

No. 07-72420

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**UNITED STATES COURT OF APPEALS  
FOR THE NINTH CIRCUIT**

COOK INLETKEEPER, COOK INLET FISHERMEN'S FUND, NATIVE  
VILLAGE OF NUNWALEK, NATIVE VILLAGE OF PORT GRAHAM, and  
UNITED COOK INLET DRIFT ASSOCIATION,

Petitioners,

v.

U.S. ENVIRONMENTAL PROTECTION AGENCY, and LISA P. JACKSON,  
Administrator of the U.S. Environmental Protection Agency,

Respondents,

and

UNION OIL COMPANY OF CALIFORNIA, and XTO ENERGY, INC.,

Respondent-Intervenors.

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**RESPONDENTS' ANSWER BRIEF**

**PETITION FOR REVIEW OF A DECISION OF THE UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY**

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## **OTHER AUTHORITIES**

EPA, Water Quality Standards Handbook, § 5.1.1 (2d ed. 1994) . . . . . 9



## **GLOSSARY OF ACRONYMS AND ABBREVIATIONS**

Pursuant to Circuit Rule 28(a)(3), the following is a glossary of acronyms and abbreviations used in this brief:

ADEC	Alaska Department of Environmental Conservation
AMEL	Average Monthly Effluent Limit
AR	Administrative Record
BAT	Best Available Technology Economically Achievable
BCT	Best Conventional Control Technology
BPJ	Best Professional Judgment
BPT	Best Practicable Control Technology Currently Available
CWA	Clean Water Act
DMR	Discharge Monitoring Reports
EA	Environmental Assessment
ELG	Effluent Limitation Guidelines
EPA or Agency	United States Environmental Protection Agency
GP	General Permit
MDEL	Maximum Daily Effluent Limits
NPDES	National Pollutant Discharge Elimination System
NSPS	New Source Performance Standards

RER	Respondent's Excerpts of Record
RMC	Reasonable Maximum Concentration
RPA	Reasonable Potential Analysis
RPMF	Reasonable Potential Multiplying Factor
RWC	Receiving Water Concentration
TAH	Total Aromatic Hydrocarbons
TaqH	Total Aqueous Hydrocarbons
TBEL	Technology-Based Effluent Limitation
TSD	Technical Support Document
TU	Toxic Units
TU <sub>c</sub>	Toxic Units-Chronic
WET	Whole Effluent Toxicity
WQBEL	Water Quality-Based Effluent Limitation
WQS	Water Quality Standards

## JURISDICTIONAL STATEMENT

Respondents United States Environmental Protection Agency and its Administrator, Lisa Jackson (collectively, “Respondent” or “EPA”) concur in the jurisdictional statement set forth in Petitioners’ Opening Brief (“Pet. Br.”) at 1.

## STATEMENT OF ISSUES

1. Whether the Court should remand those portions of the “Authorization to Discharge Under the National Pollutant Discharge Elimination System (NPDES) for Oil and Gas Extraction in Federal and State Waters” (“General Permit”) for Cook Inlet, Alaska, that set forth less-stringent effluent limits than the previous general permit so that EPA may reconsider its antibacksliding analysis in light of a properly-noticed antidegradation analysis by Alaska that is informed by State implementation procedures guidance.

2. Whether EPA incorporated all required technology-based effluent limitations into the General Permit.

3. Whether EPA’s administrative record for the General Permit was sufficient to support its action, when it did not include computer run documents generated by the State of Alaska that were not before EPA.

4. Whether EPA set appropriate water quality-based effluent limits in the General Permit based in part on mixing zones authorized by the State of Alaska

under State law.

## STATEMENT OF THE CASE

### I. INTRODUCTION

In this petition for review, Petitioners challenge EPA's issuance of the Clean Water Act General Permit for oil and gas facilities in Cook Inlet, Alaska.<sup>1/</sup> EPA has filed a motion for voluntary partial remand of the effluent limits in the General Permit that are less stringent than those included in the previous general permit. We demonstrate in this brief that EPA's administrative record for the issuance of the General Permit is sufficient to support the balance of the General Permit's provisions; that all appropriate technology-based effluent limitations are included in the General Permit; and that EPA set appropriate water quality-based effluent limits in the General Permit.

### II. STATUTORY AND REGULATORY BACKGROUND

#### A. The Clean Water Act

The objective of the Clean Water Act ("CWA" or the "Act"), 33 U.S.C. § 1251, *et seq.*, "is to restore and maintain the chemical, physical, and biological

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<sup>1/</sup> A version of the General Permit is included in Petitioners' Excerpt of Record ("ER") at 1-49. That version is missing certain pages. A complete copy of the General Permit is set forth at pages 1-115 of Respondents' Supplemental Excerpts of Record ("RSE").

integrity of the Nation's waters" through the reduction and eventual elimination of the discharge of pollutants into those waters. 33 U.S.C. § 1251(a).

1. NPDES Program

The CWA focuses in large part on effluent limitations on discharges from "point sources" into the navigable waters. The CWA provides that "the discharge of any pollutant by any person shall be unlawful," unless in compliance with a variety of requirements. 33 U.S.C. § 1311(a). The most prominent permit program is the "National Pollutant Discharge Elimination System" ("NPDES"), under which EPA (or an authorized State) issues permits to individual point sources to allow the discharge of pollutants in compliance with effluent limitations and other standards. 33 U.S.C. § 1342. The Administrator of EPA is responsible for administering the NPDES permit program for oil and gas facility discharges in Alaska.

2. Effluent Limitations

NPDES permits typically contain limitations that restrict the amount of pollutants that may be discharged into navigable waters.

a. Technology-Based Effluent Limitations

NPDES permit may contain two types of effluent limitations. First, NPDES permits implement technology-based effluent limitation guidelines ("effluent

guidelines”), developed by EPA on an industry-by-industry basis, which reflect a specified level of pollutant-reducing technology available for the type of facility being permitted. 33 U.S.C. §§ 1311, 1314; 40 C.F.R. § 122.44(a)(1); *E.I. du Pont de Nemours & Co. v. Train*, 430 U.S. 112, 126-36 (1977). These technology-based effluent guidelines typically specify numerical amounts or concentrations of particular effluents which may not be exceeded in an NPDES permit. The discharger is not required to use the technology upon which the effluent guidelines are based; rather, the discharge may use any technology that meets the limitations established.

b. Water Quality-Based Effluent Limitations

Second, the Clean Water Act directs the States, with federal approval and oversight, to establish water quality-based standards to assure protection of the quality of state waters. 33 U.S.C. § 1313(c)(2)(A). Water quality standards (“WQS”) are not technology-based standards, but are based on the desired uses and condition of the particular water body involved. 40 C.F.R. § 131.3(i). They are specific to a particular water body and consist of three principal elements: (a) “designated uses” for each water body, such as for public water supply, recreation, or fish propagation, 33 U.S.C. § 1313(c)(2)(A); (b) “criteria” specifying the amounts of various pollutants that may be present in water without impairing the

designated use, 33 U.S.C. § 1313(c)(2)(A); and (c) an “antidegradation policy” to protect existing uses and high-quality waters. 33 U.S.C. § 1313(d)(4)(B); 40 C.F.R. §§ 131.6(d), 131.12. If necessary to meet applicable water quality standards, NPDES permits must contain “water quality-based effluent limitations” (“WQBELs”) more stringent than limitations that would be required to comply with the applicable technology-based effluent limitation. 33 U.S.C. § 1311(b)(1)(C); 40 C.F.R. § 122.44(d). Such limitations “must control all pollutants or pollutant parameters (either conventional, non-conventional, or toxic pollutants) which [EPA] determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard . . . .” 40 C.F.R. § 122.44(d)(1)(i). NPDES permits are normally issued for individual facilities, but in some circumstances, a “general permit” may be issued for a similar group of facilities. 40 C.F.R. § 122.28.

### 3. State Water Quality Standards Certification

Before issuing an NPDES permit, EPA must receive a certification from the State in which the discharge originates that, if the permittee discharges in accordance with the limitations and conditions contained in the permit and the certification, applicable water quality standards will be met. 33 U.S.C. § 1341(a);

40 C.F.R. § 124.53(e). “No license or permit shall be granted until the certification required by this section has been obtained or has been waived . . . No license or permit shall be granted if certification has been denied by the State . . .” 33

U.S.C. § 1341(a)(1); 40 C.F.R. § 122.44(d)(3). Under the Act, any conditions or limitations contained in the water quality certification “shall become a condition on any Federal license or permit subject to the provisions of this section.” 33 U.S.C. § 1341(d). The State is required to establish procedures for public notice of all applications to the State for a water quality certification, and “to the extent it deems appropriate,” procedures for public hearings on such applications. 33 U.S.C. § 1341(a)(1).

#### 4. Anti-Backsliding

An NPDES permit generally may not be renewed, reissued or modified to contain effluent limitations that are “less stringent than the comparable effluent limitations in the previous permit.” 33 U.S.C. § 1342(o)(1). This requirement is known as the “anti-backsliding” provision. However, backsliding *may* be allowed in an NPDES permit for discharges into waters whose quality exceed state water quality standards (such as Cook Inlet), but “only if such revision is subject to and consistent with the antidegradation policy established [by the State] under this section.” 33 U.S.C. § 1313(d)(4)(B).



5. Antidegradation

Consistent with the statutory anti-backsliding requirement, EPA's regulations provide that "[t]he State shall develop and adopt a statewide antidegradation policy and identify the methods for implementing such policy pursuant to this subpart." 40 C.F.R. § 131.12(a). The regulation requires that a state antidegradation policy and implementation methods provide at a minimum that existing water uses and the level of water quality necessary to protect existing uses be maintained and protected. *Id.* § 131.12(a)(1). In addition, where the quality of waters exceeds levels necessary to support recreation and the propagation of fish, shellfish, and wildlife, that quality must be maintained and protected *unless* the State finds "that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located." *Id.* § 131.12(a)(2). In allowing such degradation, the State must assure water quality adequate to fully protect existing uses, and "that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources . . . ." *Id.*

B. Alaska's Water Quality Standards

The State of Alaska has adopted water quality standards that have been approved by EPA. 18 AAC Ch. 70. Under these standards, a person "may not

conduct an operation that causes or contributes to a violation of the water quality standards set by this chapter.” 18 AAC 70.010(a). The standards “specify the degree of degradation that may not be exceeded in a waterbody as a result of human actions.” 18 AAC 70.010(b). The WQS include water quality criteria (18 AAC 70.020(b)), “whole effluent toxicity” limits (18 AAC 70.030), and Alaska’s antidegradation policy (18 AAC 70.015). 18 AAC 70.010(b).

#### 1. Antidegradation Policy

Alaska has established an antidegradation policy that closely mirrors the federal antidegradation policy. 18 AAC 70.015. Thus, “existing water uses and the level of water quality necessary to protect existing uses must be maintained and protected.” 18 AAC 70.015(a)(1). The quality of waters whose quality exceeds levels necessary to support recreation and propagation of fish, shellfish, and wildlife may be reduced *only* after a showing that “allowing lower water quality is necessary to accommodate important economic or social development in the area where the water is located”; that reducing water quality will not violate water quality criteria or whole effluent toxicity; that the resulting water quality will fully protect the existing uses of the water; that methods of pollution prevention, control, and treatment which are most effective and reasonable will be applied; and that the wastes will be treated to “the highest statutory and regulatory requirements.” 18

AAC 70.015(a)(2). An application to allow a reduction in water quality “is subject to the public participation and intergovernmental review procedures applicable . . . .” 18 AAC 70.015(c). If ADEC is certifying a federal permit, the public participation and intergovernmental review processes followed by the federal agency in issuing the permit will meet the State requirements. *Id.*

## 2. Mixing Zones

EPA’s regulations provide that States may include in their water quality standards “policies generally affecting their application and implementation, such as mixing zones . . . .” 40 C.F.R. § 131.13. “Mixing zones” are “areas where an effluent discharge undergoes initial dilution and are extended to cover the secondary mixing in the ambient water body. A mixing zone is an allocated impact zone where acute and chronic water quality criteria can be exceeded as long as a number of protections are maintained.” EPA, Water Quality Standards Handbook, § 5.1.1, at 5-5 (2d ed. 1994), *quoted in American Wildlands v. Browner*, 260 F.3d 1192, 1195 (10<sup>th</sup> Cir. 2001). “By definition, the effluent itself [within the mixing zone] does not meet water quality standards. . . . It necessarily follows, then, that the edge or outer circumference of the mixing zone is defined as the boundary at which water quality standards are first met.” *Marathon Oil Co. v. EPA*, 830 F.2d 1346, 1349 (5<sup>th</sup> Cir. 1987).

Alaska's mixing zone regulation states that "[u]pon application, [ADEC] may authorize in a . . . certification, a mixing zone or multiple mixing zones in which the water quality criteria and any limit set under this chapter may be exceeded." 18 AAC 70.240(a). Mixing zones must be "as small as practicable," and comply with size restrictions. 18 AAC 70.240(k). The pollutants discharged must not exceed "acute aquatic life criteria" past the boundaries of a "smaller initial mixing zone" surrounding the outfall, while chronic aquatic life criteria may not be exceeded at or beyond the edge of the overall mixing zone. 18 AAC 70.240(d)(8).

### 3. State Water Quality Certification Procedures

Alaska's process for providing water quality certifications is set forth at 18 AAC 15.130 - .180.<sup>2/</sup> Public notice of the certification application must be published jointly with EPA's notice of permit actions under 40 C.F.R. § 124.10. 18 AAC 15.140(a).

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<sup>2/</sup> EPA's requirements regarding the contents of a state WQS certification are set forth at 40 C.F.R. § 124.53.

### III. FACTUAL BACKGROUND

#### A. Cook Inlet and Prior General Permit

This petition for review challenges the EPA-issued NPDES General Permit for oil and gas extraction facilities in federal and state waters located in Cook Inlet, Alaska. Cook Inlet runs in a northeasterly to southwesterly direction for approximately 180 miles, with Anchorage on the northeastern end and the outlet to the Gulf of Alaska at the southwestern end. The Inlet averages about 60 miles wide. ER at 314.

All current oil and gas facilities in Cook Inlet are located north of Kalgin Island in the upper Inlet, in “coastal waters.” ER 266. The Cook Inlet oil and gas field has been declining in production for many years. At the height of oil production, in 1970, the region produced 80 million barrels annually. By 2001, production declined to under 10 million barrels per year. EA at 1-6, ER 267.

In 1999, EPA Region 10 issued the “NPDES General Permit for Oil and Gas Exploration, Development and Production Facilities Located in State and Federal Waters in Cook Inlet,” Permit No. AKG-28-5000. That permit became effective on April 1, 1999, and expired on April 1, 2004. ER 771-816. Beginning in 2003, affected companies submitted applications for a renewal of the general permit. *E.g.*, ER 752-59; RSER 116-22.

B. Permit Application, Draft Water Quality Certification and Proposed General Permit

On August 5, 2004, Union Oil Company, XTO Energy and ConocoPhillips submitted a “Mixing Zone Application for Cook Inlet Oil and Gas Operators,” prepared by Parametrix, to the Alaska Department of Environmental Conservation (“ADEC”) in connection with the application for a renewal of the prior general permit. ER 700; RSER 127-38.<sup>3/</sup>

At EPA Region 10's request, ADEC prepared preliminary mixing zone calculations and dilutions for the new general permit in January 2005. RSER 139-48. Citing more monitoring data and use of the CORMIX model rather than the PLUMES model, ADEC noted that the mixing zones and dilution calculations for the new permit were quite different from those calculated by ADEC for the 1999 general permit. RSER 139. The CORMIX and PLUMES models are methods of predicting the dilution of pollutants in a receiving waterbody at particular distances from an effluent outfall.

On October 28, 2005, ADEC sent a draft section 401 water quality certification to EPA Region 10. ER 666-76. The draft certification was based upon ADEC's review of the mixing zone applications, the various NPDES permit

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<sup>3/</sup>The companies submitted an amended mixing zone application on October 20, 2005. ER 677-99.

applications submitted by the operators, and a preliminary draft NPDES general permit sent to ADEC by EPA Region 10. ER 666.

On February 17, 2006, in conjunction with EPA's issuance of a proposed general permit, ADEC submitted a second draft section 401 certification. ER 594-605. ADEC made "a preliminary finding that any reduction in natural water quality of Cook Inlet would be in accord with the requirements of 18 AAC 70.015, Antidegradation Policy." ER 677.

In February 2006, EPA issued a "Fact Sheet," ER 461-533, which described the proposed new general permit, to be renumbered AKG-31-5000. Notice of the proposed reissuance of the general permit was published in the Federal Register, 71 Fed. Reg. 10032 (February 28, 2006), with a comment period through May 1, 2006. Pursuant to public request, the comment period was ultimately extended through May 31, 2006. 71 Fed. Reg. 20397 (April 20, 2006). Numerous comments were received, including those submitted by Trustees for Alaska, ER 552-85; Cook Inletkeeper, ER 606-12; and Liberte Environmental Associates, ER 586-93.

EPA issued a 491-page "Response to Public Comment" document regarding the proposed general permit and the Environmental Assessment in April 2007. (Portions of the Response to Public Comment document are found at ER 82-163,

164-239).

C. Final General Permit

ADEC's final section 401 water quality certification ("ADEC Certification") was issued on May 18, 2007. ER 62-81. The final General Permit was issued June 14, 2007, effective July 2, 2007, and expiring at midnight, July 2, 2012. ER 1-59 (complete version at RSER 1-115).

The General Permit authorizes certain discharges from exploratory, development, and production platforms in the permit area, as well as onshore production facilities. Nineteen different discharges are regulated, the most important of which are discharges of drilling fluids, drill cuttings, and "produced water." <sup>4/</sup> ER 57.

An "exploratory facility" is any structure engaged in the drilling of wells to determine the nature of potential hydrocarbon reservoirs. ER 55. "Development

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<sup>4/</sup> "Produced water" is the "water (brine) brought up from the hydrocarbon-bearing strata during the extraction of oil and gas, and can include formation water, injection water, and any chemicals added downhole or during the oil/water separation process." 40 C.F.R. § 435.11(bb).

Other regulated discharges are deck drainage; sanitary wastes; domestic wastes; desalination unit wastes; blowout preventer fluid; boiler blowdown; fire control test water; non-contact cooling water; uncontaminated ballast water; bilge water; excess cement slurry; mud, cuttings and cement at sea floor; waterflooding discharges; and completion, workover, well treatment, and test fluids. ER 1.



facilities” are those engaged in drilling and completing wells. ER 54. Production facilities are operations engaged in the active recovery of oil and gas from production formations. ER 57. In addition to these covered facilities, the General Permit also regulates discharges from onshore facilities, such as the Trading Bay Production Facility, that are associated with these extraction activities.

Under the General Permit, “new sources” (*i.e.*, new development and production facilities) are not authorized to discharge produced water, drilling fluids, or drill cuttings. ER 7. New exploratory facilities are not permitted to discharge produced water under the General Permit. *Id.*

D. General Permit Technology-Based Effluent Limitations

The General Permit includes limits based on the discharge of pollutants from various waste streams. Some of those limits are based on the applicable technology-based effluent limitation guidelines, and some are based on the need to meet Alaska’s state water quality standards, which are applicable to all existing facilities covered by the General Permit.

All facilities covered under the General Permit are part of the Oil and Gas Extraction Point Source Category, Coastal subcategory. 40 C.F.R. Part 435, Subpart D. Technology-based effluent limits must be included in NPDES permits as a minimum floor, in addition to any more stringent limitations needed to meet

state water quality standards. 40 C.F.R. §§ 122.44(a), (d).

The effluent guidelines for the Coastal subcategory for oil and gas extraction set out technology-based effluent limits for a variety of waste streams. Under these effluent guidelines, facilities located in Cook Inlet are allowed to discharge produced water if it meets oil and grease limitations, while such discharge is prohibited in all other parts of the United States. Most of the limits included in the General Permit are technology-based.

Further, under the effluent guidelines, existing Cook Inlet facilities may not discharge drilling fluids or drill cuttings containing free oil or diesel oil. 40 C.F.R. § 435.43; ER 16-19. Under the General Permit, the discharge of drilling fluids and drill cuttings is only authorized for exploratory facilities and existing sources, not for new sources. ER 16. New sources can be covered under the General Permit only if they do not discharge muds, cuttings and produced water. *Id.*, at 7. There is generally no drilling occurring at existing platforms, and only a few additional wells are expected to be drilled from those platforms in the future. EPA therefore does not expect significant discharges of drilling fluid or cutting from existing facilities. ER 486.

The discharge limitations for produced water under the General Permit include both technology-based effluent limits and water quality-based effluent

limits. The effluent guidelines establish limits for produced water based on “best available technology economically achievable” limits. 40 C.F.R. § 435.43. For all facilities in the Coastal subcategory *except* Cook Inlet, no produced water may be discharged. For Cook Inlet facilities, the effluent guidelines allow controlled discharge of produced water based on the technology of improved gas flotation. EPA established the effluent limit for “oil and grease” as an “indicator parameter” for all toxic and nonconventional pollutants in produced water, so that Cook Inlet facilities may discharge produced water with up to a maximum daily concentration of 42 mg/l of oil and grease, and an average monthly concentration of 29 mg/l of oil and grease. 40 C.F.R. § 435.43 (Coastal subcategory); ER 30.

E. General Permit Water Quality-Based Effluent Limitations

The General Permit also includes water quality-based effluent limits that must be met by specific facilities. EPA compared effluent data from produced water discharges to Alaska’s state water quality standards. ER 226-39. It concluded that the effluent concentrations of certain pollutants (ammonia, arsenic, copper, manganese, mercury, zinc, total aromatic hydrocarbons (“TAH”), and total aqueous hydrocarbons (“TAqH”)) found in produced water would exceed the Alaska water quality criteria. However, only copper, TAH, mercury, manganese, silver, and zinc have the “reasonable potential” to exceed water quality criteria

*outside the mixing zones* established by Alaska. ER 228.

Therefore, the General Permit includes “facility specific incremental water quality based limits and monitoring requirements” for produced waters. ER 34-38. The General Permit includes specific limits, expressed in milligram or microgram units per liter of produced water, for TAH, TAqH, ammonia, copper, manganese, mercury, silver, and zinc. *Id.* Water quality-based effluent limits for arsenic, cadmium, and lead in produced water were included in the previous general permit. Because recent discharge monitoring reports showed no reasonable potential for exceedence of the water quality standards for those pollutants, they were not carried over as water quality-based effluent limitations in the current General Permit. ER 226-28.

As part of the NPDES permitting process, EPA is required to determine whether there is a “reasonable potential” that particular effluents will cause an excursion over state water quality standards. 40 C.F.R. § 122.44(d). In Attachment A to its Response to Public Comment, April 2007, ER 226-37, EPA explained that, “based on further review and verification of effluent characterization data,” it had revised the reasonable potential analysis from the method used for the draft General Permit. ER 226. The revised reasonable potential analysis was performed following the methods set forth in EPA’s 1991 “Technical Support

Document for Water Quality-Based Toxics Control” (“TSD”) (portions of which are included at ER 843-962). ER 226.

F. Alaska’s Final Water Quality Certification

ADEC issued its final section 401 water quality certification in conjunction with the General Permit on May 17, 2007. ER 62-81. ADEC authorized the mixing zones for the General Permit in the final certification and provided a detailed rationale for its determination. In preparing the Certification, ADEC reviewed the applicants’ mixing zone applications, the NPDES permit applications, the preliminary draft and final General Permits and comments by the public on the draft water quality certification. ER 62. The final Certification “reflects changes to effluent limits in the final permit based on [EPA’s and ADEC’s] joint review of effluent data, public comment, and a change of method to determine reasonable potential to exceed water quality standards.” *Id.* Attachment 1 to the final Certification includes a detailed rationale for the calculation of mixing zones for the produced water wastestream, along with tables showing mixing zones and dilution factors for each facility. ER 69-76.

ADEC also “reviewed the existing and proposed wastewater discharges with respect to the standards and antidegradation requirements of the Alaska Water Quality Standards and [found] any reduction in natural water quality of Cook Inlet

to be in accord with the requirements of 18 AAC 70.015, Antidegradation Policy . . . .” ER 62.

### SUMMARY OF THE ARGUMENT

Petitioners challenge EPA’s issuance of the General Permit on a number of grounds. They claim that EPA could not lawfully issue the General Permit with certain water quality-based effluent limits that are less stringent than those included in the previous general permit under the Clean Water Act’s “anti-backsliding” provision, 33 U.S.C. § 1342(o)(1), because Alaska allegedly did not provide an acceptable antidegradation analysis. EPA is contemporaneously moving the Court for a voluntary remand of that portion of the General Permit that includes less stringent effluent limits so that Alaska may make an antidegradation finding after giving adequate notice of the analysis for public comment, and after adopting implementation procedures for its antidegradation policy.

EPA included technology-based effluent limitation guidelines for Cook Inlet’s oil and gas industry. The effluent guidelines occupied the field for the technology-based requirements under the Act, as they established BAT limitations for toxic and nonconventional pollutants in produced water by establishing an oil and grease limit as an “indicator” pollutant.

EPA’s administrative record is more than sufficient to support its issuance of

the General Permit. Its rationale is included in the General Permit, responses to comments, Alaska's various analyses, and a great number of background documents. The record includes sufficient material to enable this Court to determine that EPA's actions were not arbitrary or capricious and that deference should be paid to EPA's technical and scientific judgments.

In addition, EPA appropriately selected water quality-based effluent limitations in the permit. EPA performed an appropriate analysis of whether various effluents discharged under the General Permit have a "reasonable potential" to exceed State water quality standards, and Alaska's modeling of Cook Inlet as part of its determination of mixing zones under State water quality standards was reasonable and entitled to deference.

## ARGUMENT

### I. STANDARD OF REVIEW

Agency action subject to review under 33 U.S.C. § 1369(b)(1)(F) is judged under the standards set forth in the Administrative Procedure Act, 5 U.S.C. § 706(2)(A), which states that agency action will not be set aside unless it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law." *NRDC v. U.S. EPA*, 526 F.3d 591, 602 (9<sup>th</sup> Cir. 2008). The arbitrary and capricious standard "is narrow and a court is not to substitute its judgment for that

of the agency.” *Motor Vehicles Mfrs’ Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983). Indeed, an agency’s determinations must be upheld if they “conform to ‘certain minimal standards of rationality.’” *Small Refiner Lead Phase-Down Task Force v. EPA*, 705 F.2d 506, 521 (D.C. Cir. 1983) (citations omitted). An agency action is arbitrary and capricious only “if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.” *Motor Veh. Mfrs. Ass’n*, 463 U.S. at 43.

Under this standard, the reviewing court may not set aside agency action merely because the court would have decided the issue differently, so long as the agency has considered the relevant factors and offered a rational explanation for its action. *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 416 (1971). Where, as here, the Court is reviewing an agency’s scientific determinations, the Court should exercise its highest level of deference. *Baltimore Gas & Elec. Co. v. NRDC*, 462 U.S. 87, 103 (1983).



II. THE COURT SHOULD GRANT EPA’S REQUEST FOR VOLUNTARY PARTIAL REMAND OF THOSE PORTIONS OF THE GENERAL PERMIT SETTING LESS STRINGENT WATER QUALITY-BASED EFFLUENT LIMITATIONS FOR FURTHER ACTION BY EPA

Petitioners argue in their opening brief that EPA’s issuance of the General Permit was improper, among other reasons, because the General Permit allegedly violates the “anti-backsliding” proscription of the Clean Water Act, 33 U.S.C. § 1342(o)(1), and because EPA did not obtain a valid Section 401 water quality certification from the State of Alaska prior to issuance of the General Permit. 33 U.S.C. § 1341(a). Pet. Br. at 15-20. Both of those claims hinge on Alaska’s application of its “antidegradation policy.” 18 AAC 70.015.

The general prohibition of “backsliding” in NPDES permits is set forth at 33 U.S.C. § 1342(o)(1). That section states that in the case of water quality-based effluent limitations, “a permit may not be renewed, reissued, or modified to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit” except in compliance with 33 U.S.C. § 1313(d)(4).

33 U.S.C. § 1313(d)(4)(B) in turn provides that for waters “where the quality . . . equals or exceeds levels necessary to protect the designated use for such waters or otherwise required by applicable water quality standards,” an effluent limitation based on water quality standards “may be revised only if such revision is

subject to and consistent with the antidegradation policy established under this section.” In this case, it is undisputed that the waters of Cook Inlet affected by the General Permit meet water quality standards. Pet. Br. at 16.

Most water quality-based effluent limitations in the General Permit were not made less stringent. However, for some constituents of produced water, at some facilities covered under the General Permit, there was an increase in water quality-based effluent limitation levels.

Respondent EPA is contemporaneously filing a motion for voluntary partial remand (“Remand Motion”) of portions of the General Permit that include water quality-based effluent limitations (*i.e.*, mercury, copper, TAH, TAqH, and WET), that are less stringent than the limits for those effluents in the prior general permit. EPA demonstrates in the Remand Motion why the General Permit should not be vacated pending the remand.

Petitioners argue that the inclusion of less-stringent limits in the General Permit is improper (a) because ADEC did not provide an appropriate opportunity for public comment on its draft conclusion that the State antidegradation policy would not be violated by the terms of the General Permit, and (b) because Alaska does not presently have “implementation procedures” for its antidegradation policy. Pet. Br. at 15-20.

EPA concedes that ADEC's antidegradation finding was flawed, and should not have been relied upon by EPA to support backsliding, because ADEC's *proposed* antidegradation finding did not provide the public with an adequate opportunity to comment (in that the proposed conclusion did not include any reasoning for the proposal). EPA continues to stand behind the other WQBELs established in the General Permit, and defends them in this brief.

The Court need not resolve Petitioners' other argument, regarding implementation procedures. As set forth in the Declaration of Michael Bussell, attached to the Remand Motion, ADEC has committed to identify implementation procedures in guidance for its antidegradation policy by September 1, 2010; to provide public notice of a proposed antidegradation analysis regarding the less-stringent effluent limits, based upon the implementation procedures, by October 1, 2010; to allow a 30-day period, through November 1, 2010, for public comment on the new draft proposed analysis; and to issue a final Section 401 water quality certification and final antidegradation finding, by December 1, 2010. EPA proposes in the Remand Motion to reconsider inclusion of the less-stringent effluent limits in the General Permit, based on a revised ADEC antidegradation analysis informed by the implementation procedures to be identified by ADEC.

