

Chapter NR 437

VOLUNTARY EMISSION REDUCTION REGISTRY

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NR 437.01 Applicability; purpose. (1) APPLICABILITY.

This chapter applies to any person who wants to register emission reductions or avoided emissions of greenhouse gases or air contaminants, or carbon sequestration, if the emission reduction, emission avoidance or carbon sequestration occurs before it is required by law or results in emissions which are lower than those allowed by law.

(2) PURPOSE. (a) This chapter is adopted under ss. 227.11 (2) (a) and 285.78, Stats., to establish a system under which the department registers emission reductions or avoided emissions of greenhouse gases or air contaminants or carbon sequestration, if the emission reduction, avoided emissions or carbon sequestration occurs before it is required by law or results in emissions which are lower than those allowed by law.

Note: Emission reductions may be used to comply with existing regulations if they meet the provisions specified in the applicable regulation. Examples of existing regulations are the emission offset requirements of s. NR 408.06 and the internal offsets compliance option in s. NR 425.05. Registrants should be aware that registration under this chapter does not guarantee that the emission reductions meet the requirements of the applicable regulation. Once used to meet a regulatory requirement, the emission reductions are no longer eligible for registration under this chapter.

(b) The purpose of the registry is to ensure, to the greatest extent possible, that efforts undertaken voluntarily by persons in Wisconsin to reduce or avoid emissions of greenhouse gases or air contaminants or to sequester carbon are publicly recognized and that these reductions are considered under future mandatory federal or state emission reduction programs.

(c) The department shall consider the information recorded in the registry under this chapter when determining baselines and reduction requirements under future emission reduction programs implemented under state authority, to the extent allowed under state law.

History: CR 02-012: cr. Register October 2002 No. 562, eff. 11-1-02.

NR 437.02 Definitions. The definitions contained in ch. NR 400 apply to the terms used in this chapter. In addition, the following definitions apply to the terms used in this chapter:

(1) "Baseline" means the average annual amount or rate of a greenhouse gas or air contaminant emitted before an emission reduction or avoidance action is taken, or the amount of carbon stored before a carbon sequestration project is undertaken.

(2) "Carbon dioxide equivalent" means the amount of CO₂ that would have the same global warming potential as a given amount of another greenhouse gas. The CO₂ equivalent amount of any greenhouse gas is calculated by multiplying the mass of the greenhouse gas by the global warming potential for that gas.

(3) "Carbon reserve" means any system that takes in and stores more carbon from the atmosphere than it releases to the atmosphere.

(4) "Carbon sequestration" means the establishment or enhancement of a carbon reserve.

(5) "Fine particulate matter" means solid or liquid particles with a diameter less than or equal to 2.5 micrometers or emissions that are precursors to solid or liquid particles with a diameter less than or equal to 2.5 micrometers.

(6) "Global warming potential" means the potential over a 100 year time period for a greenhouse gas to cause warming of the

earth's surface compared to the global warming potential of carbon dioxide over the same time period.

Note: The global warming potentials for most of the greenhouse gases covered in this chapter are contained in IPCC Third Assessment Report, Climate Change 2001: The Scientific Basis, Intergovernmental Panel on Climate Change, 2001.

(7) "Greenhouse gas" means carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride or any other gas that traps heat in the atmosphere.

(8) "Law" means any federal or state statute, rule, order, mandatory emission limiting condition in an air permit or other legal requirement.

(9) "Mandatory emission limiting condition in an air permit" means a condition in an air pollution control permit that restricts emissions in order to comply with a federal or state statute, rule, order or other legal requirement or in order to avoid application of a federal or state statute, rule, order or other legal requirement. "Mandatory emission limiting condition in an air permit" does not include a permit condition that reflects a lower emission level that is the result of a voluntary action or a contractual agreement with the department, such as an agreement under the Environmental Cooperative Agreement program (s. 299.80, Stats.), or a federal voluntary program.

(10) "Ozone precursor" means nitrogen oxides and volatile organic compounds.

(11) "Quantification protocol" means a replicable and workable method or set of methods for quantifying emissions, emission rates, or the amount of carbon sequestered.

(12) "Renewable energy project" means a project or facility that produces energy from a renewable resource.

(13) "Renewable resource" means any of the following: direct radiation from the sun, geothermal energy, wind, tidal or wave action, flowing water, biomass, human waste, or animal waste.

(14) "Voluntary emission reduction" or "VER" means any emission reduction, avoided emission or carbon sequestration that occurs before it is required by law or that results in emissions that are lower than those allowed by law.

