- WAC 173-400-810 Major stationary source and major modification definitions. The definitions in this section must be used in the major stationary source nonattainment area permitting requirements in WAC 173-400-800 through 173-400-860. If a term is defined differently in the federal program requirements for issuance, renewal and expiration of a Plant Wide Applicability Limitation (WAC 173-400-850), then that definition must be used for purposes of the Plant Wide Applicability Limitation program.
 - (1) Actual emissions means:
- (a) The actual rate of emissions of a regulated NSR pollutant from an emissions unit, as determined in accordance with (b) through (d) of this subsection. This definition does not apply when calculating whether a significant emissions increase has occurred, or for establishing a PAL under WAC 173-400-850. Instead, "projected actual emissions" and "baseline actual emissions" as defined in subsections (2) and (23) of this section apply for those purposes.
- (b) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a consecutive twenty-four-month period which precedes the particular date and which is representative of normal source operation. The permitting authority shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.
- (c) The permitting authority may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.
- (d) For any emissions unit that has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.
- (2) Baseline actual emissions means the rate of emissions, in tons per year, of a regulated NSR pollutant, as determined in accordance with (a) through (d) of this subsection.
- (a) For any existing electric utility steam generating unit, baseline actual emissions means the average rate, in tons per year, at which the unit actually emitted the pollutant during any consecutive twenty-four-month period selected by the owner or operator within the five-year period immediately preceding when the owner or operator begins actual construction of the project. The permitting authority shall allow the use of a different time period upon a determination that it is more representative of normal source operation.
- (i) The average rate shall include emissions associated with startups, shutdowns, and malfunctions; and, for an emissions unit that is part of one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source, or for an emissions unit that is located at a major stationary source that belongs to one of the listed source categories, the average rate shall include fugitive emissions (to the extent quantifiable).
- (ii) The average rate shall be adjusted downward to exclude any noncompliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive twenty-four-month period.
- (iii) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive twenty-four-month period must be used to determine the baseline actual emissions for the emis-

sions units being changed. A different consecutive twenty-four-month period can be used for each regulated NSR pollutant.

- (iv) The average rate shall not be based on any consecutive twenty-four-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by (a) (ii) of this subsection.
- (b) For an existing emissions unit (other than an electric utility steam generating unit), baseline actual emissions means the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during any consecutive twenty-four-month period selected by the owner or operator within the ten-year period immediately preceding either the date the owner or operator begins actual construction of the project, or the date a complete permit application is received by the permitting authority for a permit required either under WAC 173-400-800 through 173-400-860 or under a plan approved by EPA, whichever is earlier, except that the ten-year period shall not include any period earlier than November 15, 1990.
- (i) The average rate shall include emissions associated with startups, shutdowns, and malfunctions; and, for an emissions unit that is part of one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source, or for an emissions unit that is located at a major stationary source that belongs to one of the listed source categories, the average rate shall include fugitive emissions (to the extent quantifiable).
- (ii) The average rate shall be adjusted downward to exclude any noncompliant emissions that occurred while the source was operating above an emission limitation that was legally enforceable during the consecutive twenty-four-month period.
- (iii) The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had such major stationary source been required to comply with such limitations during the consecutive twenty-four-month period. However, if an emission limitation is part of a maximum achievable control technology standard that EPA proposed or promulgated under 40 C.F.R. Part 63, the baseline actual emissions need only be adjusted if the state has taken credit for such emissions reductions in an attainment demonstration or maintenance plan as part of the demonstration of attainment or as reasonable further progress to attain the NAAQS.
- (iv) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive twenty-four-month period must be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive twenty-four-month period can be used for each regulated NSR pollutant.
- (v) The average rate shall not be based on any consecutive twenty-four-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required under (b) (ii) and (iii) of this subsection.
- (c) For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit. In the latter case, fugitive emissions, to the extent quantifiable, shall be included only if the emissions unit is part of one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source, or if the emissions

unit is located at a major stationary source that belongs to one of the listed source categories.