III. THE GENERAL PERMIT PROPERLY INCLUDES TECHNOLOGY-BASED EFFLUENT LIMITATIONS FOR COOK INLET FACILITIES BASED ON THE APPLICABLE EFFLUENT LIMITATIONS GUIDELINE

Petitioners argue that EPA should have made a “case-by-case” determination of the appropriate technology-based effluent limits for certain pollutants in the produced water discharges covered by the General Permit. Pet. Br. at 20-23. They claim that the produced water waste stream in Cook Inlet includes certain substances that EPA did not consider when it derived the 1996 effluent limitations guidelines for produced water in Cook Inlet found at 40 C.F.R. § 435.43, and that EPA must therefore establish case-by-case technology-based limitations for those pollutants in the General Permit. Pet. Br. at 22-23. This argument is waived, because Petitioners did not raise it in comments during the administrative process. In addition, EPA’s authority to include case-by-case technology-based limitations is limited to situations where there is no applicable effluent limitation guideline or where the effluent limitation guideline applies only to certain pollutants in the discharger’s operation. 40 C.F.R. § 125.3(c)(1)-(3). In this case, there are effluent limitation guidelines that apply to the produced water discharges covered by the General Permit, which established limits on oil and grease as an “indicator” pollutant for all toxic and nonconventional constituents of produced water in Cook Inlet, including those listed by Petitioners. EPA is therefore not authorized to

include more stringent technology-based limits on a case-by-case basis for those pollutants.

A. Effluent Limitations Guidelines Applicable to Produced Water Discharges in Cook Inlet

Produced water is the highest volume waste type in the coastal oil and gas industry. In the early production phase of a well, the proportion of produced water to hydrocarbons recovered is relatively low. As the field ages, the produced water volume increases in comparison to hydrocarbon recovery. 61 Fed. Reg. 66,086, 66,097 (Dec. 16, 1996); “Development Document for Final Effluent Limitations Guidelines and Standards for the Coastal Subcategory of the Oil and Gas Extraction Point Source Category” (“Coastal Dev. Doc.”), ER 819-20. Produced water includes many substances, including “conventional” pollutants such as “oil and grease” and total suspended solids; toxic metals and organic substances; and “nonconventional” pollutants. 61 Fed. Reg. at 66,096; Coastal Dev. Doc., ER 827.

The Clean Water Act, 33 U.S.C. § 1311(b), requires EPA to specify effluent limitations based on particular levels of technology-based controls. EPA does this either by promulgating nationally applicable effluent limitation guidelines (“ELGs”), or where EPA has not yet promulgated such a rule, or the rule does not apply to certain pollutants in the discharge or only certain aspects of the discharge, by developing effluent limitations in a particular permit that represents the

applicable level of control on a best professional judgment basis. 33 U.S.C. § 1342(a)(1); 40 C.F.R. § 125.3(c)(1)-(3).

As indicated above, EPA develops technology-based effluent limitation guidelines on an industry-by-industry basis. The ELGs for the “coastal subcategory” of the oil and gas industrial category are located at 40 C.F.R. Part 435, Subpart D. The Clean Water Act requires EPA to specify differing levels of controls on effluents based on particular levels of technology. In 1979, pursuant to 33 U.S.C. § 1314(b)(1), EPA established the first level of control, “best practicable control technology currently available” (“BPT”), applicable to all pollutants, for produced water in the oil and gas industry. 44 Fed. Reg. 22,069 (April 13, 1979). BPT represents the first level of control for discharges and is designed to bring sources up to the average of the best performance of facilities within an industry. Coastal Dev. Doc., RSER 149.

The Clean Water Act also requires EPA to establish a second level of technology-based controls depending on the type of pollutant. “Best conventional control technology” (“BCT”) applies to “conventional” pollutants, which consist of biological oxygen demand, suspended solids, fecal coliform, pH, and oil and grease. 33 U.S.C. § 1314(a)(4); 44 Fed. Reg. 44,501 (July 30, 1979) (adding oil and grease to list); 40 C.F.R. § 125.3(a)(2)(ii). EPA establishes the BCT level after

consideration of a “cost-reasonableness” test. 33 U.S.C. § 1314(b)(4); 51 Fed. Reg. 24,974 (July 9, 1986).

“Best technology economically achievable” (“BAT”) applies to toxic and nonconventional pollutants, 33 U.S.C. §§ 1311(b)(2)(A), (C), (D); 40 C.F.R. § 125.3(a)(2)(iii)-(v), and represents the best available economically achievable performance of facilities in the industrial category or subcategory. 33 U.S.C. § 1314(b)(2).

EPA promulgated effluent limitations guidelines representing BCT and BAT for the coastal subcategory in 1996. 61 Fed. Reg. 66,086 (December 16, 1996). For all coastal facilities, EPA set a BCT effluent limit for the conventional pollutant in produced water (*i.e.*, oil and grease), of a one-day maximum concentration of oil and grease not to exceed 72 mg/l, and a 30-day average not to exceed 48 mg/l. 40 C.F.R. § 435.44.

EPA set a BAT limit for toxic and nonconventional pollutants in produced water at coastal facilities at a more stringent level. EPA established a “no discharge” produced water limit for produced water for all coastal areas except Cook Inlet. For Cook Inlet facilities, including those covered by the General Permit, EPA set a one-day maximum concentration of oil and grease of 42 mg/l and a 30-day average not to exceed 29 mg/l. 40 C.F.R. § 435.43. The primary

method used by non-Cook Inlet facilities for discharge of produced water is subsurface injection, which was the technical basis for establishing zero discharge as BAT for all facilities except Cook Inlet. Coastal Dev. Doc., RSER 150.

However, for Cook Inlet, “because of the highly fractured and compartmented geology present, there are no formations onshore directly beneath the treatment facilities to accept the large volumes of produced waters treated, making injection onsite infeasible.” *Id.* at RSER 151-52. EPA determined that an improved gas flotation method was an appropriate technology basis for BAT limits in Cook Inlet. *Id.*, at RSER 153.

One of the requirements for a BAT limitation is that the limit be “economically achievable.” 33 U.S.C. § 1311(b)(2)(A)(I). “Because Cook Inlet is economically and geographically isolated and the economic effects of zero discharge in Cook Inlet are significant and disproportionately worse than they are in the rest of the subcategory, EPA rejects zero discharge in Cook Inlet as not economically achievable.” Coastal Dev. Doc., RSER 154-55; 61 Fed. Reg. at 66,101. The Fifth Circuit Court of Appeals held that “EPA’s decision to set more lenient effluent limits for Cook Inlet facilities than for other members of the Coastal Subcategory reflects a permissible interpretation of the CWA.” *Texas Oil & Gas Ass’n v. EPA*, 161 F.3d 923, 939 (5<sup>th</sup> Cir. 1998).



EPA found that it was appropriate to establish limits on total oil and grease as an indicator for other pollutants in produced water in Cook Inlet. EPA's studies found that "oil and grease serves as an indicator for toxic pollutants in the produced water wastestream . . . ." Coastal Dev. Doc., RSER 153.

EPA determined that it is not feasible to regulate each pollutant individually for reasons that include the following: 1) the variable nature of the number of constituents in the produced water, 2) the impracticality of measuring a large number of analytes, many of them at or just above trace levels, 3) use of technologies for removal of oil which are effective in removing many of the specific pollutants, and 4) many of the organic pollutants are directly associated with oil and grease because they are constituents of oil, and thus, are directly controlled by the oil and grease limitation.

*Id.*, RSER 156. The use of indicator pollutants has been approved by the courts.

*NRDC v. EPA*, 822 F.2d 104, 125 (D.C. Cir. 1987).

B. Petitioners' Argument that EPA Must Establish Case-By-Case Technology-based Limits is Waived by Failure to Raise the Issue in Comments

The proposed General Permit included the BAT limit of 42 mg of oil and grease per liter as a daily maximum concentration and 29 mg/l as a maximum 30-day average concentration as the technology-based effluent limit for produced water. In the associated Fact Sheet, EPA stated that "since EPA has established ELGs for oil and gas point sources, the Proposed Permit may not impose more stringent technology-based limits. For any specific waste stream or pollutant not

addressed by the ELGs, EPA must develop technology-based permit limitations through the use of Best Professional Judgment ('BPJ') on a case-by-case basis."

ER 842. Cook Inletkeeper argued in comments that EPA should apply best professional judgment and discretion to require zero discharge of produced water.

ER 563-65. In its response to that comment, EPA stated:

To establish a limit based on BPJ, it must be determined whether a need for additional controls beyond the existing ELGs is necessary. The need for additional controls may result from not falling under any category for which an ELG exists or there is a discharge of pollutants that are not addressed in the development of the ELGs. See 40 CFR § 125.3. Here, the oil and gas operators are specifically covered by the ELGs. Therefore, EPA does not have the flexibility to develop additional technology-based limitations unless the Effluent Guideline is revised.

ER 167.

Petitioners make a different argument here. They assert that certain substances listed as constituents of produced water in Cook Inlet (*i.e.*, 1,2-dichlorobenzene, acenaphthene, antimony, arsenic, chromium, mercury, selenium, and silver) were not included in the list of materials EPA mentioned as portions of the produced water waste stream in the Development Document for the coastal oil and gas effluent limitation guidelines. Pet. Br. at 22. They argue that those pollutants were not addressed in the development of the effluent limitation guidelines, and that therefore EPA should have regulated those substances on a

“case-by-case” basis pursuant to 40 C.F.R. § 125.3(c)(2), as materials to which the “EPA-promulgated effluent limitations are inapplicable.” *Id.*

Petitioners’ challenge is waived, however, because they did not raise in comments their current argument that EPA should have established technology-based effluent guidelines using best professional judgment for the constituents of produced water not specifically listed in the development of the Cook Inlet effluent limitation guideline, rather than using the oil and grease limits in the produced water in the ELG.<sup>5/</sup> *Marathon Oil Co. v. United States*, 807 F.2d 759, 767 (9<sup>th</sup> Cir. 1986) (argument not raised before agency is waived on appeal).

C. The Oil and Grease Limit for Produced Water in the Effluent Limitation Guideline Applies to the Constituents Listed by Petitioners

Even apart from that barrier to Petitioners’ argument, the substance of the argument must be rejected. As described above, EPA established an indicator pollutant, oil and grease, for controlling the discharge of produced water in Cook Inlet. It had “evaluated the feasibility of regulating separately each of the constituents present in produced water,” and “determined for the Coastal Guidelines that it is not feasible to regulate each pollutant individually . . . .” 61

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<sup>5/</sup> In any case, acenaphthene, antimony, arsenic, mercury, silver and chromium were considered as part of the development process for the Offshore Subcategory effluent guidelines; those results were in turn considered by EPA in the Coastal Subcategory development process. ER 824 RSER 157-62.

Fed. Reg., at 66,098. One of the reasons given was “the variable nature of the number of constituents in the produced water . . . .” *Id.* EPA made the reasonable decision that oil and grease would be an appropriate surrogate for other constituents of produced water. EPA appropriately included in the General Permit the technology-based effluent limitation guideline for produced water in Cook Inlet set forth in the coastal oil and gas subcategory regulation. 40 C.F.R. § 435.43.

#### IV. THE ADMINISTRATIVE RECORD IS SUFFICIENT TO SUPPORT EPA’S ISSUANCE OF THE GENERAL PERMIT

Petitioners claim that EPA’s failure to include in the administrative record CORMIX modeling run results “that provide the receiving water concentrations (‘RWC’) of pollutants at the edges of the mixing zones that EPA and [ADEC] specified in the Fact Sheet and 401 Certification,” mean that the General Permit should be remanded pursuant to Section 706(2) of the Administrative Procedure Act. Pet. Br. at 23.

In their brief, Petitioners refer to “EPA” as having made “all the modeling and other decisions discussed in this Brief, even if actually performed by another agency or entity, because EPA relied on these decisions to carry out its mandate” to ensure sufficiency of effluent limits in the General Permit. Pet. Br. at 11, n. 7. In reality, pursuant to the regulatory division of authority between EPA and the State of Alaska, ADEC calculated the mixing zones. Mixing zones are part of

Alaska's water quality standards and are the province of the State to analyze and authorize.

EPA provided an explanation of how it used the dilution factors derived from ADEC's mixing zone analysis to calculate maximum concentrations at the edge of the mixing zone. ER 226. EPA provided details on the basis for its determination of appropriate water quality-based effluent limits. ER 199, 218-19, 226-39. Thus, even if the Court denies Petitioners' previously-filed motion to supplement the administrative record with ADEC's CORMIX runs (among other materials), there is sufficient information in the administrative record as assembled by EPA to review EPA's actions. If the Petitioners' motion to supplement the administrative record is granted, their argument here is moot.

V. EPA ESTABLISHED APPROPRIATE WATER QUALITY-BASED EFFLUENT LIMITS IN THE GENERAL PERMIT

The Clean Water Act provides that NPDES discharge permits must include technology-based standards established by EPA, 33 U.S.C. § 1311(b)(1)(A), and "any more stringent limitation," including those necessary to meet State water quality standards. 33 U.S.C. § 1311(b)(1)(C). Thus, if technology-based water quality standards are not sufficiently stringent to meet State water quality standards, EPA (in states, like Alaska, in which EPA issues NPDES permits) must develop water-quality based effluent limitations that are as stringent as necessary

to meet water quality standards.

A. Derivation of Reasonable Potential Analysis and Mixing Zones

Section V of Petitioners' opening brief contains a series of highly technical arguments claiming that certain of the WQBELs contained in the General Permit do not meet all applicable water quality standards as required by the Clean Water Act. 33 U.S.C. § 1342(a). Pet. Br. at 25-57. In essence, they claim that EPA did not perform an adequate analysis of whether certain pollutant discharges have a "reasonable potential" to cause or contribute to "an excursion above any State water quality standard" (known as the "reasonable potential analysis," or "RPA"). 40 C.F.R. § 122.44(d)(1)(i). Petitioners also assert that the "CORMIX" modeling, used by ADEC in determining the size of "mixing zones," was improperly conducted for a variety of reasons.

40 C.F.R. § 122.44 governs the establishment of water quality-based effluent limits in NPDES permits by EPA. It provides that such permits must include effluent limits necessary to achieve water quality standards. 40 C.F.R. § 122.44(d)(1). Those limitations "must control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which [EPA] determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water

quality standard, including State narrative criteria for water quality.” *Id.* § 122.44(d)(1)(i). In deciding whether a discharge causes or has the reasonable potential to cause exceedences of state numeric or narrative water quality criteria, “the permitting authority shall use procedures which account for existing controls on point and nonpoint sources of pollution, the variability of the pollutant or pollutant parameter in the effluent, the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity), and where appropriate, the dilution of the effluent in the receiving water.” *Id.* § 122.44(d)(1)(ii).

In order to determine whether discharge of a particular pollutant has a reasonable potential to exceed state water quality standards, EPA performs a calculation to compare the concentration of the pollutant at the edge of the mixing zone with the state water quality criteria. If the concentration as calculated does not exceed the water quality standards, then no WQBEL is needed in the permit for that particular pollutant. If the concentration is higher than the water quality standard concentration criteria at the edge of the mixing zone, then EPA must calculate a water quality-based limit for that effluent.

A State may, in its discretion, include “policies generally affecting . . . mixing zones” in its water quality standards. 40 C.F.R. § 131.13. In general terms, a “mixing zone” is an area of the receiving water in which a State determines that it

is acceptable to exceed water quality standards. Mixing zone decisions are commonly supported by mathematical and empirical models that estimate the mixing processes in the vicinity of an outfall.

The general method used by EPA for making “reasonable potential” analyses is set forth in EPA’s “Technical Support Document for Water Quality-Based Toxics Control,” March 1991 (“TSD”).<sup>6</sup> ER 843-962. Where some actual effluent data exists, EPA generally uses a statistical method to determine whether a pollutant has the “reasonable potential” to exceed state water quality standards at the edge of the mixing zone (and thus, require a water quality-based effluent limitation in the permit). First, EPA determines the number of samples that had been taken for the particular effluent, and the concentration of the pollutant in the sample with the highest concentration. This gives EPA the *maximum observed concentration*. Next, EPA determines an appropriate “coefficient of variation,” which is a statistical measure.<sup>7</sup> Then, using a chart with the number of samples on

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<sup>6</sup> The TSD is not binding on EPA when it makes permit decisions. “This document is agency guidance only. It does not establish or affect legal rights or obligations. It does not establish a binding norm and is not finally determinative of the issues addressed. Agency decisions in any particular case will be made applying the law and regulations on the basis of specific facts when permits are issued or regulations promulgated.” TSD, ER 845.

<sup>7</sup> When the number of samples is less than ten, the coefficient of variation is estimated to be 0.6; where the number of samples is greater than ten, the



one axis and the coefficient of variation on the other, the *reasonable potential multiplying factor* (“RPMF”) is selected. In general, the fewer the samples, the higher the RPMF, because it is more difficult to predict possible concentrations with fewer samples.<sup>87</sup> The maximum observed concentration is then multiplied by the RPMF to arrive at the *reasonable maximum concentration* (“RMC”) of the pollutant in the water. The RMC is essentially a prediction, based on the highest observed concentration of the effluent and on the number of samples, of what the highest concentration of the pollutant *might* be. This predicted concentration is then used as the concentration of the pollutant that EPA compares to state water quality criteria to determine whether the pollutant has a “reasonable potential” to exceed the water quality standards and therefore requires imposition of a WQBEL. TSD, ER 858-63. If there is no mixing zone, the predicted effluent concentration would be compared directly to the water quality criterion. If a mixing zone is authorized, then the predicted mixed concentration at the edge of the mixing zone is compared with the water quality criterion.

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coefficient of variation is defined as the standard deviation of the data divided by the mean. TSD, ER 859.

<sup>87</sup> As an example, if there is only one actual sample, at a coefficient of variation of 0.6, the RPMF is 13.2; with two samples, 7.4; with ten samples, 3.0; and with 20 samples, 2.3. TSD, Table 3-1, ER 860.

As indicated above, mixing zone regulations are a part of state water quality standards; there are no federally-promulgated mixing zone standards. In Alaska, “[u]pon application, [ADEC] may authorize in a discharge permit or certification, a mixing zone or multiple mixing zones in which the water quality criteria and any limit set under this chapter may be exceeded.” 18 AAC 70.240(a). The applicant has the burden of providing “all available evidence reasonably necessary to demonstrate that a mixing zone will comply” with the regulation. *Id.* ADEC may approve a mixing zone “only if it finds that the mixing zone is as small as practicable” and complies with certain listed size restrictions, unless the evidence “is sufficient to reasonably demonstrate that these size restrictions can be safely increased.” 18 AAC 70.240(k).

In August 2004, Unocal Corporation, ConocoPhillips Alaska, Inc., and XTO Energy, Inc., through their contractor Parametrix, submitted a “Mixing Zone Application for Cook Inlet Oil and Gas Operators” to ADEC.<sup>97</sup> RSER 127-38. Among other waste streams, the operators requested mixing zones for produced water, sanitary wastes, and some other discharges from onshore facilities

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<sup>97</sup> The August 2004 Parametrix Mixing Zone Application was supplemented by a May 2005 letter and attachments responding to ADEC and EPA requests for additional information, particularly regarding design of a “diffuser” outfall for the Trading Bay Production Facility, RSER 163-76, and by an amendment to the original mixing zone application, dated October 20, 2005. ER 677-99.

containing chemical additives such as biocides and oxygen scavengers. RSER

135. As to produced water, mixing zones were sought for petroleum hydrocarbons (i.e., total aromatic hydrocarbons (TAH) and total aqueous aromatic hydrocarbons (TAqH)), metals, ammonia and whole effluent toxicity). *Id.*

In determining the size of a mixing zone, the first step is to determine a “dilution factor” for the pollutant. The dilution factor is the maximum expected effluent concentration at the end of the pipe divided by the water quality standard, and represents the number of times the effluent would have to be diluted to meet the state water quality standard criteria. RSER 181. As an example, assume that the maximum expected effluent concentration of pollutant X is 5.0 mg/l, and that the state water quality standard numerical criterion for pollutant X is 1.0 mg/l. The dilution factor is therefore 5.0 mg/l divided by 1.0 mg/l, or 5. In order to meet the water quality criterion of 1.0 mg/l, the effluent must be diluted by a factor of five.

The next step is to determine, based on the characteristics of the effluent and the receiving water, how large the mixing zone would have to be such that the effluent, at the edge of the mixing zone, has been sufficiently diluted to meet the state water quality standard numeric criteria for that pollutant. This is where modeling comes in. Many of Petitioners’ arguments are highly technical complaints about how ADEC used and ran CORMIX, the model that essentially

provides estimates of the dilution of the effluent in the receiving water with increasing distance from the outfall pipe.

If it appears that discharge of a pollutant at the rate requested by the permit applicant will either cause or has the reasonable potential to cause or contribute to an exceedence of the state water quality criteria at the edge of the mixing zone, then a water-quality based effluent limitation must be calculated for that pollutant and included in the permit. 40 C.F.R. § 122.44(d)(1)(i). The WQBEL is essentially “back calculated” from the water quality standard criteria limit at the end of the mixing zone to determine the concentration of pollutant that could be discharged at the end of the outfall so that water quality standards are in fact met at the end of the mixing zone.

ADEC reviewed the mixing zone application submitted by the oil and gas companies and calculated mixing zones for sanitary wastes, miscellaneous discharges and produced water. ADEC issued a draft Section 401 water quality certification, relating to EPA’s preliminary draft general permit, on October 28, 2005. ER 666. ADEC prepared an amended draft Section 401 water quality certification dated February 17, 2006, which was based on the draft General Permit made available for public comment in February 2006. ER 596. ADEC issued its final Section 401 water quality certification on May 18, 2007. The final Section

401 certification “reflects changes to effluent limits in the final permit based on the agencies’ [*i.e.*, ADEC and EPA] joint review of effluent data, public comment, and a change of method to determine reasonable potential to exceed water quality standards.” ER 62. The final 401 certification included mixing zones for sanitary discharges and for produced water from existing facilities. ADEC included an attachment to the final certification describing the rationale for the produced water mixing zones. ER 69-76. ADEC stated that “[t]he mixing zones in this 401 certification are based on the CORMIX model using site-specific current, temperature, and salinity data to more accurately reflect the dispersion of pollutants into Cook Inlet from these facilities.” ER 69.

In the Final General Permit, EPA set water quality effluent limits for a variety of pollutants found in produced water, on a facility-by-facility basis. ER 30-34. WQBELs were set for TAH, TAqH, un-ionized ammonia, copper, mercury, manganese, silver, zinc, and for whole effluent toxicity. In determining the *mixing zones* for WQBEL-limited effluent discharges at those facilities, ADEC combined certain of the constituents:

Because of the large size of Cook Inlet, mixing zone sizes were determined from the Reasonable Maximum Concentration (RMC) of the pollutant needing the greatest dilution, taking into account compliance with risk and the protection of all uses of the water body. Mixing zones for metals are based on either the aquatic life or human health criteria, whichever requires the greatest dilution. Permit limits

for metals are based on the dilution factor and the applicable water quality standard. If there is a reasonable potential for a metal to exceed the water quality standard at any one facility, then limits are included for that metal at all facilities. For other than the metal needing the greatest dilution, the permit limit is based on the RMC.

Final 401 Water Quality Certification, ER 69. Thus, for each facility, ADEC set mixing zones based on effects on aquatic life for chronic exposures to hydrocarbons (TAH and TAqH); chronic and acute metals; chronic and acute ammonia; and chronic WET exposure. For human health effects, mixing zones were set based on chronic metals and chronic organics water quality standards. ER 74-75. As noted by ADEC, the largest mixing zones for constituents of produced water were associated with TAH/TAqH. ER 69. For example, the mixing zone for hydrocarbons at Trading Bay Production Facility, before that facility installed an 80-meter long diffuser outfall, was 3,644 meters in length and 231 meters wide. ER 75. After the installation of the diffuser, the mixing zone was 2,418 meters in length and 360 meters wide. *Id.* The shape of the mixing zone was determined by application of CORMIX, and was dependent on numerous variables. Thus, for example, the hydrocarbons mixing zone for Platform Baker, located in the Inlet itself, was 3016 meters long but only 6.6 meters wide, reflecting a variety of factors including current speeds. ER 74.

The operators' mixing zone application used data from the facilities and

from CORMIX modeling to determine the size of mixing zones and exposure times for organisms in the mixing zones. ADEC “used information in this document and the NPDES permit application to run CORMIX models for verification of the results, and concurred with the conclusions presented in that document. ER 70.

In its responses to comments in support of the General Permit, EPA noted that its “reasonable potential analysis” for the draft permit had been based on single-effluent observed concentration values that were included in the dischargers’ NPDES permit application. ER 226-39. The revised analysis was performed following the methods set forth in the TSD. *Id.* EPA supplemented the prior observed values with data summarized in the dischargers’ Mixing Zone Application, and also independently reviewed “discharge monitoring reports” (“DMRs”) submitted by the dischargers from December 1998 through December 2003. *Id.* EPA used the reasonable potential multipliers calculated by the dischargers in the mixing zone application, but independently verified the dischargers’ calculation of the coefficient of variation and reasonable potential multiplier for each parameter and facility. *Id.* Ultimately, EPA determined that a reasonable potential to exceed the water quality standards was shown for TAH (at Platform Anna); copper (at Trading Bay); mercury (at Platform Dillon); manganese (at Tyonek A); silver (at East Forelands); and zinc (Granite Point Production

Facility and Tank Farm). In the updated “reasonable potential analysis,” no reasonable potential was shown for ammonia, nickel, or TAqH, so water quality-based effluent limitations for those substances were not included in the final General Permit. However, while TAqH and ammonia did not show a reasonable potential to exceed water quality standards, EPA included monitoring requirements for those parameters in the General Permit.

In Section V of their brief, Petitioners present technical arguments claiming that EPA failed “to realistically model Cook Inlet so as to set water quality-based effluent limitations in the [General Permit] that meet all applicable water quality standards.” Pet. Br. at 25. Petitioners’ claims in this regard may be broadly divided into challenges to EPA’s reasonable potential analysis on the one hand (Pet. Br. at 25-37, 54-56), and challenges to ADEC’s use of the CORMIX model to determine mixing zones on the other. Pet. Br. at 37-54. In neither case do Petitioners identify any fatal flaw, but simply point to technical choices made by EPA or ADEC that they would have made differently. That is insufficient to overturn the General Permit. “When specialists express conflicting views, an agency must have discretion to rely on the reasonable opinions of its own qualified experts even if, as an original matter, a court might find contrary views more persuasive.” *Marsh v. Oregon Nat’l Resources Council*, 490 U.S. 360, 378 (1989);



*Bering Strait Citizens for Responsible Resource Development v. U.S. Army Corps of Engineers*, 524 F.3d 938, 957 (9<sup>th</sup> Cir. 2008) (quoting *Marsh*). Both EPA and ADEC made reasonable choices in their analyses of these arcane technical matters, and their decisions are entitled to deference.

B. EPA’s “Reasonable Potential Analysis” Was Reasonable and Is Entitled to Deference

Petitioners argue that EPA “failed to use all available, statistically-reliable information” in deriving WQBELs in the General Permit, Pet. Br. at 29-33, which they claim is a requirement of EPA’s “Technical Support Document for Water Quality-Based Toxics Control,” or TSD. ER 858. Petitioners assert that the purported TSD requirement “implements” 40 C.F.R. § 122.44(d)(1)(ii). Pet. Br. at 30. Petitioners assert that, as the number of samples used in the reasonable potential analysis decreases, the reasonable maximum expected concentration rises (because a lower number of samples increases the reasonable potential multiplying factor), and ultimately the resulting WQBEL would be less stringent. *Id.*, at 31-32.

Of course, 40 C.F.R. § 122.44(d)(1)(ii) does not specify what data points must be considered in a reasonable potential analysis. It simply says that the permitting authority should “use procedures” to account for, among other things, “the variability of the pollutant or pollutant parameter in the effluent.” In any case, the Technical Support Document is “agency guidance only,” does not “establish a

binding norm,” and is “not finally determinative of the issues addressed.” ER 845.

Here, as indicated in its response to comments document submitted in connection with the final General Permit, EPA revised the reasonable potential analysis for the final General Permit “based on further review and verification of effluent characterization data.” ER 226. EPA did depend on many single effluent concentrations found in the NPDES permit application submitted by the dischargers. *Id.* However, in performing the reasonable potential analysis for the final permit, EPA reviewed data based on discharge monitoring reports for 1998-2003 as summarized in the dischargers’ mixing zone application, as well as on its own independent review of 1998-2003 discharge monitoring reports. *Id.* EPA used the reasonable potential multiplier calculated by the dischargers in the mixing zone application. EPA noted that the multipliers did not incorporate all of the effluent data from the updated reasonable potential analysis. EPA, however, “determined that the multipliers are a reasonable approximation particularly for parameters with extended long-term monitoring data.” ER 227. Petitioners have not shown that the use of these data points was irrational, or that the law compels EPA to use a different method for accomplishing the reasonable potential analysis.

Petitioners assert that EPA improperly used a “measured maximum concentration” of total aromatic hydrocarbon (“TAH”) in produced water at the

Trading Bay Production Facility of 16,420 µg/L. Pet. Br. at 33-34. They claim that this figure was a “statistical outlier” which, pursuant to the Technical Support Document, should have been eliminated from EPA’s calculation of the reasonable expected maximum concentration of TAH, and that the WQBEL for TAH was inflated as a result. *Id.*, at 35.

In the first instance, it should be noted that Petitioners did not comment on this point, and therefore may not raise it now. *Marathon Oil Co.*, 807 F.2d at 767. In addition, agencies are to be accorded deference in scientific matters. *Great Basin Mine Watch v. Hankins*, 456 F.3d 955, 970 (9<sup>th</sup> Cir. 2006).

Second, Petitioners’ source for the TSD “requirement” that Z-score analyses must be performed to determine statistical outliers is simply a reference to a statistics treatise listed in the Technical Support Document’s “References” section. ER 962. As we have pointed out previously, the TSD is not compulsory, but simply guidance. Petitioners have not shown any binding authority requiring the statistical analysis they espouse.

In any case, it is not at all obvious that the TAH value at Trading Bay was an outlier. For example, the dischargers’ October 2005 mixing zone application shows maximum observed values of TAH of 89,350 µg/L at Platform Anna (ER 692); 11,870 µg/L at Platform Baker (ER 693); 65,500 µg/L at Platform Bruce,

with 58 samples (ER 694); and 16,840 µg/L at the Granite Point Tank Farm (54 samples) (ER 696). The TAH maximum of 16,420 µg/L at Trading Bay was the highest of 58 samples. ER 697. Petitioners have not shown that the 16,420 µg/L TAH value was in fact anomalous.

Petitioners also claim that EPA “fabricated” a measured maximum concentration of 103 µg/L for copper in the Trading Bay Production Facility produced water waste stream. Pet. Br. at 35-36. The highest measured value for copper reported in the dischargers’ October 2005 mixing zone application at Trading Bay was 11 µg/L. ER 697.

