of the performance requirements established under 40 CFR part 63. The end of the out-of-control period is the hour following the completion of corrective action and successful demonstration that the system is within the allowable limits. During the period the CMS is out of control, recorded data may not be used in data averages and calculations or to meet any data availability requirement established under 40 CFR part 63 and in chs. NR 460 to 469.

chd The owner or operator of a CMS that is out of control as defined in par. cgd shall submit all information concerning out-of-control periods, including start and end dates and hours and descriptions of corrective actions taken, in the excess emissions and continuous monitoring system performance report required in s. NR 460.09 c5d ccd.

**c4d QUALITY CONTROL PROGRAM.** cad The results of the quality control program required in this subsection shall be considered by the department when it determines the validity of monitoring data.

cbd The owner or operator of an affected source that is required to use a CMS and is subject to the monitoring requirements of this section and a relevant standard shall develop and implement a CMS quality control program. As part of the quality control program, the owner or operator shall develop and submit to the department for approval upon request a site-specific perfor-

mance evaluation test plan for the CMS performance evaluation required in sub. c5d ccd 1., according to the procedures specified in sub. c5d. In addition, each quality control program shall include, at a minimum, a written protocol that describes procedures for each of the following operations:

1. Initial and any subsequent calibration of the CMS.
2. Determination and adjustment of the calibration drift of the CMS.
3. Preventive maintenance of the CMS, including spare parts inventory.
4. Data recording, calculations, and reporting.
5. Accuracy audit procedures, including sampling and analysis methods.
6. Program of corrective action for a malfunctioning CMS.

ccd The owner or operator shall keep the written procedures required by par. cbd on record for the life of the affected source or until the affected source is no longer subject to the provisions of 40 CFR part 63 or chs. NR 460 to 469, to be made available for inspection, upon request, by the department. If the performance evaluation plan is revised, the owner or operator shall keep previous versions of the performance evaluation plan on record to be made available for inspection, upon request, by the department, for a period of 5 years after each revision to the plan. Where relevant, these written procedures may be incorporated as part of the affected source[s] startup, shutdown and malfunction plan to avoid duplication of planning and recordkeeping efforts.

**c5d PERFORMANCE EVALUATION OF CONTINUOUS MONITORING SYSTEMS.** cad *General.* When required by a relevant standard, and at any other time as may be required under section 114 of the act c42 USC 7414d, the owner or operator of an affected source being monitored shall conduct a performance evaluation of the CMS. The performance evaluation shall be conducted according to the applicable specifications and procedures described in this section or in the relevant standard.

cbd *Notification of performance evaluation.* The owner or operator shall notify the department in writing of the date of the performance evaluation simultaneously with the notification of the performance test date required under s. NR 460.06 c2d or at least 30 days prior to the date the performance evaluation is scheduled to begin if no performance test is required.

ccd *Submission of site-specific performance evaluation test plan.* 1. Before conducting a required CMS performance evaluation, the owner or operator of an affected source shall develop and submit a site-specific performance evaluation test plan to the department for approval upon request. The performance evaluation test plan shall include the evaluation program objectives, an evaluation program summary, the performance evaluation schedule, data quality objectives, and both an internal and external quality assurance program. Data quality objectives are the pre-evaluation expectations of precision, accuracy, and completeness of data.

2. The internal quality assurance program shall include, at a minimum, the activities planned by routine operators and analysts to provide an assessment of CMS performance. The external quality assurance program shall include, at a minimum, systems audits that include the opportunity for on-site evaluation by the department of instrument calibration, data validation, sample logging and documentation of quality control data and field maintenance activities.

3. The owner or operator of an affected source shall submit the site-specific performance evaluation test plan to the department at least 30 days before the performance test or performance evaluation is scheduled to begin, or on a mutually agreed upon date, and review and approval of the performance evaluation test



plan by the department shall occur with the review and approval of the site-specific test plan under s. NR 460.06 c2d.

4. The department may request additional relevant information after the submittal of a site-specific performance evaluation test plan.

5. In the event that the department fails to approve or disapprove the site-specific performance evaluation test plan within the time period specified under s. NR 460.06 c2d, the following conditions shall apply:

a. If the owner or operator intends to demonstrate compliance using the monitoring methods specified in the relevant standard, the owner or operator shall conduct the performance evaluation within the time specified in this chapter using the specified methods.

b. If the owner or operator intends to demonstrate compliance by using an alternative to a monitoring method specified in the relevant standard, the owner or operator shall refrain from conducting the performance evaluation until the department approves the use of the alternative method. If the department does not approve the use of the alternative method within 5 days before the performance evaluation is scheduled to begin, the performance evaluation deadlines specified in par. cdd may be extended such that the owner or operator shall conduct the performance evaluation within 60 calendar days after the department approves the use of the alternative method.

c. Notwithstanding the requirements in subd. 5. b., the owner or operator may proceed to conduct the performance evaluation as required in this section, without the department[s] prior approval of the site-specific performance evaluation test plan, if the specified monitoring methods is subsequently chosen instead of an alternative.

6. Neither the submission of a site-specific performance evaluation test plan for approval, nor the department[s] approval or disapproval of a plan, nor the department[s] failure to approve or disapprove a plan in a timely manner shall cause any of the following:

a. Relieve an owner or operator of legal responsibility for compliance with any applicable provisions of 40 CFR part 63, chs. NR 460 to 469 or with any other applicable federal, state or local requirement.

b. Prevent the department from implementing or enforcing 40 CFR part 63, chs. NR 460 to 469 or taking any other action under the act.

*cdd Conduct of performance evaluation and performance evaluation dates.* The owner or operator of an affected source shall conduct a performance evaluation of a required CMS during any performance test required under s. NR 460.06 in accordance with the applicable performance specification as specified in the relevant standard. If the owner or operator of an affected source elects to submit COMS data for compliance with a relevant opacity emission standard as provided under s. NR 460.05 c6d cfd, a performance evaluation shall be conducted of the COMS as specified in the relevant standard, before the performance test required under s. NR 460.06 is conducted, in time to submit the results of the performance evaluation as specified in par. ced 2. If a performance test is not required, or the requirement for a performance test has been waived under s. NR 460.06 c7d, the owner or operator of an affected source shall conduct the performance evaluation not later than 180 days after the appropriate compliance date for the affected source, as specified in s. NR 460.06 c1d, or as otherwise specified in the relevant standard.

*ced Reporting performance evaluation results.* 1. The owner or operator shall furnish the department a copy of a written report of the results of the performance evaluation simultaneously with

the results of the performance test required under s. NR 460.06, or within 60 days of completion of the performance evaluation if no test is required, unless otherwise specified in a relevant standard. The department may request that the owner or operator submit the raw data from a performance evaluation in the report of the performance evaluation results.

