



## Ohio Administrative Code Rule 3745-2-12 Total maximum daily loads.

Effective: February 15, 2019

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[Comment: For dates of non-regulatory government publications, publications of recognized organizations and associations, federal rules and federal statutory provisions referenced in this rule, see rule 3745-2-02 of the Administrative Code.]

(A) Administrative procedures.

(1) At a minimum, total maximum daily loads (TMDLs) shall be established in accordance with the listing and priority setting process established in Section 303(d) of the act and 40 C.F.R. 130.7.

(2) The director shall do the following for stakeholder involvement during TMDL development in accordance with section 6111.562 of the Revised Code:

(a) Provide notice of and opportunity for input during the development of a TMDL at each of the following stages:

(i) The project assessment study plan, including portions of the plan that seek to determine the causes and sources of impairments or threats.

(ii) The biological and water quality study report or an equivalent report.

(iii) The loading analysis plan, including, but not limited to, the proposed modeling approach and the water quality restoration targets, goals or criteria.

(iv) The preliminary modeling results including the following:

(a) Any management choices.

(b) Load allocations (LAs) for nonpoint sources of pollutants.



- (c) Wasteload allocations (WLAs) for point sources of pollutants.
  - (d) Allowances for margin of safety and future growth.
  - (e) Permit limits necessary to achieve the WLAs.
  - (f) Preliminary TMDL implementation plan establishing specific actions, schedules and monitoring proposed to effectuate a TMDL.
- (b) Provide notice as required in paragraph (A)(2)(a) of this rule to the following stakeholders:
- (i) Potentially affected dischargers.
  - (ii) County soil and water conservation districts.
  - (iii) Other interested stakeholders. This may include a watershed specific stakeholder distribution list or listserv.
- (c) Allow not less than thirty days for input at each stage required in paragraph (A)(2)(a) of this rule.
- (d) For TMDLs in development prior to September 29, 2017, provide at least two opportunities for stakeholder input prior to submittal of the TMDL to U.S. EPA for approval.

[Comment: The director may provide stakeholder notification through posting of information on the Ohio EPA website and electronic notifications, or first class mail if electronic means are not available.]

[Comment: The director may convene a watershed advisory committee to provide input to Ohio EPA on an individual project throughout the TMDL development process.]

[Comment: The director may organize stakeholder meetings during the development of a TMDL depending upon the level of stakeholder interest in a given watershed.]



(3) Official draft TMDL. The director shall prepare an official draft TMDL prior to establishing a final TMDL, as follows:

(a) The official draft TMDL shall include both of the following:

(i) An estimate of the total amount of each pollutant that causes water quality impairment from all sources.

(ii) An estimate of the total amount of pollutants that may be added to the water of the state while still allowing the water of the state to achieve and maintain applicable water quality standards.

(b) The director shall provide public notice of the official draft TMDL in accordance with rule 3745-49-07 of the Administrative Code. In addition to the information required by rule 3745-49-08 of the Administrative Code, the public notice shall specify both of the following:

(i) The water of the state to which the official draft TMDL relates.

(ii) The time, date and location of the public hearing, if applicable.

(c) The director shall send the public notice to the following stakeholders:

(i) All individuals NPDES permit holders that discharge into the water of the state to which the official draft TMDL relates.

(ii) All significant industrial users listed in the permit holders' annual report.

(iii) Other stakeholders that provided input during the development of the TMDL in accordance with paragraph (A)(2) of this rule.

(iv) Agency listservs or watershed specific stakeholder distribution list, if available.

(d) The director shall allow not less than sixty days for comment on the official draft TMDL.



(e) The director shall provide an opportunity for public hearing regarding the official draft TMDL if there is significant public interest. Interested persons may request, in writing, that Ohio EPA hold a public hearing on an official draft TMDL within thirty days after the public notice of the official draft TMDL. Requests shall state the nature of issues proposed to be raised at the hearing. Ohio EPA will hold a public hearing if any of the following occur:

(i) Requests are made from one or more public officials, any affected state, U.S. EPA or other federal agency.

(ii) Requests are made from seven or more citizens.

(iii) Request is made from an organized citizens group, including watershed groups, trade associations or other non-profit organizations, or potentially impacted entities.

(iv) The director determines that the public interest would be served by holding a hearing.

(f) The director shall prepare and make available a written responsiveness summary of the comments received during the applicable comment period on the official draft TMDL. The director may consider comments received after the comment deadline as time and circumstances allow.

(4) Final TMDL. After completion of the items in paragraph (A)(3) of this rule if the director determines it is appropriate to complete the TMDL, the director shall establish a final TMDL and submit the final TMDL to U.S. EPA for approval. A final TMDL may be challenged in accordance with section 6111.564 of the Revised Code.