However, as noted in EPA’s response to comments regarding its updated reasonable potential analysis, ER 226-39, the Agency considered measured effluent data from the dischargers’ NPDES permit application, from the data included in the dischargers’ mixing zone application, and from “independently reviewing DMRs submitted by the dischargers December 1998-December 2003.” ER 226. EPA “used the maximum observed effluent concentrations from the three data sets in preparing” the reasonable potential analysis. *Id.* The highest maximum observed copper concentration for Trading Bay, as derived from EPA’s independent review of the discharge monitoring reports, was the 103 µg/L value

EPA used.<sup>10</sup> Petitioners have no basis for their claim that EPA “fabricated” that value.

Petitioners argue that EPA failed to calculate WQBELs that ensure compliance with “all applicable” water quality standards. Pet. Br. at 54-56. In fact, EPA’s methods in calculating WQBELs were conservative and consistent with the Clean Water Act.

Petitioners begin by describing a process for deriving water quality-based effluent limits that they assert is “required” by the Technical Support Document. Pet. Br. at 54-55. Their complaint is that “EPA, quite simply, failed to follow this methodology.” *Id.*, at 55. While recommending that the “statistical permit derivation procedure” described in Section 5.4 of the TSD be followed, “[t]he type of [waste load allocation] chosen from which to derive the limits is a matter of case-by-case application, as determined by the permitting authority.” TSD, ER 904. The method used by EPA was appropriate.

As described above, EPA reviewed the maximum *observed* effluent concentration for each parameter at each facility. Using statistical methods, the

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<sup>10</sup> In addition, reported maximum values for copper at some other Cook Inlet facilities were not dramatically different: 33 µg/L at Platform Anna, ER 229; 31 µg/L at East Forelands Production Facility, ER 233; 50 µg/L at the Granite Point Production Facility and Tank Farm, ER 234; and 272 µg/L at Tyonek A. ER 236.

*maximum* concentration of the pollutant was calculated. The “dilution factor” (*i.e.*, the maximum potential concentration divided by the water quality standard criteria limit) was applied to the maximum potential concentration at the edge of the mixing zone calculated by ADEC. That potential concentration at the edge of the mixing zone was then compared to the most stringent applicable water quality standard. If the potential concentration exceeded the standard, EPA determined that a “reasonable potential” to exceed the water quality standard had been established and a WQBEL must be imposed. ER 226.

ADEC’s Section 401 Water Quality Certification contained mixing zones for chronic exposures to hydrocarbons, metals, ammonia, whole effluent toxicity, and organics, and acute mixing zones for metals and ammonia. ER 74-76. ADEC based the mixing zones on “driver” pollutants, the constituent needing the most dilution to meet water quality standards. ER 237. Mixing zone sizes “were determined from the Reasonable Maximum Concentration (RMC) of the pollutant needing the greatest dilution, taking into account compliance with risk and the protection of all uses of the water body.” ADEC Final 401 Water Quality Certification, ER 69.

EPA took a conservative approach. It was concerned that using the parameter requiring the largest dilution to meet the water quality standards as the

driver would result in larger mixing zones for non-driver parameters than necessary. To limit the size of the mixing zones for the non-driver parameters, EPA established WQBELS for the “maximum daily effluent limits” (“MDEL”) for those parameters as the maximum projected effluent concentration (in cases where there was enough data to predict the upper endpoint of the concentration range.) ER 237. Then, using “best professional judgment,” EPA set the “average monthly effluent limit” (“AMEL”) for those parameters at two-thirds of the MDEL. *Id.* In addition, “[b]ecause of limited data for many parameters for individual facilities, EPA . . . determined that it is appropriate to include effluent limits at all facilities where a parameter shows reasonable potential at one or more facilities.” ER 228.

Finally, Petitioners argue that EPA failed to calculate acute limits on whole effluent toxicity and TAH. EPA did not do so because there are no acute Alaska water quality standards, only chronic ones, for those two parameters. 18 AAC 70.030; ER 69-70.

C. ADEC’s Modeling of Cook Inlet Was Reasonable and Is Entitled to Deference

As part of its argument that the WQBELS in the General Permit were improperly derived, Petitioners assert that the CORMIX model, used to determine the dilution of effluents from oil and gas facilities in Cook Inlet, was not appropriately operated. They claim that “EPA used CORMIX to *fabricate* and

*omit* critical conditions in Cook Inlet to make the pollutants appear as if they dispersed more rapidly than in reality, and thus could meet their [water quality standards] at the edges of the mixing zones requested by the dischargers.”

(Emphasis in original). Pet. Br. at 38. As described above, the CORMIX modeling complained of by Petitioners was actually performed by the dischargers (as part of their mixing zone application) and by ADEC, in its analysis of State mixing zone water quality standards.<sup>11/</sup>

Petitioners’ challenges to how the CORMIX model was used are as follows:

(a) a claim that the actual outfall configurations of the Trading Bay Production Facility, and certain surface discharges, were not modeled; (b) that certain discharges were not modeled as “toxic” in CORMIX and that actual reasonable maximum concentrations were not modeled; (c) that Cook Inlet should have been modeled as an estuary; and (d) that certain “critical design” conditions for estuaries or oceans were not modeled. Pet. Br. at 39. As we demonstrate below, the

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<sup>11/</sup> In addition, Petitioners base much of their arguments on certain CORMIX runs that were not part of the administrative record of this case. Petitioners filed a “Motion to Supplement the Administrative Record, to Require Preparation of a Privilege Log, and for Alternative Relief.” EPA filed a memorandum in opposition to the motion, and the Court deferred decision on the matter until consideration of the merits. Respondent EPA continues its objection to the consideration of the CORMIX material for the reasons set forth in its memorandum, *i.e.*, that those materials were not before EPA.



CORMIX model was appropriately and reasonably run, and the Court should give deference to the scientific and technical judgments of EPA and ADEC.

1. Outfall configurations and surface discharges

Citing CORMIX model runs which are not properly part of the record in this case (“PE 14, 16, 17”), Petitioners assert that modeling of a two-port outfall at the Trading Bay Production Facility showed a plume descending to the bottom of Cook Inlet. They claim that “EPA” ( in actuality, ADEC) then changed the outfall configuration in the model to a single port, “making the bottom contact and its attendant environmental risks disappear.” Pet. Br. at 40.

In May 2004, in response to ADEC’s questions, the dischargers’ consultant who prepared the mixing zone application explained that the use of the two-port outfall violated certain basic CORMIX model assumptions (*i.e.*, “low exit velocity speed compared to current speed”), and described how altering the configuration of the outfall port allowed a “work-around” with the model with “overall dilution predictions . . . not significantly effected [*sic*].” ER 706.

As to alleged plume contact with the bottom of Cook Inlet at Trading Bay, ADEC explained in a draft response to comment document that “Trading [B]ay was initially modeled as though the discharge pipe lay on the sea floor. It actually rests upon a concrete base which raises the plume off the sea floor.” ER 543.

There was therefore a reasoned basis for the results of the CORMIX modeling relating to the Trading Bay outfall.

Petitioners complain that although certain “chemically treated miscellaneous discharges” from a number of platforms come from outfalls above the surface, ADEC allowed the dischargers to model them as if they were discharges from under the surface. Pet. Br. at 40. The dischargers’ consultant responded to ADEC’s questions about why the surface discharges were modeled as sub-sea discharges, explaining that the results using the CORMIX3 model were not plausible. ER 705. After further consultations, the consultant, ADEC and EPA held a conversation with Robert Doneker, one of the developers of the CORMIX model. RSER 177. Mr. Doneker suggested an approach in which the discharge was simulated as if it occurred near the sea floor. *Id.* Petitioners claim that “Mr. Doneker’s recommendation . . . may not have been fully informed,” because “nothing in the record” shows that Mr. Doneker was informed that ADEC did not model slack tides or tidal reversal or that the discharges “might have resulted in bottom contact.” Pet. Br. at 41. This speculative spin is not sufficient to overcome the deference due to the scientific and technical judgment of ADEC and EPA. In any case, Petitioners do not offer a coherent argument that connects ADEC’s assumptions about tidal conditions with the problem addressed by Mr. Doneker,

which was how best to use the CORMIX model to estimate dilution of discharges to the surface of the receiving water.

2. Toxicity and Concentration Inputs Into CORMIX

Petitioners claim that in the first group of CORMIX model runs, ADEC did not enter into the model that produced water discharges are “toxic.” Pet. Br. at 41. In the second run, they claim that ADEC modeled the discharges as non-toxic, “but also made the run nonsensical by modeling the pollutant concentrations as 100 percent.”

First, Petitioners’ argument is a challenge to ADEC’s actions, and the CORMIX model printouts which form the basis of the challenge are not properly part of EPA’s administrative record. The CORMIX model was used to determine the amount of dilution at distance from the effluent outfall. The CORMIX model has the capability of providing other analytical predictions, but EPA and ADEC only used the model for dilution factors in the General Permit. Options in the CORMIX program to estimate effluent percentages and toxic pollutant characteristics were not used and not relevant to the mixing zone authorization. ER 226. CORMIX was being used to obtain dilution estimates; inputs regarding toxicity or lack thereof and pollutant concentrations were not relevant to the purpose for which the model was used.

### 3. Modeling Cook Inlet as an “Estuary” was not required

Petitioners claim that Cook Inlet “is plainly a tidal estuary,” but that it was modeled as an ocean. Pet. Br. at 43. EPA responded to a comment that an estuarine model should be used by deferring to ADEC’s establishment of the mixing zones. ER 224. ADEC stated that “[i]t is a matter of opinion as to whether Cook Inlet should or should not be considered an estuary.” ER 545. ADEC noted several definitions for “estuary” in the response to comments, and stated that Cook Inlet does not appear to have the variations in salinity with depth that would be expected of an estuary. ER 546. ADEC thus set forth its rationale for choosing to model Cook Inlet as “marine waters.” ER 545.

Furthermore, the name given the waterbody in the analysis (whether “estuary” or “ocean”) is not determinative of the dilution analysis. The actual site-specific characteristics of the discharge location are the relevant consideration.

Nevertheless, ADEC did use a 90<sup>th</sup> percentile current speed in the analysis, which was suggested in the TSD as a condition to be considered for estuarine modeling. ER 546; ER 880 (TSD). The courts generally “defer[ ] the determination of fit between the facts and the model” to the agency. *Chemical Mfr’s Ass’n v. EPA*, 28 F.3d 1259, 1265 (D.C. Cir. 1994). “That the model does not fit every application perfectly is no criticism; a model is meant to simplify

reality to make it tractable.” *Id.*, at 1264. A choice had to be made, and the choice made by ADEC was rational.

Petitioners claim that ADEC’s analysis was unfounded because it did not model tidal reversal, slack tide, or tidal reflux. Pet. Br. at 44-47. Petitioners claim that EPA failed to model “tidal reversal” and “inexplicably modeled Cook Inlet as a river . . . with the tide flowing out at all times.” Pet. Br. at 44.

The CORMIX model basically provides a snapshot of dilution in time. When considering a particular point in time, the current is moving in only one direction. In modeling the dilution-with-distance estimation with CORMIX, it is the magnitude of the current that is important, not its direction. That is the reason the model inputs only included positive current speeds. The purpose of the modeling is to determine the maximum radius of the mixing zone at an instant in time. Tidal reversal is explicitly recognized in the ADEC mixing zone analysis; for example, ADEC doubled the radial length of the mixing zones to account for tidal reversal. ER 62, 66. Doubling the radius of the mixing zone accounts for currents passing by the outfall in both directions.

With regard to slack tides, ADEC responded to the comments of Petitioners’ consultant, indicating that it did in fact consider slack tides. ER 541-42. ADEC considered the range in tidal conditions by analyzing dilution at low (10<sup>th</sup>

percentile) and high (90<sup>th</sup> percentile) current speeds.<sup>12/</sup> ADEC responded to the slack tide comment by citing the TSD, which states that “the 10<sup>th</sup> percentile value . . . of each parameter should be used to define the period of minimum dilution.” ER 541-42. The use of a low current speed, rather than zero current speed (*i.e.*, completely “slack” currents) is also supported in the CORMIX user manual, which cites model limitations in simulating stagnant conditions and states that “the simulation of stagnant conditions should be avoided . . . a real water body never is truly stagnant. Therefore, a more realistic assumption for natural water bodies would be to consider a small, but finite, ambient crossflow.” RSER 178-79.

In addition, ADEC considered tidal reflux. Tidal reflux is a term that refers to limitations in the overall flushing capacity of the water body. ADEC responded to this concern, stating that “because Cook Inlet is a very dynamic water body, and because of the tremendous tidal exchange volumes,” the permitting authorities and the dischargers determined that tidal reflux need not be analyzed. ER 541-42.

#### D. Critical Design Conditions for Ocean Environment

Petitioners argue that ADEC did not model certain “critical design” conditions for estuaries or oceans, including (a) thermal or saline stratification; (b)

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<sup>12/</sup> The “10<sup>th</sup> percentile current” is the current speed that is slower than 90 percent of current speeds in a particular water, and the “90<sup>th</sup> percentile current” is the speed faster than 90 percent of current speeds.

realistic current speeds; (c) low and high end currents; and (d) the actual Cook Inlet tidal cycle. Pet. Br. at 48-49.

As to stratification, ADEC noted in its draft response to comment document that the dischargers' modeling consultant, Parametrix, reviewed density and stratification. ER 542. The studies indicated some stratification in mid-channel, but the consultant "did not feel comfortable extrapolating the mid-channel information to the facilities in question since the outfalls are fairly near-shore." ER 542, 708.

With regard to current speeds, Petitioners assert that ADEC overestimated current speeds, which in turn overestimates available dilution. Pet. Br. at 50-51. EPA's response to comments asserts that a high current speed assumption is protective. CORMIX "explicitly accounts for changes in dilution caused by changes in ambient current speeds. The critical condition for these discharges occurs when the discharge concentration is at the maximum permit limit and the current speed is high (*e.g.*, 90<sup>th</sup> percentile velocity)." RSER 180. The use of a higher current speed would mean that "the plume travels to the mixing zone boundary quickly, and the dilution at the mixing zone boundary is lower than the dilution at a lower current speed." *Id.* Thus, the use of a high current speed provides a more accurate basis for estimating the full extent of the mixing zone.

*Id.* ADEC's choice of current speeds was rational and a permissible technical choice that is entitled to deference.

Petitioners claim that ADEC did not model the true neap and spring tide current speeds, but instead "combined the simulated spring and neap tide current speeds, thereby eliminating the true high and low currents from the range of currents it modeled." Pet. Br. at 51-52. Petitioners did not raise this point in comments and are therefore foreclosed from raising it here. *Marathon Oil Co.*, 807 F.2d at 767. In any case, the selection of 10<sup>th</sup> and 90<sup>th</sup> percentile current speeds is consistent with the Technical Support Document and provides a reasonable representation of the range of conditions in the area.

Finally, Petitioners argue that Cook Inlet was modeled as if it had a 48-hour tidal cycle, stating that such method resulted in the simulation of a period of lowest dilution every 48 hours, rather than four times of lowest dilution during that period. Pet. Br. at 53. Petitioners' argument is based upon a misinterpretation of the purpose of the statistical analysis, which was conducted to determine current speeds rather than direction. The 10<sup>th</sup> percentile and 90<sup>th</sup> percentile currents were determined from data collected in the 48-hour period with the highest and lowest current speeds measured in 2004. AR 22804 The use of a 48-hour data "window" for statistical analysis is not related to the semi-diurnal nature of the tidal cycle.



CONCLUSION

EPA has contemporaneously filed a motion for partial voluntary partial remand of that portion of the General Permit that relates to water quality-based effluent limits. The Court should remand those portions of the General Permit for reconsideration by EPA, but without vacating the General Permit. The balance of the General Permit's provisions are reasonable, supported by the record, and should be afforded deference as the result of EPA's scientific and technical determinations.

Respectfully submitted,

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Dated: March 15, 2010

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## **STATEMENT OF RELATED CASES**

Respondents are not aware of any related case pending in this Court within the meaning of Circuit Rule 28-2.6

## **CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME REQUIREMENTS**

This brief complies with the type-volume limitation of Fed. R. Civ. P. 32(a)(7)(B) because this brief contains 13,761 words, excluding parts of the brief exempted by Fed. R. App. P. 32(a)(7)(B)(iii).

COUNSEL FOR RESPONDENTS:

Dated: March 15, 2010

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## **CERTIFICATE OF SERVICE**

I hereby certify that I served the foregoing RESPONDENTS' ANSWER BRIEF by Notice of Electronic Filing using the Court's CM/ECF system, which will send notice of such filing via email to all counsel of record. Additionally, RESPONDENTS' SUPPLEMENTAL EXCERPTS OF RECORD was served via Federal Express, Standard Overnight Service (March 15, 2010) on:

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Said filing was made on or before the date set forth below.

Dated: March 15, 2010

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**ADDENDUM**

<u>Addendum Page</u>	<u>Citation</u>	<u>Title</u>
1	5 U.S.C. § 706	Scope of Review
2	33 U.S.C. § 1311	Effluent Limitations
10	33 U.S.C. § 1313	Water Quality Standards and Implementation Plans
14	33 U.S.C. § 1314	Information and Guidelines
19	33 U.S.C. § 1341	Certification
20	33 U.S.C. § 1342	National Pollutant Discharge Elimination System
27	33 U.S.C. § 1362	Definitions
29	40 C.F.R. § 122.28	General Permits
32	40 C.F.R. § 122.44	Establishing Limitations, Standards, and Other Permit Conditions
39	40 C.F.R. § 124.10	Public Notice of Permit Actions and Public Comment Period
43	40 C.F.R. § 124.53	State Certification
45	40 C.F.R. § 125.3	Technology-Based Treatment Requirements in Permits
50	40 C.F.R. § 131.3	Definitions
52	40 C.F.R. § 131.12	Antidegradation Policy
53	40 C.F.R. § 131.13	General Policies

<u>Addendum Page</u>	<u>Citation</u>	<u>Title</u>
55	40 C.F.R. § 435.13	Effluent Limitations Guidelines Representing the Degree of Effluent Reduction Attainable by the Application of the Best Available Technology Economically Achievable (BAT)
58	40 C.F.R. § Part 435 Subpart D	Coastal Subcategory
67	18 AAC 15.060	Public Hearings
69	18 AAC 15.140	Public Notice
70	18 AAC 15.150	Public Hearings
71	18 AAC 70.010	General
73	18 AAC 70.015	Antidegradation Policy
75	18 AAC 70.030	Whole Effluent Toxicity Limit
77	18 AAC 70.240	Mixing Zones
82	18 AAC 70.990	Definitions

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5 U.S.C.A. § 706

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**C**

**Effective:[See Text Amendments]**

United States Code Annotated Currentness  
Title 5. Government Organization and Employees (Refs & Annos)  
    ▣ Part I. The Agencies Generally  
        ▣ Chapter 7. Judicial Review (Refs & Annos)  
            → § 706. Scope of review

To the extent necessary to decision and when presented, the reviewing court shall decide all relevant questions of law, interpret constitutional and statutory provisions, and determine the meaning or applicability of the terms of an agency action. The reviewing court shall--

- (1) compel agency action unlawfully withheld or unreasonably delayed; and
- (2) hold unlawful and set aside agency action, findings, and conclusions found to be--
  - (A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law;
  - (B) contrary to constitutional right, power, privilege, or immunity;
  - (C) in excess of statutory jurisdiction, authority, or limitations, or short of statutory right;
  - (D) without observance of procedure required by law;
  - (E) unsupported by substantial evidence in a case subject to sections 556 and 557 of this title or otherwise reviewed on the record of an agency hearing provided by statute; or
  - (F) unwarranted by the facts to the extent that the facts are subject to trial de novo by the reviewing court.

In making the foregoing determinations, the court shall review the whole record or those parts of it cited by a party, and due account shall be taken of the rule of prejudicial error.

CREDIT(S)

(Pub.L. 89-554, Sept. 6, 1966, 80 Stat. 393.)

Current through P.L. 111-144 approved 3-2-10

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**(d) Cost-sharing**

The Federal share of the cost of activities carried out using amounts from a grant made under subsection (a) of this section shall be not less than 55 percent of the cost. The non-Federal share of the cost may include, in any amount, public and private funds and in-kind services, and may include, notwithstanding section 1383(h) of this title, financial assistance, including loans, from a State water pollution control revolving fund.

**(e) Administrative reporting requirements**

If a project receives grant assistance under subsection (a) of this section and loan assistance from a State water pollution control revolving fund and the loan assistance is for 15 percent or more of the cost of the project, the project may be administered in accordance with State water pollution control revolving fund administrative reporting requirements for the purposes of streamlining such requirements.

**(f) Authorization of appropriations**

There is authorized to be appropriated to carry out this section \$750,000,000 for each of fiscal years 2002 and 2003. Such sums shall remain available until expended.

**(g) Allocation of funds****(1) Fiscal year 2002**

Subject to subsection (h) of this section, the Administrator shall use the amounts appropriated to carry out this section for fiscal year 2002 for making grants to municipalities and municipal entities under subsection (a)(2) of this section, in accordance with the criteria set forth in subsection (b) of this section.

**(2) Fiscal year 2003**

Subject to subsection (h) of this section, the Administrator shall use the amounts appropriated to carry out this section for fiscal year 2003 as follows:

(A) Not to exceed \$250,000,000 for making grants to municipalities and municipal entities under subsection (a)(2) of this section, in accordance with the criteria set forth in subsection (b) of this section.

(B) All remaining amounts for making grants to States under subsection (a)(1) of this section, in accordance with a formula to be established by the Administrator, after providing notice and an opportunity for public comment, that allocates to each State a proportional share of such amounts based on the total needs of the State for municipal combined sewer overflow controls and sanitary sewer overflow controls identified in the most recent survey conducted pursuant to section 1375(b)(1) of this title.

**(h) Administrative expenses**

Of the amounts appropriated to carry out this section for each fiscal year—

(1) the Administrator may retain an amount not to exceed 1 percent for the reasonable and necessary costs of administering this section; and

(2) the Administrator, or a State, may retain an amount not to exceed 4 percent of any grant made to a municipality or municipal en-

tity under subsection (a) of this section, for the reasonable and necessary costs of administering the grant.

**(i) Reports**

Not later than December 31, 2003, and periodically thereafter, the Administrator shall transmit to Congress a report containing recommended funding levels for grants under this section. The recommended funding levels shall be sufficient to ensure the continued expeditious implementation of municipal combined sewer overflow and sanitary sewer overflow controls nationwide.

(June 30, 1948, ch. 758, title II, §221, as added Pub. L. 106-554, §1(a)(4) [div. B, title I, §112(c)], Dec. 21, 2000, 114 Stat. 2763, 2763A-225.)

**INFORMATION ON CSOS AND SSOS**

Pub. L. 106-554, §1(a)(4) [div. B, title I, §112(d)], Dec. 21, 2000, 114 Stat. 2763, 2763A-227, provided that:

"(1) **REPORT TO CONGRESS.**—Not later than 3 years after the date of enactment of this Act [Dec. 21, 2000], the Administrator of the Environmental Protection Agency shall transmit to Congress a report summarizing—

"(A) the extent of the human health and environmental impacts caused by municipal combined sewer overflows and sanitary sewer overflows, including the location of discharges causing such impacts, the volume of pollutants discharged, and the constituents discharged;

"(B) the resources spent by municipalities to address these impacts; and

"(C) an evaluation of the technologies used by municipalities to address these impacts.

"(2) **TECHNOLOGY CLEARINGHOUSE.**—After transmitting a report under paragraph (1), the Administrator shall maintain a clearinghouse of cost-effective and efficient technologies for addressing human health and environmental impacts due to municipal combined sewer overflows and sanitary sewer overflows."

**SUBCHAPTER III—STANDARDS AND ENFORCEMENT****§ 1311. Effluent limitations****(a) Illegality of pollutant discharges except in compliance with law**

Except as in compliance with this section and sections 1312, 1316, 1317, 1328, 1342, and 1344 of this title, the discharge of any pollutant by any person shall be unlawful.

**(b) Timetable for achievement of objectives**

In order to carry out the objective of this chapter there shall be achieved—

(1)(A) not later than July 1, 1977, effluent limitations for point sources, other than publicly owned treatment works, (i) which shall require the application of the best practicable control technology currently available as defined by the Administrator pursuant to section 1314(b) of this title, or (ii) in the case of a discharge into a publicly owned treatment works which meets the requirements of subparagraph (B) of this paragraph, which shall require compliance with any applicable pretreatment requirements and any requirements under section 1317 of this title; and

(B) for publicly owned treatment works in existence on July 1, 1977, or approved pursuant to section 1283 of this title prior to June 30,



1974 (for which construction must be completed within four years of approval), effluent limitations based upon secondary treatment as defined by the Administrator pursuant to section 1314(d)(1) of this title; or,

(C) not later than July 1, 1977, any more stringent limitation, including those necessary to meet water quality standards, treatment standards, or schedules of compliance, established pursuant to any State law or regulations (under authority preserved by section 1370 of this title) or any other Federal law or regulation, or required to implement any applicable water quality standard established pursuant to this chapter.

(2)(A) for pollutants identified in subparagraphs (C), (D), and (F) of this paragraph, effluent limitations for categories and classes of point sources, other than publicly owned treatment works, which (i) shall require application of the best available technology economically achievable for such category or class, which will result in reasonable further progress toward the national goal of eliminating the discharge of all pollutants, as determined in accordance with regulations issued by the Administrator pursuant to section 1314(b)(2) of this title, which such effluent limitations shall require the elimination of discharges of all pollutants if the Administrator finds, on the basis of information available to him (including information developed pursuant to section 1325 of this title), that such elimination is technologically and economically achievable for a category or class of point sources as determined in accordance with regulations issued by the Administrator pursuant to section 1314(b)(2) of this title, or (ii) in the case of the introduction of a pollutant into a publicly owned treatment works which meets the requirements of subparagraph (B) of this paragraph, shall require compliance with any applicable pretreatment requirements and any other requirement under section 1317 of this title;

(B) Repealed. Pub. L. 97-117, §21(b), Dec. 29, 1981, 95 Stat. 1632.

(C) with respect to all toxic pollutants referred to in table 1 of Committee Print Numbered 95-30 of the Committee on Public Works and Transportation of the House of Representatives compliance with effluent limitations in accordance with subparagraph (A) of this paragraph as expeditiously as practicable but in no case later than three years after the date such limitations are promulgated under section 1314(b) of this title, and in no case later than March 31, 1989;

(D) for all toxic pollutants listed under paragraph (1) of subsection (a) of section 1317 of this title which are not referred to in subparagraph (C) of this paragraph compliance with effluent limitations in accordance with subparagraph (A) of this paragraph as expeditiously as practicable, but in no case later than three years after the date such limitations are promulgated under section 1314(b) of this title, and in no case later than March 31, 1989;

(E) as expeditiously as practicable but in no case later than three years after the date such limitations are promulgated under section 1314(b) of this title, and in no case later than March 31, 1989, compliance with effluent limitations for categories and classes of point sources, other than publicly owned treatment works, which in the case of pollutants identified pursuant to section 1314(a)(4) of this title shall require application of the best conventional pollutant control technology as determined in accordance with regulations issued by the Administrator pursuant to section 1314(b)(4) of this title; and

(F) for all pollutants (other than those subject to subparagraphs (C), (D), or (E) of this paragraph) compliance with effluent limitations in accordance with subparagraph (A) of this paragraph as expeditiously as practicable but in no case later than 3 years after the date such limitations are established, and in no case later than March 31, 1989.

(3)(A) for effluent limitations under paragraph (1)(A)(i) of this subsection promulgated after January 1, 1982, and requiring a level of control substantially greater or based on fundamentally different control technology than under permits for an industrial category issued before such date, compliance as expeditiously as practicable but in no case later than three years after the date such limitations are promulgated under section 1314(b) of this title, and in no case later than March 31, 1989; and

(B) for any effluent limitation in accordance with paragraph (1)(A)(i), (2)(A)(i), or (2)(E) of this subsection established only on the basis of section 1342(a)(1) of this title in a permit issued after February 4, 1987, compliance as expeditiously as practicable but in no case later than three years after the date such limitations are established, and in no case later than March 31, 1989.

#### (c) Modification of timetable

The Administrator may modify the requirements of subsection (b)(2)(A) of this section with respect to any point source for which a permit application is filed after July 1, 1977, upon a showing by the owner or operator of such point source satisfactory to the Administrator that such modified requirements (1) will represent the maximum use of technology within the economic capability of the owner or operator; and (2) will result in reasonable further progress toward the elimination of the discharge of pollutants.

#### (d) Review and revision of effluent limitations

Any effluent limitation required by paragraph (2) of subsection (b) of this section shall be reviewed at least every five years and, if appropriate, revised pursuant to the procedure established under such paragraph.

#### (e) All point discharge source application of effluent limitations

Effluent limitations established pursuant to this section or section 1312 of this title shall be applied to all point sources of discharge of pollutants in accordance with the provisions of this chapter.

**(f) Illegality of discharge of radiological, chemical, or biological warfare agents, high-level radioactive waste, or medical waste**

Notwithstanding any other provisions of this chapter it shall be unlawful to discharge any radiological, chemical, or biological warfare agent, any high-level radioactive waste, or any medical waste, into the navigable waters.

**(g) Modifications for certain nonconventional pollutants**

**(1) General authority**

The Administrator, with the concurrence of the State, may modify the requirements of subsection (b)(2)(A) of this section with respect to the discharge from any point source of ammonia, chlorine, color, iron, and total phenols (4AAP) (when determined by the Administrator to be a pollutant covered by subsection (b)(2)(F) of this section) and any other pollutant which the Administrator lists under paragraph (4) of this subsection.

**(2) Requirements for granting modifications**

A modification under this subsection shall be granted only upon a showing by the owner or operator of a 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, 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.

**(3) Limitation on authority to apply for subsection (c) modification**

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 pollutant only during the same time period as he is eligible to apply for a modification under this subsection.

**(4) Procedures for listing additional pollutants**

**(A) General authority**

Upon petition of any person, the Administrator may add any pollutant to the list of pollutants for which modification under this section is authorized (except for pollutants identified pursuant to section 1314(a)(4) of

this title, toxic pollutants subject to section 1317(a) of this title, and the thermal component of discharges) in accordance with the provisions of this paragraph.

**(B) Requirements for listing**

**(i) Sufficient information**

The person petitioning for listing of an additional pollutant under this subsection shall submit to the Administrator sufficient information to make the determinations required by this subparagraph.

**(ii) Toxic criteria determination**

The Administrator shall determine whether or not the pollutant meets the criteria for listing as a toxic pollutant under section 1317(a) of this title.