- (d) For a PAL for a major stationary source, the baseline actual emissions shall be calculated for existing electric utility steam generating units in accordance with the procedures contained in (a) of this subsection, for other existing emissions units in accordance with the procedures contained in (b) of this subsection, and for a new emissions unit in accordance with the procedures contained in (c) of this subsection, except that fugitive emissions (to the extent quantifiable) shall be included regardless of the source category.
- (3) Building, structure, facility, or installation means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same major group (i.e., which have the same two-digit code) as described in the Standard Industrial Classification Manual, 1972, as amended by the 1977 Supplement (U.S. Government Printing Office stock numbers 4101-0065 and 003-005-00176-0, respectively).
- (4) Clean coal technology means any technology, including technologies applied at the precombustion, combustion, or post combustion stage, at a new or existing facility which will achieve significant reductions in air emissions of sulfur dioxide or oxides of nitrogen associated with the utilization of coal in the generation of electricity, or process steam which was not in widespread use as of November 15, 1990.
- (5) Clean coal technology demonstration project means a project using funds appropriated under the heading "Department of Energy-Clean Coal Technology," up to a total amount of two and one-half billion dollars for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the Environmental Protection Agency. The federal contribution for a qualifying project shall be at least twenty percent of the total cost of the demonstration project.
- (6) Construction means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) that would result in a change in emissions.
- (7) Continuous emissions monitoring system (CEMS) means all of the equipment that may be required to meet the data acquisition and availability requirements of this section, to sample, condition (if applicable), analyze, and provide a record of emissions on a continuous basis.
- (8) Continuous parameter monitoring system (CPMS) means all of the equipment necessary to meet the data acquisition and availability requirements of this section, to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, O_2 or CO_2 concentrations), and to record average operational parameter value(s) on a continuous basis.
- (9) Continuous emissions rate monitoring system (CERMS) means the total equipment required for the determination and recording of the pollutant mass emissions rate (in terms of mass per unit of time).

- (10) Electric utility steam generating unit means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.
- (11) Emissions unit means any part of a stationary source that emits or would have the potential to emit any regulated NSR pollutant and includes an electric steam generating unit. For purposes of this section, there are two types of emissions units:
- (a) A new emissions unit is any emissions unit which is (or will be) newly constructed and which has existed for less than two years from the date such emissions unit first operated.
- (b) An existing emissions unit is any emissions unit that is not a new emissions unit. A replacement unit, as defined in subsection (25) of this section is an existing emissions unit.
- (12) Fugitive emissions means those emissions which could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening. Fugitive emissions, to the extent quantifiable, are addressed as follows for the purposes of this section:
- (a) In determining whether a stationary source or modification is major, fugitive emissions from an emissions unit are included only if the emissions unit is part of one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source, or the emissions unit is located at a stationary source that belongs to one of those source categories. Fugitive emissions are not included for those emissions units located at a facility whose primary activity is not represented by one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source and that are not, by themselves, part of a listed source category.
- (b) For purposes of determining the net emissions increase associated with a project, an increase or decrease in fugitive emissions is creditable only if it occurs at an emissions unit that is part of one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source, or if the emission unit is located at a major stationary source that belongs to one of the listed source categories. Fugitive emission increases or decreases are not creditable for those emissions units located at a facility whose primary activity is not represented by one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source, and that are not, by themselves, part of a listed source category.
- (c) For purposes of determining the projected actual emissions of an emissions unit after a project, fugitive emissions are included only if the emissions unit is part of one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source, or if the emission unit is located at a major stationary source that belongs to one of the listed source categories. Fugitive emissions are not included for those emissions units located at a facility whose primary activity is not represented by one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source, and that are not, by themselves, part of a listed source category.

