

### **3745-1-05 Antidegradation.**

#### **(A) Definitions.**

- (1) "Available pollutant assimilative capacity" means the water body pollutant assimilative capacity for a substance, as determined in paragraph (A)(28)(a) of this rule, minus the background pollutant load, or the quantity for a substance as calculated in paragraph (A)(28)(b) of this rule.
- (2) "Background pollutant load" means the sum of all upstream pollutant loads of a regulated pollutant and has the same meaning as the background water quality as determined in accordance with paragraph (A)(3) of rule 3745-2-05 of the Administrative Code.
- (3) "Best available demonstrated control technology" means a wastewater treatment capable of meeting the following effluent limitations or design criteria.
  - (a) For the discharge of sanitary wastewater from facilities using conventional treatment technologies, the effluent limitations in table 5-1 of this rule.
  - (b) For the discharge of sanitary wastewater from alternative treatment technologies such as lagoon systems, land application and controlled discharge systems, constructed wetland systems or combined sewer overflow control systems effluent limitations shall be developed on a case-by-case basis.
  - (c) For industrial direct discharges subject to federal effluent guidelines, the facility shall be designed to meet the most stringent of the new source performance standards, best conventional pollutant control technology, best available technology economically achievable and best practicable control technology currently available for the appropriate categorical guidelines of 40 C.F.R. 400 to 40 C.F.R. 471.
  - (d) For categorical industrial indirect dischargers, the facility shall be designed to meet categorical pretreatment standards for existing sources or categorical pretreatment standards for new sources as contained in Chapter 3745-3 of the Administrative Code.
  - (e) For non-categorical industrial direct or indirect discharges, effluent limitations will be developed based upon best engineering/professional judgment.
  - (f) For wastewater discharges resulting from clean-up of response action sites contaminated with volatile organic compounds, the facility shall include air-stripping, carbon columns, both, or equivalent treatment capable of achieving final thirty-day average effluent limits of five micrograms per liter or less for each individually regulated volatile organic compound.

- (4) "Control document" means any authorization issued by a state or federal agency to any source of pollutants to waters under its jurisdiction that specifies conditions under which the source is allowed to operate.
- (5) "Declining fish species" mean those species listed in table 5-2 of this rule. Declining fish species are native species that have declined in distribution across Ohio based on collection records since 1978 compared to historical distributions of fish species.
- (6) "Designated uses" mean those uses assigned in Chapter 3745-1 of the Administrative Code for a water body or segment whether or not those uses are being attained. Specific designated uses are defined in rule 3745-1-07 of the Administrative Code.
- (7) "Director" means the director of the Ohio environmental protection agency, or the director of the Ohio department of agriculture for projects or activities governed under Chapter 903. of the Revised Code.
- (8) "Existing uses" mean those uses actually attained in the water body on or after November 28, 1975.
- (9) "Existing source" means any treatment works or disposal system, and its associated treatment/production capacity that:
  - (a) Was built, operational and discharging prior to July 1, 1993; or
  - (b) Was authorized by a permit to install and/or national pollutant discharge elimination system permit issued after July 1, 1993.

An individual or a collection of several household sewage treatment systems does not constitute an existing source.

- (10) "High quality waters" mean all surface waters of the state except limited quality waters. Pursuant to division (A)(2) of section 6111.12 of the Revised Code, four categories of high quality waters are hereby recognized and described in this paragraph. Categorizations of specific water bodies shall follow the procedures in paragraph (E) of this rule.
  - (a) "General high quality waters" are wetlands categorized as category 2 or 3 in accordance with rule 3745-1-54 of the Administrative Code and other surface waters that are not specifically categorized limited quality waters, superior high quality waters, outstanding state waters, or outstanding national resource waters.
  - (b) "Superior high quality waters" are surface waters that possess exceptional ecological values and that have been so categorized pursuant to paragraph (E) of this rule. Except as provided below, exceptional ecological values shall be

assessed based upon a combination of the presence of threatened or endangered species and a high level of biological integrity. The following factors shall be considered in determining exceptional ecological value: providing habitat for Ohio or federal endangered species; providing habitat for Ohio threatened species; harboring stable populations of a declining fish species that coincide with the presence of suitable habitat for that species, or that coincide with an essential migration path between areas of suitable habitat for that species; and displaying a level of biological integrity equivalent to the exceptional warmwater habitat index of biotic integrity and/or invertebrate community index criteria values listed in rule 3745-1-07 of the Administrative Code.

Water bodies that exhibit a pattern of biological integrity equivalent to index of biotic integrity and, where applicable, invertebrate community index scores of fifty-six or greater at most sites are characteristic of a near-pristine aquatic habitat. Such waters, as well as other ecologically unique water bodies that have essentially undisturbed native faunas, but for which the biological criteria in rule 3745-1-07 of the Administrative Code do not apply, may be considered as possessing exceptional ecological values without the presence of threatened or endangered species.

- (c) "Outstanding state waters" are waters that have special significance for the state because of their exceptional ecological values and/or exceptional recreational values, and that have been so categorized pursuant to paragraph (E) of this rule. To qualify on the basis of exceptional ecological values they must meet the qualifications for superior high quality waters and be further distinguished as being demonstratively among the best waters of the state from an ecological perspective. To qualify on the basis of exceptional recreational values they must provide outstanding or unique opportunities for recreational boating, fishing or other personal enjoyment.
  - (d) "Outstanding national resource waters" are surface waters that have a national ecological or recreational significance, and that have been so categorized pursuant to paragraph (E) of this rule. National ecological significance may include providing habitat for populations of federal endangered or threatened species or displaying some unique combination of biological characteristics in addition to those factors listed in paragraph (A)(10)(b) of this rule. National recreational significance may include designation in the national wild and scenic river system.
- (11) "Land application and controlled discharge system" means an innovative technology for the treatment of sewage that balances land application of treated wastewater with controlled discharges of wastewater under conditions that minimize stress on the aquatic environment. The system shall be designed to allow a discharge during winter months and required land application of the wastewater during summer months.

- (12) "Limited quality waters" mean wetlands categorized as category 1 in accordance with rule 3745-1-54 of the Administrative Code and other surface waters of the state specifically designated in rules 3745-1-08 to 3745-1-30 of the Administrative Code as limited resource water, nuisance prevention, limited warmwater habitat, or modified warmwater habitat.
- (13) "Mass discharge limit" means for an existing source:
- (a) The average thirty-day mass limit specified in the national pollutant discharge elimination system permit; or
  - (b) The product of the average concentration limit specified in the permit and the permitted discharge flow, if no average mass limit is specified; or
  - (c) The product of an average concentration value derived from the maximum concentration limit specified in the permit using derivation methods established in the total maximum daily load procedures and the permitted discharge flow, if no average concentration or mass limit is specified.
- (14) "Minimal degradation alternative" means an alternative, other than the applicant's preferred alternative, including pollution prevention alternatives, that would result in a lesser lowering of water quality.
- (15) "Mitigative technique alternative" means an alternative, other than the applicant's preferred alternative, or other on-site or off-site control measures designed to offset all or part of the lowering of water quality, preferably within the same watershed.
- (16) "Modification of a facility" means:
- (a) The addition of new wastewater or sources of pollutants to an existing source, including the addition of new industrial users; and
  - (b) Any other physical change at the facility from which the discharge is generated that increases the capacity of that facility to discharge a pollutant or results in the discharge of a pollutant not previously discharged, excluding the following:
    - (i) Routine repair, maintenance and replacement of existing equipment;
    - (ii) Increases in hours or rates of operation and the use of alternative fuels or raw materials that can be implemented without any physical changes to the facility; and
    - (iii) Physical changes designed to restore previously existing production or treatment capacity.

An expansion of the wastewater treatment system is not considered a modification of the facility.

