

AR-35

49 FR 31462



ENVIRONMENTAL PROTECTION AGENCY

AGENCY: Environmental Protection Agency.

40 CFR Parts 124 and 125

National Pollutant Discharge Elimination System; Water Quality Variances

[OW-FRL-2564-3]

49 FR 31462

August 7, 1984

ACTION: Proposed rule.

SUMMARY: This proposed rule sets forth application requirements and decision criteria for granting water quality variances under section 301(g) of the Clean Water Act. Section 301(g) authorizes a waiver from BAT ("best available technology economically achievable") requirements for nonconventional pollutants. The variance will be granted if the applicant can demonstrate that the proposed modified effluent limitation for a nonconventional pollutant is equal to or more stringent than BPT ("best practicable control technology currently available") and applicable water quality standards, that the modified limitation will not result in additional requirements on other sources, and that it will not impair the integrity of the receiving water or pose unacceptable risks to the environment or human health because of bioaccumulation, persistency, acute or chronic toxicity, or synergistic propensities.

DATES: Comments on the proposed regulation must be received by November 5, 1984.

A public hearing to discuss and to receive comments on the proposed regulation will be held on October 16, 1984, in Washington, D.C.

ADDRESSES: Interest persons may participate in the proposed rulemaking by submitting comments to Robert Cantilli, Permits Division (EN-336), Office of Water Enforcement and Permits, Environmental Protection Agency, 401 M Street, SW., Washington, D.C. 20460.

A copy of all comments received will be available for review during normal business hours at the Environmental Protection Agency, Public Information Reference Unit, Room 2922, 401 M Street, SW., Washington, D.C. 20460.

A public hearing to discuss and to receive comments on the proposed rulemaking will be held on October 16, 1984, at Waterside Mall, 401 M St., Washington, D.C. Anyone wishing to make an oral statement at the hearing should notify in writing Robert Cantilli, Permits Division (EN-336), Office of Water Enforcement and Permits, Environmental Protection Agency, 401 M Street, SW., Washington, D.C. 20460.

FOR FURTHER INFORMATION CONTACT: Robert Cantilli, Permits Division (EN-336), Office of Water Enforcement and Permits, Environmental Protection Agency, 401 M Street, SW., Washington, D.C. 20460; (202) 426-7035.

TEXT: SUPPLEMENTARY INFORMATION: In 1972 the Clean Water Act (the Act) was amended to require all non-

municipal discharges to meet best available technology economically achievable (BAT) by 1983. In 1977 the Act was further amended to categories pollutants into 3 classes -- conventional, nonconventional and toxic -- and to establish for non-municipal discharges distinct treatment requirements depending on the type of pollutant discharged. The conventional pollutants are listed in *40 CFR 401.16*, while the toxic pollutants are listed in *40 CFR 401.15*. All other pollutants fall into the third class of nonconventional pollutants, e.g., ammonia and chlorine. The amended Act requires BAT July 1, 1984 for specified toxic pollutants and requires BAT no later than three years after the applicable effluent limitation guidelines are established for other toxic pollutants, section 301(b)(2) (A), (C), and (D); for conventional pollutants, the Act requires compliance with best conventional technology by July 1, 1984. Section 301(b)(2)(E). For nonconventional pollutants, the Act requires compliance with BAT July 1, 1984 or up to three years after the applicable effluent limitations are established, but in no case later than July 1, 1987. Section 301(b)(2)(F).

Although the Act requires BAT for nonconventional pollutants, it provides for the possible modification of that requirement. Under section 301(g) of the Act, the Administrator may modify BAT requirements established for nonconventional pollutants if the owner or operator of the point source discharging those pollutants can make specified demonstrations. The requirements for toxic and conventional pollutants and for the thermal components of the discharge can not be modified under section 301(g). In essence, the owner or operator must show that the discharge will comply with BPT and applicable water quality standards, will not result in the imposition of additional requirements on any other source, and will not impair the integrity of the receiving water or pose an unacceptable risk to human health or the environment because of bioaccumulation, persistency, acute or chronic toxicity or synergistic propensities. Section 301(g).

EPA is today proposing regulations to establish procedures, standards, and criteria for the implementation of section 301(g). The Agency will make a technical guidance manual available for review during the Public comment period on these regulations. The manual will discuss methodologies for making the demonstrations required by section 301(g) and will include a checklist for use in developing section 301(g) completed requests.

I. Program Description

These regulations, 40 CFR Part 125, Subpart F, would establish the procedures, criteria and standards to be applied by EPA in acting upon section 301(g) applications for modification of the BAT requirements applicable to the discharge of nonconventional pollutants.

A. Eligibility; Initial Requests

In keeping with the Clean Water Act, existing EPA regulations require that, in order to be eligible to apply for a variance under section 301(g), a discharger must have submitted an initial request no later than 270 days after the date of promulgation of the applicable effluent limitation guideline under section 304 of the CWA or not later than 270 days after enactment of section 301(g) (December 27, 1977), whichever is later. *40 CFR 122.21(1)(2)(i)*; see CWA section 301(j)(1)(B). The statute does not specify applicable deadlines in cases where guidelines have not been promulgated and BAT requirements for a nonconventional pollutant are developed using best professional judgment (BPJ) and are initially proposed in a draft permit. Section 122.21(1)(2)(iii) of the existing regulations provides that in these cases no initial request is mandated and the applicant may submit its completed request up to the close of the public comment period on the draft permit. Under these regulations, the public comment period could close less than 270 days after the date of notice of the draft permit. See § 214.10(b). To assure that all applicants are provided the same period of time to prepare their applications, § 125.53(d) of today's proposal makes it clear that applicants for a BPJ/BAT modification can request an extension of the public comment period for their draft permit when the period is less than 270 days.

Any source seeking variances from BAT under sections 301(g) and 301(c) (variance based on showing that modified requirements will represent the maximum technology within the economic capability of the owner or operator and that they will result in reasonable further progress toward the elimination of the discharge of pollutants) may file its section 301(c) application only within the time that the applicant is eligible to apply for the section 301(g) variance. Section 301(g)(2).

B. Completed Requests

Existing EPA regulations require eligible sources to submit a completed request for a section 301(g) variance no later than the close of the public comment period on the draft permit. *40 CFR 122.21(l)(2)(ii)*. A public comment period may be as short as 30 days after public notice of the draft permit, *40 CFR 124.10(b)*, but EPA recognizes that a longer period will often be necessary in complicated proceedings and will establish longer public comment periods as necessary. See *40 CFR 124.13*. As noted above, where a section 301(g) applicant seeks modification of requirements based on best professional judgment, rather than on promulgated effluent limitation guidelines, EPA proposes to allow applicants to request extensions of the public comment period when it is less than the statutory period of 270 days.

The existing regulations provide that a discharger who cannot file a completed request required under section *40 CFR 122.21(l)(2)(ii)* or *(l)(2)(iii)* may request an extension which may not exceed 6 months in duration. The extension may be granted or denied at the discretion of the Director, *40 CFR 122.21(n)(2)*.

Existing *40 CFR 122.21(l)(2)(ii)* provides that the completed request must demonstrate compliance with the requirements of *40 CFR 124.13* and applicable requirements of Part 125. Today's proposal would establish the Part 125 requirements.

Proposed 125.53(e) would establish requirements for a completed request. It would require each request to contain a completed NPDES Application Standard Form 1 and 2B or 2C as appropriate, documentation demonstrating compliance with the requirements of § 125.54 and certification by the applicant signatory in accordance with *40 CFR 122.6(d)*.

C. Early Consultation

The regulation proposed today states that an applicant for a section 301(g) modification of its BAT limitations should hold an early consultation with Federal and State permitting authorities. Proposed 125.53(b). Early consultation is not mandatory, but the applicant is strongly urged to take advantage of this opportunity. Early consultation would allow EPA, the State and the applicant to determine what is required to prepare a section 301(g) completed request.