**(iii) Listing as toxic pollutant**

If the Administrator determines that the pollutant meets the criteria for listing as a toxic pollutant under section 1317(a) of this title, the Administrator shall list the pollutant as a toxic pollutant under section 1317(a) of this title.

**(iv) Nonconventional criteria determination**

If the Administrator determines that the pollutant does not meet the criteria for listing as a toxic pollutant under such section and determines that adequate test methods and sufficient data are available to make the determinations required by paragraph (2) of this subsection with respect to the pollutant, the Administrator shall add the pollutant to the list of pollutants specified in paragraph (1) of this subsection for which modifications are authorized under this subsection.

**(C) Requirements for filing of petitions**

A petition for listing of a pollutant under this paragraph—

(i) must be filed not later than 270 days after the date of promulgation of an applicable effluent guideline under section 1314 of this title;

(ii) may be filed before promulgation of such guideline; and

(iii) may be filed with an application for a modification under paragraph (1) with respect to the discharge of such pollutant.

**(D) Deadline for approval of petition**

A decision to add a pollutant to the list of pollutants for which modifications under this subsection are authorized must be made within 270 days after the date of promulgation of an applicable effluent guideline under section 1314 of this title.

**(E) Burden of proof**

The burden of proof for making the determinations under subparagraph (B) shall be on the petitioner.

**(5) Removal of pollutants**

The Administrator may remove any pollutant from the list of pollutants for which modifications are authorized under this subsection if the Administrator determines that adequate

test methods and sufficient data are no longer available for determining whether or not modifications may be granted with respect to such pollutant under paragraph (2) of this subsection.

**(h) Modification of secondary treatment requirements**

The Administrator, with the concurrence of the State, may issue a permit under section 1342 of this title which modifies the requirements of subsection (b)(1)(B) of this section with respect to the discharge of any pollutant from a publicly owned treatment works into marine waters, if the applicant demonstrates to the satisfaction of the Administrator that—

(1) there is an applicable water quality standard specific to the pollutant for which the modification is requested, which has been identified under section 1314(a)(6) of this title;

(2) the discharge of pollutants in accordance with such modified requirements will not interfere, alone or in combination with pollutants from other sources, with the attainment or maintenance of that water quality which assures protection of public water supplies and the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife, and allows recreational activities, in and on the water;

(3) the applicant has established a system for monitoring the impact of such discharge on a representative sample of aquatic biota, to the extent practicable, and the scope of such monitoring is limited to include only those scientific investigations which are necessary to study the effects of the proposed discharge;

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

(5) all applicable pretreatment requirements for sources introducing waste into such treatment works will be enforced;

(6) in the case of any treatment works serving a population of 50,000 or more, with respect to any toxic pollutant introduced into such works by an industrial discharger for which pollutant there is no applicable pretreatment requirement in effect, sources introducing waste into such works are in compliance with all applicable pretreatment requirements, the applicant will enforce such requirements, and the applicant has in effect a pretreatment program which, in combination with the treatment of discharges from such works, removes the same amount of such pollutant as would be removed if such works were to apply secondary treatment to discharges and if such works had no pretreatment program with respect to such pollutant;

(7) to the extent practicable, the applicant has established a schedule of activities designed to eliminate the entrance of toxic pollutants from nonindustrial sources into such treatment works;

(8) there will be no new or substantially increased discharges from the point source of the pollutant to which the modification applies above that volume of discharge specified in the permit;

(9) the applicant at the time such modification becomes effective will be discharging ef-

fluent which has received at least primary or equivalent treatment and which meets the criteria established under section 1314(a)(1) of this title after initial mixing in the waters surrounding or adjacent to the point at which such effluent is discharged.

For the purposes of this subsection the phrase "the discharge of any pollutant into marine waters" refers to a discharge into deep waters of the territorial sea or the waters of the contiguous zone, or into saline estuarine waters where there is strong tidal movement and other hydrological and geological characteristics which the Administrator determines necessary to allow compliance with paragraph (2) of this subsection, and section 1251(a)(2) of this title. For the purposes of paragraph (9), "primary or equivalent treatment" means treatment by screening, sedimentation, and skimming adequate to remove at least 30 percent of the biological oxygen demanding material and of the suspended solids in the treatment works influent, and disinfection, where appropriate. A municipality which applies secondary treatment shall be eligible to receive a permit pursuant to this subsection which modifies the requirements of subsection (b)(1)(B) of this section with respect to the discharge of any pollutant from any treatment works owned by such municipality into marine waters. No permit issued under this subsection shall authorize the discharge of sewage sludge into marine waters. In order for a permit to be issued under this subsection for the discharge of a pollutant into marine waters, such marine waters must exhibit characteristics assuring that water providing dilution does not contain significant amounts of previously discharged effluent from such treatment works. No permit issued under this subsection shall authorize the discharge of any pollutant into saline estuarine waters which at the time of application do not support a balanced indigenous population of shellfish, fish and wildlife, or allow recreation in and on the waters or which exhibit ambient water quality below applicable water quality standards adopted for the protection of public water supplies, shellfish, fish and wildlife or recreational activities or such other standards necessary to assure support and protection of such uses. The prohibition contained in the preceding sentence shall apply without regard to the presence or absence of a causal relationship between such characteristics and the applicant's current or proposed discharge. Notwithstanding any other provisions of this subsection, no permit may be issued under this subsection for discharge of a pollutant into the New York Bight Apex consisting of the ocean waters of the Atlantic Ocean westward of 73 degrees 30 minutes west longitude and northward of 40 degrees 10 minutes north latitude.

**(i) Municipal time extensions**

(1) Where construction is required in order for a planned or existing publicly owned treatment works to achieve limitations under subsection (b)(1)(B) or (b)(1)(C) of this section, but (A) construction cannot be completed within the time required in such subsection, or (B) the United States has failed to make financial assistance under this chapter available in time to achieve



such limitations by the time specified in such subsection, the owner or operator of such treatment works may request the Administrator (or if appropriate the State) to issue a permit pursuant to section 1342 of this title or to modify a permit issued pursuant to that section to extend such time for compliance. Any such request shall be filed with the Administrator (or if appropriate the State) within 180 days after February 4, 1987. The Administrator (or if appropriate the State) may grant such request and issue or modify such a permit, which shall contain a schedule of compliance for the publicly owned treatment works based on the earliest date by which such financial assistance will be available from the United States and construction can be completed, but in no event later than July 1, 1988, and shall contain such other terms and conditions, including those necessary to carry out subsections (b) through (g) of section 1281 of this title, section 1317 of this title, and such interim effluent limitations applicable to that treatment works as the Administrator determines are necessary to carry out the provisions of this chapter.

(2)(A) Where a point source (other than a publicly owned treatment works) will not achieve the requirements of subsections (b)(1)(A) and (b)(1)(C) of this section and—

(i) if a permit issued prior to July 1, 1977, to such point source is based upon a discharge into a publicly owned treatment works; or

(ii) if such point source (other than a publicly owned treatment works) had before July 1, 1977, a contract (enforceable against such point source) to discharge into a publicly owned treatment works; or

(iii) if either an application made before July 1, 1977, for a construction grant under this chapter for a publicly owned treatment works, or engineering or architectural plans or working drawings made before July 1, 1977, for a publicly owned treatment works, show that such point source was to discharge into such publicly owned treatment works,

and such publicly owned treatment works is presently unable to accept such discharge without construction, and in the case of a discharge to an existing publicly owned treatment works, such treatment works has an extension pursuant to paragraph (1) of this subsection, the owner or operator of such point source may request the Administrator (or if appropriate the State) to issue or modify such a permit pursuant to such section 1342 of this title to extend such time for compliance. Any such request shall be filed with the Administrator (or if appropriate the State) within 180 days after December 27, 1977, or the filing of a request by the appropriate publicly owned treatment works under paragraph (1) of this subsection, whichever is later. If the Administrator (or if appropriate the State) finds that the owner or operator of such point source has acted in good faith, he may grant such request and issue or modify such a permit, which shall contain a schedule of compliance for the point source to achieve the requirements of subsections (b)(1)(A) and (C) of this section and shall contain such other terms and conditions, including pretreatment and interim effluent limitations and water conservation require-

ments applicable to that point source, as the Administrator determines are necessary to carry out the provisions of this chapter.

(B) No time modification granted by the Administrator (or if appropriate the State) pursuant to paragraph (2)(A) of this subsection shall extend beyond the earliest date practicable for compliance or beyond the date of any extension granted to the appropriate publicly owned treatment works pursuant to paragraph (1) of this subsection, but in no event shall it extend beyond July 1, 1988; and no such time modification shall be granted unless (i) the publicly owned treatment works will be in operation and available to the point source before July 1, 1988, and will meet the requirements of subsections (b)(1)(B) and (C) of this section after receiving the discharge from that point source; and (ii) the point source and the publicly owned treatment works have entered into an enforceable contract requiring the point source to discharge into the publicly owned treatment works, the owner or operator of such point source to pay the costs required under section 1284 of this title, and the publicly owned treatment works to accept the discharge from the point source; and (iii) the permit for such point source requires that point source to meet all requirements under section 1317(a) and (b) of this title during the period of such time modification.

**(j) Modification procedures**

(1) Any application filed under this section for a modification of the provisions of—

(A) subsection (b)(1)(B) of this section under subsection (h) of this section shall be filed not later than<sup>1</sup> the 365th day which begins after December 29, 1981, except that a publicly owned treatment works which prior to December 31, 1982, had a contractual arrangement to use a portion of the capacity of an ocean outfall operated by another publicly owned treatment works which has applied for or received modification under subsection (h) of this section, may apply for a modification of subsection (h) of this section in its own right not later than 30 days after February 4, 1987, and except as provided in paragraph (5);

(B) subsection (b)(2)(A) of this section as it applies to pollutants identified in subsection (b)(2)(F) of this section shall be filed not later than 270 days after the date of promulgation of an applicable effluent guideline under section 1314 of this title or not later than 270 days after December 27, 1977, whichever is later.

(2) Subject to paragraph (3) of this section, any application for a modification filed under subsection (g) of this section shall not operate to stay any requirement under this chapter, 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, persistence in the environment, acute toxicity, chronic toxicity (including carcinogenicity, mutagenicity, or teratogenicity), or synergistic propensities, and that there is a substantial likelihood

<sup>1</sup> So in original. Probably should be "than".

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.

**(3) COMPLIANCE REQUIREMENTS UNDER SUBSECTION (g).—**

**(A) EFFECT OF FILING.**—An application for a modification under subsection (g) of this section and a petition for listing of a pollutant as a pollutant for which modifications are authorized under such subsection shall not stay the requirement that the person seeking such modification or listing comply with effluent limitations under this chapter for all pollutants not the subject of such application or petition.

**(B) EFFECT OF DISAPPROVAL.**—Disapproval of an application for a modification under subsection (g) of this section shall not stay the requirement that the person seeking such modification comply with all applicable effluent limitations under this chapter.

**(4) DEADLINE FOR SUBSECTION (g) DECISION.**—An application for a modification with respect to a pollutant filed under subsection (g) of this section must be approved or disapproved not later than 365 days after the date of such filing; except that in any case in which a petition for listing such pollutant as a pollutant for which modifications are authorized under such subsection is approved, such application must be approved or disapproved not later than 365 days after the date of approval of such petition.

**(5) EXTENSION OF APPLICATION DEADLINE.**—

**(A) IN GENERAL.**—In the 180-day period beginning on October 31, 1994, the city of San Diego, California, may apply for a modification pursuant to subsection (h) of this section of the requirements of subsection (b)(1)(B) of this section with respect to biological oxygen demand and total suspended solids in the effluent discharged into marine waters.

**(B) APPLICATION.**—An application under this paragraph shall include a commitment by the applicant to implement a waste water reclamation program that, at a minimum, will—

(i) achieve a system capacity of 45,000,000 gallons of reclaimed waste water per day by January 1, 2010; and

(ii) result in a reduction in the quantity of suspended solids discharged by the applicant into the marine environment during the period of the modification.

**(C) ADDITIONAL CONDITIONS.**—The Administrator may not grant a modification pursuant to an application submitted under this paragraph unless the Administrator determines that such modification will result in removal of not less than 58 percent of the biological oxygen demand (on an annual average) and not less than 80 percent of total suspended solids (on a monthly average) in the discharge to which the application applies.

**(D) PRELIMINARY DECISION DEADLINE.**—The Administrator shall announce a preliminary decision on an application submitted under

this paragraph not later than 1 year after the date the application is submitted.

**(k) Innovative technology**

In the case of any facility subject to a permit under section 1342 of this title which proposes to comply with the requirements of subsection (b)(2)(A) or (b)(2)(E) of this section by replacing existing production capacity with an innovative production process which will result in an effluent reduction significantly greater than that required by the limitation otherwise applicable to such facility and moves toward the national goal of eliminating the discharge of all pollutants, or with the installation of an innovative control technique that has a substantial likelihood for enabling the facility to comply with the applicable effluent limitation by achieving a significantly greater effluent reduction than that required by the applicable effluent limitation and moves toward the national goal of eliminating the discharge of all pollutants, or by achieving the required reduction with an innovative system that has the potential for significantly lower costs than the systems which have been determined by the Administrator to be economically achievable, the Administrator (or the State with an approved program under section 1342 of this title, in consultation with the Administrator) may establish a date for compliance under subsection (b)(2)(A) or (b)(2)(E) of this section no later than two years after the date for compliance with such effluent limitation which would otherwise be applicable under such subsection, if it is also determined that such innovative system has the potential for industrywide application.

**(l) Toxic pollutants**

Other than as provided in subsection (n) of this section, the Administrator may not modify any requirement of this section as it applies to any specific pollutant which is on the toxic pollutant list under section 1317(a)(1) of this title.

**(m) Modification of effluent limitation requirements for point sources**

(1) The Administrator, with the concurrence of the State, may issue a permit under section 1342 of this title which modifies the requirements of subsections (b)(1)(A) and (b)(2)(E) of this section, and of section 1343 of this title, with respect to effluent limitations to the extent such limitations relate to biochemical oxygen demand and pH from discharges by an industrial discharger in such State into deep waters of the territorial seas, if the applicant demonstrates and the Administrator finds that—

(A) the facility for which modification is sought is covered at the time of the enactment of this subsection by National Pollutant Discharge Elimination System permit number CA0005894 or CA0005282;

(B) the energy and environmental costs of meeting such requirements of subsections (b)(1)(A) and (b)(2)(E) of this section and section 1343 of this title exceed by an unreasonable amount the benefits to be obtained, including the objectives of this chapter;

(C) the applicant has established a system for monitoring the impact of such discharges on a representative sample of aquatic biota;

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

(E) there will be no new or substantially increased discharges from the point source of the pollutant to which the modification applies above that volume of discharge specified in the permit;

(F) the discharge is into waters where there is strong tidal movement and other hydrological and geological characteristics which are necessary to allow compliance with this subsection and section 1251(a)(2) of this title;

(G) the applicant accepts as a condition to the permit a contractual<sup>2</sup> obligation to use funds in the amount required (but not less than \$250,000 per year for ten years) for research and development of water pollution control technology, including but not limited to closed cycle technology;

(H) the facts and circumstances present a unique situation which, if relief is granted, will not establish a precedent or the relaxation of the requirements of this chapter applicable to similarly situated discharges; and

(I) no owner or operator of a facility comparable to that of the applicant situated in the United States has demonstrated that it would be put at a competitive disadvantage to the applicant (or the parent company or any subsidiary thereof) as a result of the issuance of a permit under this subsection.

(2) The effluent limitations established under a permit issued under paragraph (1) shall be sufficient to implement the applicable State water quality standards, to assure the protection of public water supplies and protection and propagation of a balanced, indigenous population of shellfish, fish, fauna, wildlife, and other aquatic organisms, and to allow recreational activities in and on the water. In setting such limitations, the Administrator shall take into account any seasonal variations and the need for an adequate margin of safety, considering the lack of essential knowledge concerning the relationship between effluent limitations and water quality and the lack of essential knowledge of the effects of discharges on beneficial uses of the receiving waters.

(3) A permit under this subsection may be issued for a period not to exceed five years, and such a permit may be renewed for one additional period not to exceed five years upon a demonstration by the applicant and a finding by the Administrator at the time of application for any such renewal that the provisions of this subsection are met.

(4) The Administrator may terminate a permit issued under this subsection if the Administrator determines that there has been a decline in ambient water quality of the receiving waters during the period of the permit even if a direct cause and effect relationship cannot be shown: *Provided*, That if the effluent from a source with a permit issued under this subsection is contributing to a decline in ambient water quality of the receiving waters, the Administrator shall terminate such permit.

<sup>2</sup>So in original. Probably should be "contractual".

#### (n) Fundamentally different factors

##### (1) General rule

The Administrator, with the concurrence of the State, may establish an alternative requirement under subsection (b)(2) of this section or section 1317(b) of this title for a facility that modifies the requirements of national effluent limitation guidelines or categorical pretreatment standards that would otherwise be applicable to such facility, if the owner or operator of such facility demonstrates to the satisfaction of the Administrator that—

(A) the facility is fundamentally different with respect to the factors (other than cost) specified in section 1314(b) or 1314(g) of this title and considered by the Administrator in establishing such national effluent limitation guidelines or categorical pretreatment standards;

(B) the application—

(i) is based solely on information and supporting data submitted to the Administrator during the rulemaking for establishment of the applicable national effluent limitation guidelines or categorical pretreatment standard specifically raising the factors that are fundamentally different for such facility; or

(ii) is based on information and supporting data referred to in clause (i) and information and supporting data the applicant did not have a reasonable opportunity to submit during such rulemaking;

(C) the alternative requirement is no less stringent than justified by the fundamental difference; and

(D) the alternative requirement will not result in a non-water quality environmental impact which is markedly more adverse than the impact considered by the Administrator in establishing such national effluent limitation guideline or categorical pretreatment standard.

##### (2) Time limit for applications

An application for an alternative requirement which modifies the requirements of an effluent limitation or pretreatment standard under this subsection must be submitted to the Administrator within 180 days after the date on which such limitation or standard is established or revised, as the case may be.

##### (3) Time limit for decision

The Administrator shall approve or deny by final agency action an application submitted under this subsection within 180 days after the date such application is filed with the Administrator.

##### (4) Submission of information

The Administrator may allow an applicant under this subsection to submit information and supporting data until the earlier of the date the application is approved or denied or the last day that the Administrator has to approve or deny such application.

##### (5) Treatment of pending applications

For the purposes of this subsection, an application for an alternative requirement based on



fundamentally different factors which is pending on February 4, 1987, shall be treated as having been submitted to the Administrator on the 180th day following February 4, 1987. The applicant may amend the application to take into account the provisions of this subsection.

**(6) Effect of submission of application**

An application for an alternative requirement under this subsection shall not stay the applicant's obligation to comply with the effluent limitation guideline or categorical pretreatment standard which is the subject of the application.

**(7) Effect of denial**

If an application for an alternative requirement which modifies the requirements of an effluent limitation or pretreatment standard under this subsection is denied by the Administrator, the applicant must comply with such limitation or standard as established or revised, as the case may be.

**(8) Reports**

By January 1, 1997, and January 1 of every odd-numbered year thereafter, the Administrator shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives a report on the status of applications for alternative requirements which modify the requirements of effluent limitations under section 1311 or 1314 of this title or any national categorical pretreatment standard under section 1317(b) of this title filed before, on, or after February 4, 1987.

**(o) Application fees**

The Administrator shall prescribe and collect from each applicant fees reflecting the reasonable administrative costs incurred in reviewing and processing applications for modifications submitted to the Administrator pursuant to subsections (c), (g), (i), (k), (m), and (n) of this section, section 1314(d)(4) of this title, and section 1326(a) of this title. All amounts collected by the Administrator under this subsection shall be deposited into a special fund of the Treasury entitled "Water Permits and Related Services" which shall thereafter be available for appropriation to carry out activities of the Environmental Protection Agency for which such fees were collected.

**(p) Modified permit for coal remining operations**

**(1) In general**

Subject to paragraphs (2) through (4) of this subsection, the Administrator, or the State in any case which the State has an approved permit program under section 1342(b) of this title, may issue a permit under section 1342 of this title which modifies the requirements of subsection (b)(2)(A) of this section with respect to the pH level of any pre-existing discharge, and with respect to pre-existing discharges of iron and manganese from the remined area of any coal remining operation or with respect to the pH level or level of iron or manganese in any pre-existing discharge affected by the remining

operation. Such modified requirements shall apply the best available technology economically achievable on a case-by-case basis, using best professional judgment, to set specific numerical effluent limitations in each permit.

**(2) Limitations**

The Administrator or the State may only issue a permit pursuant to paragraph (1) if the applicant demonstrates to the satisfaction of the Administrator or the State, as the case may be, that the coal remining operation will result in the potential for improved water quality from the remining operation but in no event shall such a permit allow the pH level of any discharge, and in no event shall such a permit allow the discharges of iron and manganese, to exceed the levels being discharged from the remined area before the coal remining operation begins. No discharge from, or affected by, the remining operation shall exceed State water quality standards established under section 1313 of this title.

**(3) Definitions**

For purposes of this subsection—

**(A) Coal remining operation**

The term "coal remining operation" means a coal mining operation which begins after February 4, 1987 at a site on which coal mining was conducted before August 3, 1977.

**(B) Remined area**

The term "remined area" means only that area of any coal remining operation on which coal mining was conducted before August 3, 1977.

**(C) Pre-existing discharge**

The term "pre-existing discharge" means any discharge at the time of permit application under this subsection.

**(4) Applicability of strip mining laws**

Nothing in this subsection shall affect the application of the Surface Mining Control and Reclamation Act of 1977 [30 U.S.C. 1201 et seq.] to any coal remining operation, including the application of such Act to suspended solids.

(June 30, 1948, ch. 758, title III, §301, as added Pub. L. 92-500, §2, Oct. 18, 1972, 86 Stat. 844; amended Pub. L. 95-217, §§42-47, 53(c), Dec. 27, 1977, 91 Stat. 1582-1586, 1590; Pub. L. 97-117, §§21, 22(a)-(d), Dec. 29, 1981, 95 Stat. 1631, 1632; Pub. L. 97-440, Jan. 8, 1983, 96 Stat. 2289; Pub. L. 100-4, title III, §§301(a)-(e), 302(a)-(d), 303(a), (b)(1), (c)-(f), 304(a), 305, 306(a), (b), 307, Feb. 4, 1987, 101 Stat. 29-37; Pub. L. 100-688, title III, §3202(b), Nov. 18, 1988, 102 Stat. 4154; Pub. L. 103-431, §2, Oct. 31, 1994, 108 Stat. 4396; Pub. L. 104-66, title II, §2021(b), Dec. 21, 1995, 109 Stat. 727.)

**REFERENCES IN TEXT**

The Surface Mining Control and Reclamation Act of 1977, referred to in subsec. (p)(4), is Pub. L. 95-87, Aug. 3, 1977, 91 Stat. 445, as amended, which is classified generally to chapter 25 (§1201 et seq.) of Title 30, Mineral Lands and Mining. For complete classification of this Act to the Code, see Short Title note set out under section 1201 of Title 30 and Tables.

**AMENDMENTS**

1995—Subsec. (n)(8), Pub. L. 104-66 substituted "By January 1, 1997, and January 1 of every odd-numbered

**§ 1312. Water quality related effluent limitations****(a) Establishment**

Whenever, in the judgment of the Administrator or as identified under section 1314(l) of this title, discharges of pollutants from a point source or group of point sources, with the application of effluent limitations required under section 1311(b)(2) of this title, would interfere with the attainment or maintenance of that water quality in a specific portion of the navigable waters which shall assure protection of public health, public water supplies, agricultural and industrial uses, and the protection and propagation of a balanced population of shellfish, fish and wildlife, and allow recreational activities in and on the water, effluent limitations (including alternative effluent control strategies) for such point source or sources shall be established which can reasonably be expected to contribute to the attainment or maintenance of such water quality.

**(b) Modifications of effluent limitations****(1) Notice and hearing**

Prior to establishment of any effluent limitation pursuant to subsection (a) of this section, the Administrator shall publish such proposed limitation and within 90 days of such publication hold a public hearing.

**(2) Permits****(A) No reasonable relationship**

The Administrator, with the concurrence of the State, may issue a permit which modifies the effluent limitations required by subsection (a) of this section for pollutants other than toxic pollutants if the applicant demonstrates at such hearing that (whether or not technology or other alternative control strategies are available) there is no reasonable relationship between the economic and social costs and the benefits to be obtained (including attainment of the objective of this chapter) from achieving such limitation.

**(B) Reasonable progress**

The Administrator, with the concurrence of the State, may issue a permit which modifies the effluent limitations required by subsection (a) of this section for toxic pollutants for a single period not to exceed 5 years if the applicant demonstrates to the satisfaction of the Administrator that such modified requirements (i) will represent the maximum degree of control within the economic capability of the owner and operator of the source, and (ii) will result in reasonable further progress beyond the requirements of section 1311(b)(2) of this title toward the requirements of subsection (a) of this section.

**(c) Delay in application of other limitations**

The establishment of effluent limitations under this section shall not operate to delay the application of any effluent limitation established under section 1311 of this title.

(June 30, 1948, ch. 758, title III, § 302, as added Pub. L. 92-500, § 2, Oct. 18, 1972, 86 Stat. 846;

amended Pub. L. 100-4, title III, § 308(e), Feb. 4, 1987, 101 Stat. 39.)

**AMENDMENTS**

1987—Subsec. (a). Pub. L. 100-4, § 308(e)(2), inserted "or as identified under section 1314(l) of this title" after "Administrator" and "public health," after "protection of".

Subsec. (b). Pub. L. 100-4, § 308(e)(1), amended subsec. (b) generally. Prior to amendment, subsec. (b) read as follows:

"(1) Prior to establishment of any effluent limitation pursuant to subsection (a) of this section, the Administrator shall issue notice of intent to establish such limitation and within ninety days of such notice hold a public hearing to determine the relationship of the economic and social costs of achieving any such limitation or limitations, including any economic or social dislocation in the affected community or communities, to the social and economic benefits to be obtained (including the attainment of the objective of this chapter) and to determine whether or not such effluent limitations can be implemented with available technology or other alternative control strategies.

"(2) If a person affected by such limitation demonstrates at such hearing that (whether or not such technology or other alternative control strategies are available) there is no reasonable relationship between the economic and social costs and the benefits to be obtained (including attainment of the objective of this chapter), such limitation shall not become effective and the Administrator shall adjust such limitation as it applies to such person."

**§ 1313. Water quality standards and implementation plans****(a) Existing water quality standards**

(1) In order to carry out the purpose of this chapter, any water quality standard applicable to interstate waters which was adopted by any State and submitted to, and approved by, or is awaiting approval by, the Administrator pursuant to this Act as in effect immediately prior to October 18, 1972, shall remain in effect unless the Administrator determined that such standard is not consistent with the applicable requirements of this Act as in effect immediately prior to October 18, 1972. If the Administrator makes such a determination he shall, within three months after October 18, 1972, notify the State and specify the changes needed to meet such requirements. If such changes are not adopted by the State within ninety days after the date of such notification, the Administrator shall promulgate such changes in accordance with subsection (b) of this section.

(2) Any State which, before October 18, 1972, has adopted, pursuant to its own law, water quality standards applicable to intrastate waters shall submit such standards to the Administrator within thirty days after October 18, 1972. Each such standard shall remain in effect, in the same manner and to the same extent as any other water quality standard established under this chapter unless the Administrator determines that such standard is inconsistent with the applicable requirements of this Act as in effect immediately prior to October 18, 1972. If the Administrator makes such a determination he shall not later than the one hundred and twentieth day after the date of submission of such standards, notify the State and specify the changes needed to meet such requirements. If such changes are not adopted by the State with-



in ninety days after such notification, the Administrator shall promulgate such changes in accordance with subsection (b) of this section.

(3)(A) Any State which prior to October 18, 1972, has not adopted pursuant to its own laws water quality standards applicable to intrastate waters shall, not later than one hundred and eighty days after October 18, 1972, adopt and submit such standards to the Administrator.

(B) If the Administrator determines that any such standards are consistent with the applicable requirements of this Act as in effect immediately prior to October 18, 1972, he shall approve such standards.

(C) If the Administrator determines that any such standards are not consistent with the applicable requirements of this Act as in effect immediately prior to October 18, 1972, he shall, not later than the ninetieth day after the date of submission of such standards, notify the State and specify the changes to meet such requirements. If such changes are not adopted by the State within ninety days after the date of notification, the Administrator shall promulgate such standards pursuant to subsection (b) of this section.

**(b) Proposed regulations**

(1) The Administrator shall promptly prepare and publish proposed regulations setting forth water quality standards for a State in accordance with the applicable requirements of this Act as in effect immediately prior to October 18, 1972, if—

(A) the State fails to submit water quality standards within the times prescribed in subsection (a) of this section.

(B) a water quality standard submitted by such State under subsection (a) of this section is determined by the Administrator not to be consistent with the applicable requirements of subsection (a) of this section.

(2) The Administrator shall promulgate any water quality standard published in a proposed regulation not later than one hundred and ninety days after the date he publishes any such proposed standard, unless prior to such promulgation, such State has adopted a water quality standard which the Administrator determines to be in accordance with subsection (a) of this section.

**(c) Review; revised standards; publication**

(1) The Governor of a State or the State water pollution control agency of such State shall from time to time (but at least once each three year period beginning with October 18, 1972) hold public hearings for the purpose of reviewing applicable water quality standards and, as appropriate, modifying and adopting standards. Results of such review shall be made available to the Administrator.

(2)(A) Whenever the State revises or adopts a new standard, such revised or new standard shall be submitted to the Administrator. Such revised or new water quality standard shall consist of the designated uses of the navigable waters involved and the water quality criteria for such waters based upon such uses. Such standards shall be such as to protect the public health or welfare, enhance the quality of water and serve

the purposes of this chapter. Such standards shall be established taking into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other purposes, and also taking into consideration their use and value for navigation.

(B) Whenever a State reviews water quality standards pursuant to paragraph (1) of this subsection, or revises or adopts new standards pursuant to this paragraph, such State shall adopt criteria for all toxic pollutants listed pursuant to section 1317(a)(1) of this title for which criteria have been published under section 1314(a) of this title, the discharge or presence of which in the affected waters could reasonably be expected to interfere with those designated uses adopted by the State, as necessary to support such designated uses. Such criteria shall be specific numerical criteria for such toxic pollutants. Where such numerical criteria are not available, whenever a State reviews water quality standards pursuant to paragraph (1), or revises or adopts new standards pursuant to this paragraph, such State shall adopt criteria based on biological monitoring or assessment methods consistent with information published pursuant to section 1314(a)(8) of this title. Nothing in this section shall be construed to limit or delay the use of effluent limitations or other permit conditions based on or involving biological monitoring or assessment methods or previously adopted numerical criteria.

