

7052.0220 REASONABLE POTENTIAL FOR CHEMICAL-SPECIFIC WQBELS.

Subpart 1. **Applicability.** Where the agency determines, using factors specified under Code of Federal Regulations, title 40, section 122.44, paragraph (d)(1)(ii), that a GLI pollutant is or may be discharged to surface waters of the state at a level which has the reasonable potential to cause or contribute to an excursion above any water quality standard listed or referenced in part 7052.0100 or water quality criterion developed according to part 7052.0110, WQBELs must be included in the permit. When facility-specific effluent monitoring data are available, the agency must make the reasonable potential determination by developing preliminary effluent limitations (PELs) and comparing them to the projected effluent quality (PEQ) as described in this part.

Subp. 2. **Developing preliminary effluent limitations.** The first step in a reasonable potential determination is to calculate a PEL. The procedures in parts 7052.0200 and 7052.0210 must be used to determine a PEL from a standard or criterion. If the agency determines that there are insufficient data to calculate a standard or criterion, the procedure in subpart 4 must be followed to determine if data must be generated to calculate a standard or site-specific criterion.

Subp. 3. **Developing projected effluent quality.** The procedures in items A to D must be used when developing PEQ.

A. Determine the maximum concentration for each GLI pollutant from its respective data set.

B. Select the corresponding factor from part 7052.0370 using the calculated coefficient of variation from part 7052.0200, subpart 5, item B, and the number of data points in the data set. Determine the PEQ concentration by multiplying the maximum value from the data set by the selected factor.

C. If the data set in item B contains less than ten values, the coefficient of variation used in part 7052.0370 must be 0.6.

D. If the PEQ is greater than the PEL, an effluent limitation for that GLI pollutant must be established in the permit.

On a case-by-case basis, when a discharger submits and the agency determines that an alternate PEQ procedure fulfills the requirements of Code of Federal Regulations, title 40, section 122.44, paragraph (d)(1), the agency must use this procedure in lieu of items A to D.

Subp. 4. **Developing data for calculating Tier II aquatic life standards and criteria or noncancer human health-based standards or site-specific criteria.** This subpart applies when the agency determines that insufficient data currently exist to calculate aquatic life toxicity-based Tier II or human health-based standards or criteria for GLI pollutants known to be in the discharge, or suspected to be in the discharge based on knowledge of the raw materials used or internal process or waste streams.

A. The agency shall use all available toxicity information to estimate ambient screening criteria for each identified GLI pollutant which will protect humans from noncancer health effects, and aquatic life from acute and chronic effects.

B. Using the provisions in parts 7052.0200 and 7052.0210, the agency must develop PELs based on the estimated ambient screening criteria and compare the PELs with each PEQ developed under subpart 3. If the PEQ exceeds the PEL for any GLI pollutant, the agency must generate or require the permittee to generate the data necessary to derive standards or site-specific criteria to protect human health from noncancer effects and aquatic life from acute and chronic effects using the methods in part 7052.0110 with site-specific consideration as provided in part 7052.0270.

C. The agency must use the data generated according to item B to calculate standards and site-specific criteria according to the methods in part 7052.0110. The derived standards and criteria must be used to calculate PELs to determine if an effluent limitation must be established in the permit. If the PEQ exceeds the PEL for any GLI pollutant, an effluent limitation must be established in the permit.

D. For GLI pollutants other than BCCs, a WQBEL for aquatic life protection will not be established if the following conditions exist:

- (1) the agency determines that insufficient data exist to calculate a standard or criterion;
- (2) the permittee has completed an in-stream biological assessment that demonstrates no acute or chronic aquatic life impact in the receiving water; and
- (3) there is no reasonable potential for WET determined under part 7052.0240, subpart 5.

Subp. 5. **Intake credits.** Intake pollutants must be evaluated on a pollutant-by-pollutant, outfall-by-outfall basis. The conditions in items A to I apply to the agency's consideration of intake pollutants, in the absence of a TMDL or an assessment and remediation plan approved under part 7052.0200, subpart 1, item C, when establishing effluent limitations in a permit.