- (17) "Net increase" means:
- (a) For a new source, any level of a regulated pollutant discharged to waters of the state as a result of the activity subject to this rule;
  - (b) For an existing source:
    - (i) The amount by which the sum of the following exceeds zero:
      - (a) The increase in the mass discharge limit attributable to the activity subject to this rule; and
      - (b) All other contemporaneous increases or decreases attributable to other pollutant source(s) affecting the surface water segment(s) under consideration and which are stipulated as a condition of the applicant's permit and which shall occur during the term of the applicant's permit; or
    - (ii) For heat, bacteria and any other regulated pollutant which, though not measurable as a mass level is nonetheless susceptible to determinations of net increase, the amount by which the sum of the following exceeds zero:
      - (a) The increase in an authorized discharge level attributable to the activity subject to this rule; and
      - (b) All other contemporaneous increases or decreases attributable to other pollutant source(s) affecting the surface water segment(s) under consideration and which are stipulated as a condition of the applicant's permit and which shall occur during the term of the applicant's permit.
- (18) "New source" means any treatment works or disposal system other than an existing source, excluding new domestic sewage sources and industrial users tributary to a publicly owned treatment works. A new treatment works built to serve a home or homes with individual systems is considered a new source.
- (19) "Non-degradation alternative" means an alternative, other than the applicant's preferred alternative, including pollution prevention alternatives, that would result in the elimination of the need to lower water quality.
- (20) "Permit modification" means an application filed by the permit holder pursuant to

paragraph (D) of rule 3745-33-04 of the Administrative Code.

- (21) "Permitted discharge flow" means the discharge flow specified in the national pollutant discharge elimination system permit, or permit to install application if not specified in a national pollutant discharge elimination system permit, and shall be representative of the typical wastewater flow to be discharged by a facility when the wastewater facility is operating at full capacity, and considering, where applicable, discharge flows during wet weather events.
- (22) "Pollution prevention alternative" means the use of source reduction techniques in order to reduce risk to public health, safety, welfare and the environment and, as a second preference, the use of environmentally sound recycling to achieve these same goals. Pollution prevention avoids cross-media transfers of waste and/or pollutants and is multi-media in scope; it addresses all types of waste and environmental releases to the air, water and land.
- (23) "Regulated pollutant" means any parameter for which water quality criteria have been adopted in, or developed pursuant to, Chapter 3745-1 of the Administrative Code with the exception of biological criteria, and any other parameter that may be limited in a national pollutant discharge elimination system permit as a result of new source performance standards, best conventional pollutant control technology, best available technology economically achievable or best practicable control technology currently available for the appropriate categorical guidelines of 40 C.F.R. 400 to 40 C.F.R. 471. For the purposes of this rule, pH and dissolved oxygen are not considered "regulated pollutants".
- (24) "Remaining available pollutant assimilative capacity" means the available pollutant assimilative capacity for a substance minus the load already allocated to existing national pollutant discharge elimination system permits for dischargers in the water body segment receiving the allocation. This term is not used in the application of antidegradation for lake Erie.
- (25) "State resource water " is a designation of high quality waters that is being replaced by the categories of high quality waters described in paragraph (A)(10) of this rule. All water body segments currently designated state resource waters in rules 3745-1-08 to 3745-1-30 of the Administrative Code are categorized in this rule as general high quality waters, unless they are specifically listed in tables 5-4 to 5-7 of this rule. Waters designated state resource waters in rules 3745-1-08 to 3745-1-30 of the Administrative Code are subject to the considerations of paragraph (C)(5)(d) of this rule.
- (26) "Threatened species" mean those species listed in table 5-3 of this rule. A threatened species is an indigenous species whose survival in Ohio is not in immediate jeopardy, but to which a threat exists. Continued or increased stress will result in its becoming endangered.

- (27) "Total maximum daily load procedures" mean the procedures for calculating wasteload allocations adopted in Chapter 3745-2 of the Administrative Code.
- (28) "Water body pollutant assimilative capacity" means the total maximum allowable load of a substance for a specific water body segment and is calculated as:
- (a) For a stream, the water quality criteria for a substance multiplied by the total applicable flow at the end of the segment being studied. The applicable flow is determined using the total maximum daily load procedures; and
  - (b) For a lake, a value equal to the permitted discharge flow times Y, where Y equals eleven times the water quality criteria for a substance minus ten times the background concentration for the substance.

Water body pollutant assimilative capacity for a lake can also be determined by any alternative method which the director determines to be appropriate and consistent with the total maximum daily load procedures.

(B) Applicability; responsibilities of the applicant.

Except as provided in paragraphs (B)(2), (D) and (F) of this rule, projects or activities covered under paragraph (B)(1) of this rule shall be subject to an antidegradation review described in paragraph (C) of this rule.

- (1) This rule shall apply to the following.
- (a) For existing sources, any re-issuance or modification of a national pollutant discharge elimination system permit that, if approved, would result in:
    - (i) Any net increase of a regulated pollutant;
    - (ii) If the national pollutant discharge elimination system permit specifies no limit for the pollutant, then the imposition of any effluent limit as a result of a modification of the facility; or
    - (iii) Approval of combined sewer overflow long term control plans and incorporation of the appropriate conditions into an NPDES permit. Long term control plans shall address planned sewer connections/development tributary to the collection system.
  - (b) For new sources, any permit to install or national pollutant discharge elimination system permit application that, if approved, would result in a net increase in the discharge of any regulated pollutant. For these sources, if a national pollutant

discharge elimination system permit application is submitted and approved under the provisions of this rule, a subsequent permit to install application proposing the selected alternative will not be subject to review under this rule.

- (c) Any section 401 water quality certification application pursuant to Chapter 3745-32 of the Administrative Code.
  - (d) Any nonpoint source of pollution that results in a net increase in the release of any regulated pollutant, provided the director has separate authority to regulate the activity.
  - (e) Unless authorized by a section 404 permit and section 401 water quality certification or a state isolated wetland permit, any permit to install application reviewed pursuant to Chapter 6111. of the Revised Code that would authorize the placement of fill or the construction of any portion of a sewerage system in or near surface waters of the state, if the director determines that aquatic habitat alterations caused by the activity and associated construction disturbances would result in the loss of an existing or designated use as defined in this chapter.
  - (f) The transfer of all or a portion of the wastewater discharged by a treatment works to a different receiving water body, or to a different treatment works discharging to a different water body, unless the transfer is to a treatment works with capacity to accept the transferred wastewater within the terms of its existing national pollutant discharge elimination system permit. If a discharge is relocated on the same receiving water body within two miles of the original discharge then there is considered to be no net increase in the discharge.
  - (g) The issuance by the director of environmental protection, in accordance with Chapter 3745-38 of the Administrative Code, or by the director of agriculture, in accordance with Chapter 901:10-4 of the Administrative Code, of a general national pollutant discharge elimination system permit that would result in a net increase.
  - (h) Any state isolated wetland permit application submitted under section 6111.024 of the Revised Code.
- (2) The activities, permits, applications, certifications or other circumstances described in this paragraph are exempt from all provisions of this rule.
- (a) Any existing source discharging to waters of the state prior to July 1, 1993, or modifications of a facility made after July 1, 1993, that is not discharging under the terms of a national pollutant discharge elimination system permit. Only the portion of the flow that the existing source was capable of discharging as of July 1, 1993 shall not be subject to the rule provisions.

- (b) Any existing source where the net increase is simply the result of allowing a previously authorized or documented production/treatment capacity to be achieved.
- (c) Any permit to install application for a sanitary sewer line extension or a new or expanding industrial user upstream of combined sewer overflows in a community operating a combined sewer system if:
  - (i) The application conforms to the conditions related to an approved long term development/planning documents associated with combined sewer overflow control measures incorporated into a national pollutant discharge elimination system permit as referenced in paragraph (B)(1)(a)(iii) of this rule; or
  - (ii) It can be documented that subsequent overflows from the combined sewer system will only occur in situations where the wet weather flows within the sanitary sewers exceed six times the average dry weather flows within the sanitary sewers; or
  - (iii) It can be documented that the combined sewers are and will continue to be operating at less than the original design dry weather capacity; or
  - (iv) There is an approved and ongoing flow/pollutant offset or infiltration/inflow reduction program for the collection system.
- (d) Any notice of intent filed with the director of environmental protection requesting coverage under a general national pollutant discharge elimination system permit issued in accordance with Chapter 3745-38 of the Administrative Code or notice of intent filed with the director of agriculture requesting coverage under a general national pollutant discharge elimination system permit issued in accordance with Chapter 901:10-4 of the Administrative Code.
- (e) Any discharge that, as the result of the addition of heat associated with the process or wastewater treatment system, increases the ambient temperature of the receiving water body by less than 1°F or is otherwise covered by the provisions of a section 316(a) variance.
- (f) The initial inclusion of whole effluent toxicity limitations in any national pollutant discharge elimination system permit or other control document, if there has been no change in discharge since July 1, 1993.
- (g) The addition or expansion of an industrial user to a publicly owned treatment works (POTW) collection system that does not trigger a permit limit for the POTW. Local limits shall be established for the POTW pretreatment program, or

equivalent, utilizing a ten per cent safety factor when performing the evaluation related to effluent limitations to protect water quality standards.