2. The owner or operator of an affected source using a COMS to determine opacity compliance during any performance test required under s. NR 460.06 shall furnish the department 2 or, upon request, 3 copies of a written report of the results of the COMS performance evaluation under this subsection. The copies shall be provided at least 15 calendar days before the performance test required under s. NR 460.06 is conducted.

**c6d USE OF AN ALTERNATIVE MONITORING METHOD.** *cad Alternatives.* After receipt and consideration of written application, the department may approve minor and intermediate alternative monitoring methods or procedures of 40 CFR part 63 or chs. NR 460 to 469 including, but not limited to, any of the following:

**Note:** Under 40 CFR 63.91 cgd only EPA can approve major alternatives to monitoring methods.

1. Alternative monitoring requirements when installation of a CMS specified by a relevant standard would not provide accurate measurements due to liquid water or other interferences caused by substances within the effluent gases.

2. Alternative monitoring requirements when the affected source is infrequently operated.

3. Alternative monitoring requirements to accommodate CEMS that require additional measurements to correct for stack moisture conditions.

4. Alternative locations for installing CMS when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements.

5. Alternate methods for converting pollutant concentration measurements to units of the relevant standard.

6. Alternate procedures for performing daily checks of zero low-level and high-level drift that do not involve use of high-level gases or test cells.

7. Alternatives to the American Society for Testing and Materials test methods or sampling procedures specified by any relevant standard.

8. Alternative CMS that do not meet the design or performance requirements in 40 CFR part 63 or chs. NR 460 to 469, but adequately demonstrate a definite and consistent relationship between their measurements and the measurements of opacity by a system complying with the requirements as specified in the relevant standard. The department may require that the demonstration be performed for each affected source.

9. Alternative monitoring requirements when the effluent from a single affected source or the combined effluent from 2 or more affected sources is released to the atmosphere through more than one point.

*cbd Disputed results.* If the department finds reasonable grounds to dispute the results obtained by an alternative monitoring method, requirement or procedure, the department may require the use of a method, requirement or procedure specified in this section or in the relevant standard. If the results of the specified and alternative method, requirement or procedure do not agree, the results obtained by the specified method, requirement or procedure shall prevail.

*ccd Request to use alternative monitoring procedure.* 1. An owner or operator who wishes to use an alternative monitoring procedure shall submit an application to the department as described in subd. 2. The application may be submitted at any time

provided that the monitoring procedure is not the performance test method used to demonstrate compliance with a relevant standard or other requirement. If the alternative monitoring procedure will serve as the performance test method that is to be used to demonstrate compliance with a relevant standard, the application shall be submitted at least 60 days before the performance evaluation is scheduled to begin and shall meet the requirements for an alternative test method under s. [NR 460.06 c5d](#).

2. The application shall contain a description of the proposed alternative monitoring system which addresses the 4 elements contained in the definition of monitoring in s. [NR 460.02 c24wd](#) and a performance evaluation test plan, if required, as specified in sub. [c5d ccd](#). In addition, the application shall include information justifying the owner or operator's request for an alternative monitoring procedure, such as the technical or economic infeasibility, or the impracticality, of the affected source using the required method.

3. The owner or operator may submit the information required in this subsection well in advance of the submittal dates specified in subd. 1. to ensure a timely review by the department in order to meet the compliance demonstration date specified in this section or the relevant standard.

4. Application for minor changes to monitoring procedures, as specified in sub. [c2d cad](#), may be made in the site-specific performance evaluation plan.

*ccd Approval of request to use alternative monitoring procedure.*

1. The department shall notify the owner or operator of approval or intention to deny approval of the request to use an alternative monitoring procedure within 30 calendar days after receipt of the original request and within 30 calendar days after receipt of any supplementary information that is submitted. If a request for a minor change is made in conjunction with the site-specific performance evaluation plan, approval of the plan shall constitute approval of the minor change. Before disapproving any request to use an alternative monitoring method, the department shall notify the applicant of the department's intention to disapprove the request together with all of the following:

a. Notice of the information and findings on which the intended disapproval is based.

b. Notice of opportunity for the owner or operator to present additional information to the department before final action on the request. At the time the department notifies the applicant of its intention to disapprove the request, the department shall specify how much time the owner or operator will have after being notified of the intended disapproval to submit the additional information.

2. The department may establish general procedures and criteria in a relevant standard to accomplish the requirements of subd. 1.

3. If the department approves the use of an alternative monitoring method for an affected source under subd. 1., the owner or operator of the source shall continue to use the alternative monitoring method until he or she receives approval from the department to use another monitoring method as allowed under this subsection.

*ced Alternative to the relative accuracy test.* An alternative to the relative accuracy test for CEMS specified in a relevant standard may be requested as follows:

1. An alternative to the test method for determining relative accuracy is available for affected sources with emission rates demonstrated to be less than 50% of the relevant standard. The owner or operator of an affected source may petition the department under subd. 2. to substitute the relative accuracy test in section 7 of Performance Specification 2 in Appendix B of [40 CFR](#)

[part 60](#), incorporated by reference in s. [NR 484.04 c21d](#), with the procedures in section 10 if the results of a performance test conducted according to the requirements in s. [NR 460.06](#), or other tests performed following the criteria in s. [NR 460.06](#), demonstrate that the emission rate of the pollutant of interest in the units of the relevant standard is less than 50% of the relevant standard. For affected sources subject to emission limitations expressed as control efficiency levels, the owner or operator may petition the department to substitute the relative accuracy test with the procedures in section 10 of Performance Specification 2 if the control device exhaust emission rate is less than 50% of the level needed to meet the control efficiency requirement. The alternative procedures do not apply if the CEMS is used continuously to determine compliance with the relevant standard.

2. The petition to use an alternative to the relative accuracy test shall include a detailed description of the procedures to be applied, the location and the procedure for conducting the alternative, the concentration or response levels of the alternative relative accuracy materials, and the other equipment checks included in the alternative procedures. The department shall review the petition for completeness and applicability. The department's determination to approve an alternative shall depend on the intended use of the CEMS data and may require specifications more stringent than in Performance Specification 2.

3. The department shall review the permission to use an alternative to the CEMS relative accuracy test and may rescind the permission if the CEMS data from a successful completion of the alternative relative accuracy procedure indicate that the affected source's emissions are approaching the level of the relevant standard. The criterion for reviewing the permission is that the collection of CEMS data shows that emissions have exceeded 70% of the relevant standard for any averaging period, as specified in the relevant standard. For affected sources subject to emission limitations expressed as control efficiency levels, the criterion for reviewing the permission is that the collection of CEMS data shows that exhaust emissions have exceeded 70% of the level needed to meet the control efficiency requirement for any averaging period, as specified in the relevant standard. The owner or operator of the affected source shall maintain records and determine the level of emissions relative to the criterion for permission to use an alternative for relative accuracy testing. If this criterion is exceeded, the owner or operator shall notify the department within 10 days of the occurrence and include a description of the nature and cause of the increased emissions. The department shall review the notification and may rescind permission to use an alternative and require the owner or operator to conduct a relative accuracy test of the CEMS as specified in section 7 of Performance Specification 2 in Appendix B of [40 CFR part 60](#), incorporated by reference in s. [NR 484.04 c21d](#).