EPA recommends that the early consultation be held soon after (within 90 days of) the promulgation of this regulation or the promulgation of the applicable effluent guideline. § 125.53 (b)(1) and (b)(2). For applicants requesting a variance from BAT limitations based on BPJ, EPA recommends an early consultation within 90 days of the notice of preparation of the applicant's draft permit. Section 125.53(b)(3).

In each of the above cases, the applicant should discuss a plan of study describing the proposed modified limitation, a general description of the data, studies, experiments and other information which will be submitted, and other data and information to assist the Regional Administrator and State Director in determining whether the applicant's plan of study is well conceived. Early consultation is designed to assist the applicant in determining the tests and data necessary to make a complete section 301(g) demonstration. The early consultation will help the applicant avoid unnecessary or inadequate testing and could lead to a redirection of the applicant's proposed study. In addition, early consultation could lead to an earlier decision on the completed request.

Early consultation is particularly recommended if: (1) The proposed modified effluent limitation is for a pollutant or pollutant parameter for which the State has not adopted a numerical water quality standard and the applicant does not plan to use a published EPA numerical water quality criterion or none is available; (2) the proposed modified effluent limitation is for a pollutant or pollutant parameter which is suspected of being a carcinogen; (3) the applicant has reason to believe that the pollutant or pollutant parameter for which the modification is requested will contribute to synergistic or additive characteristics in the effluent or receiving water; and/or (4) the applicant plans to request an extension for filing a final application as provided in *40 CFR 122.21(n)(2)*.

D. Section 301(g) Decisionmaking Procedures; State Role

Permitting under section 301(g) will follow the procedures set forth in 40 CFR Part 124. See, in particular, § 124.62 (b), (c), and (d), § 124.63, and § 124.64.

Only the Administrator of EPA is authorized to modify effluent limitations pursuant to section 301(g). However, section 301(g) requires the Administrator to assure State concurrence prior to approving a modification. Under existing regulations, the applicant in an NPDES State must file its request with the State, as well as with EPA, see *40 CFR*

122.21(1)(2)(i); the State may deny the request, forward it to the Regional Administrator with a written concurrence (which may include conditions the State deems appropriate) or submit the request without recommendation. See 40 CFR 124.62(b)(3). As discussed below, if the State submits the variance request without recommendation, EPA will be required to deny the request.

The present regulations provide that in the case of an EPA-administered permit program, the applicant is only required to file its request with EPA. Section 122.21(1)(2)(ii). However, EPA must then assure an opportunity for State review, which is accomplished through the State certification process. If EPA receives an application without State certification, the Regional Administrator will forward the application to the certifying State agency for action. Section 124.53.

In most instances, EPA proposes to review the variance request concurrently with the State's consideration. However, where applicable State water quality standards contain specific numerical water quality limits for the pollutant that is the subject of the variance request, and those standards are designed to assure the levels of water quality protection required by section 301(g), EPA proposes to defer consideration of the section 301(g) application until after the State determines whether the proposed modified effluent limitation would comply with its specific standards.

Section 301(g) specifically requires State concurrence in any variance approval under the section. Therefore, EPA proposes to deny any variance request where a State either refuses certification or waives its right to respond to the request. Proposed § 124.67(b)(1).

For an EPA-administered NPDES program, the State's section 401 concurrence or its waiver or denial constitutes its response to the section 301(g) application. In State-administered NPDES programs, the State may forward the variance request to EPA as provided in § 124.62(b).

The following State concurrence, the Regional Administrator may deny the section 301(g) request or forward it to the EPA Office Director for Water Enforcement and Permits, previously referred to as the Deputy Assistant Administrator for Water Enforcement. See 40 CFR 124.62(c).

Under today's proposal, where the Office Director approves a variance respecting a permit in a NPDES-approved State, the State Director may prepare a draft permit incorporating the variance. See proposed § 124.67(b)(3). Although the EPA-approved variance is incorporated in the State permit, the variance may be challenged in a separate action against EPA. See 40 CFR 124.64.

E. Application Review Criteria

In developing application review criteria under Subpart F, EPA has kept in mind the Congressional admonition that section 301(g) applications must not excessively delay the NPDES permit process. See, e.g., A Legislative History of the Clean Water Act of 1977, serial No. 95-14, October 1978, Vol. 3, p. 457. At the same time, elements of the section 301(g) criteria involve sophisticated scientific conclusions of extreme importance to human health and the environment. These elements include the requirement that the proposed modified effluent limitation not threaten human health or the environment because of bioaccumulation, persistency, acute or chronic toxicity (including carcinogenicity, mutagenicity or teratogenicity), or synergistic propensities. The present proposal attempts to balance the justified concern for a speedy decision with the critical need for a level of information sufficient to support EPA's determination that a section 301(g) modification should or should not be granted.

Section 125.54 would state the criteria for EPA review of the section 301(g) applications. These proposed criteria are designated to implement the statutory requirements of section 301(g). The section would list each statutory criterion and would briefly state the minimum demonstration needed to satisfy that criterion. Further, the proposed section would indicate that the preferred method of making the water quality demonstration is through the use of State or Federal water quality criteria numbers applicable to the specific pollutant. A brief discussion of the major factors in approving or denying an application follows.

Proposed 125.54(b) would require compliance at a minimum with BPT, State water quality standards and other Federal and State requirements. The section would make it clear that if no BPT effluent limitation guidelines has been promulgated, best professional judgement (BPJ) would be used to establish BPT limitations. Under the section as proposed, the applicant would make its technical demonstration regarding BPT and State requirements. The Completed request would have to include a determination from the State or interstate agency that provides section 401 certifications

that the modified effluent limitation would comply with applicable provisions of State law. The determination would have to be supported by a discussion of the basis for the conclusion. The applicant would have to show compliance with any applicable requirement formally established by the governing State or interstate agency, whether or not the requirement was subject to or had obtained EPA approval.

Proposed § 125.54(c) would provide that the proposed modification must not result in any additional pollution control requirements on any other point or nonpoint source. To make this showing, the completed request would have to include a determination from the State or interstate agency which conducts wasteload allocations and total maximum daily loads. As with § 125.54(b), before EPA would approve the request, the State or interstate agency would have to provide a discussion of the basis for its conclusion that other sources' requirements would not be increased.

Proposed § 125.54(d) would provide that the proposed modification must not interfere with attainment or maintenance of water quality which will assure protection of public water supplies, the protection and propagation of a balanced aquatic population and human recreational activities. It would also provide that the proposed modification must not result in the discharge of pollutants in quantities which may pose an unacceptable risk to human health or the environment because of bioaccumulation, persistency, acute or chronic toxicity (including carcinogenicity, mutagenicity or teratogenicity), or synergistic propensities. In particular the proposed regulation would specify that the modified effluent must not interfere with any planned or existing public water supply, must not prevent a balanced population of shellfish, fish and wildlife, and must not interfere with recreational activities. The last two factors would be evaluated at the edge of a mixing zone, if the zone is approved by the State under its water quality standards regulations. For recreational activities, the proposed regulation would require the applicant to show that there would be no special Federal, State, or local restrictions on recreation activities in the vicinity of the applicant's modified discharge.

These requirements may pose significant difficulties for some applicants because of the complexity of determining requirements for, and assuring protection of the aquatic environment and human health. The difficulties would be minimized by relying on State water quality standards, where adequate, and by encouraging the use of EPA criteria or criteria development methodology to make a demonstration of the section 301(g) environmental effects and toxicity questions where State standards are insufficient. To the extent that State water quality standards supply numerical standards for the specific nonconventional pollutant and are designed to assure protection of factors listed at section 301(g)(1)(C), EPA proposes to give considerable weight to the applicant's showing (confirmed by the State) that the standards would be satisfied by the proposed modified effluent limitation. Otherwise, EPA proposes to ease the difficulty of demonstrating environmental effects by giving considerable weight to an applicant's showing that the modified effluent would comply with a published EPA criterion number for the pollutant or with a criterion number which the applicant would derive using published EPA methodologies.