- (h) The addition of domestic sewage sources to the POTW within the design capacity of the POTW.
- (3) Except as provided in paragraphs (B)(2), (D) and (F) of this rule, the applicant covered by paragraph (B)(1) of this rule must submit documentation of the following.
- (a) Identification of the substances to be discharged, including the amount of regulated pollutants to be discharged in terms of mass and concentration, and, if paragraph (B)(1)(c) of this rule applies, the amount of dredged and fill material to be discharged.
  - (b) A description of any construction work, fill or other structures to occur or be placed in or near the stream bed.
  - (c) A description and schematic of the applicant's preferred alternative for design and operation, including appropriate cost estimates, of the activity.
  - (d) Description and analyses, including availability, cost effectiveness and technical feasibility, of the utilization of central or regional treatment facilities rather than creating a new point source discharge. This analysis shall include an evaluation of long-range plans outlined in state or local water quality management planning documents and applicable facility planning documents.
  - (e) Descriptions, schematics and analyses of non-degradation alternatives, minimal degradation alternatives and mitigative technique alternatives for the design and operation, including appropriate cost estimates, of the activity that the applicant has considered.
  - (f) An estimate of the important social, economic and environmental benefits to be realized through the project or activity if the water quality is lowered, including, as appropriate, the number and types of jobs created and the tax revenues generated.
  - (g) An estimate of important social, economic and environmental benefits to be lost if water quality is lowered, such as lost or lowered recreational opportunities.
  - (h) To the extent that such information is known to those in the local community or is otherwise public, a listing and description of all government or privately sponsored conservation projects that have specifically targeted improved water quality and/or enhanced recreational opportunities on the water body(ies) affected by the activity.

(C) Antidegradation review requirements.

(1) Protection of water body uses.

Existing uses, which are determined using the use designations defined in rule 3745-1-07 of the Administrative Code, and the level of water quality necessary to protect existing uses, shall be maintained and protected. There may be no degradation of water quality that results in either a violation of the applicable water quality criteria for the designated uses, unless authorized by a water quality standard variance issued in accordance with rule 3745-33-07 of the Administrative Code, or the elimination or substantial impairment of existing uses. The director shall, pursuant to paragraph (A)(6) of rule 3745-1-07 of the Administrative Code, prohibit increased concentrations of specific regulated pollutants that are incompatible with the attainment or restoration of the designated use. Existing wetland uses, as defined in rule 3745-1-53 of the Administrative Code, shall be maintained and protected in accordance with rules 3745-1-50 to 3745-1-54 of the Administrative Code.

(2) Required treatment technology, nonpoint source controls.

Except as provided in paragraph (D)(2) of this rule, any net increase in the discharge of a specific regulated pollutant resulting from a modification or new source shall, as a minimum, be controlled through best available demonstrated control technology relative to the specific regulated pollutant. More stringent treatment may be required pursuant to paragraph (C)(8) of this rule, or if needed to meet water quality standards. Feasible management or regulatory programs pursuant to sections 208, 303 and 319 of the Act, 33 U.S.C. Sections 1288 (effective February 4, 1987), 1313 (effective October 10, 2000) and 1329 (effective February 4, 1987), shall be applied to nonpoint sources.

(3) Public involvement.

Except as provided in paragraphs (B)(2) and (D) of this rule, the director shall provide for public participation and intergovernmental coordination prior to taking action on all activities covered by paragraph (B)(1) of this rule using the provisions of this paragraph.

- (a) In accordance with Chapter 3745-47 of the Administrative Code, the director shall publish a public notice within thirty days regarding receipt of any permit application, section 401 water quality certification application or state isolated wetland permit application covered by paragraph (B)(1) of this rule. The purpose of such notice shall be to allow for inspection and review of the application, to indicate that the project is subject to the provisions of this rule and whether any of the exclusions or waivers described in paragraph (D) of this rule apply, to instruct people to contact the director within thirty days if they want to be on the interested parties mailing list for that application, and, on general high quality waters and limited quality waters, to determine whether there is interest in having a public

hearing.

Notices shall be sent by first class mail to all persons on the mailing list created pursuant to paragraph (C)(3)(d) of this rule.

- (b) The director shall develop an informational fact sheet for each permit or activity for which a public notice is issued in accordance with paragraph (C)(3)(a) of this rule, excluding section 401 water quality certification and state isolated wetland permit activities, within thirty days of receipt of the application. The purpose of such fact sheet shall be to: provide information to potentially affected parties; provide a description of the project; outline the review process and schedule; specify where the application/permits can be viewed; identify the waterbody(ies) potentially affected; instruct individuals how to request to be on the interested parties mailing list; provide an opportunity to request a public hearing pursuant to paragraph (C)(3)(f) of this rule; and advertise the date, time and location of a public hearing if one is scheduled pursuant to paragraph (C)(3)(e) of this rule. These fact sheets shall be sent by first class mail, or alternative means as requested, to all persons on the mailing list created pursuant to paragraph (C)(3)(d) of this rule.
- (c) All notices of public hearings required by paragraphs (C)(3)(e) and (C)(3)(f) of this rule shall be published once in a newspaper having general circulation in the county where the source, activity or facility is located. The notice shall be published at least forty-five days before the hearing. Notices of hearings shall also be sent by first class mail, or by alternative means as requested, to all persons on the mailing list created pursuant to paragraph (C)(3)(d) of this rule.
- (d) The director shall develop and maintain a list of persons and organizations who have expressed an interest in or may, by the nature of their purposes, activities or members, be affected by or have an interest in antidegradation reviews. These persons and organizations may request that all fact sheets or public hearing public notices identified by this rule be forwarded to them by means other than first class mail (e.g., by electronic transmission).
- (e) Within ninety days of receipt of the application, the director shall hold a public hearing for any permit application, section 401 water quality certification application or state isolated wetland permit application covered by paragraph (B)(1) of this rule whenever a water body categorized outstanding national resource water, outstanding state water, superior high quality water or category 3 wetland is affected. This public hearing shall be for the purpose of evaluating issues related to lower water quality and shall be prior to and separate from a public hearing on the proposed or draft action on the application.
- (f) For general high quality waters other than category 3 wetlands and for limited

quality waters, the director shall hold a public hearing for any permit to install application, national pollutant discharge elimination system permit application, section 401 water quality certification application or state isolated wetland permit application covered by paragraph (B)(1) of this rule whenever the director determines there is significant public interest. A public hearing shall be held for the issuance of any draft general national pollutant discharge elimination system permit.

The director shall hold public hearings relative to issues of lower water quality as a concurrent hearing at the time of the draft or proposed action. However, if the application is not covered by paragraph (D) of this rule, the director may choose to hold a public hearing preceding the draft or proposed action if, at the director's discretion, the project is considered to be controversial or complex. For section 401 water quality certification applications and state isolated wetland permit applications, the public hearing shall precede any action of the director.

- (g) A public notice of the director's proposed or draft action regarding the activity and its potential to lower water quality shall be published following the procedures in Chapter 3745-47 of the Administrative Code. The director shall provide notification by first class mail, or alternative means as requested, to all interested parties identified through the procedures in paragraph (C)(3) of this rule. Additional procedures are described in paragraph (C)(8) of this rule.
  - (h) The director shall notify the Ohio department of natural resources, the United States fish and wildlife service, the United States environmental protection agency and any affected local areawide planning agencies of all proposed activities that may lower water quality. In addition, for activities covered under paragraph (B)(1)(a), (B)(1)(b) or (B)(1)(f) of this rule, the director shall notify the Ohio department of development and any affected local governmental units. The director or the other agencies may initiate additional intergovernmental coordination.
- (4) Outstanding national resource waters.

The director shall impose the following requirements on all activities covered by paragraph (B)(1) of this rule that discharge to outstanding national resource waters, or that discharge upstream of outstanding national resource waters.

- (a) Present ambient water quality in outstanding national resource waters shall not be degraded for any substance.
- (b) The director may re-issue permits for any source discharging to an outstanding national resource water if the source had a national pollutant discharge elimination system permit at the time the water body was categorized an outstanding national

resource water as described in paragraph (E) of this rule, provided there is no increase in the permitted discharge concentrations or loads.

