

TITLE 35: ENVIRONMENTAL PROTECTION

SUBTITLE C: WATER POLLUTION

CHAPTER II: ENVIRONMENTAL PROTECTION AGENCY

PART 352

PROCEDURES FOR DETERMINING WATER QUALITY BASED PERMIT  
LIMITATIONS FOR NATIONAL POLLUTANT DISCHARGE ELIMINATION  
SYSTEM DISCHARGERS TO THE LAKE MICHIGAN BASIN

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AUTHORITY: Implementing Section 13 and authorized by Sections 11(b) and 39(b) of the Environmental Protection Act [415 ILCS 5/11(b), 13 and 39(b)]

SOURCE: Adopted at 22 Ill. Reg. 4356, effective February 20, 1998.

NOTE: In this Part, superscript number or letters are denoted by parentheses; subscript are denoted by brackets; and SUM means the summation series or sigma function as used in mathematics.

SUBPART A: INTRODUCTION

**Section 352.100 Introduction**

This Part 352 contains Illinois Environmental Protection Agency (Illinois EPA or Agency) rules for the application of the Illinois Pollution Control Board (Illinois PCB) rules for the Lake Michigan Basin at 35 Illinois Adm. Code 302.Subparts A and E to the National Pollutant Discharge Elimination System (NPDES) permit program administered for discharges to the Lake Michigan Basin within the State of Illinois. These rules are required pursuant to the Final Guidance for the Great Lakes System, 60 FR 15366 adopted on March 23, 1995 by the United States Environmental Protection Agency (USEPA) to implement Section 118(c)(2) of the Clean Water Act (33 U.S.C. 1268) as amended by the Great Lakes Critical Programs Act of 1990 (P. L. 101-596, 104 Stat. 3000). That guidance identifies minimum water quality standards, antidegradation policies and implementation procedures that states must establish for the Great Lakes System to protect human health, aquatic life and wildlife. The water quality standards, criteria and value derivation procedures, variance and site specific rulemaking

procedures and antidegradation policies required under the Great Lakes Guidance and applicable to the Lake Michigan Basin, are contained in Illinois Pollution Control Board Rules. The implementation procedures required by that guidance are contained in this Part 352.

#### **Section 352.101 Scope**

The regulations in this Part 352 contain the procedures used by the Illinois Environmental Protection Agency to determine effluent limits and other conditions in NPDES permits. These regulations are cumulative with conditions, effluent limitations and other requirements established under the Illinois Environmental Protection Act [415 ILCS 5], regulations of the Illinois Pollution Control Board, the Federal Water Pollution Control Act (33 U.S.C. 1251) as now or hereafter amended, and regulations pursuant thereto, and schedules for achieving compliance therewith at the earliest reasonable date.

#### **Section 352.102 Applicability**

The regulations in this Part 352 apply only to dischargers to the Lake Michigan Basin, as that term is defined at 35 Ill. Adm. Code 303.443. These regulations do not apply to a Wet Weather Point Source as that term is defined at 35 Ill. Adm. Code 352.104.

#### **Section 352.103 Purpose**

The purpose of this Part 352 is to establish implementation procedures that are consistent with (as protective as) Appendix E and Procedures 3, 4, 5, 6, 7, 8, and 9 of Appendix F to 40 CFR 132 (1996).

#### **Section 352.104 Definitions**

Terms used in this Part have the meanings specified in 35 Ill. Adm. Code 301.200 through 301.444 and 302.501. The following terms have the meanings specified:

"Agency" means the Illinois Environmental Protection Agency.

"Area of Concern" or "AOC" is an area specially designated for remediation efforts.

"Bioaccumulative Chemicals of Concern" or "BCC" means a chemical or class of chemicals meeting the definition at 35 Ill. Adm. Code 302.501.

"Lake Michigan Lakewide Management Plan" or "LaMP" is a plan to manage the Illinois portion of Lake Michigan as approved by USEPA.

"Method Detection Level" is the minimum concentration of an analyte (substance) that can be measured and reported with a 99 percent confidence that the analyte concentration is greater than zero as determined by the procedure set forth in Appendix B of 40 CFR 136.

"Minimum Level" or "ML" is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard

analyzed by a specific analytical procedure approved in 40 CFR 136, assuming that all the method-specified sample weights, volumes and processing steps have been followed.

"Outlier" is a test value that is not statistically valid under tests approved in 40 CFR 136.

"Quantification Level" is a measurement of the concentration of a contaminant obtained by using a specified laboratory procedure approved in 40 CFR 136 and calibrated at a specified concentration above the method detection level. It is considered the lowest concentration at which a particular contaminant can be quantitatively measured using a specified laboratory procedure for monitoring of the contaminant.

"Pollutant Minimization Program" means a plan to achieve or maintain the goal of reducing contaminant discharges to below water quality based effluent limits.

"Preliminary Effluent Limitation" or "PEL" is an estimate of an allowable discharge taking into consideration mixing or dilution.

"Projected Effluent Quality" or "PEQ" is the amount of a contaminant estimated to be discharged by a facility or activity taking into account statistical analysis of the discharge or activity.

"Reasonable Potential Analysis" or "Reasonable Potential to Exceed" means the procedure to predict whether an existing or future discharge would cause or contribute to a violation of water quality standards, criteria or values.

"Same Body of Water" means that, for purposes of evaluating intake toxic substances consistent with Section 352.425, the Agency will consider intake toxic substances to be from the same body of water if the Agency finds that the intake toxic substance 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 and there is a direct hydrological connection between the intake and the discharge points. Notwithstanding the provisions of this definition, an intake toxic substance shall be considered to be from the same body of water if the permittee's intake point is located on Lake Michigan and the outfall point is located on a tributary of Lake Michigan. In this situation, the background concentration of the toxic substance in the receiving water shall be similar to or greater than that in the intake water and the difference, if any, between the water quality characteristics of the intake and receiving water shall not result in an adverse impact on the receiving water.

"Total Maximum Daily Load" or "TMDL" is the sum of the individual wasteload allocations for point sources and load allocations for nonpoint sources and natural background, as more fully defined at 40 CFR 130.2(i). A TMDL sets and allocates the maximum amount of a pollutant that may be introduced into a water body and still assure attainment and maintenance of water quality standards.

"USEPA" means the United States Environmental Protection Agency.

"Waste Load Allocation" or "WLA" is the portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution, as more fully defined at 40 CFR 130.2(h). In the absence of a TMDL approved by EPA pursuant to 40 CFR 130.7 or an assessment and remediation plan developed and approved in accordance with procedure 3.A of Appendix F of 40 CFR 132, a WLA is the allocation for an individual point source that ensures that the level of water quality to be achieved by the point source is derived from and complies with all applicable water quality standards.

"Water Quality Based Effluent Limitation" or "WQBEL" is a limit imposed in a permit so that the applicable water quality standard, criteria or value is not exceeded outside of a designated mixing zone.

