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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
WATER

MEMORANDUM

SUBJECT: Interim Guidance on Implementation of Section 402(o)
Anti-backsliding Rules For Water Quality-Based Permits

FROM: James R. Elder, Director
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TO: Water Management Division Directors, Regions I-X
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Section 402(o) of the Clean Water Act (CWA), enacted in the Water Quality Act of 1987, establishes anti-backsliding rules governing two situations. The first situation occurs when a permittee seeks to revise a technology-based effluent limitation based on best professional judgment (BPJ) to reflect a subsequently promulgated effluent guideline which is less stringent. The second situation addressed by §402(o) arises when a permittee seeks relaxation of an effluent limitation which is based upon a State treatment standard or water quality standard.¹

With respect to the first situation, EPA's existing anti-backsliding regulations have recently been revised in the NPDES codification rule to include the new §402(o) requirements for revising technology-based BPJ limits based on subsequent effluent guidelines. These new regulations are found at 54 FR 246 (January 4, 1989) (see attached).²

¹In this guidance, except when otherwise specifically noted, the term "water quality-based effluent limitation" is used to refer to any effluent limitation established on the basis of CWA §301(b)(1)(C) or §303. Section 301(b)(1)(C) is not limited to requirements established on the basis of §303 water quality standards, but also includes any other State treatment requirements more stringent than required by the CWA (e.g., technology-based State treatment requirements).

²Please note that the 1988 Code of Federal Regulations (CFR) does not reflect the recent revisions to the rules. Please refer to the attachment, which sets forth all of EPA's current regulations concerning backsliding.

With respect to the second situation, §402(o)'s requirements for water quality-based permits will be included in the NPDES rulemaking to be proposed early next year. The purpose of this memorandum is to provide interim guidance on implementation of §402(o)'s requirements for water quality-based permits.

I. EFFECT OF SECTION 402(O) ON CURRENT EPA REGULATIONS

The statutory anti-backsliding provisions found at §402(o) take precedence over EPA's existing regulations governing backsliding, found at §122.44(1)(1) (attached). Therefore, the Regions and States must now apply the statute itself, instead of these regulations, when questions arise regarding backsliding from limitations based on State treatment or water quality standards.

EPA's existing anti-backsliding regulations continue to apply to questions regarding non-water quality-based effluent limits. Specifically, EPA's existing regulations govern backsliding questions regarding permit limitations based on effluent limitation guidelines, BPJ, or new source performance standards (NSPS). The existing regulations also apply to backsliding questions regarding permit conditions, (rather than permit limitations) even where the conditions in question are based on water quality considerations. Section 402(o) is silent on the issue of permit conditions, and only addresses backsliding from permit limitations.

II. INTERPRETATION OF SECTION 402(O)

A. OVERVIEW

Section 402(o), as it applies to water quality-based effluent limitations, establishes a prohibition against backsliding except in certain limited circumstances. The section is divided into three paragraphs. First, paragraph (o)(1) establishes the conditional prohibition against backsliding. It prohibits backsliding from water quality-based effluent limits unless the revised limits are established in compliance with §303(d)(4).³ Second, paragraph (o)(2) provides for a number of

³Please note that like §402(o), §303(d)(4) is also a new provision, which was enacted by the WQA of 1987 as part of the anti-backsliding amendments.

Both sections 303(d)(4)(A) and (B) apply to "waters identified under paragraph (d)(1)(A)" for which technology-based effluent limitations are insufficient to implement applicable water quality standards. The §303(d)(1)(A) identification

(Continued)

additional exceptions. These exceptions, discussed below, are similar to those found in EPA's existing regulations. Finally, paragraph (o)(3) establishes a baseline, which requires that all revised effluent limits assure compliance with applicable national technology-based guidelines, and State water quality standards, including a State's antidegradation policy.

It is important to note that restrictions on backsliding do not apply to challenged permit limits which have been stayed pending final agency action. For example, where a limit is challenged in an evidentiary hearing or administrative appeal, the limit may be made more or less stringent than the initially proposed revision, without that change being subject to the backsliding prohibition. The restrictions on backsliding do apply to limits with a delayed implementation date which have not been challenged.

B. LEGISLATIVE HISTORY

In order to fully understand §402(o), it is necessary to consider the legislative history of the provision. Because the provision, as enacted, reflects a combination of individual language and sections from the Senate and House bills, along with new language added by the Conferees, it is difficult to reconcile the various provisions of the statute. In light of this difficulty, and the conflicting and uncertain legislative history of the statute, EPA has attempted to interpret the provision in a manner which, to the extent possible, gives full meaning to all of its components and strengthens the development of water quality-based permit limits.

