APA-1
11/96

TRANSMITTAL SHEET FOR NOTICE OF INTENDED ACTION

Control 335 Department or Agency **Environmental Management**
Rule No. **335-6-6-.15**
Rule Title: **Calculating NPDES Permit Limitations**
____ New **X** Amend ____ Repeal ____ Adopt by Reference

Would the absence of the proposed rule significantly harm or endanger the public health, welfare, or safety?	**YES**
Is there a reasonable relationship between the state's police power and the protection of the public health, safety, or welfare?	**YES**
Is there another, less restrictive method of regulation available that could adequately protect the public?	**NO**
Does the proposed rule have the effect of directly or indirectly increasing the costs of any goods or services involved and, if so, to what degree?	**NO**
Is the increase in cost, if any, more harmful to the public than the harm that might result from the absence of the proposed rule?	**NO**
Are all facts of the rulemaking process designed solely for the purpose of, and so they have, as their primary effect, the protection of the public?	**YES**

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Does the proposed rule have an economic impact? **NO**

If the proposed rule has an economic impact, the proposed rule is required to be accompanied by a fiscal note prepared in accordance with subsection (f) of Section 41-22-23, Code of Alabama 1975.

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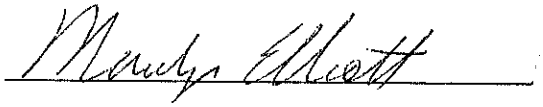
Certification of Authorized Official

I certify that the attached proposed rule has been proposed in full compliance with the requirements of Chapter 22, Title 41, Code of Alabama 1975, and that it conforms to all applicable filing requirements of the Administrative Procedure Division of the Legislative Reference Service.

Signature of certifying officer 

Date **April 20, 2015**

APA-2
11/96

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
WATER DIVISION

NOTICE OF INTENDED ACTION

Agency Name: Alabama Department of Environmental Management

Rule No. & Title: 335-6-6-.15 Calculating NPDES Permit Limitations (Amend)

Intended Action: The Alabama Department of Environmental Management proposes to amend rule 335-6-6-.15.

Substance of Proposed Action:

The Department proposes to update this rule for consistency with a federal rule. The Department also proposes to make administrative corrections and revisions in this rule.

Time, Place, Manner of Presenting Views:

Comments may be submitted in writing or orally at a public hearing to be held at 2:00 P.M., June 15, 2015, in the ADEM Main Hearing Room, 1400 Coliseum Boulevard, Montgomery, Alabama 36110.

Final Date for Comment and Completion of Notice: June 15, 2015

Contact Person at Agency: Christy Monk, (334) 394-4364

Lance R. LeFleur
Director

335-6-6-.15 Calculating NPDES Permit Limitations.

(1) Outfalls and Discharge Points. Permit discharge limitations, standards and prohibitions shall be established for each discharge point from the facility, except where limitations on internal waste streams are more appropriately used.

(2) Production Based Limitations.

(a) In the case of POTW's, permit limitations, standards, or prohibitions shall be calculated based on design flow, the Department's Water Quality Criteria, Section IV, ~~ADEM Administrative Code rule~~ chapter 335-6-10, 40 CFR Part 133 (1994) secondary treatment requirements, and criteria necessary to achieve or maintain water quality standards for the particular receiving stream.

(b) Except, in the case of POTW's or as provided in subparagraph 335-6-6-.15(2)(c) or ~~subparagraph 335-6-6-.15(2)~~(d), calculation of any permit limitations, standards, or prohibitions which are based on production (or other measure of operation) shall not be based upon the designed production capacity but shall be based upon a reasonable measure of actual production of the facility~~,~~; ~~for example, the production during the high month of the previous year, or the monthly average for the highest of the previous five years.~~ For new sources or new dischargers, actual production shall be estimated using projected production. The time period of the measure of production shall correspond to the time period of the calculated permit limitation; ~~for example, monthly production shall be used to calculate average monthly discharge limitations.~~

(c) The Director may include a condition establishing alternate permit limitations, standards, or prohibitions based upon an anticipated increase, not to exceed maximum production capability, or decrease in production levels. Such anticipated increases or decreases in production must be reasonably projected to occur during the duration of the permit.