*c7d REDUCTION OF MONITORING DATA.* *cad* The owner or operator of each CMS shall reduce the monitoring data as specified in this subsection.

*cbd* The owner or operator of each COMS shall reduce all data to 6-minute averages calculated from 36 or more data points equally spaced over each 6-minute period. Data from CEMS for measurement other than opacity, unless otherwise specified in the relevant standard, shall be reduced to 1-hour averages computed from 4 or more data points equally spaced over each 1-hour period, except during periods when calibration, quality assurance or maintenance activities pursuant to provisions of [40 CFR part 63](#) or chs. [NR 460](#) to [469](#) are being performed. During these periods, a valid hourly average shall consist of at least 2 data points with each representing a 15-minute period. Alternatively, an arithmetic or integrated 1-hour average of CEMS data may be used. Time periods for averaging are defined in s. [NR 460.02](#).

ccd The data may be recorded in reduced or nonreduced form.

cdd All emission data shall be converted into units of the relevant standard for reporting purposes using the conversion procedures specified in that standard. After conversion into units of the relevant standard, the data may be rounded to the same number of significant digits as used in that standard to specify the emission limit.

ced Monitoring data recorded during periods of unavoidable CMS breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks and zero flow-level and high-level adjustments may not be included in any data average computed under 40 CFR part 63 or under chs. NR 460 to 469. For owners or operators complying with the requirements of s. NR 460.09 c2d cbd 7., data averages shall include any data recorded during periods of monitor breakdown or malfunction.

**History:** Cr. Register, March, 1997, No. 495, eff. 4-1-97; CR 00-175: am. c6d cad cintro.d, ced 1., and c7d eed Register March 2002 No. 555, eff. 4-1-02; corrections in c6d ced 1. and 3. made under s. 13.93 c2md cbd 7., Stats., Register March 2002 No. 555; CR 05-039: am. c2d cad cintro.d, 2., cbd 1., 2. cintro.d, c3d cad 1., cfd, c6d ced 1., 2., cdd 1. cintro.d, and c7d cad, r. and recr. c3d cad 2. and 3., renum. c3d cbd to be c3d cbd 1., cr. c3d cbd 2. and c6d ced 4., Register February 2006 No. 602, eff. 3-1-06; CR 07-105: am. c3d cad 3. Register December 2008 No. 636, eff. 1-1-09.

**NR 460.08 Notification requirements. c1d** APPLICABILITY AND GENERAL INFORMATION. cad The requirements in this section apply to owners and operators of affected sources that are subject to the provisions of 40 CFR part 63 and chs. NR 460 to 469, unless specified otherwise in a relevant standard.

cbd For affected sources that have been granted an extension of compliance under Subpart D of 40 CFR part 63, the requirements of this section do not apply to those sources while they are operating under compliance extensions.

**c2d** INITIAL NOTIFICATIONS. cad 1. The requirements of this subsection apply to the owner or operator of an affected source when the source becomes subject to a relevant standard.

2. If an area source that otherwise would be subject to an emission standard or other requirement established under 40 CFR part 63 or chs. NR 460 to 469 if it were a major source subsequently increases its emissions of hazardous air pollutants, or its potential to emit hazardous air pollutants, such that the source is a major source that is subject to the emission standard or other requirement, the source shall be subject to the notification requirements of this section.

3. Affected sources that are required under this subsection to submit an initial notification may use the application for approval of construction or reconstruction under ch. NR 406, if relevant, to fulfill the initial notification requirements of this subsection.

cbd The owner or operator of an affected source that has an initial startup before the effective date of a relevant standard under 40 CFR part 63 shall notify the department in writing that the source is subject to the relevant standard. The notification, which shall be submitted not later than 120 calendar days after the effective date of the relevant standard, or within 120 calendar days after the source becomes subject to the relevant standard, shall provide all of the following information:

1. The name and address of the owner or operator.
2. The address where the affected source is located.
3. An identification of the relevant standard, or other requirement, that is the basis of the notification and the source[s] compliance date.
4. A brief description of the nature, size, design, and method of operation of the source, and an identification of the types of emission points within the affected source subject to the relevant standard and types of hazardous air pollutants emitted.

5. A statement of whether the affected source is a major source or an area source.

cdd The owner or operator of a new or reconstructed major affected source for which an application for approval of construction or reconstruction is required under s. 285.61 c1d, Stats., shall provide all of the following information in writing to the department:

1. A notification of intention to construct a new major affected source, reconstruct a major affected source or reconstruct a major source such that the source becomes a major affected source with the application for approval of construction or reconstruction as specified in s. 285.61 c1d, Stats.

5. A notification of the actual date of startup of the source, delivered or postmarked within 15 calendar days after that date.

ced The owner or operator of a new or reconstructed affected source for which an application for approval of construction or reconstruction is not required under s. NR 406.03 shall provide all of the following information in writing to the department:

1. A notification of intention to construct a new affected source, reconstruct an affected source or reconstruct a source such that the source becomes an affected source.

2. A notification of the actual date of startup of the source, delivered or postmarked within 15 calendar days after that date.

3. Unless the owner or operator has requested and received prior permission from the department to submit less than the information in s. 285.61 c1d, Stats., the notification shall include the information required on the application for approval of construction or reconstruction as specified in s. 285.61 c1d, Stats.

**c3d** REQUEST FOR A COMPLIANCE DATE EXTENSION. If the owner or operator of an affected source cannot comply with a relevant standard by the applicable compliance date for that source, or if the owner or operator has installed BACT or technology to meet LAER consistent with s. NR 460.05 c7d cdd, the owner or operator may submit to the department a request for an extension of the compliance date as specified in s. NR 460.05 c7d ccd to cemd.

**c4d** NOTIFICATION THAT SOURCE IS SUBJECT TO SPECIAL COMPLIANCE REQUIREMENTS. An owner or operator of a new MACT source that is subject to special compliance requirements as specified in s. NR 460.05 c2d ccd and cdd shall notify the department of the compliance obligations not later than the notification dates established in sub. c2d for new MACT sources that are not subject to the special provisions.

**c5d** NOTIFICATION OF PERFORMANCE TEST. The owner or operator of an affected source shall notify the department in writing of his or her intention to conduct a performance test at least 30 calendar days before the performance test is scheduled to begin to allow the department to review and approve the site-specific test plan required under s. NR 460.06 c2d and to have an observer present during the test.