The Agency's proposal to give considerable weight to demonstrations based on these numbers and methodologies is designed to facilitate an environmentally sound yet reasonably expeditious section 301(g) process. Of course, EPA numbers and methodologies are not officially promulgated rules. In the event they are challenged by third persons, EPA will explain their technical basis. The applicant, however, will bear the risk of the numbers or methodologies being found insufficient.

Similarly, the applicant should realize that section 301(g) establishes a broad environmental test independent of State water quality standards. Under the proposal, compliance with stringent State standards will serve as evidence, but not as complete proof, that the statutory requirements would be met by the proposed modified effluent limitation. It also should be noted that, while the applicant is required to show whether its proposed modified effluent limitation will satisfy State water quality standards, use of EPA criteria or criteria development methodologies is optional.

F. Federal Criteria

The Clean Water Act, section 304(a)(1), currently requires the Administrator, after consultation with appropriate Federal and State agencies and other interested persons, to publish water quality criteria that will reflect the latest scientific knowledge on various factors. These factors include all identifiable effects on species and ecological health and welfare, pollutant concentration and dispersal, and effects of pollutants on biological communities' diversity, productivity and stability.

Current EPA water quality criteria documents present the most recent toxicological data on a pollutant and outline the derivation of the aquatic life and human health criteria numbers. These criteria are based solely on studies of the

scientific data and expert judgment on the relationship between pollutant concentrations and environmental and health effects. Economic and technical feasibility are not considered in establishing environmental criteria values.

For studied pollutants, EPA develops two sets of criteria numbers: One set is designed to assure protection of human health; the other is developed to protect aquatic life. Since these criteria numbers, developed after careful study, address several of the objectives which underlie the section 301(g) statutory criteria (e.g., acute and chronic toxicity and bioaccumulation), EPA concludes that the most stringent, published section 304(a) criteria for a given pollutant generally should be useful for purposes of determining whether a section 301(g) modification is justified. Use of the most stringent criteria to review section 301(g) variance requests will promote the expeditious decisionmaking which Congress has directed while providing adequate assurance of environmental protection. Persistency and synergistic propensities, two conditions which are not addressed by the EPA criteria, must also be considered by the applicant. See Section H -- Special Considerations, Synergistic Propensities and Persistency.

EPA and its predecessor agencies have been engaged in developing water quality criteria since publication in 1968 of the "Green Book" (Water Quality Criteria, Report of the National Technical Advisory Committee to the Secretary of the Interior, April 1, 1968, FWPCA), a water quality criteria study which formed the basis for many State water quality standards. Subsequent publications include a "Blue Book" (Water Quality Criteria, 1972, EPA/R3/73/033/March 1973), a "Red Book" (Quality Criteria for Water, 1976), and additional criteria, published at 45 FR 79318 (Nov. 28, 1980). EPA will publish further criteria from time to time.

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Initial criteria documents have addressed recognized toxic pollutants, rather than the nonconventionals. EPA has published criteria documents for the nonconventional pollutants ammonia and chlorine (49 FR 4551; February 7, 1984). EPA is also developing a number of multimedia documents to address the toxicity of nonconventional pollutants in different environmental media -- air, water and soil. The documents will not include recommended criteria numbers but will contain a great deal of scientific data which should be helpful in making section 301(g) variance decisions. The documents will offer results of studies, lowest effect levels, and no effect levels for the following nonconventional pollutants:

1. Acetone
2. Dibenzofurans
3. Methoxychlor
4. Chlorophenoxy Herbicides
5. Malathion
6. Parathion
7. Myrex
8. Kepone
9. Iron
10. Barium

EPA expects to publish these multimedia documents during 1984 and 1985.

G. Use of Criteria

When the applicant uses published EPA criteria, the most stringent criterion in the most recently published section 304(a) criteria documents should be used. For example, the criteria in the November 1980 Federal Register should be used rather than superseded Red Book criteria for the same parameter, and where the published criteria include for both aquatic life and human health, the more stringent of the two figures should be used.

Where neither a State water quality standard nor an EPA criterion (the latest published EPA criterion or 1976 "Red Book" criterion) addresses the nonconventional pollutant for which section 301(g) modification is sought, or where local conditions or other factors may bear upon the effects of the nonconventional pollutant in particular receiving waters, the applicant may use different criteria. However, it will need to justify its development and use of such criteria.

To generate criteria to measure the acceptability of a proposed modified effluent limitation, EPA proposes to recommend that the applicant use EPA's methodology for developing criteria numbers, "Guidelines for Deriving Water Quality Criteria for the Protection of Aquatic Life and Its Use," 45 FR 79341, Appendix B. The applicant may use an alternative methodology or may substitute local biota in the bioassays, but it will have to justify that course to EPA.

In some cases, State water quality standards or EPA criteria will provide aquatic life criteria but not human health criteria. The applicant will then be expected to use the most stringent aquatic life criterion available and also to provide information adequate to support a reasonable expectation that the proposed discharge will not pose an unacceptable risk to human health. Development of human health criteria pursuant to EPA methodology is extremely complex and time-consuming. EPA does not anticipate that each applicant seeking a section 301(g) variance for a pollutant for which no human health numbers are available will generate such a number. Instead, EPA will expect the applicant to supply information sufficient to indicate that the nonconventional pollutant, in the amounts to be discharged, will not pose a human health danger.

H. Special Considerations

1. *Pollutant Parameters.* Pollutant parameters are pollutant categories which comprise one or more unspecified pollutants or pollutant characteristics. For example, COD and TOC are pollutant parameters which may comprise one major pollutant constituent or many unidentified pollutant constituents or measure a pollutant characteristic such as chemical oxygen demand. EPA proposes that the applicant seeking a section 301(g) variance for a pollutant parameter use existing water quality standard or EPA criteria, if available, or employ a criteria derivation methodology for aquatic life in the same manner as for other specific pollutants. This may be accomplished by regarding the whole effluent as if it were a single pollutant and using the single pollutant bioassays cited in the criterion derivation methodologies at 45 FR 79318, November 28, 1980. When tests are conducted with the whole effluent, results should be expressed as a percentage of the whole effluent. (For example, if acute bioassays are conducted, the whole effluent should be assayed and the percentage of the whole effluent which causes 50% mortality (LC-50) in the toxicity test should be identified. The resulting criterion might be, for example, 20% of the whole effluent.)

At the same time, EPA proposes that for pollutant parameters the applicant must identify all toxic and conventional pollutants that are constituents of the parameter, to assure that none of the constituents is a conventional pollutant or a section 307(a) toxic pollutant, or that each toxic or conventional pollutant is subject to appropriate BAT or BCT limitations. In addition, the applicant may employ "bench scale treatment" to simulate the nonconventional pollutant load at BAT and BPT for the pollutant parameter. Toxicity tests can then be conducted to compare the toxicity of the effluent after BPT and BAT treatment for the pollutant parameter. All toxicity tests must be approved by EPA. The applicant must also address the other section 301(g)(1)(C) factors, such as synergism and persistency.

2. *Total Phenols.* In keeping with the NPDES Litigation settlement of June 7, 1982, EPA recognizes that total phenols may be considered for section 301(g) variance requests as long as certain conditions are met. Because total phenols is a pollutant parameter, it would be subject to the requirements of § 125.54(e)(2). Therefore, the applicant must demonstrate that the total phenols in its effluent do not include toxic phenolics, that those toxic phenolics present are at concentrations as low as required by BAT, or that the toxic phenolics are directly controlled by BAT effluent limitations.

3. *Mixing Zones.* EPA proposes to recognize a mixing zone in reviewing section 301(g) applications, which the applicable State standards provide for such a zone. Defined State mixing zones would be used where available. Where applicable water quality standards allow but do not sufficiently define the dimensions of the State mixing zone, the State, in conjunction with the applicant, could develop a case-specific mixing zone for the purposes of the section 301(g) application. EPA would review any case-specific mixing zone as a part of its consideration of the variance request. Where a State prohibits the use of a mixing zone, or where a mixing zone is not specifically defined by the State and the applicant does not develop a mixing zone in conjunction with the State, the demonstrations required by § 125.54 must be made at the point of discharge. If a State standard includes a zone of passage in its mixing zone definition, this must be adhered to in a section 301(g) determination. If the State standards separate mixing zones from zones of passage, both concepts must be addressed by the applicant.