(5) TMDL modifications. The director may modify an official draft, final or U.S. EPA approved TMDL. A modification, other than a modification to a draft or final TMDL consistent with comments received, is subject to the requirements in paragraph (A)(3) of this rule.

(6) Where a TMDL is not required by paragraph (A)(1) of this rule or it is not technically feasible to complete development of a TMDL prior to NPDES permit issuance or renewal deadlines for a discharge to a TMDL assessment area, Ohio EPA may develop water quality based effluent limits



(WQBELs) for a discharge in the absence of a TMDL pursuant to rules 3745-2-04 to 3745-2-11 of the Administrative Code.

(B) Development of TMDLs.

(1) At a minimum, the following factors shall be considered when determining an assessment area for a TMDL:

(a) Area of impact.

(b) A linkage of the impaired use and the pollutant to be reduced.

(c) Significance of the pollutant of concern.

(d) Location, type, significance and interaction of pollutant sources.

(e) The critical conditions and seasonality of the impacts from the pollutant.

(f) Availability of information.

(g) Treatability of pollutant and pollutant sources.

(h) Resources available to develop the TMDL implementation plan.

(i) Resources available for implementing the TMDL implementation plan.

(j) Coordination with other Ohio EPA programs and program requirements.

(k) Federal regulations and guidance regarding TMDLs.

(2) A TMDL shall be determined as the sum of all existing or projected loads of a pollutant to the TMDL assessment area from point sources, nonpoint sources and background sources. The sum of the loads shall not be greater than the loading capacity of the receiving water for the pollutant minus



a specified margin of safety (MOS) and any capacity reserved for future growth.

(3) The background concentration of a pollutant for the purpose of establishing a TMDL shall be determined in accordance with rule 3745-2-05 of the Administrative Code. The director may apply alternative procedures to determine background concentrations if necessary to account for all conditions considered in the TMDL, including, but not limited to, cases where background concentrations vary substantially with flow such that a background concentration derived in accordance with rule 3745-2-05 of the Administrative code may not be appropriate.

(4) The loading capacity for the purpose of establishing a TMDL shall be determined as the largest load of a pollutant that a water body can receive without violating water quality standards at any applicable site within the TMDL implementation plan assessment area (outside of applicable mixing zones). Separate loading capacities may be determined for each flow condition or season applicable to the TMDL. Pollutant loads for sources which only affect the receiving water at certain flow conditions shall be determined to maintain only the loading capacities applicable at those conditions.

(5) Each TMDL shall include a MOS sufficient to account for technical uncertainties in establishing the TMDL. The TMDL implementation plan shall describe the manner in which the MOS is determined and incorporated into the TMDL. The MOS may be provided by leaving a portion of the loading capacity unallocated or by using conservation modeling assumptions to establish WLAs and LAs.

(6) TMDLs may include reserved allocations of loading capacity to accommodate various needs including, but not limited to, future growth, additional sources and environmental reserves. Where adequate reserved allocations are not included in a TMDL, any increased loadings of the pollutant for which the TMDL was developed that are due to a new or expanded discharge shall not be allowed unless the TMDL is revised in accordance with this rule and section 6111.563 of the Revised Code to include an allocation for the new or expanded discharge.

(7) Where appropriate and where sufficient data are available, TMDLs shall reflect contributions to the water column from sediments inside and outside of any applicable mixing zones. TMDLs shall be sufficiently stringent so as to prevent accumulation of the pollutant of concern in sediments to levels injurious to designated or existing uses, human health, wildlife and aquatic life criteria.



(8) TMDLs shall be based on the assumption that a pollutant does not degrade. However, the director may take into account degradation of the pollutant if each of the following conditions are met:

(a) Scientifically valid field studies or other relevant information demonstrate that degradation of the pollutant is expected to occur under the full range of environmental conditions expected to be encountered.

(b) Scientifically valid field studies or other relevant information address other factors that affect the level of pollutants in the water column including, but not limited to, resuspension of sediments, chemical speciation and biological and chemical transformation.

(9) TMDLs for metals shall be determined based on the total recoverable form of that metal provided by all sources considered in that TMDL. The loading capacity for that TMDL shall be determined to maintain the total recoverable criteria applicable to that metal, with the following exceptions:

(a) A WLA may be based on dissolved criteria in accordance with rule 3745-2-04 of the Administrative Code, provided that the WLA does not result in a total recoverable load in excess of that allocated to the point source as part of an established TMDL.