**c6d** NOTIFICATION OF OPACITY AND VISIBLE EMISSION OBSERVATIONS. The owner or operator of an affected source shall notify the department in writing of the anticipated date for conducting the opacity or visible emission observations specified in s. NR 460.05 c6d cdd, if the observations are required for the source by a relevant standard. The notification shall be submitted with the notification of the performance test date, as specified in sub. c5d, or if no performance test is required or visibility or other conditions prevent the opacity or visible emission observations from being conducted concurrently with the initial performance test required under s. NR 460.06, the owner or operator shall deliver or postmark the notification not less than 30 days before the opacity or visible emission observations are scheduled to take place.

**c7d** ADDITIONAL NOTIFICATION REQUIREMENTS FOR SOURCES WITH CONTINUOUS MONITORING SYSTEMS. The owner or operator of an affected source required to use a continuous monitoring system by a relevant standard shall furnish the department written notification of all of the following:

cad A notification of the date the continuous monitoring system performance evaluation under s. NR 460.07 c5d is scheduled to begin, submitted simultaneously with the notification of the performance test date required under s. NR 460.06 c2d. If no performance test is required, or if the requirement to conduct a performance test has been waived for an affected source under s. NR 460.06 c7d, the owner or operator shall notify the department in writing of the date of the performance evaluation at least 30 calendar days before the evaluation is scheduled to begin.

cbd A notification that continuous opacity monitoring system data results will be used to determine compliance with the applicable opacity emission standard during a performance test required by s. NR 460.06 in lieu of Method 9 or other opacity emissions test method data, as allowed by s. NR 460.05 c6d cfd 2., if compliance with an opacity emission standard is required for the source by a relevant standard. The notification shall be submitted at least 30 calendar days before the performance test is scheduled to begin.

ccd A notification that the criterion necessary to continue use of an alternative to relative accuracy testing, as provided by s. NR 460.07 c6d ced, has been exceeded. The notification shall be delivered or postmarked not later than 10 days after the occurrence of the exceedance, and it shall include a description of the nature and cause of the increased emissions.

**c8d** NOTIFICATION OF COMPLIANCE STATUS. cad The requirements of pars. cbd and ccd apply when an affected source becomes subject to a relevant standard.

cbd 1. Before a part 70 permit has been issued to the owner or operator of an affected source, and each time a notification of compliance status is required under 40 CFR part 63 or chs. NR 460 to 469, the owner or operator of the source shall submit to the department a notification of compliance status, signed by the responsible official who shall certify its accuracy, attesting to whether the source has complied with the relevant standard. The notification shall list all of the following:

- a. The methods that were used to determine compliance.
- b. The results of any performance tests, opacity or visible emission observations, continuous monitoring system performance evaluations, and other monitoring procedures or methods that were conducted.
- c. The methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods.
- d. The type and quantity of hazardous air pollutants emitted by the source, or surrogate pollutants if specified in the relevant standard, reported in units and averaging times and in accordance with the test methods specified in the relevant standard.
- e. If the relevant standard applies to both major and area sources, an analysis demonstrating whether the affected source is a major source, using the emissions data generated for this notification.
- f. A description of the air pollution control equipment or method for each emission point, including each control device or method for each hazardous air pollutant and the control efficiency cpercentd for each control device or method.
- g. A statement by the owner or operator of the affected existing, new or reconstructed source as to whether the source has complied with the relevant standard or other requirements.

2. The notification shall be sent before the close of business on the 60th day following the completion of the relevant compliance demonstration activity specified in the relevant standard, unless a different reporting period is specified in the standard, in which case the letter shall be sent before the close of business on the day the report of the relevant testing or monitoring results is required to be delivered or postmarked. For example, the notification shall be sent before close of business on the 60th, or other required, day following completion of the initial performance test and again before the close of business on the 60th, or other required, day following the completion of any subsequent required performance test. If no performance test is required but opacity or visible emission observations are required to demonstrate compliance with an opacity or visible emission standard under 40 CFR part 63 or chs. NR 460 to 469, the notification of compliance status shall be sent before close of business on the 30th day following the completion of opacity or visible emission observations. Notifications may be combined as long as the due date requirement for each notification is met.

ccd After a part 70 permit has been issued to the owner or operator of an affected source, the owner or operator of the source shall comply with all requirements for compliance status reports contained in the source[s part 70 permit, including reports required under 40 CFR part 63 or chs. NR 460 to 469. After a part 70 permit has been issued to the owner or operator of an affected source, and each time a notification of compliance status is required under 40 CFR part 63 or chs. NR 460 to 469, the owner or operator of the source shall submit the notification of compliance status to the department following completion of the relevant compliance demonstration activity specified in the relevant standard.

cdd If an owner or operator of an affected source submits estimates or preliminary information in the application for approval of construction or reconstruction required in ch. NR 406 in place of the actual emissions data or control efficiencies, the owner or operator shall submit the actual emissions data and other correct information as soon as available but no later than with the initial notification of compliance status required in this section.

ced Advice on a notification of compliance status may be obtained from the department.

**c9d** ADJUSTMENT TO TIME PERIODS OR POSTMARK DEADLINES FOR SUBMITTAL AND REVIEW OF REQUIRED COMMUNICATIONS. cad An owner or operator shall request the adjustment provided for in pars. cbd and ccd each time he or she wishes to change an applicable time period or postmark deadline specified in chs. NR 460 to 469 or in 40 CFR part 63.

cbd Notwithstanding time periods or postmark deadlines specified in chs. NR 460 to 469 or 40 CFR part 63 for the submittal of information to the department by an owner or operator, or the review of the information by the department, time periods or deadlines may be changed by mutual agreement between the owner or operator and the department. An owner or operator who wishes to request a change in a time period or postmark deadline for a particular requirement shall request the adjustment in writing as soon as practicable before the subject activity is required to take place. The owner or operator shall include in the request whatever information he or she considers useful to convince the department that an adjustment is warranted.

ccd If, in the department[s judgment, an owner or operator[s request for an adjustment to a particular time period or postmark deadline is warranted, the department shall approve the adjustment. The department shall notify the owner or operator in writing of approval or disapproval of the request for an adjustment

within 15 calendar days of receiving sufficient information to evaluate the request.

cdd If the department is unable to meet a specified deadline, it shall notify the owner or operator of any significant delay and inform the owner or operator of the amended schedule.

**c10d CHANGE IN INFORMATION ALREADY PROVIDED.** Any change in the information already provided under this section shall be provided to the department in writing within 15 calendar days after the change.

**History:** Cr. Register, March, 1997, No. 495, eff. 4-1-97; CR 00-175: r. c2d cdd 4. Register March 2002 No. 555, eff. 4-1-02; CR 05-039: am. c2d cbd 4., cdd cintro.d, 1., ced, c8d cbd 1. e. and 2., r. c2d ced, cdd 2. and 3., Register February 2006 No. 602, eff. 3-1-06.