(3) If the Administrator, within sixty days after the date of submission of the revised or new standard, determines that such standard meets the requirements of this chapter, such standard shall thereafter be the water quality standard for the applicable waters of that State. If the Administrator determines that any such revised or new standard is not consistent with the applicable requirements of this chapter, he shall not later than the ninetieth day after the date of submission of such standard notify the State and specify the changes to meet such requirements. If such changes are not adopted by the State within ninety days after the date of notification, the Administrator shall promulgate such standard pursuant to paragraph (4) of this subsection.

(4) The Administrator shall promptly prepare and publish proposed regulations setting forth a revised or new water quality standard for the navigable waters involved—

(A) if a revised or new water quality standard submitted by such State under paragraph (3) of this subsection for such waters is determined by the Administrator not to be consistent with the applicable requirements of this chapter, or

(B) in any case where the Administrator determines that a revised or new standard is necessary to meet the requirements of this chapter.

The Administrator shall promulgate any revised or new standard under this paragraph not later than ninety days after he publishes such proposed standards, unless prior to such promulgation, such State has adopted a revised or new water quality standard which the Administrator determines to be in accordance with this chapter.

**(d) Identification of areas with insufficient controls; maximum daily load; certain effluent limitations revision**

(1)(A) Each State shall identify those waters within its boundaries for which the effluent limitations required by section 1311(b)(1)(A) and section 1311(b)(1)(B) of this title are not stringent enough to implement any water quality standard applicable to such waters. The State shall establish a priority ranking for such waters, taking into account the severity of the pollution and the uses to be made of such waters.

(B) Each State shall identify those waters or parts thereof within its boundaries for which controls on thermal discharges under section 1311 of this title are not stringent enough to assure protection and propagation of a balanced indigenous population of shellfish, fish, and wildlife.

(C) Each State shall establish for the waters identified in paragraph (1)(A) of this subsection, and in accordance with the priority ranking, the total maximum daily load, for those pollutants which the Administrator identifies under section 1314(a)(2) of this title as suitable for such calculation. Such load shall be established at a level necessary to implement the applicable water quality standards with seasonal variations and a margin of safety which takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality.

(D) Each State shall estimate for the waters identified in paragraph (1)(B) of this subsection the total maximum daily thermal load required to assure protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife. Such estimates shall take into account the normal water temperatures, flow rates, seasonal variations, existing sources of heat input, and the dissipative capacity of the identified waters or parts thereof. Such estimates shall include a calculation of the maximum heat input that can be made into each such part and shall include a margin of safety which takes into account any lack of knowledge concerning the development of thermal water quality criteria for such protection and propagation in the identified waters or parts thereof.

(2) Each State shall submit to the Administrator from time to time, with the first such submission not later than one hundred and eighty days after the date of publication of the first identification of pollutants under section 1314(a)(2)(D) of this title, for his approval the waters identified and the loads established under paragraphs (1)(A), (1)(B), (1)(C), and (1)(D) of this subsection. The Administrator shall either approve or disapprove such identification and load not later than thirty days after the date of submission. If the Administrator approves such identification and load, such State shall incorporate them into its current plan under subsection (e) of this section. If the Administrator disapproves such identification and load, he shall not later than thirty days after the date of such disapproval identify such waters in such State and establish such loads for such waters as he determines necessary to implement the water quality standards applicable to such waters and upon such identification and

establishment the State shall incorporate them into its current plan under subsection (e) of this section.

(3) For the specific purpose of developing information, each State shall identify all waters within its boundaries which it has not identified under paragraph (1)(A) and (1)(B) of this subsection and estimate for such waters the total maximum daily load with seasonal variations and margins of safety, for those pollutants which the Administrator identifies under section 1314(a)(2) of this title as suitable for such calculation and for thermal discharges, at a level that would assure protection and propagation of a balanced indigenous population of fish, shellfish, and wildlife.

**(4) LIMITATIONS ON REVISION OF CERTAIN EFFLUENT LIMITATIONS.—**

(A) STANDARD NOT ATTAINED.—For waters identified under paragraph (1)(A) where the applicable water quality standard has not yet been attained, any effluent limitation based on a total maximum daily load or other waste load allocation established under this section may be revised only if (i) the cumulative effect of all such revised effluent limitations based on such total maximum daily load or waste load allocation will assure the attainment of such water quality standard, or (ii) the designated use which is not being attained is removed in accordance with regulations established under this section.

(B) STANDARD ATTAINED.—For waters identified under paragraph (1)(A) where the quality of such waters equals or exceeds levels necessary to protect the designated use for such waters or otherwise required by applicable water quality standards, any effluent limitation based on a total maximum daily load or other waste load allocation established under this section, or any water quality standard established under this section, or any other permitting standard may be revised only if such revision is subject to and consistent with the antidegradation policy established under this section.

**(e) Continuing planning process**

(1) Each State shall have a continuing planning process approved under paragraph (2) of this subsection which is consistent with this chapter.

(2) Each State shall submit not later than 120 days after October 18, 1972, to the Administrator for his approval a proposed continuing planning process which is consistent with this chapter. Not later than thirty days after the date of submission of such a process the Administrator shall either approve or disapprove such process. The Administrator shall from time to time review each State's approved planning process for the purpose of insuring that such planning process is at all times consistent with this chapter. The Administrator shall not approve any State permit program under subchapter IV of this chapter for any State which does not have an approved continuing planning process under this section.

(3) The Administrator shall approve any continuing planning process submitted to him under this section which will result in plans for

all navigable waters within such State, which include, but are not limited to, the following:

- (A) effluent limitations and schedules of compliance at least as stringent as those required by section 1311(b)(1), section 1311(b)(2), section 1316, and section 1317 of this title, and at least as stringent as any requirements contained in any applicable water quality standard in effect under authority of this section;
- (B) the incorporation of all elements of any applicable area-wide waste management plans under section 1288 of this title, and applicable basin plans under section 1289 of this title;
- (C) total maximum daily load for pollutants in accordance with subsection (d) of this section;
- (D) procedures for revision;
- (E) adequate authority for intergovernmental cooperation;
- (F) adequate implementation, including schedules of compliance, for revised or new water quality standards, under subsection (c) of this section;
- (G) controls over the disposition of all residual waste from any water treatment processing;
- (H) an inventory and ranking, in order of priority, of needs for construction of waste treatment works required to meet the applicable requirements of sections 1311 and 1312 of this title.

**(f) Earlier compliance**

Nothing in this section shall be construed to affect any effluent limitation, or schedule of compliance required by any State to be implemented prior to the dates set forth in sections 1311(b)(1) and 1311(b)(2) of this title nor to preclude any State from requiring compliance with any effluent limitation or schedule of compliance at dates earlier than such dates.

**(g) Heat standards**

Water quality standards relating to heat shall be consistent with the requirements of section 1326 of this title.

**(h) Thermal water quality standards**

For the purposes of this chapter the term "water quality standards" includes thermal water quality standards.

**(i) Coastal recreation water quality criteria**

**(1) Adoption by States**

**(A) Initial criteria and standards**

Not later than 42 months after October 10, 2000, each State having coastal recreation waters shall adopt and submit to the Administrator water quality criteria and standards for the coastal recreation waters of the State for those pathogens and pathogen indicators for which the Administrator has published criteria under section 1314(a) of this title.

**(B) New or revised criteria and standards**

Not later than 36 months after the date of publication by the Administrator of new or revised water quality criteria under section 1314(a)(9) of this title, each State having coastal recreation waters shall adopt and submit to the Administrator new or revised

water quality standards for the coastal recreation waters of the State for all pathogens and pathogen indicators to which the new or revised water quality criteria are applicable.

**(2) Failure of States to adopt**

**(A) In general**

If a State fails to adopt water quality criteria and standards in accordance with paragraph (1)(A) that are as protective of human health as the criteria for pathogens and pathogen indicators for coastal recreation waters published by the Administrator, the Administrator shall promptly propose regulations for the State setting forth revised or new water quality standards for pathogens and pathogen indicators described in paragraph (1)(A) for coastal recreation waters of the State.

**(B) Exception**

If the Administrator proposes regulations for a State described in subparagraph (A) under subsection (c)(4)(B) of this section, the Administrator shall publish any revised or new standard under this subsection not later than 42 months after October 10, 2000.

**(3) Applicability**

Except as expressly provided by this subsection, the requirements and procedures of subsection (c) of this section apply to this subsection, including the requirement in subsection (c)(2)(A) of this section that the criteria protect public health and welfare.

(June 30, 1948, ch. 758, title III, § 303, as added Pub. L. 92-500, § 2, Oct. 18, 1972, 86 Stat. 846; amended Pub. L. 100-4, title III, § 308(d), title IV, § 404(b), Feb. 4, 1987, 101 Stat. 39, 68; Pub. L. 106-284, § 2, Oct. 10, 2000, 114 Stat. 870.)

**REFERENCES IN TEXT**

This Act, referred to in subsecs. (a)(1), (2), (3)(B), (C) and (b)(1), means act June 30, 1948, ch. 758, 62 Stat. 1155, prior to the superseding and reenactment of act June 30, 1948 by act Oct. 18, 1972, Pub. L. 92-500, 86 Stat. 816. Act June 30, 1948, ch. 758, as added by act Oct. 18, 1972, Pub. L. 92-500, 86 Stat. 816, enacted this chapter.

**AMENDMENTS**

2000—Subsec. (i). Pub. L. 106-284 added subsec. (i).  
1987—Subsec. (c)(2). Pub. L. 100-4, § 308(d), designated existing provision as subpar. (A) and added subpar. (B).  
Subsec. (d)(4). Pub. L. 100-4, § 404(b), added par. (4).

**§ 1313a. Revised water quality standards**

The review, revision, and adoption or promulgation of revised or new water quality standards pursuant to section 303(c) of the Federal Water Pollution Control Act [33 U.S.C. 1313(c)] shall be completed by the date three years after December 29, 1981. No grant shall be made under title II of the Federal Water Pollution Control Act [33 U.S.C. 1281 et seq.] after such date until water quality standards are reviewed and revised pursuant to section 303(c), except where the State has in good faith submitted such revised water quality standards and the Administrator has not acted to approve or disapprove such submission within one hundred and twenty days of receipt. (Pub. L. 97-117, § 24, Dec. 29, 1981, 95 Stat. 1632.)



## REFERENCES IN TEXT

The Federal Water Pollution Control Act, referred to in text, is act June 30, 1948, ch. 758, as amended generally by Pub. L. 92-500, § 2, Oct. 18, 1972, 86 Stat. 816. Title II of the Act is classified generally to subchapter II (§1281 et seq.) of this chapter. For complete classification of this Act to the Code, see Short Title note set out under section 1251 of this title and Tables.

## CODIFICATION

Section was enacted as part of the Municipal Wastewater Treatment Construction Grant Amendments of 1981, and not as part of the Federal Water Pollution Control Act which comprises this chapter.

**§ 1314. Information and guidelines****(a) Criteria development and publication**

(1) The Administrator, after consultation with appropriate Federal and State agencies and other interested persons, shall develop and publish, within one year after October 18, 1972 (and from time to time thereafter revise) criteria for water quality accurately reflecting the latest scientific knowledge (A) on the kind and extent of all identifiable effects on health and welfare including, but not limited to, plankton, fish, shellfish, wildlife, plant life, shorelines, beaches, esthetics, and recreation which may be expected from the presence of pollutants in any body of water, including ground water; (B) on the concentration and dispersal of pollutants, or their byproducts, through biological, physical, and chemical processes; and (C) on the effects of pollutants on biological community diversity, productivity, and stability, including information on the factors affecting rates of eutrophication and rates of organic and inorganic sedimentation for varying types of receiving waters.

(2) The Administrator, after consultation with appropriate Federal and State agencies and other interested persons, shall develop and publish, within one year after October 18, 1972 (and from time to time thereafter revise) information (A) on the factors necessary to restore and maintain the chemical, physical, and biological integrity of all navigable waters, ground waters, waters of the contiguous zone, and the oceans; (B) on the factors necessary for the protection and propagation of shellfish, fish, and wildlife for classes and categories of receiving waters and to allow recreational activities in and on the water; and (C) on the measurement and classification of water quality; and (D) for the purpose of section 1313 of this title, on and the identification of pollutants suitable for maximum daily load measurement correlated with the achievement of water quality objectives.

(3) Such criteria and information and revisions thereof shall be issued to the States and shall be published in the Federal Register and otherwise made available to the public.

(4) The Administrator shall, within 90 days after December 27, 1977, and from time to time thereafter, publish and revise as appropriate information identifying conventional pollutants, including but not limited to, pollutants classified as biological oxygen demanding, suspended solids, fecal coliform, and pH. The thermal component of any discharge shall not be identified as a conventional pollutant under this paragraph.

(5)(A) The Administrator, to the extent practicable before consideration of any request under section 1311(g) of this title and within six months after December 27, 1977, shall develop and publish information on the factors necessary for the protection of public water supplies, and the protection and propagation of a balanced population of shellfish, fish and wildlife, and to allow recreational activities, in and on the water.

(B) The Administrator, to the extent practicable before consideration of any application under section 1311(h) of this title and within six months after December 27, 1977, shall develop and publish information on the factors necessary for the protection of public water supplies, and the protection and propagation of a balanced indigenous population of shellfish, fish and wildlife, and to allow recreational activities, in and on the water.

(6) The Administrator shall, within three months after December 27, 1977, and annually thereafter, for purposes of section 1311(h) of this title publish and revise as appropriate information identifying each water quality standard in effect under this chapter or State law, the specific pollutants associated with such water quality standard, and the particular waters to which such water quality standard applies.

(7) GUIDANCE TO STATES.—The Administrator, after consultation with appropriate State agencies and on the basis of criteria and information published under paragraphs (1) and (2) of this subsection, shall develop and publish, within 9 months after February 4, 1987, guidance to the States on performing the identification required by subsection (1)(1) of this section.

(8) INFORMATION ON WATER QUALITY CRITERIA.—The Administrator, after consultation with appropriate State agencies and within 2 years after February 4, 1987, shall develop and publish information on methods for establishing and measuring water quality criteria for toxic pollutants on other bases than pollutant-by-pollutant criteria, including biological monitoring and assessment methods.

(9) REVISED CRITERIA FOR COASTAL RECREATION WATERS.—

(A) IN GENERAL.—Not later than 5 years after October 10, 2000, after consultation and in cooperation with appropriate Federal, State, tribal, and local officials (including local health officials), the Administrator shall publish new or revised water quality criteria for pathogens and pathogen indicators (including a revised list of testing methods, as appropriate), based on the results of the studies conducted under section 1254(v) of this title, for the purpose of protecting human health in coastal recreation waters.

(B) REVIEWS.—Not later than the date that is 5 years after the date of publication of water quality criteria under this paragraph, and at least once every 5 years thereafter, the Administrator shall review and, as necessary, revise the water quality criteria.

**(b) Effluent limitation guidelines**

For the purpose of adopting or revising effluent limitations under this chapter the Administrator shall, after consultation with appropriate

Federal and State agencies and other interested persons, publish within one year of October 18, 1972, regulations, providing guidelines for effluent limitations, and, at least annually thereafter, revise, if appropriate, such regulations. Such regulations shall—

(1)(A) identify, in terms of amounts of constituents and chemical, physical, and biological characteristics of pollutants, the degree of effluent reduction attainable through the application of the best practicable control technology currently available for classes and categories of point sources (other than publicly owned treatment works); and

(B) specify factors to be taken into account in determining the control measures and practices to be applicable to point sources (other than publicly owned treatment works) within such categories or classes. Factors relating to the assessment of best practicable control technology currently available to comply with subsection (b)(1) of section 1311 of this title shall include consideration of the total cost of application of technology in relation to the effluent reduction benefits to be achieved from such application, and shall also take into account the age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, non-water quality environmental impact (including energy requirements), and such other factors as the Administrator deems appropriate;

(2)(A) identify, in terms of amounts of constituents and chemical, physical, and biological characteristics of pollutants, the degree of effluent reduction attainable through the application of the best control measures and practices achievable including treatment techniques, process and procedure innovations, operating methods, and other alternatives for classes and categories of point sources (other than publicly owned treatment works); and

(B) specify factors to be taken into account in determining the best measures and practices available to comply with subsection (b)(2) of section 1311 of this title to be applicable to any point source (other than publicly owned treatment works) within such categories or classes. Factors relating to the assessment of best available technology shall take into account the age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, the cost of achieving such effluent reduction, non-water quality environmental impact (including energy requirements), and such other factors as the Administrator deems appropriate;

(3) identify control measures and practices available to eliminate the discharge of pollutants from categories and classes of point sources, taking into account the cost of achieving such elimination of the discharge of pollutants; and

(4)(A) identify, in terms of amounts of constituents and chemical, physical, and biological characteristics of pollutants, the degree of effluent reduction attainable through the application of the best conventional pollutant

control technology (including measures and practices) for classes and categories of point sources (other than publicly owned treatment works); and

(B) specify factors to be taken into account in determining the best conventional pollutant control technology measures and practices to comply with section 1311(b)(2)(E) of this title to be applicable to any point source (other than publicly owned treatment works) within such categories or classes. Factors relating to the assessment of best conventional pollutant control technology (including measures and practices) shall include consideration of the reasonableness of the relationship between the costs of attaining a reduction in effluents and the effluent reduction benefits derived, and the comparison of the cost and level of reduction of such pollutants from the discharge from publicly owned treatment works to the cost and level of reduction of such pollutants from a class or category of industrial sources, and shall take into account the age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, non-water quality environmental impact (including energy requirements), and such other factors as the Administrator deems appropriate.

**(c) Pollution discharge elimination procedures**

The Administrator, after consultation, with appropriate Federal and State agencies and other interested persons, shall issue to the States and appropriate water pollution control agencies within 270 days after October 18, 1972 (and from time to time thereafter) information on the processes, procedures, or operating methods which result in the elimination or reduction of the discharge of pollutants to implement standards of performance under section 1316 of this title. Such information shall include technical and other data, including costs, as are available on alternative methods of elimination or reduction of the discharge of pollutants. Such information, and revisions thereof, shall be published in the Federal Register and otherwise shall be made available to the public.

**(d) Secondary treatment information; alternative waste treatment management techniques; innovative and alternative wastewater treatment processes; facilities deemed equivalent of secondary treatment**

(1) The Administrator, after consultation with appropriate Federal and State agencies and other interested persons, shall publish within sixty days after October 18, 1972 (and from time to time thereafter) information, in terms of amounts of constituents and chemical, physical, and biological characteristics of pollutants, on the degree of effluent reduction attainable through the application of secondary treatment.

(2) The Administrator, after consultation with appropriate Federal and State agencies and other interested persons, shall publish within nine months after October 18, 1972 (and from time to time thereafter) information on alternative waste treatment management techniques and systems available to implement section 1281 of this title.

(3) The Administrator, after consultation with appropriate Federal and State agencies and other interested persons, shall promulgate within one hundred and eighty days after December 27, 1977, guidelines for identifying and evaluating innovative and alternative wastewater treatment processes and techniques referred to in section 1281(g)(5) of this title.

(4) For the purposes of this subsection, such biological treatment facilities as oxidation ponds, lagoons, and ditches and trickling filters shall be deemed the equivalent of secondary treatment. The Administrator shall provide guidance under paragraph (1) of this subsection on design criteria for such facilities, taking into account pollutant removal efficiencies and, consistent with the objectives of this chapter, assuring that water quality will not be adversely affected by deeming such facilities as the equivalent of secondary treatment.

**(e) Best management practices for industry**

The Administrator, after consultation with appropriate Federal and State agencies and other interested persons, may publish regulations, supplemental to any effluent limitations specified under subsections (b) and (c) of this section for a class or category of point sources, for any specific pollutant which the Administrator is charged with a duty to regulate as a toxic or hazardous pollutant under section 1317(a)(1) or 1321 of this title, to control plant site runoff, spillage or leaks, sludge or waste disposal, and drainage from raw material storage which the Administrator determines are associated with or ancillary to the industrial manufacturing or treatment process within such class or category of point sources and may contribute significant amounts of such pollutants to navigable waters. Any applicable controls established under this subsection shall be included as a requirement for the purposes of section 1311, 1312, 1316, 1317, or 1343 of this title, as the case may be, in any permit issued to a point source pursuant to section 1342 of this title.

**(f) Identification and evaluation of nonpoint sources of pollution; processes, procedures, and methods to control pollution**

The Administrator, after consultation with appropriate Federal and State agencies and other interested persons, shall issue to appropriate Federal agencies, the States, water pollution control agencies, and agencies designated under section 1288 of this title, within one year after October 18, 1972 (and from time to time thereafter) information including (1) guidelines for identifying and evaluating the nature and extent of nonpoint sources of pollutants, and (2) processes, procedures, and methods to control pollution resulting from—

- (A) agricultural and silvicultural activities, including runoff from fields and crop and forest lands;
- (B) mining activities, including runoff and siltation from new, currently operating, and abandoned surface and underground mines;
- (C) all construction activity, including runoff from the facilities resulting from such construction;
- (D) the disposal of pollutants in wells or in subsurface excavations;

(E) salt water intrusion resulting from reductions of fresh water flow from any cause, including extraction of ground water, irrigation, obstruction, and diversion; and

(F) changes in the movement, flow, or circulation of any navigable waters or ground waters, including changes caused by the construction of dams, levees, channels, causeways, or flow diversion facilities.

Such information and revisions thereof shall be published in the Federal Register and otherwise made available to the public.

**(g) Guidelines for pretreatment of pollutants**

(1) For the purpose of assisting States in carrying out programs under section 1342 of this title, the Administrator shall publish, within one hundred and twenty days after October 18, 1972, and review at least annually thereafter and, if appropriate, revise guidelines for pretreatment of pollutants which he determines are not susceptible to treatment by publicly owned treatment works. Guidelines under this subsection shall be established to control and prevent the discharge into the navigable waters, the contiguous zone, or the ocean (either directly or through publicly owned treatment works) of any pollutant which interferes with, passes through, or otherwise is incompatible with such works.

(2) When publishing guidelines under this subsection, the Administrator shall designate the category or categories of treatment works to which the guidelines shall apply.

**(h) Test procedures guidelines**

The Administrator shall, within one hundred and eighty days from October 18, 1972, promulgate guidelines establishing test procedures for the analysis of pollutants that shall include the factors which must be provided in any certification pursuant to section 1341 of this title or permit application pursuant to section 1342 of this title.

**(i) Guidelines for monitoring, reporting, enforcement, funding, personnel, and manpower**

The Administrator shall (1) within sixty days after October 18, 1972, promulgate guidelines for the purpose of establishing uniform application forms and other minimum requirements for the acquisition of information from owners and operators of point-sources of discharge subject to any State program under section 1342 of this title, and (2) within sixty days from October 18, 1972, promulgate guidelines establishing the minimum procedural and other elements of any State program under section 1342 of this title, which shall include:

- (A) monitoring requirements;
- (B) reporting requirements (including procedures to make information available to the public);
- (C) enforcement provisions; and
- (D) funding, personnel qualifications, and manpower requirements (including a requirement that no board or body which approves permit applications or portions thereof shall include, as a member, any person who receives, or has during the previous two years received, a significant portion of his income directly or indirectly from permit holders or applicants for a permit).



**(j) Lake restoration guidance manual**

The Administrator shall, within 1 year after February 4, 1987, and biennially thereafter, publish and disseminate a lake restoration guidance manual describing methods, procedures, and processes to guide State and local efforts to improve, restore, and enhance water quality in the Nation's publicly owned lakes.

**(k) Agreements with Secretaries of Agriculture, Army, and the Interior to provide maximum utilization of programs to achieve and maintain water quality; transfer of funds; authorization of appropriations**

(1) The Administrator shall enter into agreements with the Secretary of Agriculture, the Secretary of the Army, and the Secretary of the Interior, and the heads of such other departments, agencies, and instrumentalities of the United States as the Administrator determines, to provide for the maximum utilization of other Federal laws and programs for the purpose of achieving and maintaining water quality through appropriate implementation of plans approved under section 1288 of this title and nonpoint source pollution management programs approved under section 1329 of this title.

(2) The Administrator is authorized to transfer to the Secretary of Agriculture, the Secretary of the Army, and the Secretary of the Interior and the heads of such other departments, agencies, and instrumentalities of the United States as the Administrator determines, any funds appropriated under paragraph (3) of this subsection to supplement funds otherwise appropriated to programs authorized pursuant to any agreement under paragraph (1).

(3) There is authorized to be appropriated to carry out the provisions of this subsection, \$100,000,000 per fiscal year for the fiscal years 1979 through 1983 and such sums as may be necessary for fiscal years 1984 through 1990.

**(l) Individual control strategies for toxic pollutants****(1) State list of navigable waters and development of strategies**

Not later than 2 years after February 4, 1987, each State shall submit to the Administrator for review, approval, and implementation under this subsection—

(A) a list of those waters within the State which after the application of effluent limitations required under section 1311(b)(2) of this title cannot reasonably be anticipated to attain or maintain (i) water quality standards for such waters reviewed, revised, or adopted in accordance with section 1313(c)(2)(B) of this title, due to toxic pollutants, or (ii) that water quality which shall assure protection of public health, public water supplies, agricultural and industrial uses, and the protection and propagation of a balanced population of shellfish, fish and wildlife, and allow recreational activities in and on the water;

(B) a list of all navigable waters in such State for which the State does not expect the applicable standard under section 1313 of this title will be achieved after the requirements of sections 1311(b), 1316, and 1317(b) of

this title are met, due entirely or substantially to discharges from point sources of any toxic pollutants listed pursuant to section 1317(a) of this title;

(C) for each segment of the navigable waters included on such lists, a determination of the specific point sources discharging any such toxic pollutant which is believed to be preventing or impairing such water quality and the amount of each such toxic pollutant discharged by each such source; and

(D) for each such segment, an individual control strategy which the State determines will produce a reduction in the discharge of toxic pollutants from point sources identified by the State under this paragraph through the establishment of effluent limitations under section 1342 of this title and water quality standards under section 1313(c)(2)(B) of this title, which reduction is sufficient, in combination with existing controls on point and nonpoint sources of pollution, to achieve the applicable water quality standard as soon as possible, but not later than 3 years after the date of the establishment of such strategy.

**(2) Approval or disapproval**

Not later than 120 days after the last day of the 2-year period referred to in paragraph (1), the Administrator shall approve or disapprove the control strategies submitted under paragraph (1) by any State.

**(3) Administrator's action**

If a State fails to submit control strategies in accordance with paragraph (1) or the Administrator does not approve the control strategies submitted by such State in accordance with paragraph (1), then, not later than 1 year after the last day of the period referred to in paragraph (2), the Administrator, in cooperation with such State and after notice and opportunity for public comment, shall implement the requirements of paragraph (1) in such State. In the implementation of such requirements, the Administrator shall, at a minimum, consider for listing under this subsection any navigable waters for which any person submits a petition to the Administrator for listing not later than 120 days after such last day.

**(m) Schedule for review of guidelines****(1) Publication**

Within 12 months after February 4, 1987, and biennially thereafter, the Administrator shall publish in the Federal Register a plan which shall—

(A) establish a schedule for the annual review and revision of promulgated effluent guidelines, in accordance with subsection (b) of this section;

(B) identify categories of sources discharging toxic or nonconventional pollutants for which guidelines under subsection (b)(2) of this section and section 1316 of this title have not previously been published; and

(C) establish a schedule for promulgation of effluent guidelines for categories identified in subparagraph (B), under which promulgation of such guidelines shall be no

later than 4 years after February 4, 1987, for categories identified in the first published plan or 3 years after the publication of the plan for categories identified in later published plans.

(2) **Public review**

The Administrator shall provide for public review and comment on the plan prior to final publication.

(June 30, 1948, ch. 758, title III, §304, as added Pub. L. 92-500, §2, Oct. 18, 1972, 86 Stat. 850; amended Pub. L. 95-217, §§48-51, 62(b), Dec. 27, 1977, 91 Stat. 1587, 1588, 1598; Pub. L. 97-117, §23, Dec. 29, 1981, 95 Stat. 1632; Pub. L. 100-4, title I, §101(f), title III, §§308(a), (c), (f), 315(c), 316(e), Feb. 4, 1987, 101 Stat. 9, 38-40, 52, 61; Pub. L. 106-284, §3(b), Oct. 10, 2000, 114 Stat. 871.)

**CODIFICATION**

Section 50 of Pub. L. 95-217 provided in part that, upon the enactment of subsec. (e) of this section by Pub. L. 95-217 and the concurrent redesignation of former subsecs. (e) to (j) of this section as (f) to (k), respectively, all references to former subsecs. (e) to (j) be changed to (f) to (k), respectively.

**AMENDMENTS**

2000—Subsec. (a)(9). Pub. L. 106-284 added par. (9).

1987—Subsec. (a)(7), (8). Pub. L. 100-4, §308(c), added pars. (7) and (8).

Subsec. (j). Pub. L. 100-4, §315(c), amended subsec. (j) generally. Prior to amendment, subsec. (j) read as follows: "The Administrator shall issue information biennially on methods, procedures, and processes as may be appropriate to restore and enhance the quality of the Nation's publicly owned freshwater lakes."

Subsec. (k)(1). Pub. L. 100-4, §316(e), inserted "and nonpoint source pollution management programs approved under section 1329 of this title" before period at end.

Subsec. (k)(3). Pub. L. 100-4, §101(f), inserted "and such sums as may be necessary for fiscal years 1984 through 1990" after "1983".

Subsec. (l). Pub. L. 100-4, §308(a), added subsec. (l).

Subsec. (m). Pub. L. 100-4, §308(f), added subsec. (m).

1981—Subsec. (d)(4). Pub. L. 97-117 added par. (4).

1977—Subsec. (a)(4) to (6). Pub. L. 95-217, §48(a), added pars. (4) to (6).

Subsec. (b)(4). Pub. L. 95-217, §48(b), added par. (4).

Subsec. (d)(3). Pub. L. 95-217, §49, added par. (3).

Subsecs. (e) to (i). Pub. L. 95-217, §50, added subsec. (e) and redesignated former subsecs. (e) to (h) as (f) to (i), respectively. Former subsec. (i) redesignated (j).

Subsec. (j). Pub. L. 95-217, §§50, 62(b), redesignated former subsec. (i) as (j) and substituted "shall issue information biennially on methods" for "shall, within 270 days after October 18, 1972 (and from time to time thereafter), issue such information on methods". Former subsec. (j) redesignated (k).