4. *Synergistic Propensities.* EPA proposes to require the section 301(g) applicant to demonstrate whether synergistic propensities are associated with its proposed modified effluent. Proposed § 125.54(d)(5). To make this demonstration, the applicant would identify the pollutants and the physical conditions in the effluent and the receiving waters to determine whether synergistic relationships may exist. For example, the toxicity of ammonia varies greatly according to the temperature and pH. Also, if ammonia and chlorine are in the same effluent or receiving water, they may combine to form more toxic and persistent chlorinated amines.

Although all section 301(g) applicants must make the demonstration about synergism, EPA particularly urges applicants who have reason to suspect that their nonconventional pollutants may contribute to synergistic propensities either in their effluent or the receiving stream to describe to the Agency during the early consultation their plan to determine whether synergism is occurring. EPA is particularly concerned that pollutants regulated in the Pesticides and Organic Chemical industries may exhibit such propensities, especially at levels of acute toxicity.

EPA suggests that applicants apply biomonitoring techniques, where applicable, to determine whether synergism is occurring in an applicant's effluent. These techniques could include conducting acute and chronic bioassays on the whole effluent and separate fractions of the whole effluent to determine whether the nonconventional component of the effluent, when combined with toxic and conventional fractions, exhibits synergistic qualities.

5. *Persistency.* EPA proposes to require the section 301(g) applicant to demonstrate whether the nonconventional pollutant will impact human health or aquatic life due to persistency. Proposed § 125.54(d)(5). Under this proposal, the applicant should determine the fate of the nonconventional pollutant with regard to its chemical structure and concentration in the environment. The applicant should determine whether the pollutant or pollutant concentration will be altered by such chemical or physical reactions as volatilization, photolysis, adsorption, absorption, oxidation, hydrolysis, etc. This can be accomplished through a review of the literature or direct measurements. Direct analytical methods must be cited, if used.

6. *Indicator Pollutants.* 40 CFR 125.3(g) states that if a pollutant is being used as an indicator for toxic or conventional pollutants it cannot be considered for a section 301(g) variance. Notwithstanding that prohibition, a nonconventional pollutant may be considered for a section 301(g) variance even though it is proposed for use as an indicator in its draft permit or is being used in an existing BAT permit, provided the nonconventional pollutant being used as an indicator is replaced by another indicator not the subject of the variance request or individual limits are placed on the toxic or conventional pollutants in question.

II. Section-by-Section Analysis

A. Section 124.67

This proposed amendment to 40 CFR Part 124 would provide special procedures for 301(g) variance decisions.

Subsection (a) would allow EPA or the State to make summary denial of a section 301(g) application where it is clear on the face of the application that the applicant is not entitled to a variance. This authority can be used to deny requests which are clearly incomplete or which are for ineligible pollutants (e.g., toxic pollutants). The Agency's experience with the variances indicates that responding to incomplete variance requests can be very resource intensive. To avoid this drain on permitting resources, the Agency expects to use the authority in § 124.67(a) to deny requests which are incomplete because they omit any information required by Subpart F. The early consultation is a device by

which applicants can avoid this result. When the applicant has made a good faith effort to provide all the information required by Subpart F, the Agency intends to use the authority in § 125.53(f) to fill minor gaps in the applicant's request.

Subsection (b) would (1) make it clear that no section 301(g) variance will be approved in the absence of State concurrence; (2) provide that where a State standard specifically addresses the pollutant for which a variance is requested and is designed to assure protection and propagation of a balanced population for shellfish, fish and wildlife and to allow recreational activities, in and on the water, then EPA will not review a variance request until the State has determined that the proposed modified effluent limitation will not violate that standard; (3) provide for NPDES States to issue permits reflecting section 303(g) variance decisions, and (4) make it clear that where the State denies a request or where EPA bases its denial on the submission of a completed request without recommendation by the State Director, the matter is reviewable only under State procedures. State certification of a request under § 124.53 would constitute the concurrence required by § 124.67(b)(1). Any State concurrence in a section 301(g) variance would have to clearly indicate State approval of the request and would have to include the analysis required by § 125.54.

Subsection (c) would provide that section 301(g) variance permits will adhere to requirements of 40 CFR Parts 122 and 124. Subsection (d) would provide that, upon expiration of the five-year term of a section 301(g) modified permit, no permit containing a modified section 301(g) effluent limitation shall be considered for reissuance unless the State has: (1) Adopted a numerical water quality criterion into its standards for the relevant pollutant(s) and EPA has approved such standards; and (2) the State has established wasteload allocations/total maximum daily loads through the wasteload allocation/total maximum daily load process and EPA has approved the State total maximum daily loads (TMDLs) and waste load allocations (WLAs). Since approval of a section 301(g) request necessarily involves a Federal and State determination that receiving water concentrations of the subject pollutant or pollutant parameters are acceptable, a reasonable next step is the adoption of the section 301(g) determination formally during State procedures establishing State water quality standards and WLAs and TMDLs for the locality. This requirement is consistent with section 303(c)(1), which requires review by the State of its water quality standards every three years. Availability of promulgated water quality standards and WLAs and TMDLs in an area where a section 301(g) determination has been made will expedite future variance proceedings in that locality.

EPA recognizes that standards adoption and TMDL/WLA procedures take considerable time due to institutional constraints even where substantial scientific work has been done. However, the Agency believes that the five-year permit term is sufficient time for this process.

B. Part 125, Subpart F

1. *Section 125.50. Scope and Purpose.* This section would establish the general scope and purpose of the section 301(g) regulations.

2. *Section 125.51. Law governing issuance of a section 301(g) modified permit.* This section would set forth the statutory language applicable to section 301(g) modified permits.

3. *Section 125.52. Definitions.* This section would set forth the definitions applicable to the section 301(g) regulations.

Section 125.52(a) would define "applicant" as the section 301(g) applicant.

Section 125.52(b) would define "balanced population of shellfish, fish and wildlife" as an ecological community which is similar to nearby healthy communities under comparable but unpolluted conditions or which may reasonably be expected to be established if sources of pollution were removed. The definition is similar to the definition contained in 40 CFR 125.58(f), implementing section 301(h) of the Act (municipal variance for ocean discharges). However, that section of the Act uses the term balanced "indigenous" population and therefore the section 301(h) regulation refers to water quality conditions which will allow pre-existing aquatic communities to return to the area of the applicant's discharge. The present proposal does not include the "pre-existing" communities concept.

Section 125.52(c) would define "early consultation" as correspondence or meetings between the applicant and the Federal and State permitting authorities to determine the type of data which should be submitted in the applicant's section 301(g) completed request and to identify the methods by which the data should be obtained.

Section 125.52(d) would define "load allocation" as the portion of a receiving water's loading capacity that is

attributed either to one of its existing or future nonpoint sources of pollution or to natural background sources.

Section 125.52(e) would define "mixing zone" as the State authorized area contiguous to the discharge where the effluent mixes with the receiving water. The definition establishes a preference for State-established mixing zones but recognizes that case-by-case definitions may be made if the State definition is imprecise. No mixing zone will be allowed if the State water quality standards prohibit one. Where a State prohibits the use of a mixing zone, or where a mixing zone is not defined by the State and the applicant does not develop a mixing zone in conjunction with the State, the demonstrations required by § 125.54 must be made at the point of discharge. For marine and estuarine discharges, the definition allows use of a zone of initial dilution as defined by § 125.52(n).

Section 125.52(f) would define "nonconventional pollutant" as a pollutant which is not a toxic pollutant or a conventional pollutant, as those terms are designated by 40 CFR 401.15 and 401.16, or the thermal component of a discharge.