- (d) For purposes of determining the baseline actual emissions of an emissions unit, fugitive emissions are included only if the emissions unit is part of one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source, or if the emission unit is located at a major stationary source that belongs to one of the listed source categories, except that, for a PAL, fugitive emissions shall be included regardless of the source category. With the exception of PALs, fugitive emissions are not included for those emissions units located at a facility whose primary activity is not represented by one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source, and that are not, by themselves, part of a listed source category.
- (e) In calculating whether a project will cause a significant emissions increase, fugitive emissions are included only for those emissions units that are part of one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source, or for any emissions units that are located at a major stationary source that belongs to one of the listed source categories. Fugitive emissions are not included for those emissions units located at a facility whose primary activity is not represented by one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source, and that are not, by themselves, part of a listed source category.
- (f) For purposes of monitoring and reporting emissions from a project after normal operations have been resumed, fugitive emissions are included only for those emissions units that are part of one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source, or for any emissions units that are located at a major stationary source that belongs to one of the listed source categories. Fugitive emissions are not included for those emissions units located at a facility whose primary activity is not represented by one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source, and that are not, by themselves, part of a listed source category.
- (g) For all other purposes of this section, fugitive emissions are treated in the same manner as other, nonfugitive emissions. This includes, but is not limited to, the treatment of fugitive emissions for offsets (see WAC 173-400-840(7)) and for PALs (see WAC 173-400-850).
- (13) Lowest achievable emission rate (LAER) means, for any source, the more stringent rate of emissions based on the following:
- (a) The most stringent emissions limitation which is contained in the implementation plan of any state for such class or category of stationary source, unless the owner or operator of the proposed stationary source demonstrates that such limitations are not achievable; or
- (b) The most stringent emissions limitation which is achieved in practice by such class or category of stationary sources. This limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within a stationary source. In no event shall the application of the term permit a proposed new or modified stationary source to emit any pollutant in excess of the amount allowable under an applicable new source standard of performance.
- (14)(a) Major stationary source means any stationary source of air pollutants that emits, or has the potential to emit, one hundred

tons per year or more of any regulated NSR pollutant, except that lower emissions thresholds apply in areas subject to sections 181-185B, sections 186 and 187, or sections 188-190 of the Federal Clean Air Act. In those areas the following thresholds apply:

- (i) Fifty tons per year of volatile organic compounds in any serious ozone nonattainment area;
- (ii) Fifty tons per year of volatile organic compounds in an area within an ozone transport region, except for any severe or extreme ozone nonattainment area;
- (iii) Twenty-five tons per year of volatile organic compounds in any severe ozone nonattainment area;
- (iv) Ten tons per year of volatile organic compounds in any extreme ozone nonattainment area;
- (v) Fifty tons per year of carbon monoxide in any serious nonattainment area for carbon monoxide, where stationary sources contribute significantly to carbon monoxide levels in the area (as determined under rules issued by EPA);
- (vi) Seventy tons per year of PM-10 in any serious nonattainment area for PM-10.
- (b) For the purposes of applying the requirements of WAC 173-400-830 to stationary sources of nitrogen oxides located in an ozone nonattainment area or in an ozone transport region, any stationary source which emits, or has the potential to emit, one hundred tons per year or more of nitrogen oxides emissions, except that the emission thresholds in (b)(i) through (vi) of this subsection shall apply in areas subject to sections 181-185B of the Federal Clean Air Act.
- (i) One hundred tons per year or more of nitrogen oxides in any ozone nonattainment area classified as marginal or moderate.
- (ii) One hundred tons per year or more of nitrogen oxides in any ozone nonattainment area classified as a transitional, submarginal, or incomplete or no data area, when such area is located in an ozone transport region.
- (iii) One hundred tons per year or more of nitrogen oxides in any area designated under section 107(d) of the Federal Clean Air Act as attainment or unclassifiable for ozone that is located in an ozone transport region.
- (iv) Fifty tons per year or more of nitrogen oxides in any serious nonattainment area for ozone.
- (v) Twenty-five tons per year or more of nitrogen oxides in any severe nonattainment area for ozone.
- (vi) Ten tons per year or more of nitrogen oxides in any extreme nonattainment area for ozone.
- (c) Any physical change that would occur at a stationary source not qualifying under (a) and (b) of this subsection as a major stationary source, if the change would constitute a major stationary source by itself.
- (d) A major stationary source that is major for volatile organic compounds shall be considered major for ozone.
- (e) The fugitive emissions of a stationary source shall not be included in determining for any of the purposes of subsection (14) of this section whether it is a major stationary source, unless the source belongs to one of the following categories of stationary sources:
 - (i) Coal cleaning plants (with thermal dryers);
 - (ii) Kraft pulp mills;
 - (iii) Portland cement plants;
 - (iv) Primary zinc smelters;