History: CR 02-012: cr. Register October 2002 No. 562, eff. 11-1-02.

NR 437.03 Eligibility. Any person may register VERs under this chapter. VERs may be registered if they meet all of the following requirements, as applicable:

(1) The VERs are not required by or go beyond the requirements of law. The following are examples of VERs that are eligible for registration:

(a) VERs that result from actions taken to comply with a law that result in reductions of greenhouse gas or air contaminant emissions that are not required by or go beyond those required by law.

(b) VERs that are made after an applicable law is in effect but before the reduction is required by law.

(c) VERs that are made and are reflected in an air pollution control permit, as long as the level of reduction is beyond what is required by law.

Note: A VER may be reflected in an air pollution control permit when, for example, the permit contains a requirement to use air pollution control equipment which reduces emissions beyond what is required by law. VERs that are later used to meet

netting or offset requirements or to qualify as a synthetic minor source under air permitting requirements are no longer eligible for registration under this chapter.

(d) VERs that are part of a contractual agreement with the department, as defined within the contractual agreement.

(2) The VER is the result of one or more actions taken. Examples of actions include:

- (a) Change in type of fuel used.
- (b) Installation and operation or modification of emission control equipment.
- (c) Implementation of energy efficiency measures by the energy producer or user.
- (d) Production, use, or purchase of renewable energy.
- (e) Changes to, replacement of, or retirement of a manufacturing or combustion process.
- (f) Product reformulation or replacement.
- (g) Beneficial reuse or recycling activities.
- (h) Increases in vehicle fleet fuel efficiency.
- (i) Changes that reduce vehicle miles traveled.
- (j) Carbon sequestration projects.
- (k) Projects to collect, store and dispose of mercury-containing products in a manner that will prevent or minimize future releases of mercury into the environment.

(3) The action and VER occur within the state of Wisconsin.

(4) The VER has not been registered by any other person under this chapter.

(5) (a) The amount of VERs to be registered is equal to or exceeds the corresponding threshold level in Table 1, except as provided in pars. (c) and (e).

(b) If emissions of more than one greenhouse gas have been reduced, the CO₂ equivalents of each of the gases shall be totaled to determine whether the threshold level is met or exceeded.

(c) For actions which reduce emissions of multiple air contaminants or greenhouse gases, if the VER of at least one of the air contaminants or greenhouse gases equals or exceeds the registration threshold for that greenhouse gas or air contaminant, then all of the VERs may be registered, even if VERs for one or more greenhouse gases or air contaminants are below the corresponding thresholds.

(d) VERs may be aggregated from several or many sources to meet or exceed the registration threshold level in Table 1.

Table 1

Emission Reduced	Registration Threshold
Greenhouse gases	25 tons per year CO ₂ equivalent
Nitrogen oxides	1 ton per year
Sulfur dioxide	1 ton per year
Volatile organic compounds	1 ton per year
PM ₁₀	1 ton per year
PM _{2.5}	1 ton per year
Carbon monoxide	1 ton per year
Lead and lead compounds	0.5 ton per year
Mercury and mercury compounds	1 pound per year

(e) The mass of mercury collected through a mercury collection and disposal project may be registered if it is equal to or exceeds 10 pounds.

(6) The reduction or avoidance of emissions of greenhouse gases or the sequestration of carbon occurred after December 31, 1990.

(7) The reduction or avoidance of emissions of air contaminants other than greenhouse gases occurred after December 31, 1993.

History: CR 02-012; cr. Register October 2002 No. 562, eff. 11-1-02.

NR 437.04 Quantification protocols. (1) QUANTIFICATION. The emission or carbon reserve baseline and the resulting VER shall be quantified using quantification protocols that are listed in sub. (2) (a) or that have been submitted to the department under sub. (2) (b).

(2) QUANTIFICATION PROTOCOLS. (a) The following protocols may be used to quantify baselines and VERs:

1. Source emission testing performed in accordance with ss. NR 439.07 and 446.04.

2. Continuous emissions monitoring performed in accordance with the methods specified in ss. NR 439.09 and 439.095 (6).

3. Mass balance estimates based on evaluation of input and output streams using representative supplier data, engineering estimates or sampling analyses.

4. Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories, intergovernmental panel on climate change, 1996, incorporated by reference in s. NR 484.06 (6).

5. International Performance Measurement and Verification Protocol, Volume 1, U.S. department of energy, January 2001, incorporated by reference in s. NR 484.06 (7).