**NR 460.09 Recordkeeping and reporting requirements. c1d** APPLICABILITY AND GENERAL INFORMATION. cad The requirements of this section apply to owners or operators of affected sources who are subject to the provisions of [40 CFR part 63](#) or chs. [NR 460](#) to [469](#), unless specified otherwise in a relevant standard.

cbd For affected sources that have been granted an extension of compliance under Subpart D of [40 CFR part 63](#), the requirements of this section do not apply to those sources while they are operating under compliance extensions.

ccd The owner or operator of an affected source subject to recordkeeping and reporting requirements established under [40 CFR part 63](#) or chs. [NR 460](#) to [469](#) shall submit the required reports to the department.

cdd If an owner or operator supervises one or more stationary sources in Wisconsin affected by more than one standard established pursuant to section 112 of the act [c42 USC 7412d](#), the owner or operator and the department may arrange by mutual agreement a common schedule on which periodic reports required for each source shall be submitted throughout the year. The allowance in the previous sentence applies beginning one year after the latest compliance date for any relevant standard established pursuant to section 112 of the act [c42 USC 7412d](#). Procedures governing the implementation of this provision are specified in s. [NR 460.08 c9d](#).

ced If an owner or operator supervises one or more stationary sources affected by standards established pursuant to section 112 of the act [c42 USC 7412d](#), as amended November 15, 1990, and standards set under [40 CFR part 60](#), [40 CFR part 61](#), or both parts, the owner or operator and the department may arrange by mutual agreement a common schedule on which periodic reports required by each relevant standard shall be submitted throughout the year. The allowance in the previous sentence applies beginning one year after the stationary source is required to be in compliance with the relevant section 112 standard, or one year after the stationary source is required to be in compliance with the applicable [40 CFR part 60](#) or [40 CFR part 61](#) standard, whichever is latest. Procedures governing the implementation of this provision are specified in s. [NR 460.08 c9d](#).

**c2d** GENERAL RECORDKEEPING REQUIREMENTS. cad *General.* The owner or operator of an affected source subject to the provisions of [40 CFR part 63](#) or chs. [NR 460](#) to [469](#) shall maintain files of all information, including all reports and notifications, required by [40 CFR part 63](#) or chs. [NR 460](#) to [469](#) recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Files may be maintained on micro-

film, on a computer, on computer floppy disks, on magnetic tape disks or on microfiche.

cbd *Recordkeeping requirements.* The owner or operator of an affected source subject to the provisions of [40 CFR part 63](#) shall maintain relevant records for the source of all of the following:

1. The occurrence and duration of each startup or shutdown 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.

3. All required maintenance performed on the air pollution control and monitoring equipment.

4. a. Actions taken during periods of startup or shutdown 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 c4d ccd](#).

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 c4d ccd](#).

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 c4d ccd](#), 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.

6. Each period during which a continuous monitoring system is malfunctioning or inoperative, including out-of-control periods.

7. All required measurements needed to demonstrate compliance with a relevant standard, including, but not limited to, 15-minute averages of continuous monitoring system data, raw performance testing measurements and raw performance evaluation measurements, that support data that the source is required to report. The following limitations apply:

a. This subdivision paragraph applies to owners or operators required to install a continuous emissions monitoring system cCEMSd where the CEMS installed is automated, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. An automated CEMS records and reduces the measured data to the form of the pollutant emission standard through the use of a computerized data acquisition system. In lieu of maintaining a file of all CEMS subhourly measurements under this subdivision, the owner or operator shall retain the most recent consecutive 3 averaging periods of subhourly measurements and a file that contains a hard copy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard.

b. This subdivision paragraph applies to owners or operators required to install a CEMS where the measured data is manually

reduced to obtain the reportable form of the standard, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. In lieu of maintaining a file of all CEMS subhourly measurements under this subdivision, the owner or operator shall retain all subhourly measurements for the most recent reporting period. The subhourly measurements shall be retained for 120 days from the date of the most recent summary or excess emission report submitted to the department.

c. The department, upon notification to the source, may require the owner or operator to maintain all measurements as required by subd. 7. [cintro.d](#) if the department determines these records are required to more accurately assess the compliance status of the affected source.

8. All results of performance tests, continuous monitoring system performance evaluations, and opacity and visible emission observations.

9. All measurements as may be necessary to determine the conditions of performance tests and performance evaluations.

10. All continuous monitoring system calibration checks.

11. All adjustments and maintenance performed on continuous monitoring systems.

12. Any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements under [40 CFR part 63](#) or chs. [NR 460 to 469](#), if the source has been granted a waiver under sub. [c6d](#).

13. All emission levels relative to the criterion for obtaining permission to use an alternative to the relative accuracy test, if the source has been granted permission under s. [NR 460.07 c6d ccd](#).

14. All documentation supporting initial notifications and notifications of compliance status under s. [NR 460.08](#).

*ccd Recordkeeping requirements for applicability determinations.* If an owner or operator determines that his or her stationary source that emits, or has the potential to emit, without considering controls, one or more hazardous air pollutants regulated by any standard established pursuant to section 112 *cdd* or *cfdd*, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard or other requirement established under [40 CFR part 63](#) or chs. [NR 460 to 469](#), because of limitations on the source[s] potential to emit or an exclusion, the owner or operator shall keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination shall be signed by the person making the determination and include an analysis or other information that demonstrates why the owner or operator believes the source is not an affected source. The analysis or other information shall be sufficiently detailed to allow the department to make a finding about the source[s] applicability status with regard to the relevant standard or other requirement. If relevant, the analysis shall be performed in accordance with requirements established in relevant subparts of [40 CFR part 63](#) for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with EPA guidance materials published to assist sources in making applicability determinations under section 112 of the Act [c42 USC 7412d](#), if any. The requirements to determine applicability of a standard under [40 CFR 63.1 cbd c3d](#) and to record the results of that determination under this paragraph do not by themselves create an obligation for the owner or operator to obtain a title V permit.

**c3d** ADDITIONAL RECORDKEEPING REQUIREMENTS FOR SOURCES WITH CONTINUOUS MONITORING SYSTEMS. *cad* In addition to complying with the requirements specified in sub. [c2d](#)

*cad* and *cbd*, the owner or operator of an affected source required to install a continuous monitoring system by a relevant standard shall maintain records for the source of all of the following:

1. All required continuous monitoring system measurements, including monitoring data recorded during unavoidable continuous monitoring system breakdowns and out-of-control periods.

2. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero low-level and high-level checks.

3. The date and time identifying each period during which the continuous monitoring system was out of control, as defined in s. [NR 460.07 c3d cgd](#).

4. The specific identification, including date and times, of each period of excess emissions and parameter monitoring exceedances, as defined in the relevant standards, that occurs during startups, shutdowns and malfunctions of the affected source.

5. The specific identification, including the date and times, of each period of excess emissions and parameter monitoring exceedances, as defined in the relevant standards, that occurs during periods other than startups, shutdowns and malfunctions of the affected source.

