

3745-2-06

**Application of preliminary effluent limitations.****(A) General provisions.**

- (1) The average preliminary effluent limitation (PEL) is the lowest wasteload allocation (WLA) based on chronic criteria, and the maximum PEL is the lowest WLA based on acute criteria, calculated pursuant to rule 3745-2-05 of the Administrative Code.
- (2) A water quality-based effluent limitation (WQBEL) or monitoring requirement for a pollutant shall be determined by the reasonable potential of that pollutant to cause or contribute to an excursion of any applicable water quality standard established in or developed under Chapter 3745-1 of the Administrative Code.
- (3) Except as provided in paragraph (C) of this rule, the determination of reasonable potential shall be based on the comparison of the average or the maximum projected effluent quality (PEQ) to the average or the maximum PEL, respectively, and on other site-specific factors in accordance with paragraph (B) of this rule. This comparison will result in the assignment of the pollutant to a group with an associated water quality-based permit condition recommendation. Final permit conditions shall be established by Ohio EPA in accordance with rule 3745-33-07 of the Administrative Code.

**(B) Pollutant assessment.**

- (1) WQBELs shall be recommended for any group five pollutant. A pollutant shall be assigned to group five if any of the following conditions apply:
  - (a) The average PEQ is greater than or equal to the average PEL or the maximum PEQ is greater than or equal to the maximum PEL; or
  - (b) The average or maximum PEQ is greater than or equal to seventy-five per cent of the average or maximum PEL, respectively, and any of the following conditions apply:
    - (i) The total load of a pollutant in the receiving water at a point downstream of the discharge is greater than or equal to seventy-five per cent of the loading capacity of the receiving water at that point, where, for the purpose of this determination:
      - (a) The total load of a pollutant is determined as the sum of the background load and the load associated with the PEL for

that discharge. If multiple discharges were included in determination of the PEL, the load associated with the PEL for each upstream discharge shall also be added. Other upstream pollutant loads included in determination of the PEL shall also be included;

- (b) The loading capacity is determined as the highest pollutant load in the receiving water ~~which~~that will maintain the numeric criteria applied in determination of the PEL at a receiving water flow equal to the sum of effluent flow and one hundred per cent of the stream design flow used in determination of the PEL. If other upstream pollutant sources were included in determination of the PEL, the flows applied to those sources in determination of the PEL shall also be included; and
  - (c) Background load is the load based on the background concentration and one hundred per cent of the stream design flow used in determination of the PEL;
- (ii) The PEQ value is believed to be an underestimation of effluent quality due to factors such as, but not limited to, a small data set, data inaccuracies, or projected changes in effluent quality that are not accounted for in current effluent data;
  - (iii) It is uncertain whether a PEL will be sufficient to achieve or maintain the designated uses of the receiving water for reasons such as, but not limited to:
    - (a) The PEL is based on alternative modeling methods pursuant to rule 3745-2-05 of the Administrative Code;
    - (b) Discharge-specific or project-area dissolved metal translators were used in determination of the PEL;
    - (c) The PEL exceeds the applicable inside mixing zone maximum criteria; or
    - (d) Ohio EPA determines that the PEL will achieve or maintain the designated uses;
  - (iv) Evidence suggests that the designated use of the receiving water is

impaired or threatened, or that there is bioaccumulation of the pollutant or pollutants of concern in aquatic organisms.

- (2) A monitoring requirement shall be recommended for any group four pollutant. A pollutant shall be assigned to group four if any of the following conditions apply:
  - (a) The average PEQ is greater than or equal to fifty per cent of the average PEL and paragraph (B)(1) of this rule does not apply;
  - (b) The maximum PEQ is greater than or equal to fifty per cent of the maximum PEL and paragraph (B)(1) of this rule does not apply; or
  - (c) The pollutant is expected to be present but has not been adequately quantified.
- (3) A tracking requirement in accordance with rule 3745-33-07 of the Administrative Code shall be recommended for any pollutant for which the average PEQ is more than seventy-five per cent of the average PEL or the maximum PEQ is more than seventy-five per cent of the maximum PEL and paragraph (B)(2) of this rule applies.
- (4) A monitoring requirement evaluation shall be recommended for any group three pollutant. A pollutant shall be assigned to group three if the average PEQ is less than fifty per cent of the average PEL and the maximum PEQ is less than fifty per cent of the maximum PEL and paragraph (B)(5) of this rule does not apply.
- (5) A monitoring requirement shall not be recommended for any group two pollutant. A pollutant shall be assigned to group two if a WLA was not required for one of the following reasons:
  - (a) Because the maximum PEQ is less than twenty-five per cent of the lowest applicable maximum criteria and the average PEQ is less than twenty-five per cent of the lowest applicable average criteria, in accordance with paragraphs (A)(1) and (A)(2) of rule 3745-2-04 of the Administrative Code; or
  - (b) Because all available effluent data for the pollutant are below the analytical detection levels applied to that data, in accordance with paragraph (B)(1) of rule 3745-2-04 of the Administrative Code.