Section 125.52(g) would define "Office Director" as the Director of EPA's Office of Water Enforcement and Permits. The Administrator has delegated to the Office Director authority to grant or deny section 301(g) variance requests.

Section 125.52(h) would define "pollutant parameter" as a pollutant category which comprises one or more individual pollutants or pollutant characteristics. The term includes but is not limited to total phenols, total organic carbon (TOC), and chemical oxygen demand (COD).

Section 125.52(i) would define "proposed modified effluent limitation" as an effluent limitation modified pursuant to section 301(g) and Subpart F.

Section 125.52(j) would define "public water system" as a system for the provision of piped water for human consumption, where the system meets certain minimum size requirements. The definition is the same as the definition of the term in the section 301(h) regulations, § 125.58(o).

Section 125.52(k) would define "total maximum daily load" (TMDL) as the sum of the individual wasteload allocations for point sources and load allocations for nonpoint sources and natural background. TMDLs may be expressed in terms of either mass per time, toxicity, or other appropriate measure.

Section 125.52(l) would define "wasteload allocation" (WLA) as the portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution. WLAs constitute a type of a water quality-based effluent limitation.

Section 125.52(m) would define "water quality standards" as the applicable standards approved, left in effect, or promulgated under section 303 of the Act.

Section 125.52(n) would define "zone of initial dilution" (ZID) as the region of initial mixing surrounding or adjacent to the end of the outfall pipe or diffuser ports, provided that the ZID may not be larger than allowed by mixing zone restrictions in applicable water quality standards. A zone initial dilution as defined here may be applied to marine and estuarine discharges in determining mixing zone limits for the purposes of a section 301(g) determination. The ZID definition is the same as the definition in the regulations implementing CWA section 301(h) regulations under § 125.58.

4. *Section 125.53 Applications.* 125.53(a) would specify that section 301(g) initial requests must be submitted as specified in existing § 122.21(l)(2)(i) and that applicants requesting modification of effluent limitations not based on effluent limitations guidelines are not required to submit an initial request, as provided by § 122.21(l)(2)(iii).

Section 125.53(b) would recommend an early consultation (as defined in proposed § 125.52(c)) between the applicant and the State and Federal permit authorities and would suggest the timing for the early consultation.

Section 125.53(c) would require each applicant to submit a completed request as provided in § 122.21(l)(2)(ii) and this section unless the Director extends the period for submission pursuant to § 122.21(n)(2).

Section 125.53(d) would assure that each applicant seeking a variance from proposed effluent limitations based on best professional judgement (BPJ) could request 270 days from the date of notification of the draft BPJ/BAT permit to submit a completed request. If a draft BPJ/BAT permit provides for a public comment period of less than 270 days, and the discharger requires an extension of the comment period, the discharger must request an extension from the Director. The Director must either extend the public comment period or separate the permit proceeding from the variance request

pursuant to § 124.63.

Section 125.53(e) would set forth the required contents of a completed section 301(g) variance request. Under the proposal, the completed request must include NPDES Standard Form 1 and 2B or 2C, as appropriate, demonstration of compliance with the criteria in § 125.54, and certification by the owner or operator.

Section 125.53(f) would call for the applicant to submit any information which the Regional Administrator or State Director determines to be necessary to make a decision on the variance requests. The Agency expects that this authority ordinarily will be exercised only when there are minor gaps in the completed request forwarded by the State to the Region.

Section 125.53(g) would provide for EPA to notify the Secretaries of Commerce and the Interior and any affected State of the filing of a section 301(g) completed request and to consider any timely recommendations from them.

Section 125.53(h) would allow the Regional Administrator and State Director to consider information in addition to the material submitted by the applicant. Any additional data or material used in the section 301(g) decision will be included in the record for the decision.

5. *Section 125.54. Criteria* § 125.54(a) would indicate that § 125.54 establishes the criteria for determining whether a section 301(g) modification should be granted. The burden will be on the applicant for the variance to show that the criteria of the statute and Part 125 would be met by the modified limitation.

Section 125.54(b) would require the applicant to demonstrate compliance with BPT, water quality standards and other applicable requirements of Federal or State law or regulation. The completed request must include a determination from the State or interstate certifying agency showing compliance with State requirements and discussing the basis for its conclusion.

Section 125.54(b)(1) would require the applicant to demonstrate compliance with State requirements, including water quality standards. If the applicant intends to rely on applicable State water quality standards to make a section 301(g) demonstration, those standards must be designed to maintain water quality which protects aquatic life and human health.

Section 125.54(b)(2) would require the applicant to provide a determination signed by the State or interstate agency(s) authorized to provide certification under § 124.53 that the proposed modified effluent limitation will comply with applicable provisions of State law and regulations, including applicable water quality standards.

Section 125.54(c) would require the applicant to demonstrate that the proposed section 301(g) modification will not result in the imposition of additional requirements on other point or nonpoint sources. The completed request must include a determination from the State or interstate agency which conducts wasteload allocations/total maximum daily loads showing that no additional requirements will be imposed on other sources as a result of granting the section 301(g) variance and discussing the basis for its conclusion.

Section 125.54(d) would require the applicant to demonstrate that the proposed section 301(g) modification will not interfere with the attainment or maintenance of water quality which would assure protection of public water supplies, provide for protection and propagation of a balanced population of shellfish, fish and wildlife, and allow recreational activities in and on the water, or result in the discharge of pollutants in quantities which may reasonably be anticipated to pose an unacceptable risk to human health or the environment because of bioaccumulation, persistency, acute toxicity, chronic toxicity (including carcinogenicity, mutagenicity or teratogenicity), or synergistic propensities.

Section 125.54(d)(1) would require that the proposed modification not prevent the use of planned or existing public water supplies or cause the system to provide additional treatment.

Section 125.54(d)(2) would require that the proposed modification not prevent the existence of a balanced population of fish, shellfish and wildlife immediately adjacent to the mixing zone.

Section 125.54(d)(3) and (4) would require that the proposed modification not interfere with any customary recreational activities beyond the mixing zone. In particular, the applicant would have to show that there were not Federal, State or local restrictions on recreational activities in the vicinity of the applicant's discharge due to the proposed modification, unless such restrictions are routinely imposed around industrial discharges.

Section 125.54(d)(5) would require the applicant to demonstrate that the proposed modified effluent limitation will

not cause an unacceptable risk to human health or the environment because of bioaccumulation, persistency in the environment, acute toxicity, chronic toxicity (including carcinogenicity, mutagenicity or teratogenicity), or synergistic propensities.

Section 125.54(e)(1) would provide that, in considering whether a proposed modified effluent limitation would satisfy section 301(g)(1)(C), EPA will give considerable weight to:

Section 125.54(e)(1)(A) -- a demonstration that the proposed modified effluent limitation would be in compliance with applicable State water quality standards which supply numerical criteria for the specific nonconventional pollutant, to the extent that these specific criteria are designed to assure levels of water quality protection specified in section 301(g)(1)(C);

Section 125.54(e)(1)(B) -- a demonstration that the proposed modified effluent limitation would not interfere with attainment of water quality consistent with the most recently published, most stringent EPA criterion number for the specific nonconventional pollutant; or

Section 125.54(e)(1)(C) -- a demonstration that the proposed modified effluent limitation would not interfere with the attainment of water quality consistent with an aquatic life criterion number for the specific nonconventional pollutant derived by the applicant through the use of the most recently published EPA criterion development methodologies. Where no published EPA human health criterion number is available to make a human health assessment, the applicant could attempt to demonstrate the human health effects of the proposed modified effluent limitation by supplying existing available information.

