

Chapter NR 220

CATEGORIES AND CLASSES OF POINT SOURCES AND EFFLUENT LIMITATIONS

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Note: Corrections made under s. 13.93 (2m) (b) 7., Stats., [Register, August, 1997, No. 500](#).

Subchapter I — Categories and Classes of Point Sources

NR 220.01 Purpose. The purpose of this subchapter is to establish pursuant to s. 283.13 (1), Stats., a list of categories and classes of point sources other than publicly owned treatment works for which effluent limitations, standards of performance, pretreatment standards, standards for toxic substances, and other standards have been or are to be established.

History: Cr. [Register, June, 1977, No. 258](#), eff. 7-1-77; am. [Register, September, 1988, No. 393](#), eff. 10-1-88.

NR 220.02 Categories and classes of point sources. (1) Adhesives and sealants industry

- (2) Asbestos manufacturing
- (3) Builders paper and board mills
- (4) Canned and preserved fruits and vegetables
- (5) Canned and preserved seafood processing
- (6) Carbon black industry
- (7) Cement manufacturing
- (8) Chemicals, miscellaneous
- (9) Clay, gypsum, refractory, and ceramic products
- (10) Coal mining
- (11) Concrete products
- (12) Converted paper products
- (13) Dairy product processing
- (13m) Dental offices
- (14) Domestic sewage treatment works
- (15) Electroplating
- (16) Explosives manufacturing
- (17) Feedlots
- (18) Ferroalloy manufacturing
- (19) Fertilizer manufacturing
- (20) Fish hatcheries and farms
- (21) Food and beverage processing, miscellaneous
- (22) Glass manufacturing
- (23) Grains mills
- (24) Gum and wood chemicals manufacturing
- (25) Hospital

- (26) Ink formulating
- (27) Inorganic chemicals manufacturing
- (28) Iron and steel manufacturing
- (29) Laundries, auto and other
- (30) Leather tanning and finishing
- (31) Machinery and mechanical products manufacturing
- (32) Meat product and rendering processing
- (33) Mineral mining and processing industry
- (34) Nonferrous metals manufacturing
- (35) Oil and gas extraction
- (36) Ore mining and dressing industry
- (37) Organic chemicals manufacturing
- (38) Paint formulating
- (39) Paving and roofing materials
- (40) Pesticides and agricultural chemicals industry
- (41) Petroleum refining
- (42) Pharmaceutical manufacturing
- (43) Phosphate manufacturing
- (44) Photographic processing
- (45) Plastic and synthetic material manufacturing
- (46) Printing and publishing
- (47) Pulp, paper and paperboard manufacturing
- (48) Rubber processing
- (49) Shore receptor and bulk terminals
- (50) Soap and detergent manufacturing
- (51) Steam electric power generating
- (52) Steam supply
- (53) Sugar processing
- (54) Textile mills
- (55) Timber products processing
- (56) Transportation industry
- (57) Water supply

History: Cr. [Register, June, 1977, No. 258](#), eff. 7-1-77; [CR 21-063](#): cr. (13m) [Register April 2022 No. 796](#), eff. 5-1-22.

Subchapter II — Effluent Limitations Based Upon Federally Promulgated Regulations

NR 220.10 Purpose. The purpose of this subchapter is to provide for the incorporation of effluent limitations into discharge permits required under s. 283.31, Stats., as soon as possi-

ble after the promulgation of regulations establishing effluent limitation guidelines.

History: Cr. Register, July, 1981, No. 307, eff. 8-1-81; renum. from NR 207.01 and am. Register, September, 1988, No. 393, eff. 10-1-88; CR 17-002: am. Register April 2018 No. 748, eff. 5-1-18.

NR 220.11 Applicability. This subchapter is applicable to discharge permits issued for all categories and classes of point sources listed in s. NR 220.02.

History: Cr. Register, July, 1981, No. 307, eff. 8-1-81; am. Register, April, 1983, No. 328, eff. 5-1-83; renum. from NR 207.02 and am. Register, September, 1988, No. 393, eff. 10-1-88.