6. The nature and cause of any malfunction, if known.

7. The corrective action taken or preventive measures adopted.

8. The nature of the repairs or adjustments to the continuous monitoring system that was inoperative or out of control.

9. The total process operating time during the reporting period.

10. All procedures that are part of a quality control program developed and implemented for the continuous monitoring system under s. [NR 460.07 c4d](#).

*cbd* In order to satisfy the requirements of par. [cad 6](#), to [8](#), and to avoid duplicative recordkeeping efforts, the owner or operator may use the affected source[s] startup, shutdown and malfunction plan or records kept to satisfy the recordkeeping requirements of the startup, shutdown and malfunction plan specified in s. [NR 460.05 c4d](#), provided that the plan and records adequately address the requirements of par. [cad 6](#), to [8](#).

**c4d** GENERAL REPORTING REQUIREMENTS. *cad General.* Notwithstanding the requirements in this subsection or sub. [c5d](#), and except as provided in s. [NR 460.11](#), the owner or operator of an affected source subject to reporting requirements under [40 CFR part 63](#) or under chs. [NR 460 to 469](#) shall submit reports to the department in accordance with the reporting requirements in the relevant standards.

*cbd Reporting results of performance tests.* The owner or operator of an affected source shall report the results of any performance test under s. [NR 460.06](#) to the department. The owner or operator of an affected source shall report the results of the performance test to the department before the close of business on the 60th day following the completion of the performance test, unless specified otherwise in a relevant standard or as approved otherwise in writing by the department. The results of the performance test shall be submitted as part of the notification of compliance status required under s. [NR 460.08 c8d](#).

*ccd Reporting results of opacity or visible emission observations.* The owner or operator of an affected source required to conduct opacity or visible emission observations by a relevant standard shall report the opacity or visible emission results, produced using Method 9 or Method 22 in Appendix A of [40 CFR part 60](#), incorporated by reference in s. [NR 484.04 c13d](#), or an alternative to these test methods, along with the results of the per-

formance test required under s. NR 460.06. If no performance test is required, or if visibility or other conditions prevent the opacity or visible emission observations from being conducted concurrently with the performance test required under s. NR 460.06, the owner or operator shall report the opacity or visible emission results before the close of business on the 30th day following the completion of the opacity or visible emission observations.

*cdd Progress reports.* The owner or operator of an affected source who is required to submit progress reports as a condition of receiving a compliance date extension under s. NR 460.05 c7d shall submit the reports to the department by the dates specified in the written compliance date extension.

*ced Startup, shutdown and malfunction reports.* 1. ZPeriodic 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 c4d ccd, the owner or operator shall state the information in a startup, shutdown and malfunction report. 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. c5d, 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. c5d ccd.

2. ZImmediate 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, 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 cFAXd 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, 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 c4d cad 1.

3. ZAlternative reporting arrangements.[ Notwithstanding the requirements of subd. 2., the owner or operator may make alternative reporting arrangements, in advance, with the department. Procedures governing the arrangement of alternative reporting requirements under this subsection are specified in s. NR 460.08 c9d.

**c5d** ADDITIONAL REPORTING REQUIREMENTS FOR SOURCES WITH CONTINUOUS MONITORING SYSTEMS. *cad General.* When more than one CEMS is used to measure the emissions from one affected source, due to multiple breechings or outlets, for example, the owner or operator shall report the results as required for each CEMS.

*cbd Reporting results of continuous monitoring system performance evaluations.* 1. The owner or operator of an affected source required to install a continuous monitoring system by a relevant standard shall furnish the department a copy of a written report of the results of the continuous monitoring system performance evaluation, as required under s. NR 460.07 c5d, simultaneously with the results of the performance test required under s. NR 460.06, unless otherwise specified in the relevant standard.

2. The owner or operator of an affected source using a continuous opacity monitoring system to determine opacity compliance during any performance test required under s. NR 460.06 shall furnish the department 2 or, upon request, 3 copies of a written report of the results of the continuous opacity monitoring system performance evaluation conducted under s. NR 460.07 c5d. The copies shall be furnished at least 15 calendar days before the performance test required under s. NR 460.06 is conducted.

*ccd Excess emissions and continuous monitoring system performance report and summary report.* 1. Excess emissions and parameter monitoring exceedances are defined in relevant standards. The owner or operator of an affected source required to install a continuous monitoring system by a relevant standard shall submit an excess emissions and continuous monitoring system performance report or a summary report or both to the department semiannually, except when any of the following occur:

a. More frequent reporting is specifically required by a relevant standard.

b. The department determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source.

c. The affected source is complying with the Performance Track provisions of s. NR 460.11, which allows less frequent reporting.

2. Notwithstanding the frequency of reporting requirements specified in subd. 1., an owner or operator who is required by a

relevant standard to submit excess emissions and continuous monitoring system performance and summary reports on a quarterly or more frequent basis may reduce the frequency of reporting for that standard to semiannual if all of the following conditions are met:

a. For 1 full year, the affected source[s] excess emissions and continuous monitoring system performance reports, which may be quarterly or monthly, continually demonstrate that the source is in compliance with the relevant standard.

b. The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in this chapter and the relevant standard.

c. The department does not object to a reduced frequency of reporting for the affected source, as provided in subd. 3.

3. The frequency of reporting of excess emissions and continuous monitoring system performance and summary reports required to comply with a relevant standard may be reduced only after the owner or operator notifies the department in writing of his or her intention to make a change and the department does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the department may review information concerning the source[s] entire previous performance history during the 5-year recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator[s] conformance with operation and maintenance requirements. The information may be used by the department to make a judgment about the source[s] potential for noncompliance in the future. If the department disapproves the owner or operator[s] request to reduce the frequency of reporting, the department shall notify the owner or operator in writing within 45 days after receiving notice of the owner or operator[s] intention. The notification from the department to the owner or operator shall specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

4. As soon as continuous monitoring system data indicate that the source is not in compliance with any emission limitation or operating parameter specified in the relevant standard, the frequency of reporting shall revert to the frequency specified in the relevant standard, and the owner or operator shall submit an excess emissions and continuous monitoring system performance report and summary report for the noncomplying emission points at the next appropriate reporting period following the noncomplying event. After demonstrating ongoing compliance with the relevant standard for another full year, the owner or operator may again request approval from the department to reduce the frequency of reporting for that standard, as provided for in subds. 2. and 3.

5. All excess emissions and monitoring system performance reports and all summary reports, if required, shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. Written reports of excess emissions or exceedances of process or control system parameters shall include all the information required in sub. c3d cad 2. to 8., in s. NR 460.07 c3d cgd and chd, and in the relevant standard, and they shall contain the name, title and signature of the responsible official who is certifying the accuracy of the report. When no excess emissions or exceedances of a parameter have occurred, or a continuous monitoring system has not been inoperative, out of control, repaired or adjusted, this information shall be stated in the report.