- (c) New sources may not discharge directly to outstanding national resource waters, and may not discharge at points located upstream from outstanding national resource waters unless it can be demonstrated by the applicant that the chemical and biological quality of the outstanding national resource water will not be adversely affected.
  - (d) Notwithstanding the provisions stated in paragraphs (C)(4)(a) and (C)(4)(e) of this rule, activities that result in short-term changes in water quality in outstanding national resource waters may be allowed if the director determines there will be no long-term detrimental impact. Activities resulting in short-term impacts on outstanding national resource waters will be subject to a review of non-degradation alternatives, minimal degradation alternatives, mitigative technique alternatives, economic and social benefits, public participation and intergovernmental coordination.
  - (e) Notwithstanding the provisions stated in paragraphs (C)(4)(a) and (C)(4)(d) of this rule discharges of dredged and fill material to outstanding national resource waters that are wetlands, and are owned and managed solely for natural area preservation, public recreation, education or scientific purposes, may be authorized provided the discharges and associated activities result in only a short-term disturbance to water quality and will not adversely affect the ecological quality of the wetland or other surface waters. Authorized discharges and associated activities include boardwalk construction, repair and maintenance of dikes and other hydrological controls, and removal of non-native and invasive plant species. For these discharges and associated activities the director may waive the need for the review outlined in paragraph (C)(4)(d) of this rule.
- (5) Other waters.

For waters other than outstanding national resource waters and limited quality waters, the director shall impose the following requirements on all activities covered by paragraph (B)(1) of this rule, except that for section 401 water quality certifications and state isolated wetland permits pursuant to section 6111.024 of the Revised Code for high quality waters that are wetlands, the director shall impose the requirements specified in rules 3745-1-50 to 3745-1-54 of the Administrative Code in lieu of paragraphs (C)(5) and (C)(8) of this rule. In addition, the director may apply the items in paragraphs (C)(5)(a) to (C)(5)(f) and (C)(5)(k) to (C)(5)(m) of this rule, may consider cumulative impacts as defined in paragraph (I) of rule 3745-1-50 of the Administrative Code, and shall consider whether the wetland is scarce regionally or statewide and the feasibility of replacing that wetland type, in making a decision whether to allow the lowering of water quality.

The director may approve activities that lower water quality only if there has been an examination of non-degradation, minimal degradation and mitigative technique alternatives, a review of the social and economic issues related to the activity, a public participation process and appropriate intergovernmental coordination, and the director determines that the lower water quality is necessary to accommodate important social or economic development in the area in which the water body is located.

The director may require the applicant to implement a non-degradation alternative, a minimal degradation alternative or a mitigative technique alternative to offset all or part of the proposed lowering of water quality, if the director determines that the alternative is technically feasible and economically justifiable. Any lowering of water quality shall not exceed the limitations specified in paragraph (C)(6) of this rule.

When making determinations regarding proposed activities that lower water quality the director shall consider the following:

- (a) The magnitude of the proposed lowering of water quality;
- (b) The anticipated impact of the proposed lowering of water quality on aquatic life and wildlife, including threatened and endangered species, important commercial or recreational sport fish species, other individual species and the overall aquatic community structure and function;
- (c) The anticipated impact of the proposed lowering of water quality on human health and the overall quality and value of the water resource;
- (d) The degree to which water quality may be lowered in waters located within national, state or local parks, preserves or wildlife areas, waters listed as state resource waters in rules 3745-1-08 to 3745-1-30 of the Administrative Code, or waters categorized outstanding national resource waters, outstanding state waters or superior high quality waters;
- (e) The effects of lower water quality on the economic value of the water body for recreation, tourism and other commercial activities, aesthetics, or other use and enjoyment by humans;
- (f) The extent to which the resources or characteristics adversely impacted by the lowered water quality are unique or rare within the locality or state;
- (g) The cost of the water pollution controls associated with the proposed activity;
- (h) The cost effectiveness and technical feasibility of the non-degradation alternatives, minimal degradation alternatives or mitigative technique alternatives and the effluent reduction benefits and water quality benefits associated with such

alternatives;

- (i) The availability, cost effectiveness, and technical feasibility of central or regional sewage collection and treatment facilities, including long-range plans outlined in state or local water quality management planning documents and applicable facility planning documents;
  - (j) The availability, reliability and cost effectiveness of any non-degradation alternative, minimal degradation alternative or mitigative technique alternative;
  - (k) The reliability of the preferred alternative including, but not limited to, the possibility of recurring operational and maintenance difficulties that would lead to increased degradation;
  - (l) The condition of the local economy, the number and types of new direct and indirect jobs to be created, state and local tax revenue to be generated, and other economic and social factors as the director deems appropriate; and
  - (m) Any other information regarding the proposed activities and the affected water body that the director deems appropriate.
- (6) Set asides to limit lower water quality.

In addition to the other provisions of paragraph (C) of this rule, the director shall not allow water quality to be lowered by more than as specified in this paragraph when acting on applications or activities covered by paragraph (B)(1) of this rule.

- (a) For outstanding state waters, the director shall reserve seventy per cent of the remaining available pollutant assimilative capacity for all regulated pollutants for which water quality criteria have been adopted in or developed pursuant to Chapter 3745-1 of the Administrative Code. The reserved portion shall not be allocated to any source unless the provisions of paragraph (C)(7) of this rule are applied. The requirements of this paragraph shall not apply to any water body categorized as outstanding state water solely because of its exceptional recreational value.
- (b) For lake Erie, new and existing sources shall be limited to the water body pollutant assimilative capacity as defined in paragraph (A)(28)(b) of this rule.
- (c) For superior high quality waters, other than lake Erie and those waters covered by paragraph (C)(6)(e) of this rule, the director shall reserve thirty-five per cent of the remaining available pollutant assimilative capacity for all regulated pollutants for which water quality criteria have been established in Chapter 3745-1 of the Administrative Code. The reserved portion shall not be allocated to any source unless the provisions of paragraph (C)(7) of this rule are applied. The director may

reserve a higher percentage of the remaining available pollutant assimilative capacity if there is scientific evidence that strongly suggests that resident or representative species are more sensitive to a pollutant or class of pollutants and may be inadequately protected using the applicable water quality criteria and the standard set aside provision. The higher set aside shall be established for specific pollutant(s) or classes of pollutants through rule making pursuant to paragraph (E) of this rule.

- (d) For general high quality waters and limited quality waters, water quality may not be lower than the applicable water quality criteria for the water body, unless authorized by a water quality standard variance issued in accordance with appropriate rules.
  - (e) For outstanding state waters so categorized because of exceptional recreational value the director shall:
    - (i) Evaluate, or cause the applicant to evaluate, the impact of the project on bacteriological contamination for any project covered under paragraph (B)(1) of this rule. No permit shall be granted if the director finds that the project or discharge will result in a significant long term increase in the frequency and duration of bacteriological pollution.
    - (ii) Review all permit actions, covered under paragraph (B)(1) of this rule, to minimize the introduction of pollutants or floating debris and materials which may affect the aesthetic quality of the receiving waters.
- (7) Credit projects.

An applicant for a project covered under paragraph (B)(1) of this rule may request that the director approve a credit project in lieu of the set asides described in paragraphs (C)(6)(a) and (C)(6)(c) of this rule. In order for a credit project to be considered for approval, the proposal must:

- (a) Occur in the same water body where the proposed lowering of water quality is to take place; and
- (b) Not necessarily offset the proposed pollutant load being pursued, but address an existing or potential threat to the water body. This may include providing for water body enhancement or restoration activities.

If the director determines to approve a credit project in lieu of the set asides described in paragraphs (C)(6)(a) and (C)(6)(c), he may include, at his discretion, an alternative lower set aside to accompany the credit project. A lower set aside must be established through rule making and incorporated into tables established in paragraph (E) of this

rule.

(8) Procedures.

- (a) The director shall assess each proposed activity covered by paragraph (B)(1) or (F) of this rule on a case-by-case basis. For each proposed activity, the director shall weigh the information acquired relative to the proposal, that submitted by the applicant or otherwise obtained by the director, and all comments presented during the public review period, including intergovernmental comments, and make a determination to:
  - (i) Allow the applicant's preferred alternative with appropriate conditions, if applicable, and the lower water quality as proposed because it has been determined that a discharge or the activity is necessary;
  - (ii) Deny the applicant's preferred alternative as proposed; or
  - (iii) Require a cost beneficial, technically feasible and/or available non-degradation, minimal degradation or mitigative technique alternative that would result in no or a lesser lowering of water quality.
- (b) Any action of the director issuing a permit to install or a national pollutant discharge elimination system permit covered under paragraph (B)(1) or (F) of this rule shall be preceded by a draft action and shall be issued in accordance with Chapter 3745-47 of the Administrative Code.
- (c) Any action of the director denying a permit to install or a national pollutant discharge elimination system permit covered under paragraph (B)(1) or (F) of this rule shall be preceded by a proposed action and shall be issued in accordance with Chapter 3745-47 of the Administrative Code.
- (d) Any action of the director on a section 401 water quality certification covered under paragraph (B)(1) or (F) of this rule shall be taken in accordance with Chapters 3745-32 and 3745-47 of the Administrative Code.
- (e) Any action of the director on a state isolated wetland permit application submitted pursuant to section 6111.024 of the Revised Code and covered under paragraph (B)(1) or (F) of this rule shall be taken in accordance with Chapter 3745-47 of the Administrative Code.