NR 220.12 Definitions. Terms used in this subchapter are defined in s. NR 205.03. Abbreviations used in this chapter are defined in s. NR 205.04. Other terms for this chapter are defined as follows:

(1) “Effluent Limitation Guidelines” or “ELGs” are federal or state technology based guidelines or standards that are used to establish effluent limitations for industrial categories or classes of dischargers. They include federal guidelines, standards, and limitations that are established under 33 USC 1311, 1314, 1316, 1318, 1342 and 1361 and state promulgated guidelines, standards, and limitations in chs. NR 221 to 297.

(2) “Fundamentally different factors variance” or “FDFV” means a variance or an adjustment to an effluent limitation when data specific to a permittee indicates the presence of factors that are fundamentally different from the factors considered by EPA in development of the effluent limitation guidelines 33 USC 1311 and 1314.

History: Cr. Register, July, 1981, No. 307, eff. 8-1-81; renum. from NR 207.03 and am. Register, September, 1988, No. 393, eff. 10-1-88; CR17-002: renum. 220.12 to (intro.) and am., cr. (1), (2) Register April 2018 No. 748, eff. 5-1-18; correction in (1) under s. 13.92 (4) (b) 7., Stats., Register April 2018 No. 748.

NR 220.13 Establishment of limitations based upon federal regulations. (1) LISTED INDUSTRIAL CATEGORIES. In the event that the EPA promulgates an effluent limitation guideline for a category or class of point sources listed in s. NR 220.02 that is more stringent than the promulgated effluent limitation guideline for that category or class, the department shall include an effluent limitation based on the EPA-promulgated effluent limitation guideline in an issued, reissued, or modified WPDES permit for a point source that belongs to the federal category or class of point sources in accordance with the federally required compliance date.

(2) INDUSTRIAL CATEGORIES NOT SPECIFICALLY LISTED. In the event that the EPA promulgates an effluent limitation guideline for a category or class of point sources not listed in s. NR 220.02, the department shall include an effluent limitation based on the EPA-promulgated effluent limitation guideline in an issued, reissued, or modified WPDES permit for a point source that belongs to the federal category or class of point sources in accordance with the federally required compliance date.

(3) LESS STRINGENT LIMITATIONS. If a promulgated federal effluent limitation guideline results in an effluent limitation that is less stringent than an existing applicable technology based limitation contained in a WPDES permit, the department may only include the less stringent limitation if the antibacksliding requirements in ch. NR 207 are satisfied.

(4) COMPLIANCE. Prior to any permit modification, revocation and reissuance, or reissuance to incorporate a limitation for a toxic substance based on a revised federal effluent guideline promulgated under 33 USC 1317, the permittee shall comply with the federally promulgated guideline by the required compliance date even if the permit has not yet been modified, revoked and

reissued, or reissued to include a limitation based on the revised guideline.

History: Cr. Register, July, 1981, No. 307, eff. 8-1-81; am. Register, April, 1983, No. 328, eff. 5-1-83; renum. from NR 207.04, Register, September, 1988, No. 393, eff. 10-1-88; CR 17-002: r. and recr. Register April 2018 No. 748, eff. 5-1-18.

NR 220.14 Establishment of effluent guideline limitations in the Wisconsin administrative code. The department shall, as soon as possible after the promulgation of any federal regulations establishing effluent guidelines for certain categories and classes of point sources, adopt appropriate effluent guideline limitations for such point sources in the Wisconsin administrative code.

History: Cr. Register, July, 1981, No. 307, eff. 8-1-81; am. Register, April, 1983, No. 328, eff. 5-1-83; renum. from NR 207.05, Register, September, 1988, No. 393, eff. 10-1-88.

NR 220.15 Disposal of pollutants into publicly owned treatment works, land treatment systems, or land application of wastewater. (1) In this section, “surface waters” means waters of the state, excluding groundwater.

