**Section 310.233 Combined Waste Stream Formula**

If process wastewater is mixed prior to treatment with wastewaters other than those generated by the regulated process, the Control Authority (or the industrial user with the written concurrence of the Control Authority) must derive fixed alternative discharge limits. When it is deriving alternative categorical limits, the Control Authority must calculate both an alternative daily maximum value using the daily maximum values specified in the appropriate categorical pretreatment standards and an alternative consecutive sampling day average value using the average monthly values specified in the appropriate categorical pretreatment standards. The industrial user must comply with the alternative daily maximum and average monthly limits fixed by the Control Authority until the Control Authority modifies the limits or approves an industrial user modification request. Modification is authorized whenever there is a material or significant change in the values used in the calculation to fix alternative limits for the regulated pollutant. An industrial user must immediately report any such material or significant change to the Control Authority. If appropriate, the Control Authority must calculate new alternative categorical limits within 30 days.

a) Alternative Limit Calculation. For these formulas, the "average daily flow" means a reasonable measure of the average daily flow for a 30-day period. For new sources, flows must be estimated using projected values. The Control Authority must derive the alternative limit for a specified pollutant by the use of either of the following formulas:

1) Alternative Concentration Limit

|  |  |
| --- | --- |
| C = | (T - D)ΣCiFi |
| (T)ΣFi |

where

|  |  |  |
| --- | --- | --- |
| C | = | The alternative concentration limit for the combined waste stream. |
|  |  |  |
| Ci | = | The categorical pretreatment standard concentration limit for a pollutant in the regulated stream i. |
|  |  |  |
| Fi | = | The average daily flow (at least a 30-day average) of stream i to the extent that it is regulated for such pollutant. |
|  |  |  |
| "ΣGi" |  | The sum of the results of calculation G for streams i = 1 to i = N. |
|  |  |  |
| N | = | The total number of regulated streams. |
|  |  |  |
| T | = | The average daily flow (at least a 30-day average) through the combined pretreatment facility (includes Fi, D and unregulated streams. |
|  |  |  |
| D | = | The average daily flow (at least a 30-day average) from: |

A) Boiler blowdown streams, non-contact cooling streams, stormwater streams, and demineralizer backwash streams, subject to the proviso of subsection (d);

B) Sanitary waste streams if such waste streams are not regulated by a categorical pretreatment standard; and

C) From any process waste streams that were or could have been entirely exempted from categorical pretreatment standards as specified in subsection (e).

2) Alternative Mass Limit

|  |  |
| --- | --- |
| M = | (T - D)ΣMi |
| ΣFi |

where

|  |  |  |
| --- | --- | --- |
| M | = | The alternative mass limit for a pollutant in the combined waste stream. |
|  |  |  |
| Mi | = | The categorical pretreatment standard mass limit for a pollutant in the regulated stream i (the categorical pretreatment mass limit multiplied by the appropriate measure of production). |
|  |  |  |
| Fi | = | The average daily flow (at least a 30-day average) of stream i to the extent that it is regulated for such pollutant. |
|  |  |  |
| "ΣGi" |  | means the sum of the results of calculation G for streams i = 1 to i = N. |
|  |  |  |
| N | = | The total number of regulated streams. |
|  |  |  |
| T | = | The average daily flow (at least a 30-day average) through the combined pretreatment facility (includes Fi, D and unregulated streams. |
|  |  |  |
| D | = | The average daily flow (at least a 30-day average) from: |

A) Boiler blowdown streams, non-contact cooling streams, stormwater streams and demineralizer backwash streams, subject to the proviso of subsection (d);

B) Sanitary waste streams if such waste streams are not regulated by a categorical pretreatment standard; and

C) From any process waste streams that were or could have been entirely exempted from categorical pretreatment standards, as specified in subsection (e).

b) Alternative Limits Below Detection. An alternative pretreatment limit must not be used if the alternative limit is below the analytical detection limit for any of the regulated pollutants.

c) Self-monitoring. Self-monitoring required to ensure compliance with the alternative categorical limit must be as follows:

1) The type and frequency of sampling, analysis, and flow measurement must be determined by reference to the self-monitoring requirements of the appropriate categorical pretreatment standards.

2) If the self-monitoring schedules for the appropriate standards differ, monitoring must be done according to the most frequent schedule.

3) If flow determines the frequency of self-monitoring in a categorical pretreatment standard, the sum of all regulated flows (Fi) is the flow that must be used to determine self-monitoring frequency.

d) Proviso to Subsections (a)(1) and (a)(2). If boiler blowdown, non-contact cooling streams, stormwater streams, and demineralizer backwash streams contain a significant amount of a pollutant, and the combination of such streams, prior to pretreatment, with the industrial user's regulated process waste streams will result in a substantial reduction of that pollutant, the Control Authority, upon application of the industrial user, must determine whether such waste streams should be classified as diluted or unregulated. In its application to the Control Authority, the industrial user must provide engineering, production, sampling, and analysis and such other relevant information so the Control Authority can make its determination.

e) Exemptions from Categorical Pretreatment Standards. Process waste streams were or could have been entirely exempted from categorical pretreatment standards pursuant to paragraph 8 of the NRDC v. Costle consent decree, incorporated by reference in Section 310.107, for one or more of the following reasons (see appendix D to 40 CFR 403, incorporated by reference in Section 310.107):

1) The pollutants of concern are not detectable in the discharge from the industrial user;

2) The pollutants of concern are present only in trace amounts and are neither causing nor are likely to cause toxic effects;

3) The pollutants of concern are present in amounts too small to be effectively reduced by technologies known to USEPA;

4) The waste stream contains only pollutants that are compatible with the POTW.

f) If a treated regulated process waste stream is combined prior to treatment with wastewaters other than those generated by the regulated process, the industrial user may monitor either the segregated process waste stream or the combined waste stream to determine compliance with applicable pretreatment standards. If the industrial user chooses to monitor the segregated process waste stream, it must apply the applicable categorical pretreatment standard. If the user chooses to monitor the combined waste stream, it must apply an alternative discharge limit calculated using the combined waste stream formula as provided in this Section. The industrial user may change monitoring points only after receiving approval from the Control Authority. The Control Authority must ensure that any change in an industrial user's monitoring point or points will not allow the user to substitute dilution for adequate treatment to achieve compliance with applicable standards.

BOARD NOTE: Derived from 40 CFR 403.6(e) (2005), as amended at 70 Fed. Reg. 60134 (Oct. 14, 2005).

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