Section 125.54(e)(2) would inform those applicants seeking a variance for a pollutant parameter that EPA will give considerable weight to a demonstration that the proposed modified effluent limitation would comply with applicable water quality standards or a specific water quality criterion number as provided in § 125.54(e)(1). To derive a criterion for the pollutant parameter, the applicant may derive a number for the whole effluent containing the pollutant parameter by using EPA criterion derivation methodologies (see 45 FR 79318) and may express the resulting criterion in percent effluent. Additionally, section 125.54(e)(2) would provide that for a pollutant parameter, the applicant will be required to identify each toxic and conventional pollutant that is a constituent of the parameter and demonstrate that none of the constituents of the pollutant parameter is a section 307(a) toxic pollutant or that each section 307(a) pollutant or conventional pollutant has BAT or BCT limitations. Toxicity tests must be approved by EPA.

III. Request for Comments

EPA recognizes that there are a number of issues under section 301(g) which may be controversial and welcomes comments on these. EPA particularly invites comments on the issues of use of EPA water quality criteria to make a water quality assessment; synergism and persistency; early consultation; and mandatory establishment of water quality standards for nonconventional pollutants before reissuance of the NPDES permit.

A. EPA Water Quality Criteria

The Agency is interested in comments from the public, particularly the States, on the appropriateness of relying on national criteria or discharger developed criteria (subject to EPA approval) in those cases where State standards are not available. The use of the criteria and the EPA criteria derivation methodology may raise three issues. One is the scientific validity of the criteria developed before the establishment of a standard criteria development methodology. Another issue is the fact that EPA criteria, because they are based on laboratory data, may not reflect site-specific conditions in terms of water quality and local biota acclimations to elevated background pollutant levels. The third issue is the appropriateness of using a simplified, site-specific methodology rather than the EPA criteria development methodology in producing site-specific criteria. A site-specific methodology might involve a reduced number of acute and chronic bioassays employing local sensitive species.

B. Synergism and Persistency

With regard to synergism and persistency, EPA recognizes that there are no standard established procedures for measuring each of these characteristics in surface waters and solicits comments on the EPA ad hoc approach to

evaluating the potential for synergism or persistency in an applicant's discharge and receiving water. EPA also invites suggestions on methods for examining synergism and persistency in effluent and receiving waters and the appropriateness of applying biomonitoring techniques (toxicity tests) to measure synergistic propensities in the applicant's effluent and the receiving water.

C. Early Consultation

EPA solicits comments on the necessity for an early consultation and asks commentors whether the early consultation should be made mandatory (either for all section 301(g) requests or in specified situations) or maintained as an option.

D. Mandatory Establishment of Water Quality Standards

EPA solicits comments on the mandatory establishment of water quality standards and wasteload allocations/total maximum daily loads for nonconventional pollutants before reissuance of a NPDES permit containing the section 301(g) variance provisions. EPA is especially interested in receiving State comments on this subject.

IV. Compliance With Executive Order 12291, Regulatory Flexibility Act, and Paperwork Reduction Act

A. Executive Order 12291

Under Executive Order 12291, EPA must judge whether a regulation is "major" and therefore subject to the requirements of a Regulatory Impact Analysis. EPA's proposed regulation in support of section 301(g) does not constitute a "major" regulation because it will not have a major financial or adverse impact on industrial dischargers and because it is voluntary in nature.

The following discussion of regulatory costs and savings is based on an EPA survey conducted in July 1983. Representatives from several industrial groups were interviewed to determine the probable cost of filing a completed request.

Based on the availability of EPA water quality criteria and State water quality standards, costs may vary widely for industry. If a water quality standard or criterion has already been developed, the estimated total cost to file a completed request, including dilution/dispersion determinations, literature review, technical and administrative time, and secretarial time, is estimated to be between \$7,500 and \$15,000.

If a water quality criterion or State standard does not exist, total costs to develop the information necessary for a completed request, including in-field testing and site-specific criterion development, may total between \$100,000 and \$200,000 based on EPA's criterion development methodology. If an applicant chooses an alternative criterion derivation methodology (upon EPA approval), its costs could fall outside this range.

EPA has estimated savings to section 301(g) permittees for the two largest industries eligible for a section 301(g) variance (Steam Electric and Iron and Steel). About 50 plants (15%) could be eligible for section 301(g) variances in the Steam Electric category because, at BPT, the plants' effluents are projected to meet water quality standards and the national criteria for chlorine at low flow. Total annualized costs for chlorine control for a 500 megawatt plant (median size) is about \$88,000 (1982 dollars). Based on this cost, total Steam Electric category savings due to section 301(g) variances are estimated to be \$4.4 million annually, exclusive of the cost of preparing and submitting the completed request.

Approximately 20 Iron and Steel plants have filed for a section 301(g) variance for ammonia and total phenols. If a variance is granted it would allow plants to eliminate BAT treatment for ammonia and total phenols, which would result in annual cost savings per plant of \$270,000 (1982 dollars). If the 20 section 301(g) variance requests already filed are granted, industry-wide annual cost savings would be about \$5.4 million.

This regulation was submitted to the Office of Management and Budget for review as required by Executive Order 12291. Any comments from OMB and any EPA response to those comments are available for public inspection at EPA, Room 3220, 401 M Street, SW., Washington, D.C. 20460.

B. Regulatory Flexibility Act

Under the Regulatory Flexibility Act, EPA must prepare a regulatory flexibility analysis for all regulations that may have a significant impact on a substantial number of small entities. EPA examined small facilities in the Inorganic Chemical, Iron and Steel, and Steam Electric categories to determine the cost to prepare a 301(g) completed request. For the smallest of the facilities, the \$15,000 estimated cost to produce a completed request represents less than 1% of its annual revenues. The Agency expects that even the smallest of the facilities could afford to apply for the variance. If a small plant desires to develop its own site-specific criterion or conduct other in-field studies, the \$200,000 expenditures (anticipated highest cost) could represent about 10% of the smallest facility's annual revenues. Since the variance is voluntary only those entities which expect to gain a net benefit from the variance would expend the larger cost.

Nonetheless, EPA recognizes that costs may be substantial for small entities who choose to develop water quality criteria using EPA's criterion derivation methodology and has allowed for flexibility in the regulation. EPA strongly suggests, but does not require, each entity to rely upon EPA water quality criteria and the EPA criterion derivation methodology to make their water quality impact assessment. The regulation allows any entity, regardless of size, to derive a water quality criterion using its own methodology upon approval by EPA. This flexibility should help to minimize the impact on small entities.

C. Paperwork Reduction Act

In accordance with the Paperwork Reduction Act, the reporting provisions that are included in this proposed rule have been submitted for approval to OMB under section 3504(h) of the Act. Burden hour estimates in EPA's request to OMB are based on the Agency's experience with water quality criterion development and other variance processes. Information collection requirements contained in the proposed section 301(g) regulation have been approved by OMB under the provision of the Paperwork Reduction Act and have been assigned OMB control number - - - - - .

List of Subjects

40 CFR Part 124

Administrative practice and procedure, Air pollution control, Hazardous materials, Waste treatment and disposal, Water pollution control, Water supply, Indians -- lands.

40 CFR Part 125

Water pollution control, Waste treatment and disposal.

Dated: July 31, 1984.

William D. Ruckelshaus,

Administrator.

Authority: Clean Water Act, 33 U.S.C. 1251 et seq.

For the reasons set out in the preamble, Parts 124 and 125 of Title 40 of the Code of Federal Regulations are proposed to be amended by the addition of § 124.67 and Part 125, Subpart F as set forth below.

PART 124 -- PROCEDURES FOR DECISIONMAKING

§ 124.67 Special procedures for decisions on variances for nonconventional pollutants under section 301(g).

(a) Where it is clear on the face of a section 301(g) request that the applicant is not entitled to a variance, the request must be denied. Notice of applicable procedures for appeal must be provided in accordance with § 124.62. If the applicant's variance request has been separated from its draft permit under § 124.63(a)(2) (or comparable State procedure) and the permit has become final, the Director shall prepare a new draft permit which includes the denial of the request and give notice of it under § 124.10. This draft permit shall be accompanied by the fact sheet required by §

124.8, except that the only matters considered shall relate to the variance.