(2) When part of a discharger’s process wastewater is not being discharged into surface waters because it is disposed into a POTW, into a land treatment system, or via land application of wastewater, thereby reducing the flow or level of pollutants being discharged into surface waters, applicable effluent standards and limitations for the discharge in a WPDES permit shall be adjusted to reflect the reduced raw waste resulting from such disposal. Effluent limitations and standards in the permit shall be calculated by one of the following methods:

(a) If none of the waste from a particular process is discharged into surface waters, and effluent limitations guidelines provide separate allocation for wastes from that process, all allocations for the process shall be eliminated from calculation of permit effluent limitations or standards.

(b) In all cases other than those described in par. (a), effluent limitations shall be adjusted by multiplying the effluent limitation derived by applying effluent limitation guidelines to the total waste stream by the amount of wastewater flow to be treated and discharged into surface waters, and dividing the result by the total wastewater flow. This method is expressed algebraically as:

$$P = \frac{E \times N}{T}$$

Where:

P is the final, adjusted permit effluent limitation,

E is the limitation derived by applying effluent guidelines to the total wastestream,

N is the wastewater flow to be treated and discharged to surface waters, and

T is the total wastewater flow.

(c) In addition to the adjustment in par. (b), effluent limitations and standards may be further adjusted under a fundamentally different factors variance under s. NR 220.20 to make them more or less stringent if discharges to POTWs or land treatment systems change the character or treatability of the pollutants being discharged.

Note: “Land treatment system” is defined in s. NR 214.03 (24). Wells as defined in s. NR 812.05 (1) (b) are not land treatment systems. Disposal of pollutants into wells is prohibited by s. NR 812.05.

(3) Sub. (2) does not apply to the extent that effluent limitations guidelines do any of the following:

(a) Control concentrations of pollutants discharged but not mass.

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(b) Specify a different specific technique for adjusting effluent limitations to account for land application or disposal into POTWs.

(4) This section does not alter a permittee's obligation to meet any more stringent limitations or requirements established under other WPDES permit program regulations, including those under chs. NR 204 and 214.

History: Cr. Register, July, 1981, No. 307, eff. 8-1-81; am. Register, April, 1983, No. 328, eff. 5-1-83; renum. from NR 207.06 and am. Register, September, 1988, No. 393, eff. 10-1-88; CR 17-002: r. and recr. Register April 2018 No. 748, eff. 5-1-18.

Subchapter III — Best Professional Judgment Effluent Limitations for Point Sources

NR 220.20 Purpose. The purpose of this subchapter is to provide for the application of effluent limitations in permits for discharges from point sources which are not subject to the effluent limitations in chs. NR 221 to 299 inclusive.

History: Cr. Register, June, 1976, No. 246, eff. 7-1-76; renum. from NR 217.01 and am. Register, September, 1988, No. 393, eff. 10-1-88.

NR 220.21 Application of effluent limitations. (1) The department may specify effluent limitations applicable in permits for the discharge from point sources:

(a) Which do not include the classes or categories of point sources identified in ch. NR 220, subch. I,

(b) Which belong to classes or categories of point sources for which effluent limitations have not been adopted in chs. NR 221 to 297 inclusive, or

(c) Which belong to classes or categories of point sources excluded from, or not specifically included in, the applicability provisions of the effluent limitations of chs. NR 221 to 299 inclusive.

(2) In permits for discharges from point sources identified in sub. (1) effluent limitations shall be those which the department determines are achievable by the application of the best practicable control technology currently available, or, where appropriate, the best available control technology economically achievable.

(3) In making such determinations the department shall in part be guided, where appropriate, by transferable technology identified in guideline development documents, published by the U.S. environmental protection agency pursuant to Public Law 92-500, as best practicable control technology currently available or best available control technology economically achievable and by effluent limitations achievable by such technologies as set forth in chs. NR 221 to 299 inclusive.

History: Cr. Register, June, 1976, No. 246, eff. 7-1-76; renum. from NR 217.10 and am. (1) (a), Register, September, 1988, No. 393, eff. 10-1-88; correction in (2) made under s. 13.93 (2m) (b) 4., Stats., Register, September, 1988, No. 393.