The anti-backsliding requirements of the WQA were developed in a Conference Committee that was established to resolve differences between House and Senate versions of the statute.⁴ In Conference Committee, differences between the House and Senate

requirement will be deemed to have been satisfied for purposes of anti-backsliding if a permit contains water quality-based effluent limitations. However, for the purpose of EPA regulations at 40 C.F.R. Part 130, a State is still required to identify and list these waters.

⁴The Senate anti-backsliding amendment was passed on June 13, 1985, as part of Senate bill S. 1128, 99th Cong., §115. The House anti-backsliding amendment was incorporated into the House bill that was passed on July 23, 1985 (H.R. 8, 99th Cong., §404).

versions of the anti-backsliding amendment were resolved by combining concepts and provisions from each of the bills.⁵

The Senate bill was written to add new provisions to both §§ 303 and 402 of the CWA. The provisions of §402(o)(2) would have applied to BPJ effluent limitations; while the provisions of §303(d)(4) would have applied to backsliding from water quality based effluent limits.

Unlike the Senate bill, the House bill was written to amend only CWA §402. These provisions were to apply to both BPJ and water quality-based effluent limitations.

With respect to backsliding from BPJ effluent limitations, the WQA essentially follows the House bill. However, for water quality-based effluent limitations, the WQA reflects a combination of the House and Senate bills plus additional language added by the Conferees. As with the Senate bill, WQA §404 was written in the form of amendments to both CWA §§ 303 and 404. As a result, WQA §404 reflects an effort by the Conferees to retain the overall structure and organization of the Senate bill while adding to that structure elements of the House bill.

As discussed above, §402(o)(1) establishes a conditional prohibition on backsliding from BPJ and water quality-based effluent limitations. For water quality-based effluent limitations, the primary exception to this prohibition is found at CWA §303(d)(4), drawn from the Senate bill.⁶ In the case of water quality-based effluent limitations which do not fall under this provision, or for backsliding from BPJ-based effluent limitations to reflect subsequently promulgated, less stringent effluent guidelines, the applicable exceptions are found in CWA §402(o)(2), (drawn from the House bill). Finally, under §402(o)(3) (which comes from the House bill), in no event may a BPJ or water quality based permit be revised to contain effluent limits less stringent than those required by effluent guidelines in effect at the time of the revision or which would result in violation of the applicable §303 water quality standard.

Both paragraphs 402(o)(1) and (o)(2) contain exceptions that apply to the relaxation of water quality-based permit limits. One of the issues faced by EPA in implementing the anti-backsliding provisions of the WQA was whether the exceptions should be read cumulatively or alternatively. In other words,

⁵Conf. Rep. No. 99-1004, 99th Cong., 2nd Sess., at 154 (1986) (hereinafter cited as Conf. Rep.).

⁶The Conference Report expressly notes that these backsliding exceptions apply in addition to the exceptions set forth at §402(o)(2) (Conf. Rept., 156).

must a permit meet exceptions within just one or both paragraphs in order to qualify for a relaxed limit. Given the language of the statute and its legislative history, EPA believes that the proper interpretation of WQA §404 is that backsliding from water quality based effluent limitations is allowable if either the requirements of CWA §303(d)(4) or of §402(o)(2) are met.

Before arriving at this interpretation, the Agency also considered whether WQA §404 could be read to mean that water quality-based permit limitations could only be made less stringent if an exception in both CWA §§ 303(d)(4) and 402(o)(2) were met. This interpretation was not accepted since it appears inconsistent with the statutory language, as well as being contradictory to the previously referred to language of the Conference Report. Moreover, interpreting WQA §404 to mean that exceptions in both §402(o)(2) and §303(d)(4) must be met would result in inconsistencies within the various provisions of WQA §404.

For example, CWA §303(d)(4)(A) clearly allows for the relaxation of water quality-based effluent limitations based on a revision of water quality standards, whereas §402(o)(2) would not allow this relaxation since the new information exception excludes revised regulations. Reading the statute to require that both §303(d)(4) and 402(o)(2) must be satisfied to allow backsliding from water quality based effluent limits thus would have the effect of reading §303(d)(4) out of the statute.

Another example of the inherent contradiction which would result from reading §303(d)(4) and §402(o)(2) cumulatively is shown by considering the additional language at the end of §402(o)(2) which was added by the Conference Committee. This language provides that relaxation of permit limits based on a revised wasteload allocation may only be allowed if there is a net reduction in pollutant loadings. In contrast, §303(d)(4) would allow such a revision if it "assured attainment" of water quality standards, without regard to its impact on pollutant loadings.