(d) If the Director establishes permit conditions under ~~paragraph~~ subparagraph 335-6-6-.15(2)(c):

1. The permit shall require the permittee to notify the Director at least two business days prior to a month in which the permittee expects to operate at a level higher than the lowest production level identified in the permit. The notice shall specify the anticipated level and the period during which the permittee expects to operate at the alternate level. If the notice covers more than one month, the notice shall specify the reasons for the anticipated production level increase. New notice of discharge at alternate levels is required to cover a period or production level not covered by prior notice or, if during two consecutive months otherwise covered by a notice, the production level at the facility does not in fact meet the higher level designated in the notice;

2. The permittee shall comply with the limitations, standards, or prohibitions that correspond to the lowest level of production specified in the permit, unless the permittee has notified the Director under subparagraph 335-6-6-.15(2)(d)1., in which case the permittee shall comply with the level specified in the notice; and

3. The permittee shall submit with the DMR the level of production that actually occurred during each month and the limitations, standards, or prohibitions applicable to that level of production.

(3) Metals. All permit effluent limitations, standards, or prohibitions for a metal shall be expressed in terms of "total recoverable metal" as ~~defined~~ specified in 40 CFR Part 136-~~(1994)~~ unless:

(a) An applicable effluent standard or limitation has been promulgated under the FWPCA and specifies the limitation for the metal in the dissolved or valent or total form;

(b) In establishing discharge limitations on a case by case basis, it is necessary to express the limitation on the metal in the dissolved or valent or total form to carry out the provisions of the FWPCA; or

(c) All approved analytical methods for the metal inherently measure only its dissolved form.

(4) Continuous Discharges. For continuous discharges all permit discharge limitations, standards, and prohibitions, including those necessary to achieve water quality standards, shall unless impracticable be stated as:

(a) Maximum daily and average monthly discharge limitations for all dischargers other than publicly owned treatment works or privately owned treatment facilities which treat domestic wastewater and

(b) Average weekly and average monthly discharge limitations for POTWs and privately owned treatment works which treat domestic wastewater.

(5) Non-continuous Discharges. Discharges which are not continuous, as defined in rule 335-6-6-.02, shall be particularly described and limited, considering the following factors, as appropriate:

(a) Frequency (for example, a batch discharge shall not occur more than once every three weeks);

(b) Total mass (for example, not to exceed 100 kilograms of zinc and 200 kilograms of chromium per batch discharge);

(c) Maximum rate of discharge of pollutants during the discharge (for example, not to exceed two kilograms of zinc per minute or not to exceed a specified discharge rate); and

(d) Prohibition or limitation of specified pollutants by mass, concentration, or other appropriate measure (for example, shall not contain at any time more than 0.1 milligrams per liter zinc or more than 250 grams of zinc in any discharge).

(6) Mass Limitations.

(a) All pollutants limited in permits shall have limitations, standards or prohibitions expressed in terms of mass except:

1. For pH, temperature, or other pollutants which cannot appropriately be expressed by mass;

2. When applicable standards and limitations are expressed in terms of other units of measurement;

3. When concentration limits are required to comply with water quality standards; or

4. If in establishing permit limitations on a case by case basis, limitations expressed in terms of mass are infeasible because the mass of the pollutant discharged cannot be related to a measure of operation (for example, discharges of TSS from certain mining operations), and permit conditions ensure that dilution will not be used as a substitute for treatment.

(b) Pollutants limited in terms of mass additionally may be limited in terms of other units of measurement, and the permit shall require the permittee to comply with both limitations.

(7) Pollutants in Intake Water.

(a) Upon request of the discharger, technology based effluent limitations or standards shall be adjusted to reflect credit for pollutants in the discharger's intake water if:

1. The applicable effluent limitations and standards contained in 40 CFR Subchapter N (1994) specifically provide that they shall be applied on a net basis; or

2. The discharger demonstrates that the control system it proposes or uses to meet applicable technology based limitations and standards would, if properly installed and operated, meet the limitations and standards in the absence of pollutants in the intake waters;

(b) Credit for generic pollutants such as biochemical oxygen demand or total suspended solids should not be granted unless the permittee demonstrates that the constituents of the generic measure in the effluent are substantially similar to the constituents of the generic measure in the intake water or unless appropriate additional limits are placed on process water pollutants either at the point of discharge or elsewhere.