Subsec. (k). Pub. L. 95-217, §§50, 51, redesignated former subsec. (j) as (k), substituted "The Administrator shall enter into agreements with the Secretary of Agriculture, the Secretary of the Army, and the Secretary of the Interior, and the heads of such other departments, agencies, and instrumentalities of the United States as the Administrator determines, to provide the maximum utilization of other Federal laws and programs" for "The Administrator shall, within six months from October 18, 1972, enter into agreements with the Secretary of Agriculture, the Secretary of the Army, and the Secretary of the Interior to provide for the maximum utilization of the appropriate programs authorized under other Federal law to be carried out by such Secretaries" in par. (1), made conforming amendments in par. (2), and in par. (3) authorized appropriations for fiscal years 1979 through 1983.

**TRANSFER OF FUNCTIONS**

Enforcement functions of Secretary or other official in Department of Agriculture, insofar as they involve lands and programs under jurisdiction of that Department, relating to compliance with this chapter with respect to pre-construction, construction, and initial operation of transportation system for Canadian and Alaskan natural gas were transferred to the Federal Inspector, Office of Federal Inspector for the Alaska Natural Gas Transportation System, until the first anniversary of the date of initial operation of the Alaska Natural Gas Transportation System, see Reorg. Plan No. 1 of 1979, §§102(f), 203(a), 44 F.R. 33663, 33666, 93 Stat. 1373, 1376, effective July 1, 1979, set out in the Appendix to Title 5, Government Organization and Employees. Office of Federal Inspector for the Alaska Natural Gas Transportation System abolished and functions and authority vested in Inspector transferred to Secretary of Energy by section 3012(b) of Pub. L. 102-486, set out as an Abolition of Office of Federal Inspector note under section 719e of Title 15, Commerce and Trade. Functions and authority vested in Secretary of Energy subsequently transferred to Federal Coordinator for Alaska Natural Gas Transportation Projects by section 720d(f) of Title 15.

**REVIEW OF EFFLUENT GUIDELINES PROMULGATED PRIOR TO DECEMBER 27, 1977**

Section 73 of Pub. L. 95-217 directed Administrator, within 90 days after Dec. 27, 1977, to review every effluent guideline promulgated prior to that date which was final or interim final (other than those applicable to industrial categories listed in table 2 of Committee Print Numbered 95-30 of Committee on Public Works and Transportation of House of Representatives) and which applied to those pollutants identified pursuant to 33 U.S.C. 1314(a)(4) and, on or before July 1, 1980, to review every guideline applicable to industrial categories listed in such table 2, authorized Administrator, upon completion of each such review to make such adjustments in any such guidelines as may be necessary to carry out 33 U.S.C. 1314(b)(4), directed Administrator to publish the results of each such review, and provided for judicial review of Administrator's actions.

**CONTIGUOUS ZONE OF UNITED STATES**

For extension of contiguous zone of United States, see Proc. No. 7219, set out as a note under section 1331 of Title 43, Public Lands.

**§ 1315. State reports on water quality**

(a) Omitted

(b)(1) Each State shall prepare and submit to the Administrator by April 1, 1975, and shall bring up to date by April 1, 1976, and biennially thereafter, a report which shall include—

(A) a description of the water quality of all navigable waters in such State during the preceding year, with appropriate supplemental descriptions as shall be required to take into account seasonal, tidal, and other variations, correlated with the quality of water required by the objective of this chapter (as identified by the Administrator pursuant to criteria published under section 1314(a) of this title) and the water quality described in subparagraph (B) of this paragraph;

(B) an analysis of the extent to which all navigable waters of such State provide for the protection and propagation of a balanced population of shellfish, fish, and wildlife, and allow recreational activities in and on the water;

(C) an analysis of the extent to which the elimination of the discharge of pollutants and



"(C) encourage the preparation of management plans for estuaries of national significance; and  
 "(D) enhance the coordination of estuarine research."

#### SUBCHAPTER IV—PERMITS AND LICENSES

##### § 1341. Certification

###### (a) Compliance with applicable requirements; application; procedures; license suspension

(1) Any applicant for a Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the State in which the discharge originates or will originate, or, if appropriate, from the interstate water pollution control agency having jurisdiction over the navigable waters at the point where the discharge originates or will originate, that any such discharge will comply with the applicable provisions of sections 1311, 1312, 1313, 1316, and 1317 of this title. In the case of any such activity for which there is not an applicable effluent limitation or other limitation under sections 1311(b) and 1312 of this title, and there is not an applicable standard under sections 1316 and 1317 of this title, the State shall so certify, except that any such certification shall not be deemed to satisfy section 1371(c) of this title. Such State or interstate agency shall establish procedures for public notice in the case of all applications for certification by it and, to the extent it deems appropriate, procedures for public hearings in connection with specific applications. In any case where a State or interstate agency has no authority to give such a certification, such certification shall be from the Administrator. If the State, interstate agency, or Administrator, as the case may be, fails or refuses to act on a request for certification, within a reasonable period of time (which shall not exceed one year) after receipt of such request, the certification requirements of this subsection shall be waived with respect to such Federal application. No license or permit shall be granted until the certification required by this section has been obtained or has been waived as provided in the preceding sentence. No license or permit shall be granted if certification has been denied by the State, interstate agency, or the Administrator, as the case may be.

(2) Upon receipt of such application and certification the licensing or permitting agency shall immediately notify the Administrator of such application and certification. Whenever such a discharge may affect, as determined by the Administrator, the quality of the waters of any other State, the Administrator within thirty days of the date of notice of application for such Federal license or permit shall so notify such other State, the licensing or permitting agency, and the applicant. If, within sixty days after receipt of such notification, such other State determines that such discharge will affect the quality of its waters so as to violate any water quality requirements in such State, and within such sixty-day period notifies the Administrator and the licensing or permitting agency in writing of its objection to the issuance of

such license or permit and requests a public hearing on such objection, the licensing or permitting agency shall hold such a hearing. The Administrator shall at such hearing submit his evaluation and recommendations with respect to any such objection to the licensing or permitting agency. Such agency, based upon the recommendations of such State, the Administrator, and upon any additional evidence, if any, presented to the agency at the hearing, shall condition such license or permit in such manner as may be necessary to insure compliance with applicable water quality requirements. If the imposition of conditions cannot insure such compliance such agency shall not issue such license or permit.

(3) The certification obtained pursuant to paragraph (1) of this subsection with respect to the construction of any facility shall fulfill the requirements of this subsection with respect to certification in connection with any other Federal license or permit required for the operation of such facility unless, after notice to the certifying State, agency, or Administrator, as the case may be, which shall be given by the Federal agency to whom application is made for such operating license or permit, the State, or if appropriate, the interstate agency or the Administrator, notifies such agency within sixty days after receipt of such notice that there is no longer reasonable assurance that there will be compliance with the applicable provisions of sections 1311, 1312, 1313, 1316, and 1317 of this title because of changes since the construction license or permit certification was issued in (A) the construction or operation of the facility, (B) the characteristics of the waters into which such discharge is made, (C) the water quality criteria applicable to such waters or (D) applicable effluent limitations or other requirements. This paragraph shall be inapplicable in any case where the applicant for such operating license or permit has failed to provide the certifying State, or, if appropriate, the interstate agency or the Administrator, with notice of any proposed changes in the construction or operation of the facility with respect to which a construction license or permit has been granted, which changes may result in violation of section 1311, 1312, 1313, 1316, or 1317 of this title.

(4) Prior to the initial operation of any federally licensed or permitted facility or activity which may result in any discharge into the navigable waters and with respect to which a certification has been obtained pursuant to paragraph (1) of this subsection, which facility or activity is not subject to a Federal operating license or permit, the licensee or permittee shall provide an opportunity for such certifying State, or, if appropriate, the interstate agency or the Administrator to review the manner in which the facility or activity shall be operated or conducted for the purposes of assuring that applicable effluent limitations or other limitations or other applicable water quality requirements will not be violated. Upon notification by the certifying State, or if appropriate, the interstate agency or the Administrator that the operation of any such federally licensed or permitted facility or activity will violate applicable effluent limitations or other limitations or other water

quality requirements such Federal agency may, after public hearing, suspend such license or permit. If such license or permit is suspended, it shall remain suspended until notification is received from the certifying State, agency, or Administrator, as the case may be, that there is reasonable assurance that such facility or activity will not violate the applicable provisions of section 1311, 1312, 1313, 1316, or 1317 of this title.

(5) Any Federal license or permit with respect to which a certification has been obtained under paragraph (1) of this subsection may be suspended or revoked by the Federal agency issuing such license or permit upon the entering of a judgment under this chapter that such facility or activity has been operated in violation of the applicable provisions of section 1311, 1312, 1313, 1316, or 1317 of this title.

(6) Except with respect to a permit issued under section 1342 of this title, in any case where actual construction of a facility has been lawfully commenced prior to April 3, 1970, no certification shall be required under this subsection for a license or permit issued after April 3, 1970, to operate such facility, except that any such license or permit issued without certification shall terminate April 3, 1973, unless prior to such termination date the person having such license or permit submits to the Federal agency which issued such license or permit a certification and otherwise meets the requirements of this section.

**(b) Compliance with other provisions of law setting applicable water quality requirements**

Nothing in this section shall be construed to limit the authority of any department or agency pursuant to any other provision of law to require compliance with any applicable water quality requirements. The Administrator shall, upon the request of any Federal department or agency, or State or interstate agency, or applicant, provide, for the purpose of this section, any relevant information on applicable effluent limitations, or other limitations, standards, regulations, or requirements, or water quality criteria, and shall, when requested by any such department or agency or State or interstate agency, or applicant, comment on any methods to comply with such limitations, standards, regulations, requirements, or criteria.

**(c) Authority of Secretary of the Army to permit use of spoil disposal areas by Federal licensees or permittees**

In order to implement the provisions of this section, the Secretary of the Army, acting through the Chief of Engineers, is authorized, if he deems it to be in the public interest, to permit the use of spoil disposal areas under his jurisdiction by Federal licensees or permittees, and to make an appropriate charge for such use. Moneys received from such licensees or permittees shall be deposited in the Treasury as miscellaneous receipts.

**(d) Limitations and monitoring requirements of certification**

Any certification provided under this section shall set forth any effluent limitations and other limitations, and monitoring requirements necessary to assure that any applicant for a

Federal license or permit will comply with any applicable effluent limitations and other limitations, under section 1311 or 1312 of this title, standard of performance under section 1316 of this title, or prohibition, effluent standard, or pretreatment standard under section 1317 of this title, and with any other appropriate requirement of State law set forth in such certification, and shall become a condition on any Federal license or permit subject to the provisions of this section.

(June 30, 1948, ch. 758, title IV, § 401, as added Pub. L. 92-500, § 2, Oct. 18, 1972, 86 Stat. 877; amended Pub. L. 95-217, §§ 61(b), 64, Dec. 27, 1977, 91 Stat. 1598, 1599.)

**AMENDMENTS**

1977—Subsec. (a). Pub. L. 95-217 inserted reference to section 1313 of this title in pars. (1), (3), (4), and (5), struck out par. (6) which provided that no Federal agency be deemed an applicant for purposes of this subsection, and redesignated par. (7) as (6).

**§ 1342. National pollutant discharge elimination system**

**(a) Permits for discharge of pollutants**

(1) Except as provided in sections 1328 and 1344 of this title, the Administrator may, after opportunity for public hearing issue a permit for the discharge of any pollutant, or combination of pollutants, notwithstanding section 1311(a) of this title, upon condition that such discharge will meet either (A) all applicable requirements under sections 1311, 1312, 1316, 1317, 1318, and 1343 of this title, or (B) prior to the taking of necessary implementing actions relating to all such requirements, such conditions as the Administrator determines are necessary to carry out the provisions of this chapter.

(2) The Administrator shall prescribe conditions for such permits to assure compliance with the requirements of paragraph (1) of this subsection, including conditions on data and information collection, reporting, and such other requirements as he deems appropriate.

(3) The permit program of the Administrator under paragraph (1) of this subsection, and permits issued thereunder, shall be subject to the same terms, conditions, and requirements as apply to a State permit program and permits issued thereunder under subsection (b) of this section.

(4) All permits for discharges into the navigable waters issued pursuant to section 407 of this title shall be deemed to be permits issued under this subchapter, and permits issued under this subchapter shall be deemed to be permits issued under section 407 of this title, and shall continue in force and effect for their term unless revoked, modified, or suspended in accordance with the provisions of this chapter.

(5) No permit for a discharge into the navigable waters shall be issued under section 407 of this title after October 18, 1972. Each application for a permit under section 407 of this title, pending on October 18, 1972, shall be deemed to be an application for a permit under this section. The Administrator shall authorize a State, which he determines has the capability of administering a permit program which will carry out the objec-

quality requirements such Federal agency may, after public hearing, suspend such license or permit. If such license or permit is suspended, it shall remain suspended until notification is received from the certifying State, agency, or Administrator, as the case may be, that there is reasonable assurance that such facility or activity will not violate the applicable provisions of section 1311, 1312, 1313, 1316, or 1317 of this title.

(5) Any Federal license or permit with respect to which a certification has been obtained under paragraph (1) of this subsection may be suspended or revoked by the Federal agency issuing such license or permit upon the entering of a judgment under this chapter that such facility or activity has been operated in violation of the applicable provisions of section 1311, 1312, 1313, 1316, or 1317 of this title.

(6) Except with respect to a permit issued under section 1342 of this title, in any case where actual construction of a facility has been lawfully commenced prior to April 3, 1970, no certification shall be required under this subsection for a license or permit issued after April 3, 1970, to operate such facility, except that any such license or permit issued without certification shall terminate April 3, 1973, unless prior to such termination date the person having such license or permit submits to the Federal agency which issued such license or permit a certification and otherwise meets the requirements of this section.

**(b) Compliance with other provisions of law setting applicable water quality requirements**

Nothing in this section shall be construed to limit the authority of any department or agency pursuant to any other provision of law to require compliance with any applicable water quality requirements. The Administrator shall, upon the request of any Federal department or agency, or State or interstate agency, or applicant, provide, for the purpose of this section, any relevant information on applicable effluent limitations, or other limitations, standards, regulations, or requirements, or water quality criteria, and shall, when requested by any such department or agency or State or interstate agency, or applicant, comment on any methods to comply with such limitations, standards, regulations, requirements, or criteria.

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(2) The Administrator shall prescribe conditions for such permits to assure compliance with the requirements of paragraph (1) of this subsection, including conditions on data and information collection, reporting, and such other requirements as he deems appropriate.

(3) The permit program of the Administrator under paragraph (1) of this subsection, and permits issued thereunder, shall be subject to the same terms, conditions, and requirements as apply to a State permit program and permits issued thereunder under subsection (b) of this section.

(4) All permits for discharges into the navigable waters issued pursuant to section 407 of this title shall be deemed to be permits issued under this subchapter, and permits issued under this subchapter shall be deemed to be permits issued under section 407 of this title, and shall continue in force and effect for their term unless revoked, modified, or suspended in accordance with the provisions of this chapter.

(5) No permit for a discharge into the navigable waters shall be issued under section 407 of this title after October 18, 1972. Each application for a permit under section 407 of this title, pending on October 18, 1972, shall be deemed to be an application for a permit under this section. The Administrator shall authorize a State, which he determines has the capability of administering a permit program which will carry out the objec-



tives of this chapter to issue permits for discharges into the navigable waters within the jurisdiction of such State. The Administrator may exercise the authority granted him by the preceding sentence only during the period which begins on October 18, 1972, and ends either on the ninetieth day after the date of the first promulgation of guidelines required by section 1314(i)(2) of this title, or the date of approval by the Administrator of a permit program for such State under subsection (b) of this section, whichever date first occurs, and no such authorization to a State shall extend beyond the last day of such period. Each such permit shall be subject to such conditions as the Administrator determines are necessary to carry out the provisions of this chapter. No such permit shall issue if the Administrator objects to such issuance.

**(b) State permit programs**

At any time after the promulgation of the guidelines required by subsection (i)(2) of section 1314 of this title, the Governor of each State desiring to administer its own permit program for discharges into navigable waters within its jurisdiction may submit to the Administrator a full and complete description of the program it proposes to establish and administer under State law or under an interstate compact. In addition, such State shall submit a statement from the attorney general (or the attorney for those State water pollution control agencies which have independent legal counsel), or from the chief legal officer in the case of an interstate agency, that the laws of such State, or the interstate compact, as the case may be, provide adequate authority to carry out the described program. The Administrator shall approve each submitted program unless he determines that adequate authority does not exist:

(1) To issue permits which—

(A) apply, and insure compliance with, any applicable requirements of sections 1311, 1312, 1316, 1317, and 1343 of this title;

(B) are for fixed terms not exceeding five years; and

(C) can be terminated or modified for cause including, but not limited to, the following:

(i) violation of any condition of the permit;

(ii) obtaining a permit by misrepresentation, or failure to disclose fully all relevant facts;

(iii) change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge;

(D) control the disposal of pollutants into wells;

(2)(A) To issue permits which apply, and insure compliance with, all applicable requirements of section 1318 of this title; or

(B) To inspect, monitor, enter, and require reports to at least the same extent as required in section 1318 of this title;

(3) To insure that the public, and any other State the waters of which may be affected, receive notice of each application for a permit and to provide an opportunity for public hearing before a ruling on each such application;

(4) To insure that the Administrator receives notice of each application (including a copy thereof) for a permit;

(5) To insure that any State (other than the permitting State), whose waters may be affected by the issuance of a permit may submit written recommendations to the permitting State (and the Administrator) with respect to any permit application and, if any part of such written recommendations are not accepted by the permitting State, that the permitting State will notify such affected State (and the Administrator) in writing of its failure to so accept such recommendations together with its reasons for so doing;

(6) To insure that no permit will be issued if, in the judgment of the Secretary of the Army acting through the Chief of Engineers, after consultation with the Secretary of the department in which the Coast Guard is operating, anchorage and navigation of any of the navigable waters would be substantially impaired thereby;

(7) To abate violations of the permit or the permit program, including civil and criminal penalties and other ways and means of enforcement;

(8) To insure that any permit for a discharge from a publicly owned treatment works includes conditions to require the identification in terms of character and volume of pollutants of any significant source introducing pollutants subject to pretreatment standards under section 1317(b) of this title into such works and a program to assure compliance with such pretreatment standards by each such source, in addition to adequate notice to the permitting agency of (A) new introductions into such works of pollutants from any source which would be a new source as defined in section 1316 of this title if such source were discharging pollutants, (B) new introductions of pollutants into such works from a source which would be subject to section 1311 of this title if it were discharging such pollutants, or (C) a substantial change in volume or character of pollutants being introduced into such works by a source introducing pollutants into such works at the time of issuance of the permit. Such notice shall include information on the quality and quantity of effluent to be introduced into such treatment works and any anticipated impact of such change in the quantity or quality of effluent to be discharged from such publicly owned treatment works; and

(9) To insure that any industrial user of any publicly owned treatment works will comply with sections 1284(b), 1317, and 1318 of this title.

**(c) Suspension of Federal program upon submission of State program; withdrawal of approval of State program; return of State program to Administrator**

(1) Not later than ninety days after the date on which a State has submitted a program (or revision thereof) pursuant to subsection (b) of this section, the Administrator shall suspend the issuance of permits under subsection (a) of this section as to those discharges subject to such program unless he determines that the State permit program does not meet the requirements of subsection (b) of this section or does not conform to the guidelines issued under section 1314(i)(2) of this title. If the Administrator so determines, he shall notify the State of any revisions or modifications necessary to conform to such requirements or guidelines.

(2) Any State permit program under this section shall at all times be in accordance with this section and guidelines promulgated pursuant to section 1314(i)(2) of this title.

(3) Whenever the Administrator determines after public hearing that a State is not administering a program approved under this section in accordance with requirements of this section, he shall so notify the State and, if appropriate corrective action is not taken within a reasonable time, not to exceed ninety days, the Administrator shall withdraw approval of such program. The Administrator shall not withdraw approval of any such program unless he shall first have notified the State, and made public, in writing, the reasons for such withdrawal.

(4) **LIMITATIONS ON PARTIAL PERMIT PROGRAM RETURNS AND WITHDRAWALS.**—A State may return to the Administrator administration, and the Administrator may withdraw under paragraph (3) of this subsection approval, of—

(A) a State partial permit program approved under subsection (n)(3) of this section only if the entire permit program being administered by the State department or agency at the time is returned or withdrawn; and

(B) a State partial permit program approved under subsection (n)(4) of this section only if an entire phased component of the permit program being administered by the State at the time is returned or withdrawn.

**(d) Notification of Administrator**

(1) Each State shall transmit to the Administrator a copy of each permit application received by such State and provide notice to the Administrator of every action related to the consideration of such permit application, including each permit proposed to be issued by such State.

(2) No permit shall issue (A) if the Administrator within ninety days of the date of his notification under subsection (b)(5) of this section objects in writing to the issuance of such permit, or (B) if the Administrator within ninety days of the date of transmittal of the proposed permit by the State objects in writing to the issuance of such permit as being outside the guidelines and requirements of this chapter. Whenever the Administrator objects to the issuance of a permit under this paragraph such written objection shall contain a statement of the reasons for such objection and the effluent limitations and conditions which such permit would include if it were issued by the Administrator.

(3) The Administrator may, as to any permit application, waive paragraph (2) of this subsection.

(4) In any case where, after December 27, 1977, the Administrator, pursuant to paragraph (2) of this subsection, objects to the issuance of a permit, on request of the State, a public hearing shall be held by the Administrator on such objection. If the State does not resubmit such permit revised to meet such objection within 30 days after completion of the hearing, or, if no hearing is requested within 90 days after the date of such objection, the Administrator may issue the permit pursuant to subsection (a) of this section for such source in accordance with the guidelines and requirements of this chapter.

**(e) Waiver of notification requirement**

In accordance with guidelines promulgated pursuant to subsection (i)(2) of section 1314 of this title, the Administrator is authorized to waive the requirements of subsection (d) of this section at the time he approves a program pursuant to subsection (b) of this section for any category (including any class, type, or size within such category) of point sources within the State submitting such program.

**(f) Point source categories**

The Administrator shall promulgate regulations establishing categories of point sources which he determines shall not be subject to the requirements of subsection (d) of this section in any State with a program approved pursuant to subsection (b) of this section. The Administrator may distinguish among classes, types, and sizes within any category of point sources.

**(g) Other regulations for safe transportation, handling, carriage, storage, and stowage of pollutants**

Any permit issued under this section for the discharge of pollutants into the navigable waters from a vessel or other floating craft shall be subject to any applicable regulations promulgated by the Secretary of the department in which the Coast Guard is operating, establishing specifications for safe transportation, handling, carriage, storage, and stowage of pollutants.

**(h) Violation of permit conditions; restriction or prohibition upon introduction of pollutant by source not previously utilizing treatment works**

In the event any condition of a permit for discharges from a treatment works (as defined in section 1292 of this title) which is publicly owned is violated, a State with a program approved under subsection (b) of this section or the Administrator, where no State program is approved or where the Administrator determines pursuant to section 1319(a) of this title that a State with an approved program has not commenced appropriate enforcement action with respect to such permit, may proceed in a court of competent jurisdiction to restrict or prohibit the introduction of any pollutant into such treatment works by a source not utilizing such treatment works prior to the finding that such condition was violated.

**(i) Federal enforcement not limited**

Nothing in this section shall be construed to limit the authority of the Administrator to take action pursuant to section 1319 of this title.

**(j) Public information**

A copy of each permit application and each permit issued under this section shall be available to the public. Such permit application or permit, or portion thereof, shall further be available on request for the purpose of reproduction.

**(k) Compliance with permits**

Compliance with a permit issued pursuant to this section shall be deemed compliance, for purposes of sections 1319 and 1365 of this title, with sections 1311, 1312, 1316, 1317, and 1343 of this title, except any standard imposed under section

1317 of this title for a toxic pollutant injurious to human health. Until December 31, 1974, in any case where a permit for discharge has been applied for pursuant to this section, but final administrative disposition of such application has not been made, such discharge shall not be a violation of (1) section 1311, 1316, or 1342 of this title, or (2) section 407 of this title, unless the Administrator or other plaintiff proves that final administrative disposition of such application has not been made because of the failure of the applicant to furnish information reasonably required or requested in order to process the application. For the 180-day period beginning on October 18, 1972, in the case of any point source discharging any pollutant or combination of pollutants immediately prior to such date which source is not subject to section 407 of this title, the discharge by such source shall not be a violation of this chapter if such a source applies for a permit for discharge pursuant to this section within such 180-day period.

**(l) Limitation on permit requirement**

**(1) Agricultural return flows**

The Administrator shall not require a permit under this section for discharges composed entirely of return flows from irrigated agriculture, nor shall the Administrator directly or indirectly, require any State to require such a permit.

**(2) Stormwater runoff from oil, gas, and mining operations**

The Administrator shall not require a permit under this section, nor shall the Administrator directly or indirectly require any State to require a permit, for discharges of stormwater runoff from mining operations or oil and gas exploration, production, processing, or treatment operations or transmission facilities, composed entirely of flows which are from conveyances or systems of conveyances (including but not limited to pipes, conduits, ditches, and channels) used for collecting and conveying precipitation runoff and which are not contaminated by contact with, or do not come into contact with, any overburden, raw material, intermediate products, finished product, byproduct, or waste products located on the site of such operations.

**(m) Additional pretreatment of conventional pollutants not required**

To the extent a treatment works (as defined in section 1292 of this title) which is publicly owned is not meeting the requirements of a permit issued under this section for such treatment works as a result of inadequate design or operation of such treatment works, the Administrator, in issuing a permit under this section, shall not require pretreatment by a person introducing conventional pollutants identified pursuant to section 1314(a)(4) of this title into such treatment works other than pretreatment required to assure compliance with pretreatment standards under subsection (b)(8) of this section and section 1317(b)(1) of this title. Nothing in this subsection shall affect the Administrator's authority under sections 1317 and 1319 of this title, affect State and local authority under sections 1317(b)(4) and 1370 of this title,

relieve such treatment works of its obligations to meet requirements established under this chapter, or otherwise preclude such works from pursuing whatever feasible options are available to meet its responsibility to comply with its permit under this section.

**(n) Partial permit program**

**(1) State submission**

The Governor of a State may submit under subsection (b) of this section a permit program for a portion of the discharges into the navigable waters in such State.

**(2) Minimum coverage**

A partial permit program under this subsection shall cover, at a minimum, administration of a major category of the discharges into the navigable waters of the State or a major component of the permit program required by subsection (b) of this section.

**(3) Approval of major category partial permit programs**

The Administrator may approve a partial permit program covering administration of a major category of discharges under this subsection if—

(A) such program represents a complete permit program and covers all of the discharges under the jurisdiction of a department or agency of the State; and

(B) the Administrator determines that the partial program represents a significant and identifiable part of the State program required by subsection (b) of this section.

**(4) Approval of major component partial permit programs**

The Administrator may approve under this subsection a partial and phased permit program covering administration of a major component (including discharge categories) of a State permit program required by subsection (b) of this section if—

(A) the Administrator determines that the partial program represents a significant and identifiable part of the State program required by subsection (b) of this section; and

(B) the State submits, and the Administrator approves, a plan for the State to assume administration by phases of the remainder of the State program required by subsection (b) of this section by a specified date not more than 5 years after submission of the partial program under this subsection and agrees to make all reasonable efforts to assume such administration by such date.

**(o) Anti-backsliding**

**(1) General prohibition**

In the case of effluent limitations established on the basis of subsection (a)(1)(B) of this section, a permit may not be renewed, reissued, or modified on the basis of effluent guidelines promulgated under section 1314(b) of this title subsequent to the original issuance of such permit, to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit. In the case of effluent limitations established on the basis of section 1311(b)(1)(C)



or section 1313(d) or (e) of this title, a permit may not be renewed, reissued, or modified to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit except in compliance with section 1313(d)(4) of this title.

**(2) Exceptions**

A permit with respect to which paragraph (1) applies may be renewed, reissued, or modified to contain a less stringent effluent limitation applicable to a pollutant if—

(A) material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limitation;

(B)(i) information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance; or

(ii) the Administrator determines that technical mistakes or mistaken interpretations of law were made in issuing the permit under subsection (a)(1)(B) of this section;

(C) a less stringent effluent limitation is necessary because of events over which the permittee has no control and for which there is no reasonably available remedy;

(D) the permittee has received a permit modification under section 1311(c), 1311(g), 1311(h), 1311(i), 1311(k), 1311(n), or 1326(a) of this title; or

(E) the permittee has installed the treatment facilities required to meet the effluent limitations in the previous permit and has properly operated and maintained the facilities but has nevertheless been unable to achieve the previous effluent limitations, in which case the limitations in the reviewed, reissued, or modified permit may reflect the level of pollutant control actually achieved (but shall not be less stringent than required by effluent guidelines in effect at the time of permit renewal, reissuance, or modification).

Subparagraph (B) shall not apply to any revised waste load allocations or any alternative grounds for translating water quality standards into effluent limitations, except where the cumulative effect of such revised allocations results in a decrease in the amount of pollutants discharged into the concerned waters, and such revised allocations are not the result of a discharger eliminating or substantially reducing its discharge of pollutants due to complying with the requirements of this chapter or for reasons otherwise unrelated to water quality.

**(3) Limitations**

In no event may a permit with respect to which paragraph (1) applies be renewed, reissued, or modified to contain an effluent limitation which is less stringent than required by effluent guidelines in effect at the time the permit is renewed, reissued, or modified. In no event may such a permit to discharge into waters be renewed, reissued, or modified to con-

tain a less stringent effluent limitation if the implementation of such limitation would result in a violation of a water quality standard under section 1313 of this title applicable to such waters.

**(p) Municipal and industrial stormwater discharges**

**(1) General rule**

Prior to October 1, 1994, the Administrator or the State (in the case of a permit program approved under this section) shall not require a permit under this section for discharges composed entirely of stormwater.

**(2) Exceptions**

Paragraph (1) shall not apply with respect to the following stormwater discharges:

(A) A discharge with respect to which a permit has been issued under this section before February 4, 1987.

(B) A discharge associated with industrial activity.

(C) A discharge from a municipal separate storm sewer system serving a population of 250,000 or more.

(D) A discharge from a municipal separate storm sewer system serving a population of 100,000 or more but less than 250,000.

(E) A discharge for which the Administrator or the State, as the case may be, determines that the stormwater discharge contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the United States.

**(3) Permit requirements**

**(A) Industrial discharges**

Permits for discharges associated with industrial activity shall meet all applicable provisions of this section and section 1311 of this title.

**(B) Municipal discharge**

Permits for discharges from municipal storm sewers—

(i) may be issued on a system- or jurisdiction-wide basis;

(ii) shall include a requirement to effectively prohibit non-stormwater discharges into the storm sewers; and

(iii) shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.