- (v) Iron and steel mills;
- (vi) Primary aluminum ore reduction plants;
- (vii) Primary copper smelters;
- (viii) Municipal incinerators capable of charging more than fifty tons of refuse per day;
 - (ix) Hydrofluoric, sulfuric, or nitric acid plants;
 - (x) Petroleum refineries;
 - (xi) Lime plants;
 - (xii) Phosphate rock processing plants;
 - (xiii) Coke oven batteries;
 - (xiv) Sulfur recovery plants;
 - (xv) Carbon black plants (furnace process);
 - (xvi) Primary lead smelters;
 - (xvii) Fuel conversion plants;
 - (xviii) Sintering plants;
 - (xix) Secondary metal production plants;
- (xx) Chemical process plants The term chemical processing plant shall not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140;
- (xxi) Fossil-fuel boilers (or combination thereof) totaling more than two hundred fifty million British thermal units per hour heat input;
- (xxii) Petroleum storage and transfer units with a total storage capacity exceeding three hundred thousand barrels;
 - (xxiii) Taconite ore processing plants;
 - (xxiv) Glass fiber processing plants;
 - (xxv) Charcoal production plants;
- (xxvi) Fossil fuel-fired steam electric plants of more than two hundred fifty million British thermal units per hour heat input; and
- (xxvii) Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the Federal Clean Air Act.
- (15) (a) Major modification means any physical change in or change in the method of operation of a major stationary source that would result in:
- (i) A significant emissions increase of a regulated NSR pollutant; and
- (ii) A significant net emissions increase of that pollutant from the major stationary source.
- (b) Any significant emissions increase from any emissions units or net emissions increase at a major stationary source that is significant for volatile organic compounds shall be considered significant for ozone.
- (c) A physical change or change in the method of operation shall not include:
 - (i) Routine maintenance, repair and replacement;
- (ii) Use of an alternative fuel or raw material by reason of an order under sections 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;
- (iii) Use of an alternative fuel by reason of an order or rule section 125 of the Federal Clean Air Act;
- (iv) Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;
- (v) Use of an alternative fuel or raw material by a stationary source which:

- (A) The source was capable of accommodating before December 21, 1976, unless such change would be prohibited under any federally enforceable permit condition which was established after December 12, 1976, pursuant to 40 C.F.R. 52.21 or under regulations approved pursuant to 40 C.F.R. Part 51, Subpart I or 40 C.F.R. 51.166; or
- (B) The source is approved to use under any permit issued under regulations approved by EPA implementing 40 C.F.R. 51.165.
- (vi) An increase in the hours of operation or in the production rate, unless such change is prohibited under any federally enforceable permit condition which was established after December 21, 1976, pursuant to 40 C.F.R. 52.21 or regulations approved pursuant to 40 C.F.R. Part 51, Subpart I or 40 C.F.R. 51.166;
 - (vii) Any change in ownership at a stationary source;
- (viii) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with:
- (A) The state implementation plan for the state in which the project is located; and
- (B) Other requirements necessary to attain and maintain the National Ambient Air Quality Standard during the project and after it is terminated.
- (d) This definition shall not apply with respect to a particular regulated NSR pollutant when the major stationary source is complying with the requirements for a PAL for that pollutant. Instead, the definitions in 40 C.F.R. Part 51, Appendix S (in effect on the date in WAC 173-400-025) shall apply.
- (e) For the purpose of applying the requirements of WAC 173-400-830 (1)(i) to modifications at major stationary sources of nitrogen oxides located in ozone nonattainment areas or in ozone transport regions, whether or not subject to sections 181-185B, Part D, Title I of the Federal Clean Air Act, any significant net emissions increase of nitrogen oxides is considered significant for ozone.
- (f) Any physical change in, or change in the method of operation of, a major stationary source of volatile organic compounds that results in any increase in emissions of volatile organic compounds from any discrete operation, emissions unit, or other pollutant emitting activity at the source shall be considered a significant net emissions increase and a major modification for ozone, if the major stationary source is located in an extreme ozone nonattainment area that is subject to sections 181-185B, Part D, Title I of the Federal Clean Air Act.
- (g) Fugitive emissions shall not be included in determining for any of the purposes of this section whether a physical change in or change in the method of operation of a major stationary source is a major modification, unless the source belongs to one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source.
- (16) Necessary preconstruction approvals or permits means those permits or orders of approval required under federal air quality control laws and regulations or under air quality control laws and regulations which are part of the applicable state implementation plan.
- (17) (a) Net emissions increase means with respect to any regulated NSR pollutant emitted by a major stationary source, the amount by which the sum of the following exceeds zero:
- (i) The increase in emissions from a particular physical change or change in the method of operation at a stationary source as calculated pursuant to WAC 173-400-820 (2) and (3); and