EPA believes that interpreting CWA §§ 303(d)(4) and 402(o)(2) as providing alternative grounds for backsliding from water quality based effluent limits is the interpretation most consistent with the statutory language itself, the legislative history, and the fundamental rule of statutory construction that a statute should be interpreted to give meaning to all its provisions and avoid contradictions between various statutory provisions.

III. IMPLEMENTATION OF SECTION 402(O)

A. BACKSLIDING IN NON-ATTAINMENT AND ATTAINMENT WATERS §303(d)(4)

1. INTERPRETATION OF §303(d)(4)

The most important provision relating to backsliding from water quality-based effluent limitations is §303(d)(4). As discussed above, §402(o)(1) provides that water quality-based permit limitations may not be relaxed except in compliance with §303(d)(4). Section 303(d)(4) has two parts: paragraph (A) applies to "non-attainment waters" and paragraph (B) applies to "attainment waters." The determination of attainment or non-attainment is made on a pollutant-by-pollutant basis at the time the application for the permit issuance, modification, revision, or reissuance is submitted.

2. NON-ATTAINMENT WATERS: §303(d)(4)(A)

For non-attainment waters, §303(d)(4)(A) provides that a permittee may backslide from a water quality-based effluent limitation if certain conditions are met. First, the existing permit limit being revised must be based on a Total Maximum Daily Load (TMDL) or other Wasteload Allocation (WLA) established under §303.⁷ Second, the revised permit limit must assure attainment of the water quality standard.⁸ The statute provides that there are two mechanisms for determining attainment of water quality standards. Implementation of the revised permit limitations may be sufficient to assure attainment. In addition, the statute provides that the use designation applicable to the stream segment may be revised in accordance with 40 C.F.R. Part 131.10.

3. ATTAINMENT WATERS: §303(d)(4)(B)

Section 303(d)(4)(B) provides that a permittee may backslide from a water quality-based effluent limitation where water quality meets or exceeds applicable water quality standards, if

⁷Section 303(d)(1)(C) of the CWA, and EPA regulations at 40 C.F.R. §130.7 require States to calculate TMDL/WLAs and submit them for EPA's approval for waters identified under §303(d)(1)(A).

⁸The determination of whether attainment of water quality standards is assured is made based on the assumption that all dischargers to a stream segment are complying with the requirements of their NPDES permits.

the revision is consistent with a State's approved antidegradation policy (see 40 C.F.R. §131.12).⁹

B. LISTED EXCEPTIONS: §402(o)(2)

As discussed above, §402(o)(2) lists six additional exceptions to the general prohibition on backsliding. This provision provides that in cases where the conditions of §303(d)(4) cannot be met, backsliding may be allowed in certain limited circumstances, listed below. The exceptions listed in §402(o)(2) are also applicable to backsliding questions concerning technology-based limits. Under these exceptions, backsliding from water quality-based permit limitations may be allowed under the following circumstances:

- 1) Where there have been material and substantial alterations or additions to the permitted facility which justify this relaxation;
- 2) Where good cause exists due to events beyond the permittee's control (e.g., Acts of God) and for which there is no reasonably available remedy;
- 3) Where the permittee has installed and properly operated and maintained required treatment facilities but still has been unable to meet the permit limitations (backsliding may only be allowed to the treatment levels actually achieved);
- 4) Where new information (other than revised regulations, guidance, or test methods) justifies backsliding from water quality-based permit limitations and other §301(b)(1)(C) limitations.¹⁰

Please note that although paragraph (o)(2) lists two additional exceptions, one for technical mistakes and mistakes of law and one for permit modifications or variances, the statute provides that these exceptions do not apply to water quality-based effluent limitations. However, under the paragraph (o)(1) exceptions, mistakes or new information may justify the relaxation of water quality-based permit limitations where the §303(d)(4) requirements are met.

⁹Note that §303(d)(4)(B) is broader than §303(d)(4)(A), in that (B) allows for the relaxation of permit limitations based on a §303 TMDL/WLA, any water quality standard established under §303, or any other permit standard, whereas (A) only allows for the relaxation of permit limitations based on a §303 TMDL/WLA.

¹⁰This exception applies to water quality-based permit limitations only where the revised limitations result in a net reduction in pollutant loadings and are not the result of another discharger's elimination or substantial reduction of its discharge because of compliance with the CWA or for reasons unrelated to water quality (e.g., shut down of operations).