6. As required under subds. 7. and 8., one summary report shall be submitted for the hazardous air pollutants monitored at each affected source, unless the relevant standard specifies that

more than one summary report is required, such as one summary report for each hazardous air pollutant monitored. The summary report shall be entitled XSummary Report - Gaseous and Opacity Excess Emission and Continuous Monitoring System PerformanceY and shall contain all of the following information:

a. The company name and address of the affected source.

b. An identification of each hazardous air pollutant monitored at the affected source.

c. The beginning and ending dates of the reporting period.

d. A brief description of the process units.

e. The emission and operating parameter limitations specified in the relevant standards.

f. The monitoring equipment manufacturers and model numbers.

g. The date of the latest continuous monitoring system certification or audit.

h. The total operating time of the affected source during the reporting period.

i. An emission data summary, or similar summary if the owner or operator monitors control system parameters, including the total duration of excess emissions during the reporting period, recorded in minutes for opacity and hours for gases, the total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to startup or shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

j. A continuous monitoring system performance summary, or similar summary if the owner or operator monitors control system parameters, including the total continuous monitoring system downtime during the reporting period, recorded in minutes for opacity and hours for gases, the total duration of continuous monitoring system downtime expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total continuous monitoring system downtime during the reporting period into periods that are due to monitoring equipment malfunctions, nonmonitoring equipment malfunctions, quality assurance{quality control calibrations, other known causes, and other unknown causes.

k. A description of any changes in continuous monitoring system, processes or controls since the last reporting period.

L. The name, title and signature of the responsible official who is certifying the accuracy of the report.

m. The date of the report.

7. If the total duration of excess emissions or process or control system parameter exceedances for the reporting period is less than one percent of the total operating time for the reporting period, and continuous monitoring system downtime for the reporting period is less than 5% of the total operating time for the reporting period, only the summary report shall be submitted, and the full excess emissions and continuous monitoring system performance report need not be submitted unless required by the department.

8. If the total duration of excess emissions or process or control system parameter exceedances for the reporting period is one percent or greater of the total operating time for the reporting period, or the total continuous monitoring system downtime for the reporting period is 5% or greater of the total operating time for the reporting period, both the summary report and the excess emissions and continuous monitoring system performance report shall be submitted.



cdd *Reporting continuous opacity monitoring system data produced during a performance test.* The owner or operator of an affected source required to use a continuous opacity monitoring system shall record the monitoring data produced during a performance test required under s. NR 460.06 and shall furnish the department a written report of the monitoring results. The report of continuous opacity monitoring system data shall be submitted simultaneously with the report of the performance test results required in sub. c4d cbd.

**c6d WAIVER OF RECORDKEEPING OR REPORTING REQUIREMENTS.** cad Until a waiver of a recordkeeping or reporting requirement has been granted by the administrator or the department under this subsection, the owner or operator of an affected source remains subject to the requirements of this section.

**Note:** Under 40 CFR 63.91 cgd only EPA can approve major changes to recordkeeping and reporting requirements.

cbd Recordkeeping or reporting requirements may be waived upon written application to the administrator or, for minor changes, the department if the affected source is achieving the relevant standards, or the source is operating under a compliance date extension, or the owner or operator has requested a compliance date extension and the department is still considering that request.

ccd If an application for a waiver of recordkeeping or reporting is made for a minor change to recordkeeping or reporting, the application shall accompany the request for a compliance date extension under s. NR 460.05 c7d, any required compliance progress report or compliance status report required under 40 CFR part 63 or chs. NR 460 to 469 or in the source[s] part 70 permit, or an excess emissions and continuous monitoring system performance report required under sub. c5d, whichever is applicable. The application shall include whatever information the owner or operator considers useful to convince the department that a waiver of recordkeeping or reporting is warranted.

cdd The department shall approve or deny a request for a minor waiver of recordkeeping or reporting requirements under this subsection when it does whichever of the following is applicable:

1. Approves or denies a compliance date extension.
2. Makes a determination of compliance following the submission of a required compliance status report or excess emissions and continuous monitoring systems performance report.
3. Makes a determination of suitable progress towards compliance following the submission of a compliance progress report.

ced A waiver of any recordkeeping or reporting requirement granted under this subsection may be conditioned on other recordkeeping or reporting requirements deemed necessary by the department.

cfđ Approval of any waiver granted under this section will not abrogate the department[s] authority or in any way prohibit the department from later canceling the waiver. The cancellation will be made only after notice is given to the owner or operator of the affected source.

**History:** Cr. Register, March, 1997, No. 495, eff. 4-1-97; CR 00-175: renum. c2d cbd 7. to be c2d cbd 7. cintro.d, cr. c2d cbd 7. a. to c., r. c5d ccd 1. c., am. c6d cad to cdd cintro.d Register March 2002 No. 555, eff. 4-1-02; correction in c4d ccd made under s. 13.93 c2md cbd 7., Stats., Register March 2002 No. 555; CR 05-039: am. c2d cbd 2. to 5., ccd, c4d cad, ced 1. and 2., cr. c5d ccd 1. c. Register February 2006 No. 602, eff. 3-1-06; CR 07-105: am. c2d cbd 1., 2., 5., c4d ced 1. and 2., renum. c2d cbd 4. to be c2d cbd 4. a. and am., cr. c2d cbd 4. b. Register December 2008 No. 636, eff. 1-1-09.

**NR 460.10 Control device requirements. c1d APPLICABILITY.** This section contains requirements for control devices used to comply with provisions in relevant standards. These requirements apply only to affected sources covered by rel-

evant standards referring directly or indirectly to this section or to 40 CFR 63.11.

**c2d FLARES.** cad Owners or operators using flares to comply with the provisions of 40 CFR part 63 or chs. NR 460 to 469 shall monitor these control devices to assure that they are operated and maintained in conformance with their designs. Applicable subparts of 40 CFR part 63 or applicable parts of chs. NR 460 to 469 will provide provisions stating how owners or operators using flares shall monitor these control devices.

cbd Flares shall be steam-assisted, air-assisted or non-assisted.

ccd Flares shall be operated at all times when emissions may be vented to them.

cdd Flares shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. Method 22 in Appendix A of 40 CFR part 60, incorporated by reference in s. NR 484.04 c13d, shall be used to determine the compliance of flares with the visible emission provisions of 40 CFR part 63 or chs. NR 460 to 469. The observation period is 2 hours and shall be used according to Method 22.

ced Flares shall be operated with a flame present at all times. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

cfđ An owner or operator has the choice of adhering to the heat content specifications in subd. 2., and the maximum tip velocity specifications in par. cgd or chđ, or adhering to the requirements in subd. 1.