- (ii) Any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable. In determining the net emissions increase, baseline actual emissions for calculating increases and decreases shall be determined as provided in the definition of baseline actual emissions, except that subsection (2)(a)(iii) and (b)(iv) of this section, in the definition of baseline actual emissions, shall not apply.
- (b) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs before the date that the increase from the particular change occurs;
- (c) An increase or decrease in actual emissions is creditable only if:
- (i) It occurred no more than one year prior to the date of submittal of a complete notice of construction application for the particular change, or it has been documented by an emission reduction credit (ERC). Any emissions increases occurring between the date of issuance of the ERC and the date when a particular change becomes operational shall be counted against the ERC; and
- (ii) The permitting authority has not relied on it in issuing a permit for the source under regulations approved pursuant to 40 C.F.R. 51.165, which permit is in effect when the increase in actual emissions from the particular change occurs; and
- (iii) As it pertains to an increase or decrease in fugitive emissions (to the extent quantifiable), it occurs at an emissions unit that is part of one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source, or it occurs at an emissions unit that is located at a major stationary source that belongs to one of the listed source categories. Fugitive emission increases or decreases are not creditable for those emissions units located at a facility whose primary activity is not represented by one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source, and that are not, by themselves, part of a listed source category.
- (d) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level;
- (e) A decrease in actual emissions is creditable only to the extent that:
- (i) The old level of actual emission or the old level of allowable emissions whichever is lower, exceeds the new level of actual emissions;
- (ii) It is enforceable as a practical matter at and after the time that actual construction on the particular change begins;
- (iii) The permitting authority has not relied on it as part of an offsetting transaction under WAC 173-400-113(4) or 173-400-830 or in issuing any permit under regulations approved pursuant to 40 C.F.R. Part 51, Subpart I or the state has not relied on it in demonstrating attainment or reasonable further progress;
- (iv) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change; and
- (f) An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant.
- (g) Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed one hundred eighty days.

- (h) Subsection (1)(b) of this section, in the definition of actual emissions, shall not apply for determining creditable increases and decreases or after a change.
- (18) Nonattainment major new source review (NSR) program means the major source preconstruction permit program that has been approved by EPA and incorporated into the plan to implement the requirements of 40 C.F.R. 51.165, or a program that implements 40 C.F.R. Part 51, Appendix S, sections I through VI. Any permit issued under either program is a major NSR permit.
- (19) Pollution prevention means any activity that through process changes, product reformulation or redesign, or substitution of less polluting raw materials, eliminates or reduces the release of air pollutants (including fugitive emissions) and other pollutants to the environment prior to recycling, treatment, or disposal; it does not mean recycling (other than certain "in-process recycling" practices), energy recovery, treatment, or disposal.
- (20) Predictive emissions monitoring system (PEMS) means all of the equipment necessary to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, O_2 or CO_2 concentrations), and calculate and record the mass emissions rate (for example, lb/hr) on a continuous basis.
- (21) Prevention of significant deterioration (PSD) permit means any permit that is issued under the major source preconstruction permit program that has been approved by EPA and incorporated into the plan to implement the requirements of 40 C.F.R. 51.166, or under the program in 40 C.F.R. 52.21.
- (22) Project means a physical change in, or change in the method of operation of, an existing major stationary source.
- (23) (a) Projected actual emissions means the maximum annual rate, in tons per year, at which an existing emissions unit is projected to emit a regulated NSR pollutant in any one of the five years (twelvemonth period) following the date the unit resumes regular operation after the project, or in any one of the ten years following that date, if the project involves increasing the emissions unit's design capacity or its potential to emit of that regulated NSR pollutant and full utilization of the unit would result in a significant emissions increase or a significant net emissions increase at the major stationary source.
- (b) In determining the projected actual emissions before beginning actual construction, the owner or operator of the major stationary source:
- (i) Shall consider all relevant information including, but not limited to, historical operational data, the company's own representations, the company's expected business activity and the company's highest projections of business activity, the company's filings with the state or federal regulatory authorities, and compliance plans under the approved plan; and
- (ii) Shall include emissions associated with startups, shutdowns, and malfunctions; and, for an emissions unit that is part of one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source, or for an emissions unit that is located at a major stationary source that belongs to one of the listed source categories, shall include fugitive emissions (to the extent quantifiable); and