6. Compilation of Air Pollutant Emission Factors, Volume I: Stationary, Point and Area Sources, U.S. environmental protection agency, AP-42, 5th edition, January 1, 1995, as revised by Supplements A to F and Update 2001, incorporated by reference in s. NR 484.05 (8).

7. Compilation of Air Pollutant Emission Factors, Volume II: Mobile Sources, U.S. environmental protection agency, AP-42, 4th edition, September 1985, as revised by Supplement A (1991), incorporated by reference in s. NR 484.05 (8g).

8. Compilation of Air Pollutant Emission Factors, Volume II: Mobile Sources, U.S. environmental protection agency, AP-42, 5th edition, Appendices G to K, incorporated by reference in s. NR 484.05 (8r).

9. Emission Inventory Improvement Program Technical Reports, Volume I, Introduction and Use of EIIP Guidance for Emission Inventory Development, U.S. environmental protection agency, July 1997, incorporated by reference in s. NR 484.06 (4) (b) 1.

10. Emission Inventory Improvement Program Technical Reports, Volume II, Point Sources, U.S. environmental protection agency, May 2002, incorporated by reference in s. NR 484.06 (4) (b) 2.

11. Emission Inventory Improvement Program Technical Reports, Volume III, Area Sources and Area Source Method Abstracts, U.S. environmental protection agency, December 2001, incorporated by reference in s. NR 484.06 (4) (b) 3.

12. Emission Inventory Improvement Program Technical Reports, Volume IV, Mobile Sources, U.S. environmental protection agency, September 1997, incorporated by reference in s. NR 484.06 (4) (b) 4.

13. Emission Inventory Improvement Program Technical Reports, Volume VI, Quality Assurance Procedures and DARS Software, U.S. environmental protection agency, September 1997, incorporated by reference in s. NR 484.06 (4) (b) 5.

14. Emission Inventory Improvement Program Technical Reports, Volume VII, Data Management Procedures, U.S. environmental protection agency, January 1999, incorporated by reference in s. NR 484.06 (4) (b) 6.

15. Emission Inventory Improvement Program Technical Reports, Volume VIII, Estimating Greenhouse Gas Emissions,

U.S. environmental protection agency, October 1999, published electronically, incorporated by reference in s. NR 484.06 (4) (b) 7.

16. Emission Inventory Improvement Program Technical Reports, Volume IX, Particulate Emissions, U.S. environmental protection agency, August 2001, published electronically, incorporated by reference in s. NR 484.06 (4) (b) 8.

17. Voluntary reporting of greenhouse gases under Section 1605(b) of the Energy Policy Act of 1992 – General Guidelines, October 1994, U.S. department of energy, incorporated by reference in s. NR 484.05 (14).

18. Sector-Specific Issues and Reporting Methodologies Supporting the General Guidelines for the Voluntary Reporting of Greenhouse Gases under Section 1605(b) of the Energy Policy Act of 1992, Volumes I, Electricity Supply Sector, Residential and Commercial Buildings Sector, and Industrial Sector, October 1994, U.S. department of energy, incorporated by reference in s. NR 484.05 (15).

19. Sector-Specific Issues and Reporting Methodologies Supporting the General Guidelines for the Voluntary Reporting of Greenhouse Gases under Section 1605(b) of the Energy Policy Act of 1992, Volumes II, Transportation Sector, Forestry Sector, and Agricultural Sector, October 1994, U.S. department of energy, incorporated by reference in s. NR 484.05 (16).

20. The Greenhouse Gas Protocol – a corporate accounting and reporting standard, World Resources Institute and World Business Council for Sustainable Development, September 2001, incorporated by reference in s. NR 484.11 (11) (a).

21. GHG Calculation Tools, World Resources Institute and World Business Council for Sustainable Development, October 2001, incorporated by reference in s. NR 484.11 (11) (b).

22. Factor Information Retrieval Data System (FIRE), U.S. environmental protection agency, office of air quality planning and standards, version 6.23, incorporated by reference in s. NR 484.06 (4) (a).

(b) Alternative protocols may be submitted to the department, with the following information:

1. A copy or description of the protocol.
2. Documentation of the accuracy and replicability of the protocol.
3. The name and address of the organization that developed the protocol.
4. Whether the protocol has been approved by another state, federal or international agency or organization for registering voluntary emission reductions or carbon sequestration or for regulatory purposes.

(c) The department shall maintain a list of alternative quantification protocols submitted under par. (b) and make the list available to the public.