"Wet Weather Point Source" means any discernible, confined and discrete conveyance from which pollutants are, or may be, discharged as the result of a wet weather event. Discharges from wet weather point sources shall include only: discharges of storm water from a municipal separate storm sewer as defined at 40 CFR 122.26(b)(8); storm water discharge associated with industrial activity as defined at 40 CFR 122.26(b)(14); discharges of storm water and sanitary wastewaters (domestic, commercial, and industrial) from a combined sewer overflow; or any other stormwater discharge for which a permit is required under section 402(p) of the Clean Water Act. A storm water discharge associated with industrial activity which is mixed with process wastewater shall not be considered a wet weather point source.

"Whole Effluent Toxicity" or "WET" means a test procedure that determines the effect of an effluent on aquatic life.

#### **Section 352.105 Incorporations by Reference**

- a) The Agency incorporates the following publications by reference. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington D.C. 20402. (202)783-3238:
  - 40 CFR 122.26(b)(8) (1996)
  - 40 CFR 122.26(b)(14) (1996)
  - 40 CFR 130.2(h) (1996)
  - 40 CFR 130.2(i) (1996)
  - 40 CFR 130.7 (1996)
  - Table 6 of 40 CFR 132 (1996)
  - Procedure 3.A of Appendix F of 40 CFR 132 (1996)
  - Procedure 5.b.2 of Appendix F of 40 CFR 132 (1996)
  - 40 CFR 136 (1996)
- b) This Section incorporates no future editions or amendments.

#### **Section 352.106 Relationship to Other Regulations**

Appendix F to 40 CFR 132 requires 9 specific permit procedures for which Great Lakes states must adopt consistent provisions. Procedures 1 and 2 of the Appendix requires procedures for site-specific modifications to standards, criteria and values and procedures for variances from water

quality standards, criteria and values for point sources. These requirements are within the authority of the Illinois Pollution Control Board, not Illinois EPA, and therefore not contained in this Part. These procedures are at 35 Ill. Adm. Code:Subtitle A, Chapter 1. Procedures 3 through 9 of the Appendix require specific procedures for permit issuance and are contained in Subparts B through H of this Part. Subpart I contains Agency permitting procedures related to the special antidegradation provision for bioaccumulative chemicals of concern at 35 Ill. Adm. Code 305.521.

SUBPART B: DISCHARGES TO WATERS NOT CURRENTLY MEETING WATER QUALITY  
STANDARDS, CRITERIA, OR VALUES

**Section 352.200 Procedures for Establishing Permit Limitations for Discharges to Waters Not Currently Meeting Water Quality Standards, Criteria, or Values**

Discharges tributary to any water body segment within the Lake Michigan Basin that contains a parameter that is known to exceed the ambient water quality standards and resulting in that water body being identified and listed on the Agency's list of impaired waters required by Section 303(d) of the Clean Water Act (33 U.S.C. 1313(d)) and 40 CFR 130.7(b)(6) shall have limitations and conditions established by the Agency as follows:

- a) All specific provisions and limitations contained within the most recent adopted and USEPA approved Lake Michigan Lakewide Management Plan (LaMP) that apply to any discharge covered by the permit shall be considered for incorporation into the permit consistent with subsection (e) below.
- b) All requirements of a Remedial Action Plan (RAP) for an Area of Concern (AOC) applicable to the subject discharge shall be considered for incorporation into the permit consistent with subsection (e) below.
- c) Discharge limitations established through an approved Response Action pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended, shall be considered for incorporation into the permit consistent with subsection (e) below.
- d) Total Maximum Daily Loads (TMDLs) and Waste Load Allocations (WLA) will be established through either the LaMP or a RAP for an Area of Concern. If a LaMP or RAP has not been completed and adopted, effluent limits shall be established consistent with the other provisions of this Part, including but not limited to Additivity, Intake Pollutants, Loading Limits, Level of Detection/Level of Quantification and Compliance Schedules. When calculation of TMDLs or a Waste Load Allocation is incomplete and it is expected that limits established through other provisions will be superseded upon completion of the TMDL or Waste Load Allocation process, said limits shall be identified as interim and the permit shall include a reopener clause triggered by completion of TMDL or WLA determination. Any new limits brought about through exercise of the reopener clause shall be eligible for delayed compliance dates and compliance schedules consistent with Subpart H of this Part.
- e) Any provisions or limitations referred to in subsection (a), (b), (c), or (d) will be subject to public participation procedures under State and federal law for TMDLs, certified by the Agency as meeting the requirements of sections B through F of Procedure 3 of

Appendix F to 40 CFR 132, and approved by USEPA before being incorporated into the permit. Appeal or judicial review procedures will be the same as with any other permit terms.

SUBPART C: ASSESSING HUMAN HEALTH IMPACTS OF MULTIPLE TOXIC SUBSTANCES INCLUDING ADDITIVITY PROCEDURES FOR CHLORINATED DIBENZO-P-DIOXINS AND CHLORINATED DIBENZOFURANS

**Section 352.300 Additivity for Combinations of Substances**

35 Ill. Adm. Code 302.590 establishes an acceptable additive risk level of one in 100,000 (10<sup>-5</sup>) for establishing Tier I criteria and Tier II values for combinations of substances exhibiting a carcinogenic or other nonthreshold toxic mechanism. For those discharges containing multiple nonthreshold substances, application of this additive standard shall be consistent with Sections 352.302 and 352.303.

**Section 352.302 Values for 2,3,7,8-TCDD Toxicity Equivalence Concentrations**

- a) For discharges in the Lake Michigan basin containing one or more 2,3,7,8-substituted chlorinated dibenzo-*p*-dioxins or 2,3,7,8-substituted dibenzofurans, the 2,3,7,8-TCDD toxicity equivalence concentration (TEC[TCDD]) shall be determined as outlined in subsection (b).
- b) The values listed in this Table 1 shall be used to determine the 2,3,7,8-TCDD toxicity equivalence concentrations using the following equation:

$$(TEC)[TCDD] = \text{Sigma}(C)[x] (TEF)[x] (BEF)[x]$$

where:

- (TEC)[TCDD] = 2,3,7,8-TCDD toxicity equivalence concentration in effluent
- (C)[x] = Concentration of total chemical x in effluent
- (TEF)[x] = TCDD toxicity equivalency factor for x
- (BEF)[x] = TCDD bioaccumulation equivalency factor for x

TABLE 1

Congener	TEF	BEF
2,3,7,8-TCDD	1.0	1.0
1,2,3,7,8-PeCdd	0.5	0.9
1,2,3,4,7,8-HxCDD	0.1	0.3
1,2,3,6,7,8-HxCDD	0.1	0.1
1,2,3,7,8,9-HxCDD	0.1	0.1
1,2,3,4,6,7,8-HpCDD	0.01	0.05
OCDD	0.001	0.01
2,3,7,8-TCDF	0.1	0.8
1,2,3,7,8-PeCDF	0.05	0.2
2,3,4,7,8-PeCDF	0.5	1.6
1,2,3,4,7,8-HxCDF	0.1	0.08
1,2,3,6,7,8-HxCDF	0.1	0.2
2,3,4,6,7,8-HxCDF	0.1	0.7

1,2,3,7,8,9-HxCDF	0.1	0.6
1,2,3,4,6,7,8-HpCDF	0.01	0.01
1,2,3,4,7,8,9-HpCDF	0.01	0.4
OCDF	0.001	0.02

**Section 352.303 Criteria for Consideration of Additivity for Nonthreshold Toxic Substances**

Any combination of carcinogenic or otherwise nonthreshold toxic substances shall be assessed on a case by case basis. The Agency shall only consider such additivity for chemicals that exhibit the same type of effect and the same mechanism of toxicity, based on available scientific information that supports a reasonable assumption of additive effects.