- (iii) Shall exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit's emissions following the project that an existing unit could have accommodated during the consecutive twenty-four-month period used to establish the baseline actual emissions and that are also unrelated to the particular project, including any increased utilization due to product demand growth; or
- (iv) In lieu of using the method set out in (b)(i) through (iii) of this subsection, the owner or operator may elect to use the emissions unit's potential to emit, in tons per year. For this purpose, if the emissions unit is part of one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source or if the emissions unit is located at a major stationary source that belongs to one of the listed source categories, the unit's potential to emit shall include fugitive emissions (to the extent quantifiable).
 - (24) (a) Regulated NSR pollutant, means the following:
 - (i) Nitrogen oxides or any volatile organic compounds;
- (ii) Any pollutant for which a National Ambient Air Quality Standard has been promulgated;
- (iii) Any pollutant that is identified under this subsection as a constituent or precursor of a general pollutant listed in (a)(i) or (ii) of this subsection, provided that such constituent or precursor pollutant may only be regulated under NSR as part of regulation of the general pollutant. For purposes of NSR precursor pollutants are the following:
- (A) Volatile organic compounds and nitrogen oxides are precursors to ozone in all ozone nonattainment areas.
- (B) Sulfur dioxide is a precursor to PM-2.5 in all PM-2.5 nonattainment areas.
- (C) Nitrogen oxides are precursors to PM-2.5 in all PM-2.5 nonattainment areas.
- (b) PM-2.5 emissions and PM-10 emissions shall include gaseous emissions from a source or activity which condense to form particulate matter at ambient temperatures. On or after January 1, 2011, such condensable particulate matter shall be accounted for in applicability determinations and in establishing emissions limitations for PM-2.5 in nonattainment major NSR permits. Compliance with emissions limitations for PM-2.5 issued prior to this date shall not be based on condensable particulate matter unless required by the terms and conditions of the permit or the applicable implementation plan. Applicability determinations for PM-2.5 made prior to the effective date of WAC 173-400-800 through 173-400-850 made without accounting for condensable particulate matter shall not be considered in violation of WAC 173-400-800 through 173-400-850.
- (25)(a) Replacement unit means an emissions unit for which all the criteria listed below are met:
- (i) The emissions unit is a reconstructed unit within the meaning of 40 C.F.R. 60.15 (b) (1), or the emissions unit completely takes the place of an existing emissions unit.
- (ii) The emissions unit is identical to or functionally equivalent to the replaced emissions unit.
- (iii) The replacement does not alter the basic design parameters of the process unit. Basic design parameters are:
- (A) Except as provided in (a)(iii)(C) of this subsection, for a process unit at a steam electric generating facility, the owner or operator may select as its basic design parameters either maximum hourly

heat input and maximum hourly fuel consumption rate or maximum hourly electric output rate and maximum steam flow rate. When establishing fuel consumption specifications in terms of weight or volume, the minimum fuel quality based on British thermal units content must be used for determining the basic design parameter(s) for a coal-fired electric utility steam generating unit.

- (B) Except as provided in (a)(iii)(C) of this subsection, the basic design parameter(s) for any process unit that is not at a steam electric generating facility are maximum rate of fuel or heat input, maximum rate of material input, or maximum rate of product output. Combustion process units will typically use maximum rate of fuel input. For sources having multiple end products and raw materials, the owner or operator should consider the primary product or primary raw material of the process unit when selecting a basic design parameter.
- (C) If the owner or operator believes the basic design parameter(s) in (a)(iii)(A) and (B) of this subsection is not appropriate for a specific industry or type of process unit, the owner or operator may propose to the reviewing authority an alternative basic design parameter(s) for the source's process unit(s). If the reviewing authority approves of the use of an alternative basic design parameter(s), the reviewing authority will issue a new permit or modify an existing permit that is legally enforceable that records such basic design parameter(s) and requires the owner or operator to comply with such parameter(s).
- (D) The owner or operator shall use credible information, such as results of historic maximum capability tests, design information from the manufacturer, or engineering calculations, in establishing the magnitude of the basic design parameter(s) specified in (a)(iii)(A) and (B) of this subsection.
- (E) If design information is not available for a process unit, then the owner or operator shall determine the process unit's basic design parameter(s) using the maximum value achieved by the process unit in the five-year period immediately preceding the planned activity.
 - (F) Efficiency of a process unit is not a basic design parameter.
- (iv) The replaced emissions unit is permanently removed from the major stationary source, otherwise permanently disabled, or permanently barred from operation by a permit that is enforceable as a practical matter. If the replaced emissions unit is brought back into operation, it shall constitute a new emissions unit.
- (b) No creditable emission reductions shall be generated from shutting down the existing emissions unit that is replaced.
- (26) Reviewing authority means "permitting authority" as defined in WAC 173-400-030.
 - (27) Significant means:
- (a) In reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