(D) Exclusions and waivers.

The exclusions and waivers described in paragraphs (D)(1)(a), (D)(1)(b), (D)(1)(d), (D)(1)(e) and (D)(3) of this rule do not apply to bioaccumulative chemicals of concern within the lake

Erie basin.

- (1) The following situations are excluded from the submittal and review requirements listed in paragraphs (B)(3)(e) to (B)(3)(h) and (C)(5) of this rule. In determining the applicability of any of the following exclusions, the evaluation shall not only consider potential effects or impacts to the receiving waters, but also to any subsequent waters potentially affected by the discharge or activity.
  - (a) Any source discharging to limited quality waters.
  - (b) Any de minimis net increase determined using the following criteria. For the discharge of primarily sanitary wastewaters, only ammonia-nitrogen will be evaluated to determine the applicability of the appropriate exclusion.
    - (i) For general high quality waters, any net increase in the discharge of a regulated pollutant that is less than ten per cent of the wasteload allocation to maintain water quality standards calculated using total maximum daily load procedures, provided the proposed lowering of water quality does not exceed eighty per cent of the wasteload allocation to maintain water quality standards calculated using total maximum daily load procedures.
    - (ii) For superior high quality waters, other than lake Erie, and outstanding state waters any net increase in the discharge of a regulated pollutant that results in less than a five per cent change in the ambient water quality concentration of the receiving water as projected to occur using total maximum daily load procedures, provided the proposed lowering of water quality does not exceed the portion of the remaining available assimilative capacity specified by the director pursuant to paragraphs (C)(6)(a) or (C)(6)(c) and (E) of this rule.
    - (iii) For lake Erie any net increase in the discharge of a regulated pollutant that is less than ten per cent of the water body pollutant assimilative capacity.
  - (c) Combined sewer overflow elimination or reduction projects affecting one or more water bodies where there will be a net decrease in the overall pollutant loadings discharged to surface waters of the state. Treatment byproducts of combined sewer overflow discharges (e.g., chlorine for disinfection) shall be excluded from review.
  - (d) Any disposal system built and operated exclusively for the treatment of contaminated groundwater at response action clean-up sites.
  - (e) Any disposal system built and operated as a land application and controlled discharge system as defined in paragraph (A)(11) of this rule.

- (f) Any net increase in the discharge of a regulated pollutant resulting from a change in fuel used by the discharger, provided the discharger was capable of accommodating the new fuel on the effective date of this rule.
  - (g) Any imposition of mercury effluent limitations in an NPDES permit for an existing source where the mercury limitations are based on a variance pursuant to paragraph (D)(10) of rule 3745-33-07 of the Administrative Code.
  - (h) Any discharge of the following regulated pollutants within the range indicated:
    - (i) Total suspended solids at or below sixty-five mg/l; or
    - (ii) Oil and grease at or below ten mg/l.
  - (i) Any discharge that, as the result of the addition of heat associated with the process or wastewater treatment system, increases the ambient temperature of the receiving stream greater than or equal to 1°F, as calculated using total maximum daily load procedures, up to that allowed through water quality standards.
  - (j) Any general permit developed by the director in accordance with the provisions of Chapter 3745-38 of the Administrative Code.
- (2) The director may waive the requirement to install best available demonstrated control technology for new sources discharging sanitary wastewater if:
- (a) The modification, new source or national pollutant discharge elimination system application is for a project designed exclusively to restore, maintain or ensure design capacity and associated pollutant discharge levels already authorized in an effective national pollutant discharge elimination system permit; or
  - (b) The modification, new source or national pollutant discharge elimination system application is the direct and sole result of a proposed transfer of pollutant loading from an existing direct discharge of pollution to waters of the state, and the director has determined that the transfer will result in overall environmental improvement. The director's determination on this matter shall be based upon the antidegradation review process specified in paragraph (C) of this rule, unless otherwise excluded from such review pursuant to paragraph (D) of this rule.
- (3) The director may waive the submittal and review requirements listed in paragraphs (B)(3)(f) to (B)(3)(h) and (C)(5) of this rule if it is determined that:
- (a) The proposed net increase in the discharge of a regulated pollutant does not result in an increase in the ambient water quality concentration of the receiving water after mixing as projected to occur under the total maximum daily load procedures;

- (b) Any proposed net increase in the discharge of nutrients (such as, but not limited to, phosphorus and nitrogen) or toxic substances complies with all applicable water quality standards and will not threaten environmentally sensitive areas such as downstream lakes, reservoirs, wetlands, exceptional warmwater habitats, coldwater habitats, outstanding national resource waters, outstanding state waters, or superior high quality waters; and
    - (c) The requirements of paragraphs (B)(3)(d) and (B)(3)(e) of this rule have been met and the director determines that none of the non-degradation alternatives, minimal degradation alternatives or mitigative technique alternatives for the design and operation of the activity are technically feasible and economically justifiable.
  - (4) Nothing in this rule shall prohibit the director from approving activities that lower water quality on a temporary basis whenever the director determines that an emergency exists requiring immediate action to protect public health and welfare. The director shall issue any such approval in accordance with division (C) of section 6111.06 of the Revised Code and rule 3745-47-29 of the Administrative Code.
  - (5) The director may waive the submittal and review requirements listed in paragraphs (B)(3)(f) to (B)(3)(h) and (C)(5) of this rule if the applicant is seeking a revised water quality based effluent limit based upon the results of either a site specific study of the water quality criteria or a change in the water quality criteria found in Chapter 3745-1 of the Administrative Code and the applicant demonstrates that the facility has not complied with the existing water quality based permit limit. The following conditions must be met for this waiver to apply:
    - (a) Any proposed net increase in the discharge of regulated pollutants complies with all applicable water quality standards and will not threaten environmentally sensitive areas such as downstream lakes, reservoirs, wetlands, exceptional warmwater habitats, coldwater habitats, outstanding national resource waters, outstanding state waters, or superior high quality waters; and
    - (b) The requirements of paragraphs (B)(3)(d) and (B)(3)(e) of this rule have been met and the director determines that none of the non-degradation alternatives, minimal degradation alternatives or mitigative technique alternatives for the design and operation of the activity are technically feasible and economically justifiable.
- (E) Categorization of waters.
- (1) All surface waters are categorized as general high quality waters except as follows.
    - (a) Lake Erie is categorized as a superior high quality water.

- (b) All surface waters of the state meeting the definition of limited quality waters are so categorized, unless the water body is the source of drinking water for a public water supply, in which case it shall be considered a general high quality water for the purposes of this rule.
  - (c) The water bodies listed in table 5-4 of this rule are categorized superior high quality waters. The reserved set aside percentage established pursuant to paragraph (C)(6)(c) of this rule is thirty-five per cent unless indicated otherwise in table 5-4 of this rule.
  - (d) The water bodies listed in table 5-5 of this rule are categorized outstanding state waters due to exceptional ecological values. The reserved set aside percentage established pursuant to paragraph (C)(6)(a) of this rule is seventy per cent of the remaining available pollutant assimilative capacity.
  - (e) The water bodies listed in table 5-6 of this rule are categorized outstanding state waters due to exceptional recreational values. The provisions of paragraph (C)(6)(e) of this rule apply.
  - (f) The water bodies listed in table 5-7 of this rule are categorized outstanding national resource waters.
- (2) At least once every three years, the director, in consultation with the director of the department of natural resources, shall consider available information on water bodies in Ohio and determine appropriate high quality water categorizations. Each determination shall consider attributes of exceptional recreational or ecological value, the national significance of the water body, and other existing and planned uses of the water body. If the director identifies any waters not properly categorized, he shall public notice his intent to categorize them to the appropriate category upon consideration of public comment. The director shall categorize outstanding national resource waters, outstanding state waters and superior high quality waters in tables 5-4 to 5-7 of this rule.
- (3) A person adversely affected by the high quality water categorization of a water body pursuant to paragraph (E)(1) or (E)(2) of this rule may petition the director to revise that categorization. Any such petition shall detail the basis for the petition and contain, at a minimum, new relevant and factual information, or relevant and factual information not previously available to the director at the time of the categorization described in paragraph (E)(1) or (E)(2) of this rule. The petition must contain sufficient information, or such additional information as the director may request, to justify a decision by the director to either revise or retain the categorization under paragraph (E)(1) or (E)(2) of this rule. Within three months of receiving a petition containing complete and adequate information, or within such longer time as the director and the petitioner may agree, the director shall either approve or propose to deny the petition in accordance with Chapter 119. of the Revised Code. The director shall subsequently make appropriate revisions

to the high quality water categorization of the water body in tables 5-4 to 5-7 of this rule, as appropriate, in accordance with Chapter 119. of the Revised Code.