1. a. Flares shall be used that have a diameter of 3 inches or greater, are nonassisted, have a hydrogen content of 8.0% cby volumed or greater, and are designed for and operated with an exit velocity less than 37.2 m{sec c122 ft{secd and less than the velocity  $V_{max}$ , as determined by the following equation:

$$V_{max} = cX_{H_2} - K_1 d * K_2$$

where:

$V_{max}$  is the maximum permitted velocity, m{sec

$K_1$  is the constant, 6.0 volume-percent hydrogen

$K_2$  is the constant, 3.9 cm{secd{ volume-percent hydrogen

$X_{H_2}$  is the volume-percent of hydrogen, on a wet basis, as calculated by using ASTM D1946-90, incorporated by reference in s. NR 484.10 c28d

b. The actual exit velocity of a flare shall be determined by the method specified in par. cgd 1.

2. Flares shall be used only with the net heating value of the gas being combusted at 11.2 MJ{scm c300 Btu{scfd or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted at 7.45 MJ{scm c200 Btu{scfd or greater if the flares is non-assisted. The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = K \sum_{i=1}^n C_i H_i$$

where:

$H_T$  is the net heating value of the sample, MJ{scm; where the net enthalpy per mole of offgas is based on combustion at 25vC and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20vC

K is a constant

$$1.740 \times 10^{-7} \left[ \frac{1}{\text{ppmv}} \right] \left[ \frac{\text{g-mole}}{\text{scm}} \right] \left[ \frac{\text{MJ}}{\text{kcal}} \right]$$

where the standard temperature for cg-mole{scmd is 20vC

$C_i$  is the concentration of sample component i in ppmv on a wet basis, as measured for organics by Test Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946-90, incorporated by reference in s. NR 484.10 c28d

$H_i$  is the net heat of combustion of sample component i, kcal{g-mole at 25vC and 760 mm Hg. The heat of combustion may be determined using ASTM D4809-00, incorporated by reference in s. NR 484.10 c55d, if published values are not available or cannot be calculated

n is the number of sample components

cgd 1. Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity less than 18.3 m{sec c60 ft{secd, except as provided in subds. 2. and 3. The actual exit velocity of a flare shall be determined by dividing the volumetric flow rate of gas being combusted, in units of emission standard temperature and pressure, as determined by Method 2, 2A, 2C, or 2D in Appendix A of 40 CFR part 60, incorporated by reference in s. NR 484.04 c13d, as appropriate, by the unobstructed cfreed cross-sectional area of the flare tip.

2. Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in subd. 1., equal to or greater than 18.3 m{sec c60 ft{secd but less than 122 m{sec c400 ft{secd, are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ{scm c1,000 Btu{scfd.

3. Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in subd. 1., less than the velocity  $V_{\max}$ , as determined by the method specified in this subdivision, but less than 122 m{sec c400 ft{secd are allowed. The maximum permitted velocity,  $V_{\max}$ , for flares complying with this subdivision shall be determined by the following equation:

$$\text{Log}_{10}(V_{\max}) = (H_T + 28.8)/31.7$$

where:

$V_{\max}$  is the maximum permitted velocity, m{sec

28.8 is a constant

31.7 is a constant

$H_T$  is the net heating value as determined in par. cfd

chd Air-assisted flares shall be designed and operated with an exit velocity less than the velocity  $V_{\max}$ . The maximum permitted velocity,  $V_{\max}$ , for air-assisted flares shall be determined by the following equation:

$$V_{\max} = 8.71 + 0.708(H_T)$$

where:

$V_{\max}$  is the maximum permitted velocity, m{sec

8.71 is a constant

0.708 is a constant

$H_T$  is the net heating value as determined in par. cfd

**History:** Cr. Register, March, 1997, No. 495, eff. 4-1-97; am. c2d cfd, Register, November, 1999, No. 527, eff. 12-1-99; CR 00-175: r. and recr. c2d cfd, am. c2d chd Register March 2002 No. 555, eff. 4-1-02; corrections in c2d cdd and cgd 1. made under s. 13.93 c2md cbd 7., Stats., Register March 2002 No. 555.

**NR 460.11 Performance track provisions. c1d** Notwithstanding any other requirements in 40 CFR part 63 or chs.

NR 460 to 469, an affected source at any major source or any area source at a performance track member facility, as defined in s. NR 460.02 c37gd, which is subject to regular periodic reporting under any relevant standard, may submit periodic reports at an interval that is twice the length of the regular period specified in the applicable standards provided, that for sources subject to permits under ch. NR 406 or 407, no interval for any report of the results of any required monitoring may be less frequent than once in every 6 months.

**c2d** Notwithstanding any other requirements in 40 CFR part 63 or chs. NR 460 to 469, the modifications of reporting requirements in sub. c3d apply to any major source at a performance track member facility, as defined in s. NR 460.02 c37gd, which is subject to requirements under any relevant standard and which has done all of the following:

cad Reduced its total HAP emissions to less than 25 tons per year.

cbd Reduced its emissions of each individual HAP to less than 10 tons per year.

ccd Reduced emissions of all HAPs covered by each MACT standard to at least the level required for full compliance with the applicable emission standard.

**c3d** For affected sources at any area source at a performance track member facility, as defined in s. NR 460.02 c37gd, that meet the requirements of sub. c2d ccd, or for affected sources at any major source that meet the requirements of sub. c2d:

cad If the emission standard to which the affected source is subject is based on add-on control technology, and the affected source complies by using add-on control technology, all required reporting elements in the periodic report may be met through an annual certification that the affected source is meeting the emission standard by continuing to use that control technology. The affected source shall continue to meet all relevant monitoring and recordkeeping requirements. The compliance certification shall meet the requirements delineated in Clean Air Act section 114 cad c3d.

cbd If the emission standard to which the affected source is subject is based on add-on control technology, and the affected source complies by using pollution prevention, all required reporting elements in the periodic report may be met through an annual certification that the affected source is continuing to use pollution prevention to reduce HAP emissions to levels at or below those required by the applicable emission standard. The affected source shall maintain records of all calculations that demonstrate the level of HAP emissions required by the emission standard as well as the level of HAP emissions achieved by the affected source. The affected source shall continue to meet all relevant monitoring and recordkeeping requirements. The compliance certification shall meet the requirements delineated in Clean Air Act section 114 cad c3d.

ccd If the emission standard to which the affected source is subject is based on pollution prevention, and the affected source complies by using pollution prevention and reduces emissions by an additional 50% or greater than required by the applicable emission standard, all required reporting elements in the periodic report may be met through an annual certification that the affected source is continuing to use pollution prevention to reduce HAP emissions by an additional 50% or greater than required by the applicable emission standard. The affected source shall maintain records of all calculations that demonstrate the level of HAP emissions required by the emission standard as well as the level of HAP emissions achieved by the affected source. The affected source shall continue to meet all relevant monitoring and recordkeeping requirements. The compliance certification shall

meet the requirements delineated in Clean Air Act section 114 cad c3d.

cdd Notwithstanding the provisions of pars. cad to ccd, for sources subject to permits under ch. NR 406 or 407, the results of

any required monitoring and recordkeeping shall be reported not less frequently than once in every 6 months.

**History:** CR 05-039: cr. Register February 2006 No. 602, eff. 3-1-06.