Pollutant	Emission Rate
Carbon monoxide	100 tons per year (tpy)
Nitrogen oxides	40 tons per year
Sulfur dioxide	40 tons per year
Ozone	40 tons per year of volatile organic compounds or nitrogen oxides

Pollutant	Emission Rate
Lead	0.6 tons per year
PM-10	15 tons per year
PM-2.5	10 tons per year of direct PM-2.5 emissions; 40 tons per year of nitrogen oxide emissions; 40 tons per year of sulfur dioxide emissions

- (b) Notwithstanding the significant emissions rate for ozone, significant means, in reference to an emissions increase or a net emissions increase, any increase in actual emissions of volatile organic compounds that would result from any physical change in, or change in the method of operation of, a major stationary source locating in a serious or severe ozone nonattainment area that is subject to sections 181-185B, of the Federal Clean Air Act, if such emissions increase of volatile organic compounds exceeds twenty-five tons per year.
- (c) For the purposes of applying the requirements of WAC 173-400-830 (1)(i) to modifications at major stationary sources of nitrogen oxides located in an ozone nonattainment area or in an ozone transport region, the significant emission rates and other requirements for volatile organic compounds in (a), (b), and (e) of this subsection, of the definition of significant, shall apply to nitrogen oxides emissions.
- (d) Notwithstanding the significant emissions rate for carbon monoxide under (a) of this subsection, the definition of significant, significant means, in reference to an emissions increase or a net emissions increase, any increase in actual emissions of carbon monoxide that would result from any physical change in, or change in the method of operation of, a major stationary source in a serious nonattainment area for carbon monoxide if such increase equals or exceeds fifty tons per year, provided EPA has determined that stationary sources contribute significantly to carbon monoxide levels in that area.
- (e) Notwithstanding the significant emissions rates for ozone under (a) and (b) of this subsection, the definition of significant, any increase in actual emissions of volatile organic compounds from any emissions unit at a major stationary source of volatile organic compounds located in an extreme ozone nonattainment area that is subject to sections 181-185B of the Federal Clean Air Act shall be considered a significant net emissions increase.
- (28) Significant emissions increase means, for a regulated NSR pollutant, an increase in emissions that is significant for that pollutant.
- (29) Source and stationary source means any building, structure, facility, or installation which emits or may emit a regulated NSR pollutant.
- (30) Temporary clean coal technology demonstration project means a clean coal technology demonstration project that is operated for a period of five years or less, and which complies with the state implementation plan for the state in which the project is located and other requirements necessary to attain and maintain the National Ambient Air Quality Standards during the project and after it is terminated.
- (31) Best available control technology (BACT) means an emissions limitation (including a visible emissions standard) based on the maximum degree of reduction for each regulated NSR pollutant which would be emitted from any proposed major stationary source or major modifi-

cation which the reviewing authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 C.F.R. Part 60 or 61. If the reviewing authority determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof, may be prescribed instead to satisfy the requirement for the application of BACT. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

[Statutory Authority: For chapter 173-423 WAC is RCW 70.120A.010; and for chapters 173-400 and 173-476 WAC is RCW 70.94.152, 70.94.331, 70.94.860. WSR 16-12-099 (Order 16-01), § 173-400-810, filed 5/31/16, effective 7/1/16. Statutory Authority: Chapter 70.94 RCW. WSR 12-24-027 (Order 11-10), § 173-400-810, filed 11/28/12, effective 12/29/12; WSR 11-06-060 (Order 09-01), § 173-400-810, filed 3/1/11, effective 4/1/11.]