SUBPART D: ASSESSMENT OF REASONABLE POTENTIAL TO EXCEED WATER QUALITY STANDARDS, CRITERIA, AND VALUES

**Section 352.401 Applicability and Exclusions**

The need for a WQBEL is based on the potential of a given parameter to cause or contribute to a violation of the applicable water quality standard, criteria, or value. In certain circumstances, this may entail application of a mixing zone to the discharge before comparing the effluent concentration of a substance to the water quality standard, criteria, or value. The Agency shall conduct an analysis of the reasonable potential for a given effluent to exceed or contribute to excursions above water quality standards that may occur in the receiving body during the NPDES permit review. This reasonable potential analysis is based on statistical analysis of the effluent and the following factors:

- a) Reasonable potential analysis is conducted on a parameter-by-parameter basis. In instances where a reasonable potential to exceed a water quality standard for a substance does exist, it does not imply that a reasonable potential for all parameters present in the effluent exists or that WQBELs for all parameters are required.
- b) The assignment of values for WQBELs is dependent on the application of dilution or mixing zones. The process used for permit review will be conducted in a stepwise approach with the first step being a direct comparison of the Projected Effluent Quality (PEQ) to the applicable water quality standard, criteria or value. If the PEQ is less than or equal to the applicable standard, criteria or value, the Agency will conclude that no potential to exceed exists, that the analysis for that parameter is completed and no WQBEL will be established in the permit unless otherwise warranted under Section 352.430. If the PEQ exceeds the applicable standard, criteria or value, the analysis shall proceed to consideration of mixing and dilution pursuant to Section 352.422.
- c) Exclusions from reasonable potential analysis. This procedure is a statistically based evaluation of the need for WQBEL for toxic substances based on the scientific approaches to toxicity assessment contained within 40 CFR 9, 122, 123, 131, and 132. This procedure is either not amenable to or appropriate for certain pollutants and parameters included in the Lake Michigan Basin water quality standards at 35 Ill. Adm. Code 302.Subpart E. Therefore this procedure shall not be used to establish permit limits for the following substances:



Alkalinity  
Ammonia  
Bacteria  
Chlorine  
Color  
Dissolved Oxygen  
Dissolved Solids  
pH  
Phosphorus  
Temperature  
Total and Suspended Solids  
Turbidity  
Sulfate  
Biochemical Oxygen Demand (BOD)  
Radioactivity  
Boron

#### **Section 352.410 Data Requirements**

For a particular application, reasonable potential analysis is primarily based on the effluent quality demonstrated by self-monitoring data, as required by the NPDES permit, or Agency-generated data, such as effluent sampling, facility-related stream studies, or whole effluent toxicity (WET) testing. Effluent data used in derivation of Projected Effluent Quality (PEQ) shall be selected to best represent the concentration and variability of the pollutant in the discharge anticipated for the applicable period of the NPDES permit. Data shall be collected and analyzed in accordance with USEPA or Agency approved sampling and analytical methods. The following criteria will be followed in data selection:

- a) The most recent five years of data shall be used unless the Agency determines that an alternative period better represents the time period for which effluent quality is being projected. Such alternative time periods may include but are not limited to shorter periods that reflect changed discharge characteristics resulting from changes in manufacturing activities or wastewater treatment systems.
- b) Data outliers and other anomalies resulting from collection, analysis or recording errors or non-repeatable plant operation or discharge conditions may be eliminated from the data.

#### **Section 352.412 Conversion Factors for Dissolved and Total Metals**

- a) The numeric standards for certain metal parameters in 35 Ill. Adm. Code 302.504 are established as dissolved forms of the substance since the dissolved form more closely relates to the toxicology literature utilized in deriving the standard. However, most discharge monitoring data used in deriving a PEQ will be from a total recoverable analytical method and permit limits if and when established will be set at total recoverable to accommodate the total recoverable analytical method. The Agency will use a conversion factor to determine the amount of total metal corresponding to dissolved metal for each metal with a water quality standard set at dissolved concentration. In the absence of facility specific data the following default conversion factors will be used for both PEQ derivation and establishing WQBELs. The conversion factor represents the portion of the total recoverable

metal presumed to be in dissolved form. The conversion values given in the following table are multiplied by the appropriate total recoverable metal concentration to obtain a corresponding dissolved concentration which then may be compared to the acute or chronic standard. A dissolved metal concentration may be divided by the conversion factor to obtain a corresponding total metal value which will generally be the metal form regulated in NPDES permits.

Metal	Conversion Factor	
	Acute Standard	Chronic Standard
Arsenic	1.000	1.000
Cadmium	0.850	0.850
Chromium (Trivalent)	0.316	0.860
Chromium (Hexavalent)	0.982	0.962
Copper	0.960	0.960
Mercury	0.850	0.850
Nickel	0.998	0.997
Selenium	0.922	0.922
Zinc	0.978	0.986

- b) A permittee may propose an alternate conversion factor for any particular site specific application. The request must contain sufficient site specific data, or other data that is representative of the site, to identify a representative ratio of the dissolved fraction to the total recoverable fraction of the metal in the receiving water body at the edge of the mixing zone. If a site specific conversion factor is approved, that factor will be used for PEQ derivation and establishment of a WQBEL in lieu of its default counterpart in subsection (a) above.