Subchapter IV — Variances to Effluent Limitation Guidelines

NR 220.30 Purpose. The purpose of this subchapter is to establish the criteria and standards to be used in determining whether effluent limitations alternative to those required by chs. NR 221 to 297 or by federal effluent limitation guidelines should be included in a WPDES permit for a discharger because factors relating to the discharger's facilities, equipment, processes, or other factors related to the discharger are fundamentally different from the factors considered by the department or the EPA in development of the effluent limitation guidelines. This subchapter also provides expedited variance procedures for fundamentally different factors variances and for other variances under 33 USC 1311(c).

History: CR 17-002: cr. Register April 2018 No. 748, eff. 5-1-18; correction under s. 13.92 (4) (b) 7., Stats., Register April 2018 No. 748.

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NR 220.31 Fundamentally different factors variances. (1) GENERAL. The department may adjust an effluent limitation that is based on a requirement in chs. NR 221 to 297 or based on a federal effluent limitation guideline established under 33 USC 1311 and 1314 on a case-by-case basis to make the limitation more or less stringent for a permittee within an industrial category or subcategory. An FDFV may only be approved for a limitation if data specific to the discharger indicates the presence of factors fundamentally different from those considered by EPA or the department in developing the limitation at issue. Any request for a variance and department approval of a variance shall comply with the requirements in 33 USC 1311(n) and 40 CFR 125 subpart D.

(2) WHO MAY REQUEST AN FDFV. Any interested person, including the permittee, believing that the factors relating to a discharger's facilities, equipment, processes, or other facilities related to the discharger are fundamentally different from the factors considered during the development of the effluent limitation guidelines may request an FDFV. An FDFV may also be proposed by the department in the draft permit.

(3) FDFV RESTRICTIONS. A fundamentally different factors variance may not be granted for any new source performance standard and does not apply to the BPT limitations for steam electric power generating, contained in s. NR 290.12 (1). The department may not include an alternative limitation based on a fundamentally different factors variance in a permit unless the EPA has approved the variance under 40 CFR 124.62.

History: CR 17-002: cr. Register April 2018 No. 748, eff. 5-1-18; correction in (1) under s. 13.92 (4) (b) 7., Stats., Register April 2018 No. 748.

NR 220.32 Criteria for fundamentally different factors variances. (1) APPROVABLE FDFV REQUESTS. A request for the establishment of effluent limitations under this subchapter may be approved only if all of the following apply:

(a) There is an applicable effluent limitation guideline that applies and specifically controls the pollutant for which alternative effluent limitations or standards have been requested.

(b) Factors relating to the discharge controlled by the permit are fundamentally different, as specified in sub. (4), from those considered by EPA or the department in establishing effluent limitation guidelines.

(c) The request for alternative effluent limitations or standards is made as part of the permit application.

(2) LESS STRINGENT FDFV LIMITATIONS. A request for the establishment of effluent limitations less stringent than those required by effluent limitation guidelines shall be approved only if all of the following apply:

(a) The alternative effluent limitation or standard requested is no less stringent than justified by the fundamental difference.

(b) The alternative effluent limitation or standard will be consistent with any applicable areawide waste treatment management plan under ch. NR 121 and with any more stringent limitations.

(c) Compliance with the effluent limitation guidelines, either by using the technologies upon which the effluent limitation guidelines are based or by other control alternatives, would result in any of the following:

1. A cost wholly out of proportion to the removal cost considered during development of the effluent limitation guidelines.

2. A non-water quality environmental impact, including energy requirements, fundamentally more adverse than the impact considered during development of the effluent limitation guidelines.

(3) MORE STRINGENT FDFV LIMITATIONS. A request for an

alternative limitation that is more stringent than required by effluent limitation guidelines shall be approved only if all of the following apply:

(a) The alternative effluent limitation or standard requested is no more stringent than justified by the fundamental difference.

(b) Compliance with the alternative effluent limitation or standard would not result in any of the following:

1. A removal cost wholly out of proportion to the removal cost considered during development of the effluent limitation guidelines.

2. A non-water quality environmental impact, including energy requirements, fundamentally more adverse than the impact considered during development of the effluent limitations.