(b)(1) EPA will not approve any section 301(g) variance unless the appropriate State officials have concurred in the variance request pursuant to § 124.53 (EPA-administered program) or § 124.62(b)(3) (State NPDES program). Notwithstanding the provisions of § 124.53, EPA will not approve any section 301(g) variance if the State waives its right to concur.

(2) If applicable State water quality standards include a specific, numerical standard for the pollutant or pollutant parameter for which the section 301(g) request is made, and the State's standard is designed to assure compliance with section 301(g) statutory factors, EPA will not review the variance request until the appropriate State officials have determined that the proposed modified effluent limitation would not result in a violation of the applicable standard.

(3) In the case of a variance approved by the Office Director in an NPDES-approved State, the State Director may prepare a draft permit incorporating the variance pursuant to § 124.62(d).

(4) When the State denies a request or when EPA denies a request on the basis of the State's submission of the request without recommendation, the matter is reviewable through the applicable procedures of the State and review is not available through the procedures in this Part. Notice of a denial by the State shall be given in accordance with State procedures.

(c) Any permit containing a section 301(g) modified effluent limitation shall contain all applicable terms and conditions set forth in Part 122 and shall be issued in accordance with the procedures set forth in Parts 123 and 124.

(d) No permit containing a section 301(g) modification may be reissued unless the State agency responsible for setting water quality standards has approved numerical water quality criteria and total maximum daily loads/wasteload allocations in a standard for the nonconventional pollutant or pollutants addressed in the modification.

PART 125 -- CRITERIA AND STANDARDS FOR THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Subpart F -- Criteria for Granting Water Quality Related Variances Under Section 301(g) of the Act Sec.

125.50 Scope and purpose.

125.51 Law governing issuance of a section 301(g) modified permit.

125.52 Definitions.

125.53 Applications.

125.54 Criteria for the determination of modified effluent limitations under section 301(g).

Subpart F -- Criteria for Granting Water Quality Related Variances Under Section 301(g) of the Act § 125.50 Scope and purpose.

This subpart establishes the criteria to be applied by EPA in acting on section 301(g) requests for modification to Best Available Technology (BAT) effluent limitations for nonconventional pollutants, section 301(b)(2)(F).

§ 125.51 Law governing issuance of a section 301(g) modified permit.

(a) Section 301(g) of the Clean Water Act provides that: "(1) The Administrator, with the concurrence of the State, shall modify the requirements of subsection (b)(2)(A) of this section with respect to the discharge of any pollutant (other than pollutants identified pursuant to section 304(a)(4) of this Act, toxic pollutants subjects to section 307(a) of this Act, and the thermal component of discharges) from any point source upon a showing by the owner or operator of such point source satisfactory to the Administrator that --

(A) such modified requirements will result at a minimum in compliance with the requirements of subsection (b)(1)(A) or (C) of this section, whichever is applicable;

(B) such modified requirements will not result in any additional requirements on any other point or nonpoint source; and

(C) such modification will not interfere with the attainment or maintenance of that water quality which shall assure protection of public water supplies, and the protection and propagation of a balanced population of shellfish, fish, wildlife, and allow recreational activities, in and on the water and such modification will not result in the discharge of pollutants in quantities which may reasonably be anticipated to pose an unacceptable risk to human health or the environment because of bioaccumulation, persistency in the environment, acute toxicity, chronic toxicity (including carcinogenicity, mutagenicity or teratogenicity), or synergistic propensities.

(2) If an owner or operator of a point source applies for a modification under this subsection with respect to the discharge of any pollutant, such owner or operator shall be eligible to apply for modification under subsection (c) of this section with respect to such pollutants only during the same time-period as he is eligible to apply for a modification under this subsection."

(b) Section 301(j)(1)(B) -- [(time for filing)]

Any application filed under this section for a modification of the provisions of subsection (b)(2)(A) as it applies to pollutants identified in subsection (b)(2)(F) shall be filed no later than 270 days after the date of promulgation of an applicable effluent guideline under section 304 or not later than 270 days after the date of enactment of the Clean Water Act of 1977 [December 27, 1977], whichever is later.

(c) Section 301(j)(2) -- [(Stay of Clean Water Act Requirements)]

Any application for a modification filed under subsection (g) of this section shall not operate to stay any requirements under this Act, unless in the judgment of the Administrator such a stay or the modification sought will not result in the discharge of pollutants in quantities which may reasonably be anticipated to pose an unacceptable risk to human health or the environment because of bioaccumulation, persistency in the environment, acute toxicity, chronic toxicity (including carcinogenicity, mutagenicity, teratogenicity), or synergistic propensities, and that there is substantial likelihood that the applicant will succeed on the merits of such application. In the case of an application filed under subsection (g) of this section, the Administrator may condition any stay granted under this paragraph on requiring the filing of a bond or other appropriate security to assure timely compliance with the requirements from which a modification is sought.

§ 125.52 Definitions.

For the purposes of this subpart:

(a) "Applicant" means an applicant for a modified effluent limitation pursuant to section 301(g) and this subpart.

(b) "Balanced population of shellfish, fish and wildlife" means an ecological community which:

(1) Exhibits characteristics similar to those of nearby, healthy communities existing under comparable but unpolluted environmental conditions; or

(2) May reasonably be expected to be established in the polluted water body segment if sources of pollution were removed.

(c) "Early Consultation" means correspondence or meetings between the applicant and the Federal and State permitting authorities to determine the type of data which should be submitted in the applicant's section 301(g) completed request and to identify the methods by which the data should be obtained.

(d) "Load Allocation" (LA) means the portion of a receiving water's loading capacity that is attributed either to one of its existing or future nonpoint sources of pollution or to background sources.

(e) "Mixing Zone" means an area, defined by or allowable pursuant to the State water quality standards, contiguous to the discharge where the effluent mixes with the receiving water. Mixing zones may be authorized by State water quality standards and determined pursuant to a specific definition in such water quality standards or, in the case of an

approved State mixing zone policy in the standards, determined on a case-by-case basis by the State. Where a State prohibits the use of a mixing zone, or where the dimensions of the mixing zone are not specifically defined by the State water quality standards and the applicant does not develop a mixing zone in conjunction with the State, the demonstrations required by section 125.54 must be made at the point of discharge.

(f) "Nonconventional Pollutant" means any pollutant which is not a conventional pollutant listed in *40 CFR 401.16*, a toxic pollutant listed in *40 CFR 401.15*, or the thermal component of a discharge.

(g) "Office Director" refers to the Director, Office of Water Enforcement and Permits.

(h) "Pollutant Parameter" means a pollutant category which comprises one or more individual pollutants or pollutant characteristics. The term includes, but is not limited to, total phenols, total organic carbon (TOC), and chemical oxygen demand (COD).

(i) "Proposed modified effluent limitation" means an effluent limitation which is proposed pursuant to this subpart and section 301(g) as a replacement for a source's effluent limitation based on an effluent limitation guideline or best professional judgment.

(j) "Public water supply system" means a system for the provision to the public of piped water for human consumption, if such system has at least fifteen (15) service connections or regularly serves at least twenty-five (25) individuals. The term includes (1) any collection, treatment, storage and distribution facilities under the control of the operator of the system and used primarily in connection with the system, and (2) any collection or pretreatment storage facilities not under the control of the operator of the system which are used primarily in connection with the system.

(k) "Total maximum daily load" (TMDL) means the sum of the individual waste load allocations for point sources and load allocations for nonpoint sources and natural background. If a receiving water has only one point source discharger, the TMDL is the sum of that point source's waste load allocation plus the load allocations for any nonpoint sources of pollution and natural background sources. TMDLs can be expressed in terms of either mass per time, toxicity, or other appropriate measures.

(l) "Wasteload allocation" (WLA) means the portion of the receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution. WLAs constitute a type of water quality-based effluent limitation.

(m) "Water quality standards" means applicable water quality standards which have been approved, left in effect, or promulgated under section 303 of the Clean Water Act.