- (4) A person adversely affected by the set aside percentage established pursuant to paragraph (C)(6)(a) or (C)(6)(c) of this rule may petition the director to revise that set aside percentage. Any such petition shall detail the basis for the petition and contain, at a minimum, new relevant and factual information, or relevant and factual information not previously available to the director. The petition must contain sufficient information, or such additional information as the director may request, to justify a decision by the director to either retain the set aside percentage or establish site specific set asides for one or more pollutants. Within three months of receiving a petition containing complete and adequate information, or within such longer time as the director and the petitioner may agree, the director shall either approve or propose to deny the petition in accordance with Chapter 119. of the Revised Code. The director shall subsequently make appropriate revision to the high quality water categorization of the water body in tables 5-4 to 5-7 of this rule, as appropriate, in accordance with Chapter 119. of the Revised Code.

- (F) Special provisions for bioaccumulative chemicals of concern in the lake Erie drainage basin.

The following special provisions are applicable to the discharge or release to the environment of any bioaccumulative chemical of concern in the lake Erie drainage basin. Unless otherwise noted, these requirements shall apply in addition to the provisions found in paragraphs (A) to (E) of this rule.

- (1) In lieu of the requirements of paragraph (B)(1) of this rule, any significant lowering of water quality as described in paragraph (F)(2) of this rule shall require the applicant to submit the information required by paragraph (B)(3) of this rule and to complete the demonstration required by paragraph (F)(3) of this rule. The director shall establish conditions in the control document that meet the requirements of paragraph (F)(4) of this rule.
- (2) Significant lowering of water quality.
  - (a) A significant lowering of water quality occurs when there is a new or increased loading of any bioaccumulative chemical of concern from any regulated existing or new facility, either point source or nonpoint source for which there is a control document or reviewable action, as a result of any activity including, but not limited to:
    - (i) Construction of a new regulated facility or modification of an existing regulated facility such that a new or modified control document is required;
    - (ii) Modification of an existing regulated facility operating under a current

control document such that the production capacity of the facility is increased;

- (iii) Addition of a new source of untreated or pretreated effluent containing or expected to contain any bioaccumulative chemical of concern to an existing wastewater treatment works, whether public or private;
  - (iv) A request for an increased limit in an applicable control document; and
  - (v) Other deliberate activities that, based on the information available, could be reasonably expected to result in an increased loading of any bioaccumulative chemical of concern to any waters of the Great Lakes system.
- (b) Notwithstanding the above, changes in loadings of any bioaccumulative chemical of concern within the existing capacity and processes that are covered by the existing applicable control document, are not subject to an antidegradation review. These changes include, but are not limited to:
- (i) Normal operational variability including, but not limited to, intermittent increased loadings related to wet weather conditions;
  - (ii) Changes in intake water pollutants;
  - (iii) Increasing the production hours of the facility, (e.g., adding a second shift), provided production hours do not exceed those described in, or used to derive, the existing control document;
  - (iv) Increasing the rate of production, provided production rates do not exceed those described in, or used to derive, the existing control document;
  - (v) Discharges of quantities of a bioaccumulative chemical of concern in the intake water at a facility proposing a new or increased discharge, provided that the new or increased discharge is not expected to result in a net increase in the total load of the bioaccumulative chemical of concern in the receiving water body;
  - (vi) Increasing the sewered area, connection of new sewers and customers, or acceptance of trucked-in wastes such as septage and holding tank wastes by a POTW unless, for a bioaccumulative chemical of concern, there is increased loading due to the collection of wastewater from a significant industrial user and, based on the industry's raw materials and processes, the wastewater is expected to have quantifiable concentrations of the bioaccumulative chemical of concern significantly above levels typically

associated with domestic wastewater and non-industrial stormwater;

- (vii) Increased discharge of a bioaccumulative chemical of concern due to implementation of controls on wet weather-related flows, including, but not limited to, combined sewer overflows and industrial stormwater; and
- (viii) Increased discharges of a bioaccumulative chemical of concern resulting from a change in fuel used by the discharger, provided that the discharger was capable of accommodating the new fuel on the effective date of this rule.

- (c) Also excluded from an antidegradation review are new effluent limits based on improved monitoring data or new water quality criteria or values that are not a result of changes in pollutant loading.
- (d) Also excluded from the antidegradation submittal and review requirements listed in paragraphs (B)(3)(c) to (B)(3)(h) and (C)(5) of this rule is any imposition of mercury effluent limitations in an NPDES permit for an existing source, where the mercury effluent limitations are based on a variance pursuant to paragraph (D)(10) of rule 3745-33-07 of the Administrative Code.

(3) Antidegradation demonstration.

Any entity seeking to significantly lower water quality for a bioaccumulative chemical of concern, as defined in paragraph (F)(2) of this rule, in a limited quality water or high quality water must, in addition to the requirement in paragraph (B)(3) of this rule, submit an antidegradation demonstration for consideration by the director pursuant to the review requirements of this paragraph and paragraph (C) of this rule. The antidegradation demonstration shall include the following:

- (a) Pollution prevention alternatives analysis. Identify any cost-effective pollution prevention alternatives and techniques that are available to the entity, that would eliminate or significantly reduce the loadings of bioaccumulative chemical(s) of concern; and
  - (b) Alternative or enhanced treatment analysis. Identify alternative or enhanced treatment techniques that are available to the entity that would eliminate the lowering of water quality and their costs relative to the cost of treatment necessary to achieve applicable effluent limitations.
- (4) For limited quality waters and high quality waters, the director shall ensure that no action resulting in a lowering of water quality occurs unless an antidegradation demonstration has been completed pursuant to paragraphs (B)(3) and (F)(3) of this rule and the information thus provided is determined by the director pursuant paragraph (C) of this

rule to adequately support the lowering of water quality.

- (a) The director shall establish conditions in the control document applicable to the regulated facility that prohibit the regulated facility from undertaking any deliberate action, such that there would be an increase in the rate of mass loading of any bioaccumulative chemical of concern, unless an antidegradation demonstration is provided to the director and approved pursuant to paragraph (C) of this rule prior to commencement of the action. Imposition of limits due to improved monitoring data or new water quality criteria or values, or changes in loadings of any bioaccumulative chemical of concern within the existing capacity and processes that are covered by the existing applicable control document, are not subject to an antidegradation review.
- (b) For bioaccumulative chemicals of concern known or believed to be present in a discharge, from a point or nonpoint source, a monitoring requirement shall be included in the control document. The control document shall also include a provision requiring the source to notify the director of any increased loadings that would be subject to the provisions of the paragraph (F)(2) of this rule and which have not received approval from the director under the conditions specified in this rule. Upon notification, the director shall require actions as necessary to reduce or eliminate the increased loading if the increase is subject to the provisions of the paragraph (F)(2) of this rule. Requirements to reduce or eliminate the increased loading imposed by the director pursuant to this paragraph shall apply unless or until the director approves the increased loadings under the provisions specified in this rule.
- (c) Fact sheets prepared pursuant to 40 C.F.R. 124.8 and 124.56 shall reflect any conditions developed under paragraph (F) of this rule and included in a permit.

Table 5-1. Best available demonstrated control technology for new sources discharging sanitary wastewater.

Parameter	Thirty-day Limit	Daily or Seven-day Limit	Maximum/Minimum Limit
CBOD <sub>5</sub>	10 mg/l	15 mg/l	n/a
Total suspended solids	12 mg/l	18 mg/l	n/a
Ammonia			
(Summer)	1.0 mg/l	1.5 mg/l	n/a
(Winter)	3.0 mg/l	4.5 mg/l	
Dissolved oxygen	n/a	n/a	6.0 mg/l (minimum)
Total residual chlorine	n/a	n/a	0.038 mg/l (maximum)
E. coli*	126 / 100 ml	235 / 100 ml	n/a
* E. coli is to be considered a design standard only. Effluent limitations will not be incorporated into permits.			