**Section 352.421 Estimation of Projected Effluent Quality**

- a) The first step in determining if a reasonable potential to exceed the water quality standard exists for any particular pollutant parameter is the estimation of the maximum expected effluent concentration for that substance. That estimation will be completed for both acute and chronic exposure periods and is termed the PEQ. The PEQ shall be derived from representative facility specific data to reflect a 95 percent confidence level for the 95th percentile value. These data will be presumed to adhere to a lognormal distribution pattern unless the actual effluent data demonstrates a different distribution pattern. If facility specific data in excess of 10 data values is available, a coefficient of variation that is the ratio of the standard deviation to the arithmetic average shall be calculated by the Agency. The PEQ is derived as the upper bound of a 95 percent confidence bracket around the 95th percentile value through a multiplier from the following table applied to the maximum value

in the data set that has its quality assured consistent with Section 352.410 as appropriate for acute and chronic data sets.

$$PEQ = (\text{maximum data point})(\text{statistical multiplier})$$

<u>No. Samples</u>	<u>Coefficient of Variation</u>						
	<u>0.1</u>	<u>0.2</u>	<u>0.3</u>	<u>0.4</u>	<u>0.5</u>	<u>0.6</u>	<u>0.7</u>
1	1.4	1.9	2.6	3.6	4.7	6.2	8.0
2	1.3	1.6	2.0	2.5	3.1	3.8	4.6
3	1.2	1.5	1.8	2.1	2.5	3.0	3.5
4	1.2	1.4	1.7	1.9	2.2	2.6	2.9
5	1.2	1.4	1.6	1.8	2.1	2.3	2.6
6	1.1	1.3	1.5	1.7	1.9	2.1	2.4
7	1.1	1.3	1.4	1.6	1.8	2.0	2.2
8	1.1	1.3	1.4	1.6	1.7	1.9	2.1
9	1.1	1.2	1.4	1.5	1.7	1.8	2.0
10	1.1	1.2	1.3	1.5	1.6	1.7	1.9
11	1.1	1.2	1.3	1.4	1.6	1.7	1.8
12	1.1	1.2	1.3	1.4	1.5	1.6	1.7
13	1.1	1.2	1.3	1.4	1.5	1.6	1.7
14	1.1	1.2	1.3	1.4	1.4	1.5	1.6
15	1.1	1.2	1.2	1.3	1.4	1.5	1.6
16	1.1	1.1	1.2	1.3	1.4	1.5	1.6
17	1.1	1.1	1.2	1.3	1.4	1.4	1.5
18	1.1	1.1	1.2	1.3	1.3	1.4	1.5
19	1.1	1.1	1.2	1.3	1.3	1.4	1.5
20	1.1	1.1	1.2	1.2	1.3	1.4	1.4
30	1.0	1.1	1.1	1.1	1.2	1.2	1.2
40	1.0	1.0	1.1	1.1	1.1	1.1	1.1
50	1.0	1.0	1.0	1.0	1.0	1.0	1.0
60 or greater	1.0	1.0	1.0	1.0	1.0	1.0	1.0

	<u>Coefficient of Variation</u>					
	<u>0.8</u>	<u>0.9</u>	<u>1.0</u>	<u>1.1</u>	<u>1.2</u>	<u>1.3</u>
10.1	12.6	15.5	18.7	22.3	26.4	
5.4	6.4	7.4	8.5	9.7	10.9	
4.0	4.6	5.2	5.8	6.5	7.2	
3.3	3.7	4.2	4.6	5.0	5.5	
2.9	3.2	3.6	3.9	4.2	4.5	
2.6	2.9	3.1	3.4	3.7	3.9	
2.4	2.6	2.8	3.1	3.3	3.5	
2.3	2.4	2.6	2.8	3.0	3.2	
2.1	2.3	2.4	2.6	2.8	2.9	
2.0	2.2	2.3	2.4	2.6	2.7	
1.9	2.1	2.2	2.3	2.4	2.5	
1.9	2.0	2.1	2.2	2.3	2.4	
1.8	1.9	2.0	2.1	2.2	2.3	
1.7	1.8	1.9	2.0	2.1	2.2	
1.7	1.8	1.8	1.9	2.0	2.1	
1.6	1.7	1.8	1.9	1.9	2.0	
1.6	1.7	1.7	1.8	1.9	1.9	
1.6	1.6	1.7	1.7	1.8	1.9	
1.5	1.6	1.6	1.7	1.8	1.8	
1.5	1.5	1.6	1.6	1.7	1.7	
1.3	1.3	1.3	1.3	1.4	1.4	
1.1	1.2	1.2	1.2	1.2	1.2	

1.1	1.1	1.1	1.1	1.1	1.1
1.0	1.0	1.0	1.0	1.0	1.0

- 1) If the PEQ is less than or equal to the water quality standard, there is no reasonable potential and no limit will be established in the permit.
  - 2) If the PEQ is more than the water quality standard, the Agency will proceed to consideration of dilution and mixing pursuant to Section 352.422.
- b) If facility-specific data of 10 or less data values is available, an alternative PEQ shall be derived using the table in Section 352.421(a), assuming a coefficient of variation of 0.6, applied to the maximum value in the data set that has its quality assured consistent with Section 352.410.
- 1) If the PEQ is less than or equal to the water quality standard, there is no reasonable potential and no limit will be established in the permit.
  - 2) If the PEQ exceeds the water quality standard, an alternative PEQ will be calculated using the maximum value in the data set and a multiplier of 1.4. If the alternative PEQ also exceeds the PEL, the Agency will proceed to consider dilution and mixing pursuant to Section 352.422.
  - 3) If the PEQ exceeds the water quality standard but the alternative PEQ is less than or equal to the standard, the Agency will either proceed to consider dilution and mixing pursuant to Section 352.422, or will incorporate a monitoring requirement and reopener clause to reassess the potential to exceed within a specified time schedule, not to exceed one year. In determining which of these options to use in any individual application, the Agency shall consider the operational and economic impacts on the permittee and the effect, if any, deferral of a final decision would have on an ultimate compliance schedule if a permit limit were subsequently determined to be necessary.
- c) The Agency shall compare monthly average effluent data values, when available, with chronic aquatic life, human health and wildlife standards to evaluate the need for monthly average WQBELs. The Agency shall use daily effluent data values to determine whether a potential exists to exceed acute aquatic life water quality standards.
- d) The Agency may apply other scientifically defensible statistical methods for calculating PEQ at the 95(th) percentile value for use in the reasonable potential analysis as provided for in Procedure 5.b.2 of Appendix F to 40 CFR 132.
- e) Regardless of the statistical procedure used, if the PEQ for the parameter is less than or equal to the water quality standard for that parameter, the Agency shall deem the discharge not to have a reasonable potential to exceed, and a water quality based effluent limit (WQBEL) shall not be required unless otherwise required under Section 352.430.