**(4) Permit application requirements**

**(A) Industrial and large municipal discharges**

Not later than 2 years after February 4, 1987, the Administrator shall establish regulations setting forth the permit application requirements for stormwater discharges described in paragraphs (2)(B) and (2)(C). Applications for permits for such discharges shall be filed no later than 3 years after February 4, 1987. Not later than 4 years after February 4, 1987, the Administrator or the State, as

the case may be, shall issue or deny each such permit. Any such permit shall provide for compliance as expeditiously as practicable, but in no event later than 3 years after the date of issuance of such permit.

**(B) Other municipal discharges**

Not later than 4 years after February 4, 1987, the Administrator shall establish regulations setting forth the permit application requirements for stormwater discharges described in paragraph (2)(D). Applications for permits for such discharges shall be filed no later than 5 years after February 4, 1987. Not later than 6 years after February 4, 1987, the Administrator or the State, as the case may be, shall issue or deny each such permit. Any such permit shall provide for compliance as expeditiously as practicable, but in no event later than 3 years after the date of issuance of such permit.

**(5) Studies**

The Administrator, in consultation with the States, shall conduct a study for the purposes of—

(A) identifying those stormwater discharges or classes of stormwater discharges for which permits are not required pursuant to paragraphs (1) and (2) of this subsection;

(B) determining, to the maximum extent practicable, the nature and extent of pollutants in such discharges; and

(C) establishing procedures and methods to control stormwater discharges to the extent necessary to mitigate impacts on water quality.

Not later than October 1, 1988, the Administrator shall submit to Congress a report on the results of the study described in subparagraphs (A) and (B). Not later than October 1, 1989, the Administrator shall submit to Congress a report on the results of the study described in subparagraph (C).

**(6) Regulations**

Not later than October 1, 1993, the Administrator, in consultation with State and local officials, shall issue regulations (based on the results of the studies conducted under paragraph (5)) which designate stormwater discharges, other than those discharges described in paragraph (2), to be regulated to protect water quality and shall establish a comprehensive program to regulate such designated sources. The program shall, at a minimum, (A) establish priorities, (B) establish requirements for State stormwater management programs, and (C) establish expeditious deadlines. The program may include performance standards, guidelines, guidance, and management practices and treatment requirements, as appropriate.

**(q) Combined sewer overflows**

**(1) Requirement for permits, orders, and decrees**

Each permit, order, or decree issued pursuant to this chapter after December 21, 2000, for a discharge from a municipal combined storm and sanitary sewer shall conform to the Combined Sewer Overflow Control Policy signed by

the Administrator on April 11, 1994 (in this subsection referred to as the "CSO control policy").

**(2) Water quality and designated use review guidance**

Not later than July 31, 2001, and after providing notice and opportunity for public comment, the Administrator shall issue guidance to facilitate the conduct of water quality and designated use reviews for municipal combined sewer overflow receiving waters.

**(3) Report**

Not later than September 1, 2001, the Administrator shall transmit to Congress a report on the progress made by the Environmental Protection Agency, States, and municipalities in implementing and enforcing the CSO control policy.

(June 30, 1948, ch. 758, title IV, § 402, as added Pub. L. 92-500, § 2, Oct. 18, 1972, 86 Stat. 880; amended Pub. L. 95-217, §§ 33(c), 50, 54(c)(1), 65, 66, Dec. 27, 1977, 91 Stat. 1577, 1588, 1591, 1599, 1600; Pub. L. 100-4, title IV, §§ 401-404(a), 404(c), formerly 404(d), 405, Feb. 4, 1987, 101 Stat. 65-67, 69, renumbered § 404(c), Pub. L. 104-66, title II, § 2021(e)(2), Dec. 21, 1995, 109 Stat. 727; Pub. L. 102-580, title III, § 364, Oct. 31, 1992, 106 Stat. 4862; Pub. L. 106-554, § 1(a)(4) [div. B, title I, § 112(a)], Dec. 21, 2000, 114 Stat. 2763, 2763A-224.)

**AMENDMENTS**

2000—Subsec. (q). Pub. L. 106-554 added subsec. (q).

1992—Subsec. (p)(1), (6). Pub. L. 102-580 substituted "October 1, 1994" for "October 1, 1992" in par. (1) and "October 1, 1993" for "October 1, 1992" in par. (6).

1987—Subsec. (a)(1). Pub. L. 100-4, § 404(c), inserted cl. (A) and (B) designations.

Subsec. (c)(1). Pub. L. 100-4, § 403(b)(2), substituted "as to those discharges" for "as to those navigable waters".

Subsec. (c)(4). Pub. L. 100-4, § 403(b)(1), added par. (4).

Subsec. (l). Pub. L. 100-4, § 401, inserted "Limitation on permit requirement" as subsec. heading designated existing provisions as par. (1) and inserted par. heading, added par. (2), and aligned pars. (1) and (2).

Subsecs. (m) to (p). Pub. L. 100-4, §§ 402, 403(a), 404(a), 405, added subsecs. (m) to (p).

1977—Subsec. (a)(5). Pub. L. 95-217, § 50, substituted "section 1314(i)(2)" for "section 1314(h)(2)".

Subsec. (b). Pub. L. 95-217, § 50, substituted in provisions preceding par. (1) "subsection (i)(2) of section 1314" for "subsection (h)(2) of section 1314".

Subsec. (b)(8). Pub. L. 95-217, § 54(c)(1), inserted reference to identification in terms of character and volume of pollutants of any significant source introducing pollutants subject to pretreatment standards under section 1317(b) of this title into treatment works and programs to assure compliance with pretreatment standards by each source.

Subsec. (c)(1), (2). Pub. L. 95-217, § 50, substituted "section 1314(i)(2)" for "section 1314(h)(2)".

Subsec. (d)(2). Pub. L. 95-217, § 65(b), inserted provision requiring that, whenever the Administrator objects to the issuance of a permit under subsec. (d)(2) of this section, the written objection contain a statement of the reasons for the objection and the effluent limitations and conditions which the permit would include if it were issued by the Administrator.

Subsec. (d)(4). Pub. L. 95-217, § 65(a), added par. (4).

Subsec. (e). Pub. L. 95-217, § 50, substituted "subsection (i)(2) of section 1314" for "subsection (h)(2) of section 1314".

Subsec. (h). Pub. L. 95-217, § 66, substituted "where no State program is approved or where the Administrator



spect to recipients of Federal assistance under this chapter, the Administrator is authorized to enter into noncompetitive procurement contracts with independent State audit organizations, consistent with chapter 75 of title 31. Such contracts may only be entered into to the extent and in such amounts as may be provided in advance in appropriation Acts.

**(e) Awards for outstanding technological achievement or innovative processes, methods, or devices in waste treatment and pollution abatement programs**

(1) It is the purpose of this subsection to authorize a program which will provide official recognition by the United States Government to those industrial organizations and political subdivisions of States which during the preceding year demonstrated an outstanding technological achievement or an innovative process, method, or device in their waste treatment and pollution abatement programs. The Administrator shall, in consultation with the appropriate State water pollution control agencies, establish regulations under which such recognition may be applied for and granted, except that no applicant shall be eligible for an award under this subsection if such applicant is not in total compliance with all applicable water quality requirements under this chapter, or otherwise does not have a satisfactory record with respect to environmental quality.

(2) The Administrator shall award a certificate or plaque of suitable design to each industrial organization or political subdivision which qualifies for such recognition under regulations established under this subsection.

(3) The President of the United States, the Governor of the appropriate State, the Speaker of the House of Representatives, and the President pro tempore of the Senate shall be notified of the award by the Administrator and the awarding of such recognition shall be published in the Federal Register.

**(f) Detail of Environmental Protection Agency personnel to State water pollution control agencies**

Upon the request of a State water pollution control agency, personnel of the Environmental Protection Agency may be detailed to such agency for the purpose of carrying out the provisions of this chapter.

(June 30, 1948, ch. 758, title V, § 501, as added Pub. L. 92-500, § 2, Oct. 18, 1972, 86 Stat. 885; amended Pub. L. 100-4, title V, § 501, Feb. 4, 1987, 101 Stat. 75.)

**AMENDMENTS**

1987—Subsec. (d). Pub. L. 100-4 inserted provision at end authorizing Administrator to enter into noncompetitive procurement contracts with independent State audit organizations, consistent with chapter 75 of title 31, but only to extent and in such amounts as provided in advance in appropriations Acts.

**ENVIRONMENTAL COURT FEASIBILITY STUDY**

Section 9 of Pub. L. 92-500 authorized the President, acting through the Attorney General, to study the feasibility of establishing a separate court or court system with jurisdiction over environmental matters and required him to report the results of his study, together

with his recommendations, to Congress not later than one year after Oct. 18, 1972.

**TRANSFER OF PUBLIC HEALTH SERVICE OFFICERS**

Pub. L. 89-234, § 2(b)-(k), Oct. 2, 1965, 79 Stat. 904, 905, authorized the transfer of certain commissioned officers of the Public Health Service to classified positions in the Federal Water Pollution Control Administration, now the Environmental Protection Agency, where such transfer was requested within six months after the establishment of the Administration and made certain administrative provisions relating to pension and retirement rights of the transferees, sick leave benefits, group life insurance, and certain other miscellaneous provisions.

**§ 1362. Definitions**

Except as otherwise specifically provided, when used in this chapter:

(1) The term "State water pollution control agency" means the State agency designated by the Governor having responsibility for enforcing State laws relating to the abatement of pollution.

(2) The term "interstate agency" means an agency of two or more States established by or pursuant to an agreement or compact approved by the Congress, or any other agency of two or more States, having substantial powers or duties pertaining to the control of pollution as determined and approved by the Administrator.

(3) The term "State" means a State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and the Trust Territory of the Pacific Islands.

(4) The term "municipality" means a city, town, borough, county, parish, district, association, or other public body created by or pursuant to State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 1288 of this title.

(5) The term "person" means an individual, corporation, partnership, association, State, municipality, commission, or political subdivision of a State, or any interstate body.

(6) The term "pollutant" means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water. This term does not mean (A) "sewage from vessels or a discharge incidental to the normal operation of a vessel of the Armed Forces" within the meaning of section 1322 of this title; or (B) water, gas, or other material which is injected into a well to facilitate production of oil or gas, or water derived in association with oil or gas production and disposed of in a well, if the well used either to facilitate production or for disposal purposes is approved by authority of the State in which the well is located, and if such State determines that such injection or disposal will not result in the degradation of ground or surface water resources.

(7) The term "navigable waters" means the waters of the United States, including the territorial seas.

(8) The term "territorial seas" means the belt of the seas measured from the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters, and extending seaward a distance of three miles.

(9) The term "contiguous zone" means the entire zone established or to be established by the United States under article 24 of the Convention of the Territorial Sea and the Contiguous Zone.

(10) The term "ocean" means any portion of the high seas beyond the contiguous zone.

(11) The term "effluent limitation" means any restriction established by a State or the Administrator on quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources into navigable waters, the waters of the contiguous zone, or the ocean, including schedules of compliance.

(12) The term "discharge of a pollutant" and the term "discharge of pollutants" each means (A) any addition of any pollutant to navigable waters from any point source, (B) any addition of any pollutant to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft.

(13) The term "toxic pollutant" means those pollutants, or combinations of pollutants, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will, on the basis of information available to the Administrator, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunctions in reproduction) or physical deformations, in such organisms or their offspring.

(14) The term "point source" means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include agricultural storm-water discharges and return flows from irrigated agriculture.

(15) The term "biological monitoring" shall mean the determination of the effects on aquatic life, including accumulation of pollutants in tissue, in receiving waters due to the discharge of pollutants (A) by techniques and procedures, including sampling of organisms representative of appropriate levels of the food chain appropriate to the volume and the physical, chemical, and biological characteristics of the effluent, and (B) at appropriate frequencies and locations.

(16) The term "discharge" when used without qualification includes a discharge of a pollutant, and a discharge of pollutants.

(17) The term "schedule of compliance" means a schedule of remedial measures including an enforceable sequence of actions or operations leading to compliance with an effluent limitation, other limitation, prohibition, or standard.

(18) The term "industrial user" means those industries identified in the Standard Industrial Classification Manual, Bureau of the Budget,

1967, as amended and supplemented, under the category of "Division D—Manufacturing" and such other classes of significant waste producers as, by regulation, the Administrator deems appropriate.

(19) The term "pollution" means the man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water.

(20) The term "medical waste" means isolation wastes; infectious agents; human blood and blood products; pathological wastes; sharps; body parts; contaminated bedding; surgical wastes and potentially contaminated laboratory wastes; dialysis wastes; and such additional medical items as the Administrator shall prescribe by regulation.

(21) COASTAL RECREATION WATERS.—

(A) IN GENERAL.—The term "coastal recreation waters" means—

(i) the Great Lakes; and

(ii) marine coastal waters (including coastal estuaries) that are designated under section 1313(c) of this title by a State for use for swimming, bathing, surfing, or similar water contact activities.

(B) EXCLUSIONS.—The term "coastal recreation waters" does not include—

(i) inland waters; or

(ii) waters upstream of the mouth of a river or stream having an unimpaired natural connection with the open sea.

(22) FLOATABLE MATERIAL.—

(A) IN GENERAL.—The term "floatable material" means any foreign matter that may float or remain suspended in the water column.

(B) INCLUSIONS.—The term "floatable material" includes—

(i) plastic;

(ii) aluminum cans;

(iii) wood products;

(iv) bottles; and

(v) paper products.

(23) PATHOGEN INDICATOR.—The term "pathogen indicator" means a substance that indicates the potential for human infectious disease.

(24) OIL AND GAS EXPLORATION AND PRODUCTION.—The term "oil and gas exploration, production, processing, or treatment operations or transmission facilities" means all field activities or operations associated with exploration, production, processing, or treatment operations, or transmission facilities, including activities necessary to prepare a site for drilling and for the movement and placement of drilling equipment, whether or not such field activities or operations may be considered to be construction activities.

(June 30, 1948, ch. 758, title V, § 502, as added Pub. L. 92-500, § 2, Oct. 18, 1972, 86 Stat. 886; amended Pub. L. 95-217, § 33(b), Dec. 27, 1977, 91 Stat. 1577; Pub. L. 100-4, title V, §§ 502(a), 503, Feb. 4, 1987, 101 Stat. 75; Pub. L. 100-688, title III, § 3202(a), Nov. 18, 1988, 102 Stat. 4154; Pub. L. 104-106, div. A, title III, § 325(c)(3), Feb. 10, 1996, 110 Stat. 259; Pub. L. 106-284, § 5, Oct. 10, 2000, 114 Stat. 875; Pub. L. 109-58, title III, § 323, Aug. 8, 2005, 119 Stat. 694.)

AMENDMENTS

2005—Par. (24). Pub. L. 109-58 added par. (24).

## § 122.28

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process crushed and broken stone, gravel, and riprap (See 40 CFR Part 436, Subpart B, including the effluent limitations guidelines).

(3) "Log sorting and log storage facilities" means facilities whose discharges result from the holding of unprocessed wood, for example, logs or roundwood with bark or after removal of bark held in self-contained bodies of water (mill ponds or log ponds) or stored on land where water is applied intentionally on the logs (wet decking). (See 40 CFR Part 429, Subpart I, including the effluent limitations guidelines).

§ 122.28 General permits (applicable to State NPDES programs, see § 123.25).

(a) *Coverage.* The Director may issue a general permit in accordance with the following:

(1) *Area.* The general permit shall be written to cover a category of discharges or sludge use or disposal practices or facilities described in the permit under paragraph (a)(2)(ii) of this section, except those covered by individual permits, within a geographic area. The area shall correspond to existing geographic or political boundaries, such as:

(i) Designated planning areas under sections 208 and 303 of CWA;

(ii) Sewer districts or sewer authorities;

(iii) City, county, or State political boundaries;

(iv) State highway systems;

(v) Standard metropolitan statistical areas as defined by the Office of Management and Budget;

(vi) Urbanized areas as designated by the Bureau of the Census according to criteria in 30 FR 15202 (May 1, 1974); or

(vii) Any other appropriate division or combination of boundaries.

(2) *Sources.* The general permit may be written to regulate, within the area described in paragraph (a)(1) of this section, either:

(i) Storm water point sources; or

(ii) A category of point sources other than storm water point sources, or a category of "treatment works treating domestic sewage," if the sources or "treatment works treating domestic sewage" all:

(A) Involve the same or substantially similar types of operations;

(B) Discharge the same types of wastes or engage in the same types of sludge use or disposal practices;

(C) Require the same effluent limitations, operating conditions, or standards for sewage sludge use or disposal;

(D) Require the same or similar monitoring; and

(E) In the opinion of the Director, are more appropriately controlled under a general permit than under individual permits.

(b) *Administration.* (1) *In general.* General permits may be issued, modified, revoked and reissued, or terminated in accordance with applicable requirements of Part 124 or corresponding State regulations. Special procedures for issuance are found at § 123.44 for States and § 124.58 for EPA.

(2) *Requiring an individual permit.*

(i) The Director may require any person authorized by a general permit to apply for and obtain an individual NPDES permit. Any interested person may petition the Director to take action under this paragraph. Cases where an individual NPDES permit may be required include the following:

(A) The discharger is not in compliance with the conditions of the general NPDES permit;

(B) A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;

(C) Effluent limitation guidelines are promulgated for point sources covered by the general NPDES permit;

(D) A Water Quality Management plan containing requirements applicable to such point sources is approved; or

(E) The requirements of paragraph (a) of this section are not met.

(ii) *For EPA issued general permits only,* the Regional Administrator may require any owner or operator authorized by a general permit to apply for an individual NPDES permit as provided in paragraph (b)(2)(i) of this section, only if the owner or operator has been notified in writing that a permit application is required. This notice shall include a brief statement of the

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reasons for this decision, an application form, a statement setting a time for the owner or operator to file the application, and a statement that on the effective date of the individual NPDES permit the general permit as it applies to the individual permittee shall automatically terminate. The Director may grant additional time upon request of the applicant.

(iii) Any owner or operator authorized by a general permit may request to be excluded from the coverage of the general permit by applying for an individual permit. The owner or operator shall submit an application under § 122.21, with reasons supporting the request, to the Director no later than 90 days after the publication by EPA of the general permit in the *FEDERAL REGISTER* or the publication by a State in accordance with applicable State law. The request shall be processed under Part 124 or applicable State procedures. The request shall be granted by issuing of any individual permit if the reasons cited by the owner or operator are adequate to support the request.

(iv) When an individual NPDES permit is issued to an owner or operator otherwise subject to a general NPDES permit, the applicability of the general permit to the individual NPDES permittee is automatically terminated on the effective date of the individual permit.

(v) A source excluded from a general permit solely because it already has an individual permit may request that the individual permit be revoked, and that it be covered by the general permit. Upon revocation of the individual permit, the general permit shall apply to the source.

(c) *Offshore oil and gas facilities* (Not applicable to State programs). (1) The Regional Administrator shall, except as provided below, issue general permits covering discharges from offshore oil and gas exploration and production facilities within the Region's jurisdiction. Where the offshore area includes areas, such as areas of biological concern, for which separate permit conditions are required, the Regional Administrator may issue separate general permits, individual permits, or both. The reason for separate general

permits or individual permits shall be set forth in the appropriate fact sheets or statements of basis. Any statement of basis or fact sheet for a draft permit shall include the Regional Administrator's tentative determination as to whether the permit applies to "new sources," "new dischargers," or existing sources and the reasons for this determination, and the Regional Administrator's proposals as to areas of biological concern subject either to separate individual or general permits. For Federally leased lands, the general permit area should generally be no less extensive than the lease sale area defined by the Department of the Interior.

(2) Any interested person, including any prospective permittee, may petition the Regional Administrator to issue a general permit. Unless the Regional Administrator determines under paragraph (c)(1) of this section that no general permit is appropriate, he shall promptly provide a project decision schedule covering the issuance of the general permit or permits for any lease sale area for which the Department of the Interior has published a draft environmental impact statement. The project decision schedule shall meet the requirements of § 124.3(g), and shall include a schedule providing for the issuance of the final general permit or permits not later than the date of the final notice of sale projected by the Department of the Interior or six months after the date of the request, whichever is later. The Regional Administrator may, at his discretion, issue a project decision schedule for offshore oil and gas facilities in the territorial seas.

(3) Nothing in this paragraph (c) shall affect the authority of the Regional Administrator to require an individual permit under § 122.28(b)(2)(1)(A) through (F).

(Clean Water Act (33 U.S.C. 1251 *et seq.*), Safe Drinking Water Act (42 U.S.C. 300f *et seq.*), Clean Air Act (42 U.S.C. 7401 *et seq.*), Resource Conservation and Recovery Act (42 U.S.C. 6901 *et seq.*))

[48 FR 14153, Apr. 1, 1983, as amended at 48 FR 39619, Sept. 1, 1983; 49 FR 38048, Sept. 26, 1984; 50 FR 6940, Feb. 19, 1985; 54 FR 258, Jan. 4, 1989; 54 FR 18782, May 2, 1989]



**§ 122.29**

EDITORIAL NOTE: At 54 FR 258, Jan. 4, 1989, § 122.28 was amended by removing paragraph (b)(2)(i)(A) and redesignating the existing paragraphs (B), (C), (D), (E) and (F) as (A), (B), (C), (D) and (E) respectively. At 54 FR 18782, May 2, 1989, § 122.28 was again amended, in part by revising paragraphs (b)(2)(i)(B), (C), and (F). As it is not clear how the second amendment was intended to be handled, the text of these revised paragraphs follows. EPA will publish clarification at a later date.

§ 122.28 General permits (applicable to State NPDES programs, see § 123.25).

(b)\* \* \*  
(2)\* \* \*  
(i)\* \* \*

(B) The discharger or "treatment works treating domestic sewage" is not in compliance with the conditions of the general NPDES permit;

(C) A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source or treatment works treating domestic sewage;

(F) Standards for sewage sludge use or disposal have been promulgated for the sludge use and disposal practice covered by the general NPDES permit; or

**§ 122.29 New sources and new dischargers.**

(a) *Definitions.* (1) "New source" and "new discharger" are defined in § 122.2. [See Note 2.]

(2) "Source" means any building, structure, facility, or installation from which there is or may be a discharge of pollutants.

(3) "Existing source" means any source which is not a new source or a new discharger.

(4) "Site" is defined in § 122.2;

(5) "Facilities or equipment" means buildings, structures, process or production equipment or machinery which form a permanent part of the new source and which will be used in its operation, if these facilities or equipment are of such value as to represent a substantial commitment to construct. It excludes facilities or equipment used in connection with feasibility, engineering, and design

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studies regarding the source or water pollution treatment for the source.

(b) *Criteria for new source determination.* (1) Except as otherwise provided in an applicable new source performance standard, a source is a "new source" if it meets the definition of "new source" in § 122.2, and

(i) It is constructed at a site at which no other source is located; or

(ii) It totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or

(iii) Its processes are substantially independent of an existing source at the same site. In determining whether these processes are substantially independent, the Director shall consider such factors as the extent to which the new facility is integrated with the existing plant; and the extent to which the new facility is engaged in the same general type of activity as the existing source.

(2) A source meeting the requirements of paragraphs (b)(1) (i), (ii), or (iii) of this section is a new source only if a new source performance standard is independently applicable to it. If there is no such independently applicable standard, the source is a new discharger. See § 122.2.

(3) Construction on a site at which an existing source is located results in a modification subject to § 122.62 rather than a new source (or a new discharger) if the construction does not create a new building, structure, facility, or installation meeting the criteria of paragraph (b)(1) (ii) or (iii) of this section but otherwise alters, replaces, or adds to existing process or production equipment.

(4) Construction of a new source as defined under § 122.2 has commenced if the owner or operator has:

(i) Begun, or caused to begin as part of a continuous on-site construction program:

(A) Any placement, assembly, or installation of facilities or equipment; or

(B) Significant site preparation work including clearing, excavation or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or

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(1) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of CWA if it were directly discharging those pollutants; and

(2) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.

(3) For purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

(Information collection requirements in paragraph (a) were approved by the Office of Management and Budget under control number 2040-0045)

[48 FR 14153, Apr. 1, 1983, as amended at 49 FR 38049, Sept. 26, 1984; 50 FR 4514, Jan. 31, 1985]

**§ 122.43 Establishing permit conditions (applicable to State programs, see § 123.25).**

(a) In addition to conditions required in all permits (§§ 122.41 and 122.42), the Director shall establish conditions, as required on a case-by-case basis, to provide for and assure compliance with all applicable requirements of CWA and regulations. These shall include conditions under §§ 122.46 (duration of permits), 122.47(a) (schedules of compliance), 122.48 (monitoring), and for EPA permits only 122.47(b) (alternates schedule of compliance) and 122.49 (considerations under Federal law).

(b)(1) For a State issued permit, an applicable requirement is a State statutory or regulatory requirement which takes effect prior to final administrative disposition of a permit. For a permit issued by EPA, an applicable requirement is a statutory or regulatory requirement (including any interim final regulation) which takes effect prior to the issuance of the permit (except as provided in § 124.86(c) for NPDES permits being processed under Subpart E or F of Part 124). Section 124.14 (reopening of

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comment period) provides a means for reopening EPA permit proceedings at the discretion of the Director where new requirements become effective during the permitting process and are of sufficient magnitude to make additional proceedings desirable. For State and EPA administered programs, an applicable requirement is also any requirement which takes effect prior to the modification or revocation and reissuance of a permit, to the extent allowed in § 122.62.

(2) New or reissued permits, and to the extent allowed under § 122.62 modified or revoked and reissued permits, shall incorporate each of the applicable requirements referenced in §§ 122.44 and 122.45.

(c) *Incorporation.* All permit conditions shall be incorporated either expressly or by reference. If incorporated by reference, a specific citation to the applicable regulations or requirements must be given in the permit.

**§ 122.44 Establishing limitations, standards, and other permit conditions (applicable to State NPDES programs, see § 123.25).**

In addition to the conditions established under § 122.43(a), each NPDES permit shall include conditions meeting the following requirements when applicable.

(a) *Technology-based effluent limitations and standards* based on effluent limitations and standards promulgated under section 301 of CWA or new source performance standards promulgated under section 306 of CWA, on case-by-case effluent limitations determined under section 402(a)(1) of CWA, or on a combination of the two, in accordance with § 125.3. For new sources or new dischargers, these technology based limitations and standards are subject to the provisions of § 122.29(d) (protection period).

(b)(1) *Other effluent limitations and standards* under sections 301, 302, 303, 307, 318 and 405 of CWA. If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under section 307(a) of CWA for a toxic pollutant and that standard or

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prohibition is more stringent than any limitation on the pollutant in the permit, the Director shall institute proceedings under these regulations to modify or revoke and reissue the permit to conform to the toxic effluent standard or prohibition. See also § 122.41(a).

(2) *Standards for sewage sludge use or disposal* under section 405(d) of the CWA unless those standards have been included in a permit issued under the appropriate provisions of subtitle C of the Solid Waste Disposal Act, Part C of Safe Drinking Water Act, the Marine Protection, Research, and Sanctuaries Act of 1972, or the Clean Air Act, or under State permit programs approved by the Administrator. When there are no applicable standards for sewage sludge use or disposal, the permit may include requirements developed on a case-by-case basis to protect public health and the environment from any adverse effects which may occur from toxic pollutants in sewage sludge. If any applicable standard for sewage sludge use or disposal is promulgated under section 405(d) of the CWA and that standard is more stringent than any limitation on the pollutant or practice in the permit, the Director may initiate proceedings under these regulations to modify or revoke and reissue the permit to conform to the standard for sewage sludge use or disposal.

(c) *Reopener clause:* for any discharger within a primary industry category (see Appendix A), requirements under section 307(a)(2) of CWA as follows:

(1) On or before June 30, 1981: (i) If applicable standards or limitations have not yet been promulgated, the permit shall include a condition stating that, if an applicable standard or limitation is promulgated under sections 301(b)(2) (C) and (D), 304(b)(2), and 307(a)(2) and that effluent standard or limitation is more stringent than any effluent limitation in the permit or controls a pollutant not limited in the permit, the permit shall be promptly modified or revoked and reissued to conform to that effluent standard or limitation.

(ii) If applicable standards or limitations have been promulgated or ap-

proved, the permit shall include those standards or limitations. (If EPA approves existing effluent limitations or decides not to develop new effluent limitations, it will publish a notice in the *FEDERAL REGISTER* that the limitations are "approved" for the purpose of this regulation.)

(2) On or after the statutory deadline set forth in section 301(b)(2) (A), (C), and (E) of CWA, any permit issued shall include effluent limitations to meet the requirements of section 301(b)(2) (A), (C), (D), (E), (F), whether or not applicable effluent limitations guidelines have been promulgated or approved. These permits need not incorporate the clause required by paragraph (c)(1) of this section.

(3) The Director shall promptly modify or revoke and reissue any permit containing the clause required under paragraph (c)(1) of this section to incorporate an applicable effluent standard or limitation under sections 301(b)(2) (C) and (D), 304(b)(2) and 307(a)(2) which is promulgated or approved after the permit is issued if that effluent standard or limitation is more stringent than any effluent limitation in the permit, or controls a pollutant not limited in the permit.

(4) For any permit issued to a treatment works treating domestic sewage (including "sludge-only facilities"), the Director shall include a reopener clause to incorporate any applicable standard for sewage sludge use or disposal promulgated under section 405(d) of the CWA. The Director may promptly modify or revoke and reissue any permit containing the reopener clause required by this paragraph if the standard for sewage sludge use or disposal is more stringent than any requirements for sludge use or disposal in the permit, or controls a pollutant or practice not limited in the permit.

(d) *Water quality standards and State requirements:* any requirements in addition to or more stringent than promulgated effluent limitations guidelines or standards under sections 301, 304, 306, 307, 318 and 405 of CWA necessary to:

(1) Achieve water quality standards established under section 303 of the

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CWA, including State narrative criteria for water quality.

(i) Limitations must control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality.

(ii) When determining whether a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above a narrative or numeric criteria within a State water quality standard, the permitting authority shall use procedures which account for existing controls on point and nonpoint sources of pollution, the variability of the pollutant or pollutant parameter in the effluent, the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity), and where appropriate, the dilution of the effluent in the receiving water.

(iii) When the permitting authority determines, using the procedures in paragraph (d)(1)(ii) of this section, that a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above the allowable ambient concentration of a State numeric criteria within a State water quality standard for an individual pollutant, the permit must contain effluent limits for that pollutant.

(iv) When the permitting authority determines, using the procedures in paragraph (d)(1)(ii) of this section, that a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above the numeric criterion for whole effluent toxicity, the permit must contain effluent limits for whole effluent toxicity.