- (6) A pollutant shall be assigned to group one if a WLA could not be calculated because available data is insufficient to develop numeric criteria.
- (a) For discharges in the lake Erie basin, if WLAs are determined based on ambient screening values as required by paragraph (C)(2) of rule 3745-2-04 of the Administrative Code, Ohio EPA shall generate or require the discharger to generate the data necessary to derive numeric criteria under the following conditions.
- (i) If the maximum PEQ is greater than or equal to the WLA based on the ambient screening value to protect aquatic life from acute effects, data shall be generated to derive an acute aquatic life criterion for that pollutant.
- (ii) If the average PEQ is greater than or equal to the WLA based on the ambient screening value to protect aquatic life from chronic effects, data shall be generated to derive a chronic aquatic life criterion for that pollutant.
- (iii) If the average PEQ is greater than or equal to the WLA based on the ambient screening value to protect humans from health effects other than cancer, data shall be generated to derive a human health criterion for that pollutant.
- (b) After data has been generated, as required by paragraph (B)(6)(a) of this rule, Ohio EPA shall develop numeric criteria for that pollutant in accordance with Chapter 3745-1 of the Administrative Code. Ohio EPA shall then reevaluate WLAs for that pollutant in accordance with Chapter 3745-2 of the Administrative Code.
- (c) Ohio EPA shall establish any requirements for the discharger to collect the data required by paragraph (B)(6)(a) of this rule in the discharger's permit, in accordance with Chapter 3745-33 of the Administrative Code.
- (7) Ohio EPA may exclude design parameters indicative of treatment plant performance from paragraphs (A) and (B) of this rule.
- (C) Pollutants in the intake water. The determination of reasonable potential of intake pollutants shall be made on a pollutant-specific and an outfall-specific basis. An intake pollutant is a pollutant that is present in waters of the state at the time it is withdrawn from such waters by a discharger or other facility (e.g., public water

supply) supplying the discharger with intake water.

~~(1) The determination of reasonable potential of intake pollutants shall be made on a pollutant specific and an outfall specific basis. An intake pollutant is a pollutant that is present in waters of the state at the time it is withdrawn from such waters by a discharger or other facility (e.g., public water supply) supplying the discharger with intake water.~~

~~(a)~~(1) Paragraph (C) of this rule applies only in the absence of a TMDL implementation plan applicable to the discharge developed pursuant to rule 3745-2-12 of the Administrative Code. Paragraph (C) of this rule does not alter the conditions established in paragraph (A) of rule 3745-2-04 of the Administrative Code for determining the necessity of calculating WLAs.

~~(b)~~(2) The director may determine that an intake pollutant does not have reasonable potential where a discharger demonstrates to the director's satisfaction that:

~~(i)~~(a) The discharger withdraws one hundred per cent of the intake water containing the pollutant from the same body of water into which the discharge is made;

~~(ii)~~(b) The discharger does not contribute any additional mass of the identified intake pollutant to its wastewater. In cases where the discharge is a combination of process wastewater and noncontact cooling water, and the process wastewater is limited separately from the noncontact cooling water, the director may consider application of ~~this section~~paragraph (C) of this rule to the discharge of process wastewater and noncontact cooling water separately;

~~(iii)~~(c) The discharge does not alter the identified intake pollutant chemically or physically in a manner that would cause adverse water quality impacts to occur that would not occur if the pollutants were left instream;

~~(iv)~~(d) The discharge does not increase the identified intake pollutant concentration at the edge of the mixing zone, or at the point of discharge if a mixing zone is not allowed, as compared to the pollutant concentration in the intake water, unless the increased concentration does not cause or contribute to an excursion of an applicable water quality standard; and

~~(v)~~(e) The timing and location of the discharge would not cause adverse water quality impacts to occur that would not occur if the identified intake

pollutant were left instream.

~~(e)~~(3) Upon a finding by the director under paragraph ~~(C)(1)(b)~~(C)(2) of this rule that a pollutant in the discharge does not have reasonable potential, the director shall not be required to include a WQBEL for the identified intake pollutants in the discharger's NPDES permit, provided that:

~~(i)~~(a) The NPDES permit fact sheet or statement of basis includes a specific determination that there is no reasonable potential for the discharge of an identified intake pollutant and the fact sheet or statement of basis references appropriate supporting documentation included in the administrative record;

~~(ii)~~(b) The NPDES permit requires all influent, effluent and ambient monitoring deemed necessary by the director to demonstrate that the conditions that led to the determination under paragraph ~~(C)(1)(b)~~(C)(2) of this rule are maintained during the term of the NPDES permit; and

~~(iii)~~(c) The NPDES permit contains a reopener clause authorizing modification or revocation and reissuance of the NPDES permit if new information demonstrates changes in the conditions that led to the determination under paragraph ~~(C)(1)(b)~~(C)(2) of this rule.