Table 5-2. Declining fish species.

Common name	Latin name	Comment
Bigeye chub	Notropis amblops	
Bigeye shiner	Notropis boops	
Blacknose shiner	Notropis heterolepis	
Bluebreast darter	Etheostoma camurum	
Brindled madtom	Noturus miurus	
Brook trout	Salvelinus fontinalis	Natives only
Creek chubsucker	Erimyzon oblongus	
Eastern sand darter	Ammocrypta pellucida	
Goldeye	Hiodon alosoides	
Hornyhead chub	Nocomis biguttatus	

Lake chubsucker	<i>Erimyzon sucetta</i>	
Least brook lamprey	<i>Lampetra aepyptera</i>	
Least darter	<i>Etheostoma microperca</i>	
Mimic shiner	<i>Notropis volucellus</i>	
Mooneye	<i>Hiodon tergisus</i>	Lake Erie drainage basin
Mountain madtom	<i>Noturus eleutherus</i>	
Muskellunge	<i>Esox masquinongy</i>	Natives only
North brook lamprey	<i>Ichthyomyzon fossor</i>	
Northern madtom	<i>Noturus stigmosus</i>	
Popeye shiner	<i>Notropis ariommus</i>	
Pugnose minnow	<i>Opsopoeodus emiliae</i>	
Redside dace	<i>Clinostomus elongatus</i>	
River chub	<i>Nocomis micropogon</i>	
River darter	<i>Percina schumardi</i>	Lake Erie drainage basin
Rosyface shiner	<i>Notropis rubellus</i>	
Silver lamprey	<i>Ichthyomyzon unicuspis</i>	
South redbelly dace	<i>Phoxinus erythrogaster</i>	
Streamline chub	<i>Erimystax dissimilis</i>	
Tonguetied minnow	<i>Exoglossum laurae</i>	
Variegate darter	<i>Etheostoma variatum</i>	
Western banded killifish	<i>Fundulus diaphanus menona</i>	

Table 5-3. Threatened species.

Common name	Latin name	Comment
Fish		
Bigmouth shiner	<i>Notropis dorsalis</i>	
Bluebreast darter	<i>Etheostoma camurum</i>	
Lake chubsucker	<i>Erimyzon sucetta</i>	
Paddlefish	<i>Polyodon spathula</i>	
River darter	<i>Percina shumardi</i>	
Rosyside dace	<i>Clinostomus funduloides</i>	
Silver lamprey	<i>Ichthyomyzon unicuspis</i>	
Tippecanoe darter	<i>Etheostoma tippencanoe</i>	
Mollusks		
Black sandshell	<i>Liquimia recta</i>	
Ebonysshell	<i>Fusconaia ebena</i>	
Fawnsfoot	<i>Truncilla donaciformis</i>	
Pondhorn	<i>Uniomerus tetralasmus</i>	
Snuffbox	<i>Epioblasma triquetra</i>	
Threehorn wartyback	<i>Obliquaria reflexa</i>	
Other		
Sloan's crayfish	<i>Orconectes sloanii</i>	

Table 5-4. Superior high quality waters.

Water body name	Flows into	Drainage basin
Alum creek - headwaters to West branch (RM 42.8)	Big Walnut creek	Scioto
Anderson fork - Grog run (RM 11.02) to the mouth	Caesar creek	Little Miami
Archers fork	Little Muskingum river	Central Ohio tributaries
Arney run - Black run (RM 2.2) to the mouth	Clear creek	Hocking
Ashtabula river - confluence of East and West fork (RM 27.54) to adjacent East 23 <sup>rd</sup> street (RM 2.00)	Lake Erie	Ashtabula
Auglaize river - Kelly road (RM 77.32) to Jennings creek (RM 47.02)	Maumee	Maumee
Baughman creek	Grand river	Grand
Beech fork	Salt creek	Scioto
Bend fork - Joy fork (RM 4.0) to the mouth	Captina creek	Central Ohio tributaries
Big run	Federal creek	Hocking
Big Walnut creek - Rocky fork (RM 28.3) to the mouth	Scioto river	Scioto
Blue creek	Churn creek	Scioto
Brill run	Marietta run	Hocking
Buskirk creek	Deer creek	Scioto
Caesar creek - Caesar Creek lake (RM 13.92) to the mouth	Little Miami river	Little Miami
Cedar fork	Clear Fork Mohican river	Muskingum
Cedar Lick creek	Cross creek	Central Ohio tributaries

Center fork	Elkhorn creek	Central Ohio tributaries
Chapman creek	Mad river	Great Miami
Clear creek	Rocky fork	Scioto
Clear creek - Cattail creek (RM 9.52) to the mouth	Hocking river	Hocking
Compton creek	North Fork Paint creek	Scioto
Congo creek	Scippo creek	Scioto
Deer creek - Bradford/Sugar creek confluence (RM 41.22) to Deer creek reservoir (RM 29.40)	Scioto river	Scioto
Dismal creek	Witten Fork	Central Ohio tributaries
East Branch Jelloway creek	Jelloway creek	Muskingum
East Fork Little Miami river - East Fork lake (RM 20.5) to the mouth	Little Miami river	Little Miami
East Fork Little Miami river - Howard run (RM 45.18) to Tunnel Mill road (RM 30.1)	Little Miami river	Little Miami
East Fork Queer creek	Queer creek	Scioto
Elkhorn creek	Yellow creek	Central Ohio tributaries
Federal creek - Hyde fork (RM 16.21) to the mouth	Hocking river	Hocking
Fish Creek - headwaters to the Indiana state line (RM 29.37)	St. Joseph river	Maumee
Furnace run	Cuyahoga river	Cuyahoga
Goose run - downstream Winnerline road (RM 3.00) to the mouth	Bantas fork	Great Miami
Grace run	Cherry fork	Southwest Ohio tributaries

Great Miami river - Quincy dam (RM 143.4) to Pasco-Montra road (RM 134.8)	Ohio river	Great Miami
Great Miami river - Sidney water works dam (RM 130.2) to Loramie creek RM (119.9)	Ohio river	Great Miami
Great Miami river - Lost creek (RM 100.0) to the CSX railroad bridge (RM 84.5)	Ohio river	Great Miami
Hay run	Deer creek	Scioto
Hellbranch run - Kropp road RM (5.04) to the mouth	Big Darby creek	Scioto
Honey creek	Great Miami river	Great Miami
Huron river - East/West branch confluence (RM 14.7) to the Ohio turnpike (RM 9.1)	Lake Erie	Huron
Indianfield run	Kokosing river	Muskingum
Jelloway creek	Kokosing river	Muskingum
Joes run	Big run	Hocking
Laurel run	Salt creek	Scioto
Leith run	Ohio river	Central Ohio tributaries
Little Darby creek	Big Darby creek	Scioto
Little Muskingum river - Witten fork (RM 46.44) to Fifteen Mile creek (RM 14.75)	Ohio river	Central Ohio tributaries
Lower Twin creek	Ohio river	Southwest Ohio tributaries
Lost creek	Great Miami river	Great Miami
Long run	Rocky fork	Muskingum
Lost run	Rocky fork	Muskingum
Mac-o-chee creek	Mad river	Great Miami

Mad river - headwaters to Mac-o-chee creek (RM 51.75)	Great Miami river	Great Miami
Marietta run	Federal creek	Hocking
Massie creek	Little Miami river	Little Miami
McCullough creek	Scioto Brush creek	Scioto
McKee creek	Stony creek	Great Miami
Middle Fork Laurel run	Laurel run	Scioto
Middle Fork Salt creek	Salt creek	Scioto
Mill creek	South Fork Scioto Brush creek	Scioto
Mohican river - Rocky fork (RM 27.60) to an unnamed tributary (RM 16.10)	Walhonding river	Muskingum
Morgan fork	Sunfish creek	Scioto
Muskingum river - confluence of Tuscarawas and Walhonding rivers (RM 111.13) to state route 208 (RM 92.0)	Ohio river	Muskingum
Muskingum river - Licking river (RM 76.20) to Moxahala creek (RM 73.50)	Ohio river	Muskingum
Muskingum river - Salt creek (RM 67.03) to Branch run (RM 52.58)	Ohio river	Muskingum
Muskingum river - McConnellsville dam (RM 49.0) to Madison run (RM 34.4)	Ohio river	Muskingum
Muskingum river - Beverly dam (RM 24.9) to Cushing run (RM 18.77)	Ohio river	Muskingum