(d) If no protocol is available for quantifying a VER, the action may be registered without quantifying the VER, but the baseline shall be quantified. If no protocol is available for quantifying a baseline, the action may be registered without quantifying the baseline. When a protocol becomes available, the baseline and VER shall be quantified for each year for which the action is registered.

History: CR 02-012: cr. Register October 2002 No. 562, eff. 11-1-02.

NR 437.05 Baseline determination. Any person wishing to register a VER shall determine a baseline in order to quantify the amount of emissions reduced or avoided or the amount of carbon sequestered, except as provided in sub. (4). Baselines shall be determined as follows:

(1) **STANDARD BASELINE.** (a) *Emission reductions.* Baselines for emission reduction actions shall be determined as the average annual actual emissions or emission rate for the 2 years immediately preceding the year in which the VER action is taken.

(b) *Avoided emissions.* 1. Baselines for renewable energy projects shall be determined as the average annual emission rate for the Wisconsin generating system of the electric power generator whose emissions are avoided by the renewable energy project, in terms of mass per unit of energy produced. The average annual emission rate shall be the average of the emission rates for the 2 years immediately preceding the year in which the VER action is taken.

2. Baselines for energy efficiency projects shall be determined as the average annual emission rate for the Wisconsin generating system of the electric power generator whose emissions are avoided by the energy efficiency project, in terms of mass per unit of energy produced. The average annual emission rate shall be the average of the emission rates for the 2 years immediately preceding the year in which the VER action is taken.

(2) **ALTERNATIVE BASELINES.** (a) Alternative years may be used to determine the baseline if the 2 years immediately preceding the year in which the emission reduction or avoidance action was taken are not representative of the emissions or emission rate before the emission reduction action was taken. Any person using alternative years shall submit documentation to the department explaining the reason for the use of different years.

(b) For VER projects for which there are no prior emissions, the baseline shall be determined as the emission limits or performance standards required by law, if applicable. If there are no applicable emission limits or performance standards, the baseline shall be determined as the industry or activity average emission or emission rate. Any person using an alternative baseline under this subsection shall submit documentation to the department describing how the baseline was determined.

(c) For VERs that result from actions taken to comply with a law and that result in emissions which are lower than those required by law, the baseline shall be the standard baseline as described in sub. (1) or the emission limits required by law, whichever is less.

(3) **BASELINE FOR CARBON SEQUESTRATION.** For carbon sequestration projects, the baseline shall be determined as the amount of carbon, quantified in terms of carbon dioxide equivalents, stored in the carbon sequestration project area at the beginning of the project.

(4) **NO BASELINE.** When no quantification protocol is available to determine a baseline, the action may be registered without determining a baseline.

History: CR 02-012: cr. Register October 2002 No. 562, eff. 11-1-02.

NR 437.06 Quantifying and registering voluntary emission reductions and quantifying baselines. (1) VERs and baselines shall be quantified on either a mass or a rate basis, or both. Mass-based VERs shall be quantified and registered as total tons or pounds per year. Rate-based VERs shall be quantified and registered as tons or pounds per unit of input or output.

(2) Greenhouse gas VERs and baselines shall be quantified in terms of carbon dioxide equivalents.

(3) Ozone precursor VERs and baselines may be quantified for the 5-month ozone season as defined in s. NR 400.02 (117), in terms of tons or pounds per day averaged over the ozone season, or they may be quantified on a calendar year basis, as tons per year.

(4) VERs and baselines shall be quantified on a calendar year basis. VERs shall be registered on a calendar year basis.

(5) VERs and baselines may be quantified on a project basis, facility basis or, for persons who own or operate multiple facilities within Wisconsin, a statewide basis. VERs may be registered on a project basis, facility basis or, for persons who own or operate multiple facilities within Wisconsin, on a statewide basis.

(6) VERs that result from projects to collect, store and dispose of mercury-containing products may be registered in terms of

pounds of mercury collected, stored and disposed. The emission reduction resulting from the collection, storage and disposal of mercury-containing products need not be registered.

History: CR 02-012: cr. Register October 2002 No. 562, eff. 11-1-02.

NR 437.07 Registration procedure. (1) INITIAL REGISTRATION. Any person seeking to register VERs shall complete the registration forms and submit them to the department.

Note: Registration forms may be obtained from: Voluntary Emission Reduction Registry, Wisconsin DNR, PO Box 7921, Madison WI 53707, or they may be downloaded from the voluntary emission reduction registry web page on the department's web site, which may be accessed at <http://www.dnr.state.wi.us>.