**Section 352.422 Dilution Allowance**

If the PEQ for a parameter is greater than the particular water quality standard, criteria or value for that parameter, the Agency will assess the level of treatment being provided by the discharger. If the discharger is providing (or will be providing) a level of treatment consistent with the

best degree of treatment required by 35 Ill. Adm. Code 304.102(a), the PEQ derived under Section 352.421 shall be compared to a preliminary effluent limitation (PEL) determined by applying an appropriate mixing zone or a default mixing zone to the discharge. Mixing opportunity and dilution credit will be considered as follows:

- a) Discharges to tributaries of the Lake Michigan Basin shall be considered to have no available dilution for either acute or chronic exposures, and the PEL will be set equivalent to the water quality standard unless dilution is documented through a mixing zone study.
- b) Direct discharges to the Open Waters of Lake Michigan shall have a default mixing allowance of 2:1 for acute standards, criteria or values and 10:1 for chronic standards, criteria or values if the discharge configuration indicates that the effluent readily and rapidly mixes with the receiving waters. If ready and rapid mixing is in doubt the Agency shall deny any default dilution or mixing allowance and require a mixing or dispersion study to determine the proper dilution allowance. If the discharger applies for more than the default dilution or mixing allowance, it must submit a mixing or dispersion study to justify its request. Whenever a mixing or dispersion study is available, it shall be used to determine dilution or mixing allowance in lieu of the default allowance.

#### **Section 352.423 Calculation of Preliminary Effluent Limitation**

- a) The PEL is calculated in a simple mass balance approach reflecting the dilution allowance established in Section 352.422:

$$\begin{aligned} \text{WQS} &= [(Q_e)(\text{PEL}) + (Q_d)(C_d)] / [Q_e + Q_d] \\ &\text{or} \\ \text{PEL} &= [\text{WQS}(Q_e + Q_d) - (Q_d)(C_d)] / Q_e \end{aligned}$$

where:

WQS = applicable water quality standard, criteria or value

Q<sub>e</sub> = effluent flowrate

Q<sub>d</sub> = allowable dilution flowrate

C<sub>d</sub> = background pollutant concentration in dilution water

- b) The representative background concentration of pollutants to develop TMDLs and WLAs calculated in the absence of a TMDL shall be established as follows:
  - 1) "Background" represents all pollutant loadings, specifically loadings that:
    - A) Flow from upstream waters into the specified watershed, water body, or water body segment for which a TMDL or WLA in the absence of a TMDL is being developed.
    - B) Enter the specified watershed, water body, or water body segment through atmospheric deposition, chemical reaction, or sediment release or resuspension.
  - 2) When determining what available data are acceptable for use in calculating background, the Agency shall use its best professional judgment, including consideration of the sampling location and the reliability of the data through comparison, in part, to detection and quantification levels. When data in more than 1 of the data sets or categories described in subsection (3) of this subsection (b) exists,

best professional judgment shall be used to select the data that most accurately reflects or estimates background concentrations. Pollutant degradation and transport information may be considered when using pollutant loading data to estimate a water column concentration.

- 3) The representative background concentration for a pollutant in the specified watershed, water body, or water body segment shall be established as the geometric mean of acceptable water column data or water column concentrations estimated through the use of acceptable or projected pollutant loading data. When determining the geometric mean of the data for a pollutant that includes values both above and below the detection level, values less than the detection level shall be assumed to be present at 1/2 of the detection level if the detection level is less than the lowest water quality value for that pollutant. If all of the acceptable data in a data set are below the detection level for a pollutant, then all the data for the pollutant in that data set shall be assumed to be zero. If the detection level of the available data is greater than the lowest water quality value for the pollutant, then the background concentration will be determined by the Agency on a case-by-case basis after considering all representative data, including acceptable fish tissue data.

#### **Section 352.424 Determination of Reasonable Potential**

- a) If the PEQ is less than or equal to the PEL, it will be concluded that there is no reasonable potential to exceed. Under such circumstances a permit limit for that contaminant will not be set unless otherwise justified under one or more provisions of Section 352.430.
- b) If the PEQ is greater than the PEL, and the PEQ was calculated using a data set of more than 10 values, a water quality based effluent limitation (WQBEL) will be included in the permit. If the PEQ was calculated using a data set of less than or equal to 10 values, and the alternative PEQ calculated under Section 352.421(b) also exceeds the PEL, a WQBEL will be included in the permit.
- c) If the PEQ was calculated using a data set of less than or equal to 10 values, and the PEQ is greater than the PEL but the alternative PEQ is less than the PEL, the Agency will either establish a WQBEL in the permit or incorporate a monitoring requirement and reopener clause to reassess potential to exceed within a specified time schedule, not to exceed one year. In determining which of these options to use in any individual application, the Agency shall consider the operational and economic impacts on the permittee and the effect, if any, deferral of a final decision would have on an ultimate compliance schedule if a permit limit were subsequently determined to be necessary.
- d) The WQBEL will be set at the PEL, unless the PEL is appropriately modified to reflect credit for intake pollutants when the discharged water originates in the same water body to which it is being discharged. Consideration of intake credit will be limited to the provisions of Section 352.425.
- e) The reasonable potential analysis shall be completed separately for acute and chronic aquatic life effects. When WQBELs are based

on acute impacts, the limit will be expressed as a daily maximum. When the WQBEL is based on chronic effects, the limit will be expressed as a monthly average. Human health and wildlife based WQBELs will be expressed as monthly averages. If circumstances warrant, the Agency shall consider alternatives to daily and monthly limits.

#### **Section 352.425 Intake Credits**

- a) 35 Ill. Adm. Code 304.105 provides that no effluent may cause or contribute to a violation of a water quality standard but Section 304.103 provides that it is not the intent of 35 Ill. Adm. Code 304 to clean up contamination caused by upstream sources or incidental traces of contaminants. If a discharge contains a toxic substance solely due to its presence in intake water from the same water body receiving the discharge, the Agency may determine there is no reasonable potential for that discharge to cause or contribute to an exceedance for that substance and therefore not establish a WQBEL in the permit. Agency application of such intake credits will be restricted to the following conditions:
- 1) 100% of the water comprising the discharge is withdrawn from the same body of water that receives the discharge.
  - 2) The permittee does not contribute any additional mass of the identified intake toxic substance to its discharge.
  - 3) The permittee 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 substance were left in the water body.
  - 4) The discharge does not result in an increase above the intake concentration at any applicable point below the discharge outside a mixing zone unless such increase does not cause an excursion above the applicable water quality standard, criteria or value.
  - 5) The timing and location of the discharge would not cause adverse impacts to occur that would not occur if the substance were left in the water body.
- b) If the source water contains a pollutant at a concentration in excess of an applicable water quality standard, criteria or value and there is some net addition of that parameter due to activities or operations of the permittee or source tributary to the discharge, the Agency will restrict intake credits to the following circumstances:
- 1) The Agency will establish permit limits allowing no greater discharge than the concentration and mass present in the intake water as a "no net increase limit".
  - 2) Intake credit will only be allowed for that portion of intake pollutant loading present in source water withdrawn from the same body of water receiving the discharge. If any of the intake pollutant is removed through a water treatment process prior to utilization by the permittee, intake credit will be restricted to the concentration and mass emerging from the water treatment process.
  - 3) Any permits incorporating "no net increase" provisions must include notice to the permittee that current federal guidance prohibits allowance of such limits after March 23, 2007. The permit need not include an expiration date at the time of

issuance but must give fair warning that continuation in future permit renewals is questionable due to anticipated federal requirements. The sunset of "no net increase" allowances after March 23, 2007 is mandated in USEPA's Water Quality Guidance for the Great Lakes System, 60 FR 15366, March 23, 1995. The preamble to this guidance contains a commitment from USEPA to reconsider this requirement by March 23, 2002 with the possibility of extending or deleting this deadline.