(c) Credit shall be granted only to the extent necessary to meet the applicable limitation or standard, up to a maximum value equal to the influent value. Additional monitoring may be necessary to determine eligibility for credits and compliance with permit limits.

(d) Credit shall be granted only if the discharger demonstrates that the intake water is drawn from the same body of water into which the discharge is made. The Director may waive this requirement if he finds that no significant environmental degradation will result.

(e) This paragraph does not apply to the discharge of raw water clarifier sludge generated from the treatment of intake water.

(f) In no case shall the application of credits for pollutants in intake waters be allowed to result in the violation of water quality standards.

(g) When wastewater is treated by a system which removes a pollutant for which credit is granted, the credit granted shall be no greater than the limit of treatability of the pollutant by the treatment system.

(8) Internal Waste Streams.

(a) Limitations on internal waste streams may be imposed:

1. When permit limitations or standards imposed at the point of discharge are impractical or infeasible;

2. Prior to mixing with other waste streams or cooling water streams;

3. When the wastes at the final point of discharge are so diluted that monitoring would be impracticable;

4. When interferences among pollutants at the point of discharge would make detection or analysis infeasible.

(b) When monitoring of internal waste streams is required, the monitoring requirements of subparagraph 335-6-6-.14(3)(i) shall be applicable.

(c) When monitoring of internal waste streams is required, the permit rationale and fact sheet, where required, shall set forth the circumstances which make such limitations necessary.

(9) Disposal of Pollutants into Wells, into Publicly Owned Treatment Works or by Land Application.

(a) When part of a discharger's process wastewater is not being discharged into surface waters of the state because it is disposed into a well, into a POTW, private treatment facility, or by land application thereby reducing the flow or level of pollutants being discharged into surface waters of the state, applicable technology based effluent standards and limitations for the discharge

in an NPDES permit shall be adjusted to reflect the reduced raw waste resulting from such disposal.

(b) If none of the waste from a particular process is discharged into waters of the state, and effluent limitations guidelines provide separate allocation for wastes from that process, all allocation for wastes from that process, shall be eliminated from calculation of permit effluent limitations or standards.

(c) In all cases other than those described in ~~paragraph~~ subparagraph (9)(b) of this ~~section~~rule, effluent limitations shall at least be no less stringent than the limitation derived by multiplying the effluent limitation derived by applying effluent limitation guidelines to the total waste stream by the amount of wastewater flow to be treated and discharged into waters of the state, and dividing the result by the total wastewater flow. Effluent limitations and standards so calculated may be further adjusted under 40 CFR Part 125 (1994), Subpart D to make them more or less stringent if discharges to wells, publicly owned treatment works, private treatment facilities, or by land application change the character or treatability of the pollutants being discharged to surface waters. This method may be algebraically expressed as:

$$P = \frac{[E][N]}{T}$$

Where P is the permit effluent limitation, E is the limitation derived by applying effluent guidelines to the total wastestream, N is the wastewater flow to be treated and discharged to waters of the state, and T is the total wastewater flow.

(d) Subparagraph 335-6-6-.15(9)(a) does not apply to the extent that promulgated effluent limitations guidelines:

1. Control concentrations of pollutants discharged but not mass; or

2. Specify a different specific technique for adjusting effluent limitations to account for well injection, land application, or disposal into publicly or privately owned treatment works.

(e) Subparagraph 335-6-6-.15(9)(a) does not alter a discharger's obligation to meet any more stringent permit requirements established under the AWPCA.

(10) Mixing Zones. Limits calculated to comply with water quality standards may allow an opportunity for mixing with the receiving waters in accordance with rule 355-6-10-.05. Determination of mixing zones shall be in accordance with the following requirements.

(a) Whole effluent acute toxicity limitations shall be applied at the perimeter of the zone of initial dilution (ZID), when the discharge is mixed with the receiving stream by a high rate diffuser, in the absence of a high rate

diffuser, acute limitations shall be applied based on best professional judgement and may be applied at the end of the pipe.

(b) Whole effluent chronic toxicity limitations shall be applied at the perimeter of a mixing zone developed using best professional judgement and, in instances where the discharge is to a lake or other water body having zero or near zero flow, limitations developed to meet chronic toxicity water quality standards and human health criteria for substances classified as non-carcinogens shall be applied at the perimeter of a mixing zone developed using best professional judgement. A mixing zone may be developed using isopleth studies, diffuser models, or other methods that are appropriate to the particular situation being evaluated. For discharges to waters of the coastal area, the mixing zone for whole effluent toxicity limitations and for limitations developed to meet chronic toxicity water quality standards and human health criteria for substances classified as non-carcinogens shall be the discharge information zone as defined by subrule-paragraph 335-8-2-.12(1)(a).