(2) REQUIRED INFORMATION FOR INITIAL REGISTRATION. The initial registration form shall include the following information:

(a) General information:

1. The name, address and telephone number of the applicant.
2. The location of the emission source, emission reduction project, renewable energy project or carbon sequestration project.
3. The name, title, telephone number, fax number and e-mail address, if available, of the contact for general and technical information about the registration.
4. If applicable, the appropriate 4 digit standard industrial classification code of the business or activity seeking to register VERs as specified in the Standard Industrial Classification Manual, 1987, incorporated by reference in s. NR 484.05 (1), and a brief description characterizing the nature of the business or other activity of the applicant.

5. If the source reports air contaminant emissions under ch. NR 438, the 9-digit facility identification number used in those reports.

6. If the VER is made at a facility which has an air pollution control permit, the air pollution control permit identification number or numbers.

7. For VERs that have been verified by a third party, the name and address of the person performing the verification and a brief description of the verification procedure.

8. A signed and dated statement by a responsible official stating that, to the best of his or her knowledge and belief, the information in the registration form is accurate, all of the requirements of this chapter have been met, and the VERs have not been registered under this chapter by another person.

(b) VER information:

1. A description of the action or actions taken to reduce or avoid emissions or to sequester carbon.

2. The month and year in which the action first began to reduce or avoid emissions or sequester carbon.

3. The quantification protocols and the calculations used to determine the baselines and the VERs.

4. The baseline for each greenhouse gas and air contaminant being registered and for each carbon sequestration project.

5. For each greenhouse gas or air contaminant, the amount or rate, or both, of emissions reduced or avoided for each year in which VERs are being registered.

6. For carbon sequestration, the amount of carbon sequestered, if quantified, for each year in which sequestered carbon is being registered.

7. For projects to collect mercury-containing products, the mass of mercury collected, stored and disposed of for each year in which it is collected, stored and disposed of and a description

of the methods used to store and dispose of the mercury collected in the project.

8. The name and address of other public or private registries in which the VER is registered.

(3) SECTION 1605(B) REPORTING. (a) Persons who report their greenhouse gas emission reductions to the federal voluntary reporting of greenhouse gases program, established in section 1605(b) of the energy policy act of 1992 (42 USC 13385(b)), may register any 1605(b) emission reductions which are eligible under s. NR 437.03 by submitting their annual 1605(b) reporting forms to the department, in lieu of submitting the department's forms.

(b) A registrant may submit the 1605(b) reporting forms to the department before the emission reductions are accepted into the 1605(b) database by the U.S. department of energy.

(4) REGISTRATION UPDATE. VERs may be registered for each year in which they occur after the initial registration as follows:

(a) If there is no change in the status of the initial registration or, for subsequent years, the status of the previous year's registration, the registration update shall include:

1. The year for which the VER is being registered.

2. A signed and dated statement by the responsible official stating that the information in the registration update is accurate, to the best of his or her knowledge and belief, and that all of the requirements of this chapter have been met.

(b) If there are changes to any of the information initially submitted under sub. (2) or (3) or, for subsequent years, the information submitted under this subsection for the previous year, the registration update shall include:

1. An explanation of the changes in the initial or previous year's registration.

2. If applicable, a recalculated baseline or VER or both, with the quantification protocol and the calculations used to make the recalculations.

3. A signed and dated statement by the responsible official stating that the information in the registration update is accurate, to the best of his or her knowledge and belief, and that all of the requirements of this chapter have been met.

(5) CORRECTION OF HISTORIC DATA. If new information becomes available for the calculation of previously registered VERs or baselines, registrants may provide the new information and the corrected VER or baseline with a signed statement by the responsible official stating that the corrected VER or baseline is accurate to the best of his or her knowledge and belief.

(6) DEPARTMENT ACTION. (a) Upon receipt of an initial registration, a registration update or a correction, the department shall determine whether the registration, update or correction contains all of the information required under this section. The department shall notify the registrant of its determination within 90 days after receipt of the registration, update or correction. If the initial registration, registration update or correction is determined to be incomplete, the department shall specify what additional information is required.

(b) The department shall register all VERs for which complete information has been submitted.

(c) The department shall provide source-specific emission reduction registry information on the department's web site.

Note: The Department's web site may be accessed at: <http://www.dnr.state.wi.us>.

History: CR 02-012: cr. Register October 2002 No. 562, eff. 11-1-02.