- 4) If a facility's treatment system under proper operation and maintenance results in removal of the intake pollutant of concern to a discharge level that is below the level in the intake water, the Agency will establish effluent limits that reflect the lower mass and concentration of the pollutant achievable and feasible by such treatment.
  - 5) The issuance of a permit incorporating "no net increase" provisions shall not affect or modify the requirement of 35 Ill. Adm. Code 304.103, that effluent standards in 35 Ill. Adm. Code 304 must be complied with without subtracting background concentrations, except that compliance with those standards is not required when effluent concentrations for the facility in excess of the standard result entirely from evaporation or incidental traces of materials not utilized or produced in the activity.
- c) When, pursuant to 35 Ill. Adm. Code 352.425(a), the Agency declines to establish a QWBEL that would otherwise be warranted under other provisions of this Part, the permit shall contain requirements sufficient to demonstrate that the terms of subsection (a) of this Section are being maintained. Appropriate permit requirements may include influent, effluent and ambient monitoring, and a reopener clause authorizing modification or revocation and reissuance if new information demonstrates that intake credit is no longer justified.

**Section 352.430 Instances Requiring Effluent Limits, Other Conditions, or Additional Data**

The Agency will consider the following factors when determining whether further data needs to be gathered in order to decide if a reasonable potential to exceed water quality standards exists. These factors may also warrant inclusion of a permit limit for a substance or substances that do not display a reasonable potential to exceed through the analysis of Sections 352.420 through 352.425.

- a) The facility's effluent is subject to federal categorical limits under 40 CFR 405 through 471 for the substance.
- b) A substance(s) is present in the raw wastewater in significant quantities such that treatment at the facility is designed to remove that substance.
- c) A substance is discharged in quantities that are sufficient to warrant limits in the permit due to batch or highly variable waste generation processes wherein substances are potentially discharged infrequently or sporadically and therefore may avoid detection by intermittent sampling of the final effluent.
- d) The facility has a record of spill events involving certain substances and there is evidence that those substances are discharged in quantities that are sufficient to merit inclusion of permit limits.
- e) Historical information or the knowledge of Agency field inspectors



indicate that a potential for discharge of a substance exists and there is evidence that the substance would be discharged in quantities sufficient to merit inclusion of permit limits.

- f) For each pollutant listed in Table 6 to 40 CFR 132 (1996) which a permittee reports as known or believed to be present in its discharge and for which data sufficient to calculate tier II values for noncancer human health and aquatic life do not exist all of the following provisions apply:
- 1) The Agency shall use all available, relevant toxicity information to estimate ambient screening values for the pollutant that will protect humans from noncancer health effects and aquatic life from acute and chronic effects.
  - 2) Using the provisions specified in Section 352.423, the Agency shall develop a PEL based on the estimated ambient screening value as determined in subsection (f)(1) of this Section, and compare the PEL with the PEQ. If the PEQ exceeds the PEL, then the Agency shall generate the minimum data necessary to derive tier II values for noncancer human health and aquatic life.
  - 3) The data generated in accordance with subsection (f)(2) of this Section shall be used to calculate water quality values. The values shall be used in calculating a PEL pursuant to Section 352.423 for the purpose of determining whether a WQBEL must be included in the permit. If the Agency finds that the PEQ exceeds the PEL, the Agency shall follow the procedures under Section 352.424 to determine whether a WQBEL must be established in the permit.

#### **Section 352.440 Special Provisions for Noncontact Cooling Water**

Notwithstanding the other provisions of this Part, the Agency will not impose WQBELs for a discharge consisting solely of once through noncontact cooling water withdrawn entirely from the same body of water receiving the discharge, except in accordance with the following:

- a) The Agency may require a WQBEL based on an acute aquatic criterion for a substance of acute whole effluent toxicity when information is available indicating that such a limit is necessary to protect aquatic life, unless the discharger is able to demonstrate that the presence of the substance or WET is due solely to its presence in the intake water.
- b) If a substance is present at elevated levels in the noncontact cooling water wastestream due to improper operation or maintenance of the cooling system, and this substance is or may be discharged at a level that will cause or contribute to an excursion above a numeric standard, criterion or value for a toxic substance as determined under this Part, a WQBEL shall be established for that substance.
- c) If the permittee uses or proposes to use additives in the noncontact cooling water, the additives shall be evaluated using the reasonable potential procedures of this Part to determine whether WQBELs are necessary for the wastestream.
- d) If the noncontact cooling water is blended with other wastestreams prior to final discharge, the provisions of this Section are restricted to the noncontact cooling wastestream and any permit limitations on the other commingling wastestreams shall include internal monitoring points or other appropriate methods to assess compliance prior to blending.

SUBPART E: APPLICATION OF WHOLE EFFLUENT TOXICITY REQUIREMENTS

**Section 352.500 Procedures for Establishing Permit Limits and Special Provisions for the Potential to Exceed Determination**

35 Ill. Adm. Code 302.540 prohibits the presence of a substance or combination of substances that produces an acute or chronic aquatic life toxic condition at any applicable location within any water body of the Lake Michigan Basin. The "combination of substances" terminology includes effluent discharges. Except as provided through the mixing zone regulations of 35 Ill. Adm. Code 302.102 this toxicity standard applies at all points within the Lake Michigan Basin. The Agency shall apply the aquatic life toxicity standard to whole effluents as follows:

- a) No effluent shall cause an exceedance of 0.3 acute toxicity unit (TU[a]) outside a Zone of Initial Dilution (ZID) issued pursuant to 35 Ill. Adm. Code 302.102(e); except that no acute whole effluent toxicity permit limit shall be more restrictive than 1.0 TU[a] at the point of discharge.
- b) No effluent shall cause an exceedance of 1.0 chronic toxicity unit (TU[c]) in any waters of the Lake Michigan Basin except as provided in mixing zone provisions of 35 Ill. Adm. Code 302.102 and 302.530.

**Section 352.520 Whole Effluent Toxicity Data**

When assessing reasonable potential to exceed, WET data shall be characterized consistent with the following:

- a) When multiple acute toxicity values for individual species are available for a single day, those values shall be averaged to represent one daily value. The maximum of all representative daily values for the most sensitive species tested shall be used for determination of potential to exceed the acute toxicity standard.
- b) When multiple chronic toxicity values for individual species are available for a single calendar month, those values shall be averaged to represent one monthly value. The maximum of all representative monthly values for the most sensitive species tested shall be used for determination of reasonable potential to exceed the chronic toxicity standard.
- c) When there is insufficient WET data to adequately characterize the toxicity of the effluent to aquatic life, in lieu of a WET limit the Agency will include one or both of the following provisions in the permit:
  - 1) WET testing requirements to generate sufficient data to adequately characterize the toxicity of the effluent;
  - 2) A permit reopener clause which authorizes the Agency, based upon the results of the WET tests required under subsection (c)(1), to establish toxicity reduction evaluation requirements, or WET limits, or both, if necessary to meet the toxicity standard, and a compliance schedule if appropriate.