(n) "Zone of initial dilution" (ZID) means the region of initial mixing surrounding or adjacent to the end of the outfall pipe or diffuser ports, provided that the ZID may not be larger than allowed by mixing zone restrictions in applicable water quality standards.

§ 125.53 Applications.

(a) Each applicant requesting modification under this subpart of effluent limitations based on an effluent limitations guideline shall submit an initial request as provided in § 122.21(1)(2)(i). As provided in § 122.21(1)(2)(iii), an applicant requesting modification of effluent limitations not based on effluent limitations guidelines is not required to submit an initial request.

(b) Each applicant should hold an early consultation with Federal and State permitting authorities according to the following schedule:

(1) For applicants requesting a variance from BAT requirements based on an effluent guideline promulgated on or before the date this subpart is promulgated, no later than 90 days after the promulgation of this subpart;

(2) For applicants requesting a variance from BAT requirements based on an effluent guideline promulgated after the promulgation of this subpart, no later than 90 days of the promulgation of that guideline; and

(3) For applicants requesting a variance from BAT based on best professional judgment (rather than an effluent limitation guideline), within 90 days of public notice of the preparation of the applicant's draft permit.

(c) Each applicant requesting a variance under this subpart shall submit a completed request as provided in § 122.21(1)(2)(ii) and this section, unless the Director extends the period for submission pursuant to § 122.21(n)(2).

(d) An applicant seeking a modification under this subpart of proposed effluent limitations based on best professional judgment (BPJ) (not based on effluent limitations guidelines) may request extension of the public comment period for its draft BPJ/BAT permit when the period is less than 270 days. An applicant must submit its request for an extension during the original public comment period to the Director, who must grant the request or separate the processing of the variance request from the processing of the permit.

(e) Each completed request for a section 301(g) variance submitted by the applicant or forwarded by the State to the Region shall contain:

- (1) A completed NPDES Application Standard Form 1 and 2b or 2c, as appropriate;
- (2) Documentation demonstrating compliance with the requirements of § 125.54; and
- (3) Certification as required by § 122.22(d).

(f) The applicant shall submit any data or information which the Regional Administrator and State Director subsequently determine necessary to support the completed request and, within the times specified by the Regional Administrator or State Director, may also provide any additional data or information which the applicant considers appropriate.

(g) The Regional Administrator shall promptly notify the Secretary of Commerce and the Secretary of the Interior, and any affected State, of the filing of the completed request and shall consider any timely recommendations they submit.

(h) In deciding whether to issue a modified effluent limitation under section 301(g), in addition to data and information supplied by the applicant, the Regional Administrator and State Director may consider any EPA or other relevant data and information.

§ 125.54 Criteria for the determination of modified effluent limitations under section 301(g).

(a) The Office Director shall approve a request for a modified effluent limitation if the applicant demonstrates, to the Office Director's satisfaction, that the proposed modified effluent limitation will comply with the requirements of this section.

(b) BPT; Water Quality Standards; Other Federal and State requirements.

(1) The applicant must demonstrate that the proposed modified effluent limitation will result at a minimum in compliance with the requirements of section 301(b)(1) (A) and (C) of the Clean Water Act and other applicable requirements of Federal law. For purposes of section 301(b)(1)(A), if BPT is not defined by effluent limitation guidelines regulations, BPT must be defined by best professional judgment.

(2) To show compliance with State requirements, the applicant must demonstrate that the modified effluent limitation will comply with any applicable State water quality standards and other applicable requirements of State law or regulation. If the applicant intends to rely on an applicable State water quality standard to demonstrate that the proposed modified effluent limitation will satisfy portions of section 301(g)(1)(C), the applicant shall identify the portions of the statute which it believes are satisfied by the standard and set forth the basis for its conclusion.

(3) The completed request must include a determination signed by the State or interstate agency(s) authorized to provide certification under § 124.53 that the proposed modified effluent limitation will comply with applicable provisions of State law and regulations including applicable water quality standards. This determination shall include a discussion of the basis for the conclusion reached.

(c) Other Point and Nonpoint Sources. The applicant must demonstrate that the proposed modified effluent limitation will not result in any additional pollution control requirements on any other point or nonpoint source. The completed request must include a determination from the State or interstate agency(s) having authority to establish WLAs/TMDLs indicating whether the applicant's discharge will result in any additional treatment, pollution control, or other requirement on any other point or nonpoint sources. The State determination shall include a discussion of the basis for its conclusion.

(d) Environmental Effects. The applicant must demonstrate that the proposed modified effluent limitation will not interfere with the attainment or maintenance of water quality which shall assure protection of public water supplies and

the protection and propagation of a balanced population of shellfish, fish, and wildlife, and allow recreational activities in and on the water and such modification will not result in the discharge of pollutants in quantities which may reasonably be anticipated to pose an unacceptable risk to human health or the environment because of bioaccumulation, persistency in the environment, acute toxicity, chronic toxicity (including carcinogenicity, mutagenicity or teratogenicity), or synergistic propensities. The applicant must demonstrate that:

(1) The proposed modified effluent limitation will not prevent a planned or existing public water supply system from being used, or from continuing to be used, as a public water supply, or have the effect of requiring any public water supply system to provide additional treatment.

(2) The proposed modified effluent limitation will not prevent the existence of a balanced population of shellfish, fish and wildlife immediately beyond the State mixing zone applicable to the applicant's discharge or, where appropriate, beyond the zone of initial dilution (ZID).

(3) The proposed modified effluent limitation will not interfere with recreational activities beyond the boundary of the mixing zone or, where appropriate, of the ZID, including without limitation swimming, diving, boating, fishing and picnicking and sports activities along shorelines and beaches.

(4) There will be no Federal, State, or local restrictions on recreational activities in the vicinity of the applicant's discharge due to the proposed modified effluent limitation, unless such restrictions are routinely imposed around such industrial discharges.

(5) There will be no unacceptable risk to human health or the environment due to the proposed modified effluent limitation, because of bioaccumulation, persistency in the environment, acute toxicity, chronic toxicity (including carcinogenicity, mutagenicity or teratogenicity), or synergistic propensities.

(e)(1) In determining whether the proposed modified effluent limitation would satisfy the environmental effects and toxicity requirements of section 301(g)(1)(C), EPA will give considerable weight to:

(A) A demonstration that the proposed modified effluent limitation, when evaluated at the edge of the mixing zone (if any), would be in compliance with applicable State water quality standards which supply numerical criteria for the specific nonconventional pollutant, to the extent that these specific criteria are designed to assure the levels of water quality protection specified in section 301(g)(1)(C);

(B) A demonstration that the proposed modified effluent limitation, when evaluated at the edge of the mixing zone (if any), would not interfere with attainment of water quality consistent with the most stringent of the most recently published EPA criteria numbers for the specific nonconventional pollutant; or

(C) A demonstration that the proposed modified effluent limitation, when evaluated at the edge of the mixing zone (if any), would not interfere with attainment of water quality consistent with an aquatic life criterion number for the specific nonconventional pollutant derived by the applicant through the use of the most recently published EPA criterion-development methodologies. Where no published EPA human health criterion number is available, the applicant may attempt to demonstrate the human health effects of the proposed modified effluent limitation by supplying existing available information.

(2) For a pollutant parameter, EPA will give considerable weight to a demonstration that the proposed modified effluent limitation would comply with applicable water quality standards or a specific water quality criterion number as provided in § 125.54(e)(1). To derive a criterion for a pollutant parameter as provided in § 125.54(e)(1)(C), the applicant may use EPA methodologies to derive a criterion number for the whole effluent containing the pollutant parameter. The resulting criterion number would be expressed as a percentage of the whole effluent. In addition, for a pollutant parameter the applicant must identify each toxic and conventional pollutant which is a constituent of the parameter and must demonstrate that any toxic or conventional pollutant that is a constituent of the pollutant parameter would be present at concentrations as low as required by BAT or BCT, respectively, or would be controlled by BAT or BCT effluent limitations if the variance is granted.

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