D. RESTRICTIONS ON BACKSLIDING: §402(o)(3)

Section 402(o)(3) acts as a floor, by restricting the extent to which water quality-based permit limitations may be relaxed. Specifically, this paragraph prohibits the relaxation of such permit limitations below applicable technology-based effluent limitation guidelines and water quality standards. It requires compliance with a State's approved antidegradation policy when permit limitations are relaxed, since water quality standards include antidegradation requirements. In short, paragraph (o)(3) prohibits the relaxation of permit limitations, even where an exception would otherwise allow this relaxation, if there will be a violation of applicable effluent limitation guidelines or water quality standards, including antidegradation requirements.

III. EXAMPLES AND FLOW CHART

Attached to this document are examples of situations which require application of the anti-backsliding provisions, and an analysis of these which is consistent with this guidance. A flow chart which summarizes the decision-making procedure set forth in this guidance is also attached. In addition, copies of the relevant statutory and regulatory provisions are appended.

If there are any questions about this guidance, please feel free to give me a call, or have your staff contact Ephraim King at FTS/(202) 475-9539 or Thane Joyal at FTS/(202) 475-9520.

Attachments

EXAMPLES REGARDING IMPLEMENTATION OF SECTION 402(O)

Example 1

Scenario:

- o POTW seeks to relax its water quality-based permit limitation for ammonia.
- o Current permit limitations are based on TMDL or WLA developed in accordance with 40 C.F.R. §130.7.
- o POTW is in compliance with its existing limit.
- o Water quality standard for ammonia is attained.
- o POTW has new information about flow levels, which indicates that the water quality standard for ammonia would be maintained with relaxed permit limits.
- o May the permit limit be relaxed?

Answer:

Possibly. Under the interpretation discussed above, the water quality-based permit limitations may be relaxed where one of the exceptions in paragraph (o)(1) or paragraph (o)(2) of CWA §402 is met.

In this case, although new information is being relied on to request the permit modification, paragraph (o)(2) will not justify the requested modification unless the State reduces the pollutant loadings from other point sources or non-point sources of pollution. This is because, as discussed above, paragraph (o)(2) restricts the use of new information to cases where there is a decrease in the amount of pollutants being discharged.

The paragraph (o)(1) exceptions, on the other hand, may justify this requested relaxation. In this case, the paragraph (o)(1) exception that is relevant is the reference to §303(d)(4)(B). It provides that for waters identified under §303(d)(1)(A) where applicable water quality standards are being attained, permit limitations based on a CWA §303 TMDL/WLA or other permit standard may be relaxed only if a State's antidegradation requirements are met. EPA's requirements for State antidegradation provisions are set forth in EPA regulations at 40 C.F.R. Part 131.

Example 2

Scenario:

- o Industrial permittee seeks to revise its water quality-based permit limitation for TSS to reflect actual discharge levels of 6000 mg/l.
- o Current permit limitations are based on a TMDL or WLA developed in accordance with 40 C.F.R. §130.7.
- o Current permit limitation for TSS is 1000 mg/l.
- o A permit limit of 6000 mg/l TSS is consistent with applicable effluent guidelines.
- o Permittee cites §402(o)(2)(E) in support of the revision, which states that permit limits can be revised where the limits have not been met despite the installation and proper operation and maintenance of required treatment facilities.
- o Water quality standard for TSS is not being attained.
- o Water quality standard for TSS will not be attained unless current permit limits are met.
- o May the requested revision be made?

Answer:

No. Even where a paragraph (o)(2) exception may otherwise allow for the relaxation of permit limitations, paragraph (o)(3) provides that this relaxation may not result in a violation of water quality standards.

This revision would also be prohibited if the permittee sought to apply the paragraph (o)(1) exceptions. The applicable provision under this paragraph is §303(d)(4)(A) since the TSS water quality standard is not being attained, and since the water has been "identified" under §303(d)(1)(A) because water quality-based effluent limits have been written for it. Revision of the permit's effluent limit for TSS could only be allowed under this section if compliance with applicable water quality standards is assured, or if the State determines that it is appropriate to reclassify the designated use of the waterbody in accordance with the provisions of 40 C.F.R. Part 131.

Example 3

Scenario:

- o Industrial permittee seeks to revise its water quality-based permit limitation for TSS to reflect actual discharge levels of 6000 mg/l.
- o Current permit limitations are based on a TMDL or WLA developed in accordance with 40 C.F.R. §130.7.
- o Current permit limitation for TSS is 1000 mg/l.
- o A permit limit of 6000 mg/l TSS is consistent with applicable effluent guidelines.
- o Water quality standard for TSS is not being attained.
- o New model shows that the water quality standard for TSS will be attained with a permit limitation of 4000 mg/l.
- o May the permit limit be revised from 1000 mg/l to 4000 mg/l?