**Section 352.530 Estimation of Projected Effluent Quality (PEQ)**

A minimum of five representative toxicity tests is necessary to calculate a PEQ. If less than five test results are available and there is evidence

that effluent toxicity may exist, additional toxicity testing shall be required consistent with Section 352.520(c). Whenever sufficient data exists, the PEQ is estimated to be the maximum representative value determined from Section 352.520(a) and (b), expressed in terms of acute and chronic toxicity units (TU[a] & TU[c]) increased by a multiplying factor from the table in Section 352.421. If more than 10 facility specific data values are available, and the PEQ is more than either 1.0 TU[a] or 1.0 TU[c], the Agency will proceed to consideration of dilution and mixing under Section 352.540 for the relevant effect (acute, chronic, or both). If less than 10 facility specific data values are available, and the PEQ is more than either 1.0 TU[a] or 1.0 TU[c], the Agency will follow the process set forth in Section 352.421(b) to determine whether to proceed to Section 352.540. If the PEQ is less than or equal to 1.0 TU[a] or less than or equal to 1.0 TU[c], no WET limit will be established in the permit for the relevant standard.

#### **Section 352.540 Calculation of Preliminary Effluent Limitation (PEL)**

If the PEQ is more than either 1.0 TU[a] or 1.0 TU[c], or as otherwise provided in Section 352.530, the Agency will determine eligibility for a dilution allowance consistent with Section 352.422. The preliminary effluent limitation (PEL) expressed in terms of acute and chronic toxicity units (TU[a] and TU[c]) shall be calculated pursuant to Section 352.423. Unless there is data indicating otherwise, the pollutant concentration in the background water (Cd) will be assumed to be zero.

#### **Section 352.550 Establishing Whole Effluent Toxicity Conditions**

- a) If the PEQ derived from Section 352.530 is less than or equal to the PEL calculated in Section 352.540, it will be concluded that there is no reasonable potential to exceed. Under such circumstances a permit limit will not be set unless otherwise justified under one or more provisions of Section 352.430.
- b) If the PEQ is greater than the PEL, and more than 10 facility specific data values were used in deriving the PEQ, either a whole effluent toxicity limit will be incorporated into the permit or the causative toxic substances will be limited consistent with Subpart D of this Part.
- c) If 10 or fewer data values were used in deriving the PEQ, the Agency will calculate an alternative PEQ, using the method specified in Section 352.421(b). If the alternative PEQ is greater than the PEL, appropriate limits will be incorporated into the permit, as in the situation where more than 10 data values are available. If the alternative PEQ is less than or equal to the PEL, the Agency will either establish appropriate limits in the permit or incorporate a monitoring requirement and reopener clause to reassess the potential to exceed within a specified time schedule, not to exceed one year. In determining which of these options to use in any individual application, the Agency shall consider the operational and economic impacts on the permittee and the effect, if any, deferral of a final decision would have on an ultimate compliance schedule if a permit limit were subsequently determined to be necessary.
- d) It is the preference of the Agency to limit the individual toxic substances producing the toxicity whenever they can be identified.

Therefore whole effluent toxicity limits will not be imposed whenever the toxicity can be resolved by regulating individual substances. If, however, a WET limit is necessary, the limit will be set at the PEL calculated pursuant to Section 352.540. If compliance cannot be achieved upon permit issuance, the permit may also include requirements for a toxicity reduction evaluation program, interim discharge limits and a compliance schedule.

#### SUBPART F: MASS LOADING LIMITS

##### **Section 352.600 Mass Loading Limits**

Whenever a water quality based effluent limitation (WQBEL) is established in a permit, the WQBEL shall be expressed as both a concentration value and a corresponding mass loading rate.

- a) Both mass and concentration limits shall be based on the same permit averaging periods such as daily or monthly averages, or in other appropriate permit averaging periods.
- b) The mass based WQBEL shall be calculated using effluent flow rates that are the same as those used in establishing the concentration-based WQBEL.
- c) Mass load limits are not required for parameters which cannot be appropriately expressed in terms of mass as listed below:
  - pH
  - temperature
  - radiation
  - bacteria
  - dissolved oxygen
- d) Discharges that are subject to substantial flow variation such as wet weather flows or varied production schedules may have mass limits established in a tiered fashion coinciding with different flow regimes. Typically two tiered mass limits will be established. One set shall be based on dry-weather effluent flowrate and the appropriate stream design flow. The second mass limit shall be based on effluent and stream flowrates representative of wet weather conditions.

#### SUBPART G: EFFLUENT LIMITS BELOW THE LEVEL OF QUANTIFICATION

##### **Section 352.700 Water Quality Based Effluent Limits Below Detection or Quantification**

- a) When a WQBEL for a toxic substance is calculated to be less than the quantification level, the permit shall include a discharge limit, method and quantification level consistent with the following:
  - 1) The permit shall include the WQBEL as calculated.
  - 2) The permit shall specify the most sensitive applicable analytical method adopted by the Board and contained in or approved under 40 CFR 136, or other appropriate method adopted by the Board if one is not available under 40 CFR 136. The analytical method adopted by the Board and specified in the permit shall be the method used for compliance assessment including enforcement actions.
  - 3) The permit shall also identify the quantification level that

can be achieved with the method specified pursuant to subsection (a)(2). That quantification level shall be the minimum level (ML) specified in or approved under 40 CFR 136 for the selected method for the toxic substance. If no such ML exists, or if the method is not specified or approved under 40 CFR 136, the quantification level shall be the lowest quantifiable level practicable. In determining the practicability of a method, the Agency shall consider achievability of the identified detection level by competent commercial laboratories.