(b) The loading capacity may be based on an effective total recoverable criteria, determined from applicable dissolved criteria in accordance with rule 3745-2-04 of the Administrative Code, provided that the dissolved metal translator applied in determination of the effective total recoverable criteria can be demonstrated to be appropriate and protective for all sources of that metal and all receiving water conditions considered in the TMDL.

(10) TMDLs shall reflect, where appropriate and where sufficient data are available, point source and nonpoint source pollutant loads resulting from wet weather events.

(11) In addition to the requirements of paragraphs (B)(1) to (B)(10) of this rule, the director shall consider and evaluate the factors in divisions (B) and (C) of section 6111.562 of the Revised Code.

(C) Nonpoint source load allocations (LAs).



(1) For the purpose of establishing a TMDL, LAs shall be based on at least the following information:

(a) Existing pollutant loadings if changes in loadings are not reasonably anticipated to occur.

(b) Increases in pollutant loadings that are reasonably anticipated to occur.

(c) Anticipated decreases in pollutant loadings if such decreased loadings are technically feasible and are reasonably anticipated to occur within a reasonable time period as a result of implementation of best management practices or other load reduction measures.

(2) For LAs established on the basis of paragraph (C)(1)(c) of this rule, monitoring data shall be collected and analyzed in order to validate the TMDL's assumptions, to verify anticipated load reductions, to evaluate the effectiveness of controls being used to implement the TMDL implementation plan and to revise the point source allocations and LAs as necessary to ensure that water quality standards will be achieved within the time-period established in the TMDL.

(3) For nonpoint sources considered in a TMDL that may affect the receiving water at stream flows at or below the stream design flows applicable under rule 3745-2-05 of the Administrative Code, LAs established in a TMDL shall be determined in accordance with rule 3745-2-05 of the Administrative Code such that water quality criteria are maintained at the design conditions.

(4) For nonpoint sources considered in a TMDL that only affect the receiving water at stream flows higher than the stream design flows applicable under rule 3745-2-05 of the Administrative Code, LAs may be established using stream flows and procedures that the director determines are appropriate for that nonpoint source and ensure that applicable water quality standards will be maintained whenever that nonpoint source load occurs.

(D) Point source wasteload allocations (WLAs). Pollutant loads allocated to point sources in a TMDL shall be used to determine WLAs for those point sources.

(1) If TMDLs are established in TMDL implementation plans for different segments of the same





watershed and include allocations for the same pollutant for the same point source, then WLAs for that pollutant and point source shall be consistent with the most stringent of those allocations.

(2) For point sources considered in a TMDL that discharge at stream flows at or below the stream design flows applicable under rule 3745-2-05 of the Administrative Code, WLAs shall be determined in accordance with rule 3745-2-05 of the Administrative Code such that water quality criteria are maintained at the design conditions.

(3) For point sources considered in a TMDL that only discharge at stream flows higher than the stream design flows applicable under rule 3745-2-05 of the Administrative Code, WLAs may be established using stream flows and procedures that the director determined are appropriate for that point source and ensure that applicable water quality standards will be maintained whenever that point source load occurs.

(4) WLAs determined as part of a TMDL shall be used to determine WQBELs for that discharge in accordance with rule 3745-2-06 of the Administrative Code.

(E) TMDL Implementation.

(1) TMDLs shall be established and implemented through a TMDL implementation plan. An implementation plan shall address attainment of applicable water quality standards, determined in accordance with rule 3745-2-04 of the Administrative Code (or as otherwise applicable in accordance with Chapter 3745-1 of the Administrative Code) for each pollutant for which a TMDL is established.

(2) Where an assessment and remediation plan meets the requirements of this rule and the public participation requirements applicable to TMDLs, Ohio EPA may use the assessment and remediation plan in lieu of a TMDL implementation plan. Assessment and remediation plans may include, but are not limited to, the lake Erie lakewide management plan, remedial action plans and water quality management plans. Any part of an assessment and remediation plan that satisfies one or more requirements under Section 303(d) of the act or the act's implementing regulations may be part of a TMDL implementation plan.



(3) A TMDL implementation plan may be based on attaining water quality standards over a period of time, with specific controls on individual sources being implemented in stages. Where implementing a TMDL implementation plan will not immediately attain water quality standards, the TMDL implementation plan shall reflect reasonable assurances that water quality standards will be attained in a reasonable period of time. At a minimum, the following factors shall be considered by Ohio EPA in determining the reasonable period of time in which water quality standards will be met:

(a) Receiving water characteristics.

(b) Persistence, behavior and ubiquity of pollutants of concern.

(c) Type of remediation activities necessary.

(d) Available regulatory and non-regulatory controls.

(e) Other requirements for attainment of water quality standards.

(F) All public records created in the development of the TMDL shall be made available upon request in accordance with section 149.43 of the Revised Code.