~~(d)~~(4) Absent a finding by the director that an intake pollutant in the discharge does not have reasonable potential in accordance with paragraph ~~(C)(1)(b)~~(C)(2) of this rule, the director shall use the procedures set forth in paragraphs (A) and (B) of this rule to determine the reasonable potential of that pollutant.

~~(e)~~(5) Same body of water. An intake pollutant is considered to be from the same body of water as the discharge if the intake pollutant would have reached the vicinity of the outfall in the receiving water within a reasonable period of time had it not been removed by the discharger. This finding may be established if all of the following conditions apply:

~~(i)~~(a) The background concentration of the pollutant in the receiving water is similar to that in the intake water;

~~(ii)~~(b) There is a direct hydrological connection between the intake and discharge points; and

~~(iii)~~(c) Water quality characteristics (e.g., temperature, pH, hardness) are similar in the intake and receiving waters.

- ~~(f)(6)~~ The director may also consider other site-specific factors relevant to the transport and fate of the pollutant to make the finding in a particular case that a pollutant would or would not have reached the vicinity of the outfall in the receiving water within a reasonable period of time had it not been removed by the discharger.
- ~~(g)(7)~~ The director may consider an intake pollutant from groundwater to be from the same body of water if the pollutant would have reached the vicinity of the outfall in the receiving water within a reasonable period of time had it not been removed by the discharger. Such a pollutant shall not be considered to be from the same body of water if the groundwater contains the pollutant partially or entirely due to human activity, such as industrial, commercial, or municipal operations, disposal actions, or treatment processes.
- ~~(2) Intake pollutants may be considered in establishing WQBELs only when the concentration of the intake pollutant upstream of the discharge exceeds the most stringent applicable water quality criterion for that pollutant. Paragraphs (C)(1), (C)(1)(a), and (C)(1)(e) to (C)(1)(g) of this rule shall also apply to this paragraph.~~
- ~~(a) WQBELs may be considered for an intake pollutant from the same body of water.~~
- ~~(i) In cases where a discharger meets the conditions in paragraphs (C)(1)(b)(i) and (C)(1)(b)(iii) to (C)(1)(b)(v) of this rule, the director may establish WQBELs allowing the discharger to discharge a mass and concentration of the pollutant that are no greater than the mass and concentration of the pollutant identified in the discharger's intake water until March 23, 2007. The NPDES permit shall specify how compliance with mass and concentration limitations shall be determined. After March 23, 2007, WQBELs shall be established in accordance with applicable TMDL procedures contained in rule 3745-2-12 of the Administrative Code.~~
- ~~(ii) Where proper operation and maintenance of a discharger's treatment system results in the removal of a pollutant, the director may establish limitations that reflect the lower mass and/or concentration of the pollutant achieved by such treatment, taking into account the feasibility of maintaining such limits.~~
- ~~(iii) For pollutants contained in intake water provided by a water system, the concentration of the intake pollutant shall be determined at the point where the raw water supply is removed from the same body of water, or, if treated, where the water~~

~~treatment system removes any of the identified pollutants from the raw water supply. Mass shall be determined by multiplying the concentration of the pollutant determined in accordance with this paragraph by the volume of the discharger's intake flow received from the water system.~~

- ~~(b) Where the pollutant in a discharge originates from a water of the state that is not the same body of water as the receiving water, the director shall establish WQBELs using the most stringent water quality criterion for that pollutant applicable to the receiving stream.~~
- ~~(c) Where a discharger discharges intake pollutants that originate in part from the same body of water, and in part from a different body of water, the director may apply the procedures of paragraphs (C)(2)(a) and (C)(2)(b) of this rule to derive an effluent limitation reflecting the flow-weighted average of each source of the pollutant, provided that adequate monitoring to determine compliance is included in the NPDES permit.~~

(D) Other applicable conditions.

In the lake Erie drainage basin, if the geometric mean of a pollutant in fish tissue samples collected from a waterbody exceeds the tissue basis of a tier I criterion or tier II value, after consideration of the variability of the pollutant's bioconcentration and bioaccumulation in fish, each facility that discharges detectable levels of such pollutant to that water has the reasonable potential to cause or contribute to an excursion above a tier I criteria or a tier II value and the director shall establish a WQBEL for such pollutant in the NPDES permit for such facility.

Effective: 06/07/2011

R.C. 119.032 review dates: 11/30/2010 and 06/07/2016

CERTIFIED ELECTRONICALLY

---

Certification

03/07/2011

---

Date

Promulgated Under: 119.03  
Statutory Authority: 6111.03, 6111.12  
Rule Amplifies: 6111.12  
Prior Effective Dates: 10/31/1997