- 4) A higher quantification level may be established if demonstrated to be appropriate due to effluent-specific matrix interference. The Agency may consider alternative methods adopted by the Board for deriving quantification levels if those methods are demonstrated to be scientifically defensible.
- b) The permit shall include a condition requiring the permittee to develop and conduct a pollutant minimization program (PMP) for each pollutant with a WQBEL below the quantification level, unless the permittee can demonstrate that an alternative technique is adequate to assess compliance with the WQBEL. The goal of the PMP shall be to attain and maintain the discharge at or below the WQBEL. The PMP shall include but is not limited to the following:
    - 1) An annual review of potential sources of the toxic substance;
    - 2) Periodic monitoring as necessary in order to assess progress toward the goal of the PMP;
    - 3) Implementation of appropriate cost-effective control measures at the earliest practicable time after sources are identified; and
    - 4) Submittal of an annual, unless otherwise specified in the permit, status report containing all minimization program monitoring results of the reporting period, a listing of potential sources of the toxic substance, a summary of all actions and control measures taken to reduce or eliminate the identified sources of the toxic substance and an overview of anticipated future steps in the PMP.
  - c) The permit may contain a condition requiring fish tissue monitoring, other bio-uptake sampling, facility sludge monitoring, or a combination of such sampling as necessary to assess the progress of the PMP.
  - d) The permit shall contain a reopener clause providing for subsequent modification or revocation and reissuance of the permit as warranted by the results of the PMP pursuant to subsection (b), or the availability of new or alternative analytical methods. Such modification or reissuance may accommodate more or less frequent monitoring, a new alternative analytical method or quantification level, or both if appropriate and consistent with subsection (a)(3), or modification or removal of the PMP.

#### SUBPART H: COMPLIANCE SCHEDULES

### **Section 352.800 Compliance Schedules**

Section 39(b) of the Environmental Protection Act [415 ILCS 5/39(b)] and 35 Ill. Adm. Code 309.148 authorize the Agency to establish schedules of compliance in NPDES permits for a number of circumstances, including a

discharge that is not in compliance with applicable water quality standards. NPDES permits with compliance schedules within the Lake Michigan Basin shall be issued according to the following procedures:

- a) No delayed compliance dates may be included for new discharges within the basin. Permits issued on or after February 20, 1998 that contain a water quality based effluent limit (WQBEL) shall require compliance with the WQBEL upon commencement of the discharge.
- b) Any existing permit reissued or modified after February 20, 1998 that contains a new or more restrictive WQBEL shall allow a reasonable period of time, up to five years after the date of permit issuance or modification, for the permittee to comply with that limit.
- c) If the compliance schedule established under subsection (b) extends beyond one year after the date of permit issuance or modification, the schedule shall set forth interim requirements and dates for their achievement as appropriate.
- d) Whenever a WQBEL for a toxic substance based on a Tier II value derived pursuant to 35 Ill. Adm. Code 302.563 or 302.565(b) is included in a reissued or modified permit for an existing discharge, the permit shall provide a reasonable period of time, up to two years, to acquire additional data necessary to develop a Tier I criteria or to modify the Tier II value. In such cases, the permit shall require compliance with the Tier II limitation within a reasonable period of time, consistent with subsections (e) and (f) below and contain a reopener clause consistent with subsection (e).
- e) The reopener clause referenced in subsection (d) shall authorize permit modifications if additional data become available during the time allowed which demonstrates that a revised WQBEL is appropriate. The revised WQBEL shall be incorporated through permit modification and a reasonable time period, up to five years after the date of permit modification, shall be allowed for compliance. If incorporated prior to the compliance date of the original Tier II limitation, any such revised limit shall not be considered less stringent for purposes of the anti-backsliding provisions of Section 402(o) of the Clean Water Act.
- f) If a revised WQBEL is not demonstrated to be appropriate during the time period allowed to collect additional data and derive a Tier I criteria or revised Tier II value, the Agency may provide a reasonable additional period of time, not to exceed five years after the end of the data collection period, to achieve compliance with the original effluent limitation.

#### SUBPART I: ANTIDegradation PROVISIONS FOR BIOACCUMULATIVE CHEMICALS OF CONCERN

##### **Section 352.900 Antidegradation Provisions for Bioaccumulative Chemicals of Concern (BCCs)**

Whenever a new or increased loading of any BCC is proposed from an existing or new facility or activity, either point or nonpoint source, that is subject to NPDES permitting, Clean Water Act Section 401 water quality certification, or Lake Michigan dredge and fill permits under Section 39(n) of the Illinois Environmental Protection Act [415 ILCS 5/39(n)], the Agency shall require an antidegradation demonstration.

- a) Exceptions

- 1) Changes in loading of a BCC within the existing capacity and processes that are covered by the existing permit including but not limited to:
    - A) Normal operational variability including but not limited to intermittent increased discharges due to wet weather conditions;
    - B) Changes in intake water pollutants not caused by the discharger;
    - C) Increasing the production hours of the facility;
    - D) Increasing the rate of production.
  - 2) New limits for an existing permitted discharge or activity that are not the result of changes in pollutant loading, and will not allow an increase in pollutant loading, including new limits that are a result of the following:
    - A) New or improved monitoring data;
    - B) New or improved analytical methods;
    - C) New or modified water quality criteria or values;
    - D) New or modified effluent limitations guidelines, pretreatment standards, or control requirements for POTWs.
  - 3) Those actions listed in 35 Ill. Adm. Code 302.512(c), if determined to be exempt by the Agency, including:
    - A) Short term, temporary consisting of weeks or months lowering of water quality;
    - B) Bypasses that are not prohibited at 40 CFR 122.41(m); and
    - C) Response actions pursuant to the comprehensive Environmental Response and Liability Act (CERCLA), as amended, or similar federal or State authority undertaken to alleviate a release into the environment of hazardous substances, pollutants or contaminants which may pose an imminent and substantial danger to public welfare.
- b) Antidegradation Demonstrations
- 1) An entity seeking new or increased loading allowance for a BCC into the Lake Michigan Basin must complete and submit an antidegradation demonstration adequate to substantiate the important economic or social development expected to result and to specify the pollutant minimization plan to accompany any allowable increase in BCC loading for Agency review. The Agency will consult with such entities regarding the scope of the demonstration if requested. A demonstration will address the following elements pertaining to anticipated important economic and social development:
    - A) The extent to which employment will be increased in the area;
    - B) The extent to which production levels will increase in the area;
    - C) The extent to which the proposed change will avoid otherwise anticipated reduction in employment or production levels;
    - D) The extent to which the activity will be providing economic or social benefit to the area;
    - E) The extent to which the activity will be correcting an environmental or public health problem.
  - 2) The demonstration must also address the sources of the BCC and include a comprehensive assessment of pollution

prevention alternatives and alternative or enhanced treatment techniques. This analysis and any other relevant information will form the basis for a pollutant minimization plan to accompany any permissible increased loading allowance.

- 3) If the Agency tentatively determines that increased BCC loading is allowable pursuant to 35 Ill. Adm. Code 302.520(a), such determination, including any conditions of the allowance such as but not limited to pollutant minimization steps, monitoring and reporting requirements, and special restrictions on operation, shall be fully described and subject to the public notice provisions of 35 Ill. Adm. Code 309 for NPDES permits, 35 Ill. Adm. Code 395 and the federal procedures established for the issuance of Clean Water Act Section 404 permits, or the procedures of Section 18 of the Rivers, Lakes and Streams Act [615 ILCS 5/18] for permits under Section 39(n) of the Illinois Environmental Protection Act [415 ILCS 5/39(n)]. Final action that would approve increased BCC loading shall not be taken until completion of the public participation process.