Answer:

Yes. Such backsliding is permissible under either the paragraph (o)(1) or paragraph (o)(2) exceptions.

The water quality standard for TSS is not currently being attained. Therefore, under paragraph (o)(1) the applicable exception is found in §303(d)(4)(A). This section applies to waters identified under §303(d)(1)(A) where applicable water quality standards are not being attained. In this case, if the TSS limit was based on a TMDL or other WLA, backsliding is permitted because the data show that attainment of the applicable water quality standard is assured.

Alternatively, under paragraph (o)(2), new information can be relied on to relax permit limitations where there is a reduction in pollutant loadings and, pursuant to paragraph (o)(3), where water quality standards are complied with. Again, water quality standards are being met in this case, and there also will be a reduction in actual pollutant loadings since the new proposed permit level of 4000 mg/l will represent a real reduction compared with the actual discharge levels of 6000 mg/l.

Example 4

Scenario:

- o The State has established a technology-based treatment standard for fecal coliform pursuant to CWA §301(b)(1)(C).
- o The State later relaxes this standard.
- o A POTW, which has been in violation of this limit, requests a revision of its permit limit for fecal coliform to reflect the new standard.
- o Water quality standards for fecal coliform are not being attained.
- o Models show that attainment of water quality standards will be assured if the POTW complies with a revised, relaxed permit limitation for fecal coliform.
- o There was no TMDL or WLA performed because the standard was a State technology-based standard.
- o May the permit limitation be relaxed?

Answer:

No. Under paragraph (o)(1), the applicable provision is §303(d)(4)(A). This subsection does not authorize backsliding in this case because it only applies to permit limitations based on a §303 TMDL or other WLA (unlike §303(d)(4)(B) which is broader). Here, the limitation in question is based on a type of State treatment standard authorized under §301(b)(1)(C).

Furthermore, if the permittee sought to apply the paragraph (o)(2) exceptions, the new information provision under this paragraph would not allow the revision. New information does not include "revised regulations," which is the type of new information (i.e., the rulemaking revising the treatment standard) being relied on here to justify the backsliding.

Example 5

Scenario:

- o A State has a narrative criterion "no toxics in toxic amounts." It has an EPA approved procedure for developing permit limits based on its narrative criterion.
- o In issuing a §304(1) permit in April 1989, the State uses its approved procedures and applies a risk level 10^{-6} using EPA criteria, instream criteria of 0.013 ppq.
- o The permit contains a numerical TCDD limit with a 1992 compliance date.
- o If in 1990 the State issues a numeric criterion for TCDD which is less stringent than that used in the 1989 permit, e.g., risk level of 10^{-5} using EPA criteria, instream criteria of 0.13 ppq, may the permit be revised to reflect the new standard?

Answer:

Possibly. Under paragraph (o)(1), the applicable exceptions would be found in §303(d)(4).

If the water quality standard for TCDD is not being attained, the revision would only be allowed under §303(d)(4)(A) if the limit was based on a TMDL or other WLA, and the revision assured compliance with water quality standards, including antidegradation, or if the State determines that it is appropriate to reclassify the designated use of the waterbody in accordance with the provisions of 40 C.F.R. Part 131.

If the water quality standard for TCDD was being attained, §303(d)(4)(B) would allow the revision if antidegradation requirements were met.

Example 6

Scenario:

- o A State has no numeric standard for pollutant "A."
- o The State/EPA adopts an EPA water quality advisory recommendation for an appropriate instream concentration of the pollutant.
- o The State/EPA issues a permit containing a limit for pollutant "A" based on the water quality advisory recommendation.
- o Several years later, EPA revises the advisory recommendation to a pollutant "A" instream concentration that is 10 times higher (i.e. less stringent) than the original advisory, based upon new toxicity information that has been developed.
- o May the permit limit for pollutant "A" be relaxed to reflect the new toxicity data?

Answer:

Possibly. The applicable exceptions would be found in the paragraph (o)(1) reference to §303(d)(4).

If the water quality standard for pollutant "A" is not being attained, the revision would only be allowed under §303(d)(4)(A) if the limit was based on a TMDL or other WLA, and the revision assured compliance with water quality standards, including antidegradation, or if the State determines that it is appropriate to reclassify the designated use of the waterbody in accordance with the provisions of 40 C.F.R. Part 131.

If the water quality standard for "A" was being attained, §303(d)(4)(B) would allow the revision if antidegradation requirements were met.

Anti-backsliding Rules Relating to Water Quality-Based Effluent Limitations