(4) FUNDAMENTALLY DIFFERENT FACTORS. Factors that may be considered fundamentally different are limited to any of the following:

(a) The nature or quality of pollutants contained in the raw waste load of the applicant's process wastewater.

(b) The volume of the discharger's process wastewater and effluent discharged.

(c) Non-water quality environmental impact of control and treatment of the discharger's raw waste load.

(d) Energy requirements of the application of control and treatment technology.

(e) Age, size, land availability, and configuration as they relate to the discharger's raw waste load.

(f) Cost of compliance with required control technology.

(5) UNAPPROVABLE FDFV REQUESTS. A variance request or portion of such a request under this section may not be granted on any of the following grounds:

(a) The infeasibility of installing the required waste treatment equipment within the time specified in the effluent limitation guidelines or standards or Clean Water Act.

Note: A variance may be approved based on the discharger's inability to ultimately achieve effluent limitations, but not based on the discharger's ability to meet a limit within statutory deadlines.

(b) The assertion that the effluent limitation guidelines cannot be achieved with the appropriate waste treatment facilities installed if the assertion is not based on factors listed in sub. (4).

(c) The discharger's ability to pay for the required waste treatment.

(d) The impact of a discharge on local receiving water quality.

History: CR 17-002: cr. Register April 2018 No. 748, eff. 5-1-18.

NR 220.33 Variance application process. (1) ELG VARIANCE APPLICATION DEADLINES. (a) *FDFV deadline.* A written request for an alternative limitation based on a fundamentally different factors variance shall be submitted no later than 180 days after the date on which an effluent limitation guideline is published in the federal register, and any of the following apply:

1. For a variance from an effluent limitation that is based on

the best practicable control technology currently available under 33 USC 1311(b)(1)(A) and 1314(b)(1), the request shall be submitted by the close of the public comment period under s. 283.39, Stats.

2. For a variance from an effluent limitation that is based on the best control technology available for conventional pollutants under 33 USC 1311(b)(2)(E) and 33 USC 1314(b)(4), or for variances from an effluent limitation that is based on the best available treatment technology economically achievable under 33 USC 1311(b)(2) and 33 USC 1314(b)(2), the request shall be submitted as part of the permit application for reissuance or modification.

(b) *Other technology based limitation variance deadlines.* Requests for a variance to an effluent guideline limitation under 33 USC 1311(c) or (g) shall comply with the deadlines and requirements in 40 CFR 122.21(m).

(c) *Advanced notification.* Before public notice of a draft permit modification or reissuance is given under s. 283.39, Stats., the department may notify a permittee or applicant in writing that the draft permit will likely contain limitations based on effluent limitation guidelines or standards that may be eligible for a variance under par. (a) or (b). In the written notice to the permittee, the department may require that the permittee submit a variance request within a reasonable time period if the permittee is interested in applying for a variance under par. (a) or (b). If the permittee wishes to request a variance, the variance application shall explain how the requirements for the variance have been met and the application shall be submitted within the reasonable time period specified in the written notice. The department may send the written notice to a permittee prior to submittal of a permit application for reissuance. If the department determines the variance is approvable, the draft permit or final permit may contain an alternative limitation that takes effect upon approval by the department and the EPA.

(2) CONTENT OF FDFV APPLICATION. Any permittee requesting an FDFV shall demonstrate and explain each of the following in the application:

(a) How the appropriate criteria of s. NR 220.32 have been met.

(b) How the factors listed in s. NR 220.32 regarding the discharger's facility are fundamentally different from the factors EPA or the department considered in establishing the effluent limitation guidelines. The requester shall reference all relevant material and information such as the published development documents in support of the effluent limitation guidelines, all associated technical and economic data collected for use in developing each effluent limitation guideline, all records of legal proceedings, and all written and printed documentation including records of communication that relevant to the regulations that are kept as public records by the department.

(c) How the alternative limitations requested are justified by the fundamental difference alleged in par. (b).

History: CR 17-002: cr. Register April 2018 No. 748, eff. 5-1-18.