Muskingum river - Lowell dam (RM 14.1) to Rainbow creek (RM 7.7)	Ohio river	Muskingum
Muskingum river - Devola dam (RM 5.77) to the mouth	Ohio river	Muskingum
Nancy run	North Fork Yellow creek	Central Ohio tributaries
Nellis run	Big run	Hocking
North Fork Captina creek - Long run (RM 4.0) to the mouth	Captina creek	Central Ohio tributaries
North Fork Yellow creek	Yellow creek	Cuyahoga
Ohio Brush creek - headwaters to Beasley Fork road (RM 6.30)	Ohio river	Southwest Ohio tributaries
Opossum creek	Ohio river	Central Ohio tributaries
Painter run	Rocky fork	Muskingum
Pine creek	Salt creek	Scioto
Pine creek - Hales creek (RM 38.15) to the mouth	Ohio river	Southeast Ohio tributaries
Piney fork	Sunfish creek	Central Ohio tributaries
Pretty run	Salt creek	Scioto
Proctor run	Treacle creek	Scioto
Queer creek	Salt creek	Scioto
Randall run	Mill creek	Scioto
Rarden creek	Scioto Brush creek	Scioto
Rocky fork - U.S. route 62 (RM 5.1) to the mouth	Big Walnut creek	Scioto
Rocky fork - headwaters to Rocky fork lake (RM 16.88)	Paint creek	Scioto
Schenck creek	Kokosing river	Muskingum

Scioto Brush creek - headwaters to McCullough creek (RM 10.2)	Scioto river	Scioto
Scioto river - Indian run (RM 145.18) to Olentangy river (RM 132.33)	Ohio river	Scioto
Scioto river - Scioto Big run (RM 124.40) to Scippo creek (RM 89.61)	Ohio river	Scioto
Scioto river - Paint creek (RM 63.50) to Salt creek (RM 51.18)	Ohio river	Scioto
Scioto river - Scioto Brush creek (RM 9.2) to the mouth	Ohio river	Scioto
Scippo creek - Old Tarlton pike (RM 14.80) to the mouth	Scioto river	Scioto
Sevenmile creek	Fourmile creek	Great Miami
South Fork Captina creek	Captina creek	Central Ohio tributaries
South Fork Eagle creek	Eagle creek	Mahoning
South Fork Scioto Brush creek - Shawnee creek (RM 8.3) to the mouth	Scioto Brush creek	Scioto
Spain creek	Big Darby creek	Scioto
Spring fork	Little Darby creek	Scioto
Spring run	Federal creek	Hocking
Stillwater river - Englewood dam (RM 9.0) to the mouth	Great Miami river	Great Miami
Strawcamp run	Elkhorn creek	Central Ohio tributaries
Sunfish creek - headwaters to Negro run (RM 1.7)	Ohio river	Central Ohio tributaries
Trail run	Center fork	Central Ohio tributaries
Turkey creek	Ohio river	Southwest Ohio tributaries

Turkey run	Sugartree fork	Muskingum
Unnamed tributary to East Branch Black river at RM 41.41	East Branch Black river	Black
Upper Twin creek	Ohio river	Southwest Ohio tributaries
West Branch Alum creek - Ashley West Liberty road (RM 5.09) to the mouth	Alum creek	Scioto
West Branch Huron river - Slate run (RM 10.52) to the mouth	Huron river	Huron
West Branch St. Joseph river - Michigan state line (RM 11.41) to the mouth	St. Joseph river	Maumee
West fork - Buck run (RM 9.0) to the mouth	Ohio Brush creek	Southwest Ohio tributaries
Whitewater river - Indiana state line (RM 8.26) to the mouth	Great Miami river	Great Miami
Wildcat run	Big run	Hocking
Winding fork	Wakatomika creek	Muskingum
Winterstein run	South Fork Scioto Brush creek	Scioto
Witten fork	Little Muskingum river	Central Ohio tributaries
Witten run	Clear Fork Little Muskingum river	Central Ohio tributaries
Yellow creek	Cuyahoga river	Cuyahoga
Yellow Springs creek	Little Miami river	Little Miami

Table 5-5. Outstanding state waters based on exceptional ecological values.

Water body name	Flows into	Drainage basin
Aurora branch - state route 82 (RM 17.08) to the mouth	Chagrin river	Chagrin
Bantas fork	Twin creek	Great Miami
Big Darby creek	Scioto river	Scioto
Captina creek - North/South forks (RM 25.42) to state route 7 (RM 0.70)	Ohio river	Central Ohio tributaries
Chagrin river - Woodiebrook road (RM 49.14) to state route 6 (RM 11.1)	Lake Erie	Chagrin
Conneaut creek - state line (RM 23.83) to the mouth	Lake Erie	Ashtabula
Cuyahoga river - Troy-Burton township line (RM 83.9) to U.S. route 14 (RM 60.75)	Lake Erie	Cuyahoga
Deer creek - Deer creek dam (RM 23.89) to the mouth	Scioto river	Scioto
East Branch Chagrin river - Heath road (RM 14.49) to the mouth	Chagrin river	Chagrin
Fish creek - Indiana state line (RM 5.57) to the mouth	St. Joseph river	Maumee
Grand river - state route 322 (RM 67.08) to U.S. route 20 (RM 5.67)	Lake Erie	Grand
Greenville creek - Indiana state line (RM 34.48) to the mouth	Stillwater river	Great Miami
Kokosing river	Walhonding river	Muskingum
Little Beaver creek	Ohio river	Little Beaver creek

Little Darby creek	Big Darby creek	Scioto
Little Miami river	Ohio river	Little Miami
Middle Fork Little Beaver creek - Middle run (RM 8.57) to the mouth	Little Beaver creek	Little Beaver creek
North Branch Kokosing river	Kokosing river	Muskingum
North Fork Little Beaver creek - Pennsylvania state line (RM 7.75) to the mouth	Little Beaver creek	Little Beaver creek
North Fork Little Miami river	Little Miami river	Little Miami
North Fork Paint creek - Compton creek (RM 24.57) to the mouth	Paint creek	Scioto
Olentangy river - Delaware dam (RM 32.35) to Old Wilson Bridge road (RM 11.45)	Scioto river	Scioto
Paint creek - Rocky fork (RM 37.12) to North fork (RM 3.80)	Scioto river	Scioto
Pleasant run	Big Darby creek	Scioto
Rocky fork	Licking river	Muskingum
Salt creek	Scioto river	Scioto
Sandusky river - U.S. route 30 (RM 82.1) to Roger Young Memorial park in Fremont (RM 16.6)	Lake Erie	Sandusky
Scioto Brush Creek - McCullough creek (RM 10.20) to the mouth	Scioto river	Scioto
South Fork Scioto Brush creek - Shawnee creek (RM 8.30) to the mouth	Scioto Brush creek	Scioto

Stillwater river - Riffle road (RM 55.90) to the Englewood dam (RM 9.01)	Great Miami river	Great Miami
Twin creek	Great Miami river	Great Miami
Unnamed tributary to East Branch Black river at RM 39.06	East Branch Black river	Black
Vermilion river - Southwest branch (RM 47.66) to state route 2 (RM 3.15)	Lake Erie	Vermilion
Wakatomika creek	Muskingum river	Muskingum
Walhonding river	Tuscarawas river	Muskingum
West Fork Little Beaver creek - Brush creek (RM 15.99) to the mouth	Little Beaver creek	Little Beaver creek

Table 5-6. Outstanding state waters based on exceptional recreational values.

Water body name	Flows into	Drainage basin
Cuyahoga river - Sand run (RM 39.12) to Rockside road (RM 13.13)	Lake Erie	Cuyahoga
Maumee river - Indiana state line (RM 108.1) to the U.S. route 25 bridge (RM 15.05)	Maumee bay	Maumee

Table 5-7. Outstanding national resource waters.

Water body name	Flows into	Drainage basin
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Effective: 7/01/2003

R.C. Section 119.032 review dates: 3/25/2002 and 7/01/2008

Promulgated under: R.C. Section 119.03

Rule authorized by: R.C. Section 6111.041

Rule amplifies: R.C. Section 6111.041

Prior effective dates: 2/14/1978, 4/4/1985, 10/1/1996, 10/31/1997, 5/1/1998, 4/17/2001 (Emer.)