(c) When developing permit limits for discharge to flowing streams to comply with human health water quality criteria for pollutants classified as carcinogens the wastewater discharge shall be assumed to be completely mixed in the receiving water at the moment of discharge. When the discharge is to an impoundment or estuary, the allowable mixing zone shall be based on best professional judgement.

(d) Mixing zone prohibitions.

1. Mixing zones in streams shall not preclude passage of aquatic life up or down stream, shall not exceed a width of 50 percent of the stream width, shall not exceed a length of five times the width of the mixing zone, and shall not exceed an area of 25 percent of the stream cross-sectional area, and a mixing zone shall not encompass drinking water intakes.

2. The total area of all mixing zones in a lake shall not encompass more than ten percent of the surface area of the lake, the radius of any one zone shall not be greater than 750 feet, and a mixing zone shall not encompass water intakes.

(11) Receiving Water Flow. The calculation of permit limitations to meet water quality standards shall be based on following statistical flows:

(a) Permit limitations to comply with chronic aquatic life criteria for toxic substances listed in rule 335-6-10-.07 shall be calculated using the minimum 7-day low flow that occurs once in 10 years ($7Q_{10}$) or a base flow higher than the $7Q_{10}$, in which case discharge when the stream flow is less than the base flow shall be prohibited.

(b) Permit limitations to comply with acute aquatic life criteria for toxic substances listed in rule 335-6-10-.07 shall be calculated using the minimum 1-day low flow that occurs once in 10 years ($1Q_{10}$) or a base flow

higher than the $1Q_{10}$, in which case discharge when the stream flow is less than the base flow shall be prohibited.

(c) Permit limitations to comply with human health criteria for substances classified as non-carcinogens and listed in rule 335-6-10-.07 shall be calculated using the minimum 7-day low flow that occurs once in 10 years ($7Q_{10}$) or a base flow higher than the $7Q_{10}$, in which case discharge when the stream flow is less than the base flow shall be prohibited.

(d) Permit limitations to comply with human health criteria for substances classified as carcinogens and listed in rule 335-6-10-.07 shall be calculated using the mean annual flow.

(e) Calculation of permit limitations to comply with water quality requirements, other than those listed in ~~rule~~ subparagraphs 335-6-6-.15(11)(a), (b), (c), and (d) and substances which in the concentrations found in the discharged wastewater can be reasonably expected to violate the narrative toxicity standards of chapter 335-6-10, shall be based on the assimilative capacity of the receiving water and shall not result in degradation of water quality. Permit limits recognizing the variability of receiving stream flows shall be allowable and may be based on statistical seasonal low flows or actual stream flow measurements taken at the time of discharge. Permit limits which require the instream measurement of the substance or parameter being regulated and require that the instream concentration not exceed the applicable water quality requirement may be imposed in conjunction with a discharge limit.

(12) Quantitation.

(a) For the purpose of reporting and compliance, permittees shall use the Minimum Level (ML) as established by EPA. All analytical values at or above the ML shall be reported as the measured value. Values below the ML shall be reported as "~~0~~0" (zero).

(b) For pollutant parameters without an established ML, an interim ML shall be utilized. The interim ML shall be calculated as 3.18 times the Method Detection Level (MDL) calculated ~~pursuant to~~in accordance with the procedure in Appendix B of 40 CFR Part 136~~ (1994), Appendix B~~.

(c) Permittees may develop an effluent matrix-specific ML, where an effluent matrix prevents attainment of the established ML. However, a matrix specific ML shall be based upon proper laboratory method and technique. Matrix-specific MLs must be approved by the Department, and may be developed by the permittee during permit issuance, reissuance, modification, or during a compliance schedule.

Author: John Poole, Ed Hughes, Daphne Lutz.
Statutory Authority: Code of Alabama 1975, §22-22-9, §22-22A-5.
History: January 24, 1989. **Amended**: April 29, 1991; July 12, 1995, August 1, 2002; January 23, 2003; XXXX XX, 2015.