A. There is no reasonable potential for the discharge of an identified intake pollutant or pollutant parameter to cause or contribute to an excursion above a water quality standard listed or referenced in part 7052.0100 or a water quality criterion developed under part 7052.0110 if a discharger demonstrates to the satisfaction of the agency that the following conditions exist:

- (1) the facility withdraws 100 percent of the intake water containing the intake pollutant from the same body of water, as defined in subpart 6, into which the discharge is made;
- (2) the facility does not contribute any additional mass of the identified intake pollutant to its wastewater;
- (3) the facility does not alter the identified intake pollutant chemically or physically in a manner that would cause increased toxicity or bioaccumulation to occur that would not occur if the intake pollutant was left in-stream;
- (4) the facility 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 intake pollutant concentration in the intake water, unless the increased concentration does not cause or contribute to an excursion above an applicable water quality standard or criterion; and

(5) the timing and location of the discharge would not cause increased toxicity or bioaccumulation to occur that would not occur if the identified intake pollutant was left in-stream.

B. If the agency determines that an intake pollutant in the discharge has no reasonable potential to cause or contribute to an excursion above an applicable water quality standard or criterion, a QBEL is not necessary and the permit must require influent, effluent, and ambient monitoring necessary to demonstrate that the conditions of item A are maintained during the term of the permit.

C. If a discharger does not demonstrate to the agency that the conditions in item A, subitems (1) to (5), are met, the agency must use the procedures under subparts 2 to 4 to determine whether the discharge has the reasonable potential to cause or contribute to an excursion above an applicable water quality standard or criterion.

D. Where the facility meets the conditions in item A, subitems (1) and (3) to (5), and the background concentration is greater than the most stringent applicable water quality standard or criterion, the agency must establish an effluent limitation for the discharge of the intake pollutant at a mass and concentration no greater than the mass and concentration identified in the facility's intake water.

E. Intake credit for an intake pollutant established in item D must be phased out and replaced by a TMDL. The agency must determine QBELs from these TMDLs and include them in permits after March 23, 2007.

F. For pollutants contained in the intake water provided by a water system, the concentration must be determined at the point where the raw water is removed from the same body of water, except that it must be the point where the water enters the water supplier's distribution system if a water treatment system removes any of the intake pollutant from the raw water supply. Mass must be determined by multiplying the concentration of the intake pollutant by the volume of the facility's intake flow received from the water system.

G. Where the intake pollutant in a facility's discharge originates from a water that is not the same body of water, as defined in subpart 6, as the receiving water, QBELs must be based upon the most stringent standard or criterion for that intake pollutant.

H. Where a facility discharges an intake pollutant that originates in part from the same body of water as defined in subpart 6, and in part from a different body of water, the agency must apply items C, D, and F to derive a flow-weighted average effluent limitation for each intake pollutant source.

I. Where proper operation and maintenance of a facility's treatment system results in removal of some or all of an intake pollutant, the agency must establish limitations that reflect the lower mass and/or concentration of the pollutant achieved by such treatment, taking into account the feasibility of establishing such limits.

Subp. 6. Determination of same body of water. An intake pollutant is considered to be from the same body of water as the discharge if the agency finds that the intake pollutant would have reached the vicinity of the outfall point in the receiving water within a reasonable period had it not

been removed by the permittee. The determination of the reasonable period is a site-specific determination that is based on a comparison of the time it took the intake pollutant to reach the outfall with the time it would have taken had the intake pollutant not been removed by the permittee. The finding that an intake pollutant is from the same body of water as the discharge is established when:

- A. the background concentration of the intake pollutant in the receiving water, excluding any amount of the pollutant in the facility's discharge, is similar to that in the intake water;
- B. there is a direct hydrological connection between the intake and discharge points; and
- C. water quality characteristics, for example, temperature, pH, hardness, are similar in the intake and receiving waters.

The agency may consider other site-specific factors affecting the transport and fate of the intake pollutant to make the finding in a particular case that an intake pollutant would or would not have reached the vicinity of the outfall point in the receiving water within a reasonable period had it not been removed by the permittee. An intake pollutant from groundwater must be considered to be from the same body of water if the agency determines the intake pollutant would have reached the vicinity of the outfall point in the receiving water within a reasonable period had it not been removed by the permittee, except that such an intake pollutant is not 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.

Subp. 7. **Other applicable conditions.** If the geometric mean of a GLI pollutant in fish tissue samples collected from a water body exceeds the fish tissue basis of a water quality standard or criterion, after factoring in the variability of the GLI pollutant's bioaccumulation in fish, each facility that discharges detectable levels of such GLI pollutant to that water has the reasonable potential to cause or contribute to an excursion above a water quality standard or criterion. Each permit for those identified facilities must contain a WQBEL for that GLI pollutant.

Statutory Authority: *MS s 115.03; 115.44*

History: *22 SR 1466; 39 SR 1344*

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