(v) Except as provided in this subparagraph, when the permitting authority determines, using the procedures in paragraph (d)(1)(ii) of this section, toxicity testing data, or other information, that a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion

above a narrative criterion within an applicable State water quality standard, the permit must contain effluent limits for whole effluent toxicity. Limits on whole effluent toxicity are not necessary where the permitting authority demonstrates in the fact sheet or statement of basis of the NPDES permit, using the procedures in paragraph (d)(1)(ii) of this section, that chemical-specific limits for the effluent are sufficient to attain and maintain applicable numeric and narrative State water quality standards.

(vi) Where a State has not established a water quality criterion for a specific chemical pollutant that is present in an effluent at a concentration that causes, has the reasonable potential to cause, or contributes to an excursion above a narrative criterion within an applicable State water quality standard, the permitting authority must establish effluent limits using one or more of the following options:

(A) Establish effluent limits using a calculated numeric water quality criterion for the pollutant which the permitting authority demonstrates will attain and maintain applicable narrative water quality criteria and will fully protect the designated use. Such a criterion may be derived using a proposed State criterion, or an explicit State policy or regulation interpreting its narrative water quality criterion, supplemented with other relevant information which may include: EPA's Water Quality Standards Handbook, October 1983, risk assessment data, exposure data, information about the pollutant from the Food and Drug Administration, and current EPA criteria documents; or

(B) Establish effluent limits on a case-by-case basis, using EPA's water quality criteria, published under section 307(a) of the CWA, supplemented where necessary by other relevant information; or

(C) Establish effluent limitations on an indicator parameter for the pollutant of concern, provided:

(1) The permit identifies which pollutants are intended to be controlled by the use of the effluent limitation;

(2) The fact sheet required by § 124.56 sets forth the basis for the limit, including a finding that compli-



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ance with the effluent limit on the indicator parameter will result in controls on the pollutant of concern which are sufficient to attain and maintain applicable water quality standards;

(3) The permit requires all effluent and ambient monitoring necessary to show that during the term of the permit the limit on the indicator parameter continues to attain and maintain applicable water quality standards; and

(4) The permit contains a reopener clause allowing the permitting authority to modify or revoke and reissue the permit if the limits on the indicator parameter no longer attain and maintain applicable water quality standards.

(vii) When developing water quality-based effluent limits under this paragraph the permitting authority shall ensure that:

(A) The level of water quality to be achieved by limits on point sources established under this paragraph is derived from, and complies with all applicable water quality standards; and

(B) Effluent limits developed to protect a narrative water quality criterion, a numeric water quality criterion, or both, are consistent with the assumptions and requirements of any available wasteload allocation for the discharge prepared by the State and approved by EPA pursuant to 40 CFR 130.7.

(2) Attain or maintain a specified water quality through water quality related effluent limits established under section 302 of CWA;

(3) Conform to the conditions to a State certification under section 401 of the CWA that meets the requirements of § 124.53 when EPA is the permitting authority. If a State certification is stayed by a court of competent jurisdiction or an appropriate State board or agency, EPA shall notify the State that the Agency will deem certification waived unless a finally effective State certification is received within sixty days from the date of the notice. If the State does not forward a finally effective certification within the sixty day period, EPA shall include conditions in the permit that may be neces-

sary to meet EPA's obligation under section 301(b)(1)(C) of the CWA;

(4) Conform to applicable water quality requirements under section 401(a)(2) of CWA when the discharge affects a State other than the certifying State;

(5) Incorporate any more stringent limitations, treatment standards, or schedule of compliance requirements established under Federal or State law or regulations in accordance with section 301(b)(1)(C) of CWA;

(6) Ensure consistency with the requirements of a Water Quality Management plan approved by EPA under section 208(b) of CWA;

(7) Incorporate section 403(c) criteria under Part 125, Subpart M, for ocean discharges;

(8) Incorporate alternative effluent limitations or standards where warranted by "fundamentally different factors," under 40 CFR Part 125, Subpart D;

(9) Incorporate any other appropriate requirements, conditions, or limitations (other than effluent limitations) into a new source permit to the extent allowed by the National Environmental Policy Act, 42 U.S.C. 4321 *et seq.* and section 511 of the CWA, when EPA is the permit issuing authority. (See § 122.29(c)).

(e) *Technology-based controls for toxic pollutants.* Limitations established under paragraphs (a), (b), or (d) of this section, to control pollutants meeting the criteria listed in paragraph (e)(1) of this section. Limitations will be established in accordance with paragraph (e)(2) of this section. An explanation of the development of these limitations shall be included in the fact sheet under § 124.56(b)(1)(i).

(1) Limitations must control all toxic pollutants which the Director determines (based on information reported in a permit application under § 122.21(g)(7) or (10) or in a notification under § 122.42(a)(1) or on other information) are or may be discharged at a level greater than the level which can be achieved by the technology-based treatment requirements appropriate to the permittee under § 125.3(c); or

(2) The requirement that the limitations control the pollutants meeting

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the criteria of paragraph (e)(1) of this section will be satisfied by:

(i) Limitations on those pollutants; or

(ii) Limitations on other pollutants which, in the judgment of the Director, will provide treatment of the pollutants under paragraph (e)(1) of this section to the levels required by § 125.3(c).

(f) *Notification level.* A "notification level" which exceeds the notification level of § 122.42(a)(1)(i), (ii) or (iii), upon a petition from the permittee or on the Director's initiative. This new notification level may not exceed the level which can be achieved by the technology-based treatment requirements appropriate to the permittee under § 125.3(c).

(g) *Twenty-four hour reporting.* Pollutants for which the permittee must report violations of maximum daily discharge limitations under § 122.41(1)(6)(ii)(C) (24-hour reporting) shall be listed in the permit. This list shall include any toxic pollutant or hazardous substance, or any pollutant specifically identified as the method to control a toxic pollutant or hazardous substance.

(h) *Durations* for permits, as set forth in § 122.46.

(i) *Monitoring requirements.* In addition to § 122.48, the following monitoring requirements:

(1) To assure compliance with permit limitations, requirements to monitor:

(i) The mass (or other measurement specified in the permit) for each pollutant limited in the permit;

(ii) The volume of effluent discharged from each outfall;

(iii) Other measurements as appropriate including pollutants in internal waste streams under § 122.45(i); pollutants in intake water for net limitations under § 122.45(f); frequency, rate of discharge, etc., for noncontinuous discharges under § 122.45(e); pollutants subject to notification requirements under § 122.42(a); and pollutants in sewage sludge or other monitoring as specified in 40 CFR Part 503; or as determined to be necessary on a case-by-case basis pursuant to section 405(d)(4) of the CWA.

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(iv) According to test procedures approved under 40 CFR Part 136 for the analyses of pollutants having approved methods under that part, and according to a test procedure specified in the permit for pollutants with no approved methods.

(2) Requirements to report monitoring results with a frequency dependent on the nature and effect of the discharge, but in no case less than once a year. For sewage sludge use or disposal practices, requirements to monitor and report results with a frequency dependent on the nature and effect of the sewage sludge use or disposal practice; minimally, this shall be as specified in 40 CFR Part 503 (where applicable), but in no case less than once a year.

(j) *Pretreatment program for POTWs.* Requirements for POTWs to:

(1) Identify, in terms of character and volume of pollutants, any significant indirect dischargers into the POTW subject to pretreatment standards under section 307(b) of CWA and 40 CFR Part 403.

(2) Submit a local program when required by and in accordance with 40 CFR Part 403 to assure compliance with pretreatment standards to the extent applicable under section 307(b). The local program shall be incorporated into the permit as described in 40 CFR Part 403. The program shall require all indirect dischargers to the POTW to comply with the reporting requirements of 40 CFR Part 403.

(3) For POTWs which are "sludge-only facilities," a requirement to develop a pretreatment program under 40 CFR Part 403 when the Director determines that a pretreatment program is necessary to assure compliance with Section 405(d) of the CWA.

(k) *Best management practices* to control or abate the discharge of pollutants when:

(1) Authorized under section 304(e) of CWA for the control of toxic pollutants and hazardous substances from ancillary industrial activities;

(2) Numeric effluent limitations are infeasible, or

(3) The practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of CWA.

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(1) *Reissued permits.* (1) Except as provided in paragraph (1)(2) of this section when a permit is renewed or reissued, interim effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit (unless the circumstances on which the previous permit was based have materially and substantially changed since the time the permit was issued and would constitute cause for permit modification or revocation and reissuance under § 122.62.)

(2) In the case of effluent limitations established on the basis of Section 402(a)(1)(B) of the CWA, a permit may not be renewed, reissued, or modified on the basis of effluent guidelines promulgated under section 304(b) subsequent to the original issuance of such permit, to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit.

(i) *Exceptions*—A permit with respect to which paragraph (1)(2) of this section applies may be renewed, reissued, or modified to contain a less stringent effluent limitation applicable to a pollutant, if—

(A) Material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limitation;

(B)(1) Information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance; or

(2) The Administrator determines that technical mistakes or mistaken interpretations of law were made in issuing the permit under section 402(a)(1)(b);

(C) A less stringent effluent limitation is necessary because of events over which the permittee has no control and for which there is no reasonably available remedy;

(D) The permittee has received a permit modification under section 301(c), 301(g), 301(h), 301(i), 301(k), 301(n), or 316(a); or

(E) The permittee has installed the treatment facilities required to meet the effluent limitations in the previous permit and has properly operated and maintained the facilities but has nevertheless been unable to achieve the previous effluent limitations, in which case the limitations in the reviewed, reissued, or modified permit may reflect the level of pollutant control actually achieved (but shall not be less stringent than required by effluent guidelines in effect at the time of permit renewal, reissuance, or modification).

(ii) *Limitations.* In no event may a permit with respect to which paragraph (1)(2) of this section applies be renewed, reissued, or modified to contain an effluent limitation which is less stringent than required by effluent guidelines in effect at the time the permit is renewed, reissued, or modified. In no event may such a permit to discharge into waters be renewed, issued, or modified to contain a less stringent effluent limitation if the implementation of such limitation would result in a violation of a water quality standard under section 303 applicable to such waters.

(m) *Privately owned treatment works.* For a privately owned treatment works, any conditions expressly applicable to any user, as a limited co-permittee, that may be necessary in the permit issued to the treatment works to ensure compliance with applicable requirements under this part. Alternatively, the Director may issue separate permits to the treatment works and to its users, or may require a separate permit application from any user. The Director's decision to issue a permit with no conditions applicable to any user, to impose conditions on one or more users, to issue separate permits, or to require separate applications, and the basis for that decision, shall be stated in the fact sheet for the draft permit for the treatment works.

(n) *Grants.* Any conditions imposed in grants made by the Administrator to POTWs under sections 201 and 204 of CWA which are reasonably necessary for the achievement of effluent limitations under section 301 of CWA.

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(o) *Sewage sludge.* Requirements under section 405 of CWA governing the disposal of sewage sludge from publicly owned treatment works or any other treatment works treating domestic sewage for any use for which regulations have been established, in accordance with any applicable regulations.

(p) *Coast Guard.* When a permit is issued to a facility that may operate at certain times as a means of transportation over water, a condition that the discharge shall comply with any applicable regulations promulgated by the Secretary of the department in which the Coast Guard is operating, that establish specifications for safe transportation, handling, carriage, and storage of pollutants.

(q) *Navigation.* Any conditions that the Secretary of the Army considers necessary to ensure that navigation and anchorage will not be substantially impaired, in accordance with § 124.58.

[48 FR 14153, Apr. 1, 1983, as amended at 49 FR 31842, Aug. 8, 1984; 49 FR 38049, Sept. 26, 1984; 50 FR 6940, Feb. 19, 1985; 50 FR 7912, Feb. 27, 1985; 54 FR 256, Jan. 4, 1989; 54 FR 18783, May 2, 1989; 54 FR 23895, June 2, 1989]

§ 122.45 Calculating NPDES permit conditions (applicable to State NPDES programs, see § 123.25).

(a) *Outfalls and discharge points.* All permit effluent limitations, standards and prohibitions shall be established for each outfall or discharge point of the permitted facility, except as otherwise provided under § 122.44(k) (BMPs where limitations are infeasible) and paragraph (i) of this section (limitations on internal waste streams).

(b) *Production-based limitations.* (1) In the case of POTWs, permit effluent limitations, standards, or prohibitions shall be calculated based on design flow.

(2)(i) Except in the case of POTWs or as provided in paragraph (b)(2)(ii) of this section, calculation of any permit limitations, standards, or prohibitions which are based on production (or other measure of operation) shall be based not upon the designed production capacity but rather upon a reasonable measure of actual produc-

tion of the facility. For new sources or new dischargers, actual production shall be estimated using projected production. The time period of the measure of production shall correspond to the time period of the calculated permit limitations; for example, monthly production shall be used to calculate average monthly discharge limitations.

(ii)(A)(1) The Director may include a condition establishing alternate permit limitations, standards, or prohibitions based upon anticipated increased (not to exceed maximum production capability) or decreased production levels.

(2) *For the automotive manufacturing industry only,* the Regional Administrator shall, and the State Director may establish a condition under paragraph (b)(2)(ii)(A)(1) of this section if the applicant satisfactorily demonstrates to the Director at the time the application is submitted that its actual production, as indicated in paragraph (b)(2)(i) of this section, is substantially below maximum production capability and that there is a reasonable potential for an increase above actual production during the duration of the permit.

(B) If the Director establishes permit conditions under paragraph (b)(2)(ii)(A) of this section:

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

(2) The permittee shall comply with the limitations, standards, or prohibitions that correspond to the lowest



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(b) \* \* \*

(4) \* \* \*

(i) In cases where a TMDL has not been established for an impaired waterbody, an explanation of how permit limits and/or conditions were derived for all pollutants in the discharger's effluent for which the waterbody is impaired; and

(ii) In cases where a TMDL has been established for an impaired waterbody, any TMDL that has been established for a pollutant contained in the discharger's effluent; the applicable wasteload allocation derived for the pollutant in the TMDL for that discharger; and an explanation of how permit limits for the pollutant of concern were derived as well as how those limits are consistent with the applicable wasteload allocation.

\* \* \* \* \*

**§ 124.9 Administrative record for draft permits when EPA is the permitting authority.**

(a) The provisions of a draft permit prepared by EPA under § 124.6 shall be based on the administrative record defined in this section.

(b) For preparing a draft permit under § 124.6, the record shall consist of:

(1) The application, if required, and any supporting data furnished by the applicant;

(2) The draft permit or notice of intent to deny the application or to terminate the permit;

(3) The statement of basis (§ 124.7) or fact sheet (§ 124.8);

(4) All documents cited in the statement of basis or fact sheet; and

(5) Other documents contained in the supporting file for the draft permit.

(6) For NPDES new source draft permits only, any environmental assessment, environmental impact statement (EIS), finding of no significant impact, or environmental information document and any supplement to an EIS that may have been prepared. NPDES permits other than permits to new sources as well as all RCRA, UIC and PSD permits are not subject to the environmental impact statement provisions of section 102(2)(C) of the National Environmental Policy Act, 42 U.S.C. 4321.

(c) Material readily available at the issuing Regional Office or published material that is generally available,

and that is included in the administrative record under paragraphs (b) and (c) of this section, need not be physically included with the rest of the record as long as it is specifically referred to in the statement of basis or the fact sheet.

(d) This section applies to all draft permits when public notice was given after the effective date of these regulations.

**§ 124.10 Public notice of permit actions and public comment period.**

(a) *Scope.* (1) The Director shall give public notice that the following actions have occurred:

(i) A permit application has been tentatively denied under § 124.6(b);

(ii) (*Applicable to State programs, see §§ 123.25 (NPDES), 145.11 (UIC), 233.26 (404), and 271.14 (RCRA).*) A draft permit has been prepared under § 124.6(d);

(iii) (*Applicable to State programs, see §§ 123.25 (NPDES), 145.11 (UIC), 233.26 (404) and 271.14 (RCRA).*) A hearing has been scheduled under § 124.12;

(iv) An appeal has been granted under § 124.19(c);

(v) (*Applicable to State programs, see § 233.26 (404).*) A State section 404 application has been received in cases when no draft permit will be prepared (see § 233.39); or

(vi) An NPDES new source determination has been made under § 122.29.

(2) No public notice is required when a request for permit modification, revocation and reissuance, or termination is denied under § 124.5(b). Written notice of that denial shall be given to the requester and to the permittee.

(3) Public notices may describe more than one permit or permit actions.

(b) *Timing (applicable to State programs, see §§ 123.25 (NPDES), 145.11 (UIC), 233.26 (404), and 271.14 (RCRA)).* (1) Public notice of the preparation of a draft permit (including a notice of intent to deny a permit application) required under paragraph (a) of this section shall allow at least 30 days for public comment. For RCRA permits only, public notice shall allow at least 45 days for public comment. For EPA-issued permits, if the Regional Administrator determines under 40 CFR part 6, subpart F that an Environmental

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Impact Statement (EIS) shall be prepared for an NPDES new source, public notice of the draft permit shall not be given until after a draft EIS is issued.

(2) Public notice of a public hearing shall be given at least 30 days before the hearing. (Public notice of the hearing may be given at the same time as public notice of the draft permit and the two notices may be combined.)

(c) *Methods (applicable to State programs, see §§123.25 (NPDES), 145.11 (UIC), 233.26 (404), and 271.14 (RCRA)).* Public notice of activities described in paragraph (a)(1) of this section shall be given by the following methods:

(1) By mailing a copy of a notice to the following persons (any person otherwise entitled to receive notice under this paragraph may waive his or her rights to receive notice for any classes and categories of permits);

(i) The applicant (except for NPDES and 404 general permits when there is no applicant);

(ii) Any other agency which the Director knows has issued or is required to issue a RCRA, UIC, PSD (or other permit under the Clean Air Act), NPDES, 404, sludge management permit, or ocean dumping permit under the Marine Research Protection and Sanctuaries Act for the same facility or activity (including EPA when the draft permit is prepared by the State);

(iii) Federal and State agencies with jurisdiction over fish, shellfish, and wildlife resources and over coastal zone management plans, the Advisory Council on Historic Preservation, State Historic Preservation Officers, including any affected States (Indian Tribes). (For purposes of this paragraph, and in the context of the Underground Injection Control Program only, the term State includes Indian Tribes treated as States.)

(iv) For NPDES and 404 permits only, any State agency responsible for plan development under CWA section 208(b)(2), 208(b)(4) or 303(e) and the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service and the National Marine Fisheries Service;

(v) For NPDES permits only, any user identified in the permit application of a privately owned treatment works;

(vi) For 404 permits only, any reasonably ascertainable owner of property adjacent to the regulated facility or activity and the Regional Director of the Federal Aviation Administration if the discharge involves the construction of structures which may affect aircraft operations or for purposes associated with seaplane operations;

(vii) For PSD permits only, affected State and local air pollution control agencies, the chief executives of the city and county where the major stationary source or major modification would be located, any comprehensive regional land use planning agency and any State, Federal Land Manager, or Indian Governing Body whose lands may be affected by emissions from the regulated activity;

(viii) For Class 1 injection well UIC permits only, state and local oil and gas regulatory agencies and state agencies regulating mineral exploration and recovery;

(ix) Persons on a mailing list developed by:

(A) Including those who request in writing to be on the list;

(B) Soliciting persons for "area lists" from participants in past permit proceedings in that area; and

(C) Notifying the public of the opportunity to be put on the mailing list through periodic publication in the public press and in such publications as Regional and State funded newsletters, environmental bulletins, or State law journals. (The Director may update the mailing list from time to time by requesting written indication of continued interest from those listed. The Director may delete from the list the name of any person who fails to respond to such a request.)

(x)(A) To any unit of local government having jurisdiction over the area where the facility is proposed to be located; and (B) to each State agency having any authority under State law with respect to the construction or operation of such facility.

(2)(i) For major permits, NPDES and 404 general permits, and permits that include sewage sludge land application plans under 40 CFR 501.15(a)(2)(ix), publication of a notice in a daily or weekly newspaper within the area affected by the facility or activity; and for EPA-

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issued NPDES general permits, in the FEDERAL REGISTER;

NOTE: The Director is encouraged to provide as much notice as possible of the NPDES or Section 404 draft general permit to the facilities or activities to be covered by the general permit.

(ii) For all RCRA permits, publication of a notice in a daily or weekly major local newspaper of general circulation and broadcast over local radio stations.

(3) When the program is being administered by an approved State, in a manner constituting legal notice to the public under State law; and

(4) Any other method reasonably calculated to give actual notice of the action in question to the persons potentially affected by it, including press releases or any other forum or medium to elicit public participation.

(d) *Contents (applicable to State programs, see §§123.25 (NPDES), 145.11 (UIC), 233.26 (404), and 271.14 (RCRA))—*

(1) *All public notices.* All public notices issued under this part shall contain the following minimum information:

(i) Name and address of the office processing the permit action for which notice is being given;

(ii) Name and address of the permittee or permit applicant and, if different, of the facility or activity regulated by the permit, except in the case of NPDES and 404 draft general permits under §§122.28 and 233.37;

(iii) A brief description of the business conducted at the facility or activity described in the permit application or the draft permit, for NPDES or 404 general permits when there is no application.

(iv) Name, address and telephone number of a person from whom interested persons may obtain further information, including copies of the draft permit or draft general permit, as the case may be, statement of basis or fact sheet, and the application; and

(v) A brief description of the comment procedures required by §§124.11 and 124.12 and the time and place of any hearing that will be held, including a statement of procedures to request a hearing (unless a hearing has already been scheduled) and other procedures by which the public may participate in the final permit decision.

(vi) For EPA-issued permits, the location of the administrative record required by §124.9, the times at which the record will be open for public inspection, and a statement that all data submitted by the applicant is available as part of the administrative record.

(vii) For NPDES permits only (including those for "sludge-only facilities"), a general description of the location of each existing or proposed discharge point and the name of the receiving water and the sludge use and disposal practice(s) and the location of each sludge treatment works treating domestic sewage and use or disposal sites known at the time of permit application. For EPA-issued NPDES permits only, if the discharge is from a new source, a statement as to whether an environmental impact statement will be or has been prepared.

(viii) For 404 permits only,

(A) The purpose of the proposed activity (including, in the case of fill material, activities intended to be conducted on the fill), a description of the type, composition, and quantity of materials to be discharged and means of conveyance; and any proposed conditions and limitations on the discharge;

(B) The name and water quality standards classification, if applicable, of the receiving waters into which the discharge is proposed, and a general description of the site of each proposed discharge and the portions of the site and the discharges which are within State regulated waters;

(C) A description of the anticipated environmental effects of activities conducted under the permit;

(D) References to applicable statutory or regulatory authority; and

(E) Any other available information which may assist the public in evaluating the likely impact of the proposed activity upon the integrity of the receiving water.

(ix) Requirements applicable to cooling water intake structures at new facilities under section 316(b) of the CWA, in accordance with part 125, subpart I, of this chapter.

(x) Any additional information considered necessary or proper.

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(2) *Public notices for hearings.* In addition to the general public notice described in paragraph (d)(1) of this section, the public notice of a hearing under § 124.12 shall contain the following information:

(i) Reference to the date of previous public notices relating to the permit;

(ii) Date, time, and place of the hearing;

(iii) A brief description of the nature and purpose of the hearing, including the applicable rules and procedures; and

(iv) For 404 permits only, a summary of major issues raised to date during the public comment period.

(e) *(Applicable to State programs, see §§ 123.25 (NPDES), 145.11 (UIC), 233.26 (404), and 271.14 (RCRA)).* In addition to the general public notice described in paragraph (d)(1) of this section, all persons identified in paragraphs (c)(1) (i), (ii), (iii), and (iv) of this section shall be mailed a copy of the fact sheet or statement of basis (for EPA-issued permits), the permit application (if any) and the draft permit (if any).

[48 FR 14264, Apr. 1, 1983; 48 FR 30115, June 30, 1983, as amended at 53 FR 28147, July 26, 1988; 53 FR 37410, Sept. 26, 1988; 54 FR 258, Jan. 4, 1989; 54 FR 18786, May 2, 1989; 65 FR 30911, May 15, 2000; 66 FR 65338, Dec. 18, 2001]

**§ 124.11 Public comments and requests for public hearings.**

*(Applicable to State programs, see §§ 123.25 (NPDES), 145.11 (UIC), 233.26 (404), and 271.14 (RCRA)).* During the public comment period provided under § 124.10, any interested person may submit written comments on the draft permit or the permit application for 404 permits when no draft permit is required (see § 233.39) and may request a public hearing, if no hearing has already been scheduled. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. All comments shall be considered in making the final decision and shall be answered as provided in § 124.17.

**§ 124.12 Public hearings.**

(a) *(Applicable to State programs, see §§ 123.25 (NPDES), 145.11 (UIC), 233.26 (404), and 271.14 (RCRA)).* (1) The Director shall hold a public hearing when-

ever he or she finds, on the basis of requests, a significant degree of public interest in a draft permit(s);

(2) The Director may also hold a public hearing at his or her discretion, whenever, for instance, such a hearing might clarify one or more issues involved in the permit decision;

(3) For RCRA permits only, (i) the Director shall hold a public hearing whenever he or she receives written notice of opposition to a draft permit and a request for a hearing within 45 days of public notice under § 124.10(b)(1); (ii) whenever possible the Director shall schedule a hearing under this section at a location convenient to the nearest population center to the proposed facility;

(4) Public notice of the hearing shall be given as specified in § 124.10.

(b) Whenever a public hearing will be held and EPA is the permitting authority, the Regional Administrator shall designate a Presiding Officer for the hearing who shall be responsible for its scheduling and orderly conduct.

(c) Any person may submit oral or written statements and data concerning the draft permit. Reasonable limits may be set upon the time allowed for oral statements, and the submission of statements in writing may be required. The public comment period under § 124.10 shall automatically be extended to the close of any public hearing under this section. The hearing officer may also extend the comment period by so stating at the hearing.

(d) A tape recording or written transcript of the hearing shall be made available to the public.

[48 FR 14264, Apr. 1, 1983, as amended at 49 FR 17718, Apr. 24, 1984; 50 FR 6941, Feb. 19, 1985; 54 FR 258, Jan. 4, 1989; 65 FR 30911, May 15, 2000]

**§ 124.13 Obligation to raise issues and provide information during the public comment period.**

All persons, including applicants, who believe any condition of a draft permit is inappropriate or that the Director's tentative decision to deny an application, terminate a permit, or prepare a draft permit is inappropriate, must raise all reasonably ascertainable



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Any decisions later made in proceedings under this part concerning that permit shall be consistent with the conditions of that variance.

**Subpart D—Specific Procedures  
Applicable to NPDES Permits**

**§ 124.51 Purpose and scope.**

(a) This subpart sets forth additional requirements and procedures for decisionmaking for the NPDES program.

(b) Decisions on NPDES variance requests ordinarily will be made during the permit issuance process. Variances and other changes in permit conditions ordinarily will be decided through the same notice-and-comment and hearing procedures as the basic permit.

(c) As stated in 40 CFR 131.4, an Indian Tribe that meets the statutory criteria which authorize EPA to treat the Tribe in a manner similar to that in which it treats a State for purposes of the Water Quality Standards program is likewise qualified for such treatment for purposes of State certification of water quality standards pursuant to section 401(a)(1) of the Act and subpart D of this part.

[48 FR 14264, Apr. 1, 1983, as amended at 58 FR 67983, Dec. 22, 1993; 59 FR 64343, Dec. 14, 1994]

**§ 124.52 Permits required on a case-by-case basis.**

(a) Various sections of part 122, subpart B allow the Director to determine, on a case-by-case basis, that certain concentrated animal feeding operations (§122.23), concentrated aquatic animal production facilities (§122.24), storm water discharges (§122.26), and certain other facilities covered by general permits (§122.28) that do not generally require an individual permit may be required to obtain an individual permit because of their contributions to water pollution.

(b) Whenever the Regional Administrator decides that an individual permit is required under this section, except as provided in paragraph (c) of this section, the Regional Administrator shall notify the discharger in writing of that decision and the reasons for it, and shall send an application form with the notice. The discharger must apply for a permit under

§122.21 within 60 days of notice, unless permission for a later date is granted by the Regional Administrator. The question whether the designation was proper will remain open for consideration during the public comment period under §124.11 and in any subsequent hearing.

(c) Prior to a case-by-case determination that an individual permit is required for a storm water discharge under this section (see §122.26(a)(1)(v), (c)(1)(v), and (a)(9)(iii) of this chapter), the Regional Administrator may require the discharger to submit a permit application or other information regarding the discharge under section 308 of the CWA. In requiring such information, the Regional Administrator shall notify the discharger in writing and shall send an application form with the notice. The discharger must apply for a permit within 180 days of notice, unless permission for a later date is granted by the Regional Administrator. The question whether the initial designation was proper will remain open for consideration during the public comment period under §124.11 and in any subsequent hearing.

[55 FR 48075, Nov. 16, 1990, as amended at 60 FR 17957, Apr. 7, 1995; 60 FR 19464, Apr. 18, 1995; 60 FR 40235, Aug. 7, 1995; 64 FR 68851, Dec. 8, 1999; 65 FR 30912, May 15, 2000]

**§ 124.53 State certification.**

(a) Under CWA section 401(a)(1), EPA may not issue a permit until a certification is granted or waived in accordance with that section by the State in which the discharge originates or will originate.

(b) Applications received without a State certification shall be forwarded by the Regional Administrator to the certifying State agency with a request that certification be granted or denied.

(c) If State certification has not been received by the time the draft permit is prepared, the Regional Administrator shall send the certifying State agency:

(1) A copy of a draft permit;

(2) A statement that EPA cannot issue or deny the permit until the certifying State agency has granted or denied certification under §124.55, or waived its right to certify; and

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(3) A statement that the State will be deemed to have waived its right to certify unless that right is exercised within a specified reasonable time not to exceed 60 days from the date the draft permit is mailed to the certifying State agency unless the Regional Administrator finds that unusual circumstances require a longer time.

(d) State certification shall be granted or denied within the reasonable time specified under paragraph (c)(3) of this section. The State shall send a notice of its action, including a copy of any certification, to the applicant and the Regional Administrator.

(e) State certification shall be in writing and shall include:

(1) Conditions which are necessary to assure compliance with the applicable provisions of CWA sections 208(e), 301, 302, 303, 306, and 307 and with appropriate requirements of State law;

(2) When the State certifies a draft permit instead of a permit application, any conditions more stringent than those in the draft permit which the State finds necessary to meet the requirements listed in paragraph (e)(1) of this section. For each more stringent condition, the certifying State agency shall cite the CWA or State law references upon which that condition is based. Failure to provide such a citation waives the right to certify with respect to that condition; and

(3) A statement of the extent to which each condition of the draft permit can be made less stringent without violating the requirements of State law, including water quality standards. Failure to provide this statement for any condition waives the right to certify or object to any less stringent condition which may be established during the EPA permit issuance process.

**§ 124.54 Special provisions for State certification and concurrence on applications for section 301(h) variances.**

(a) When an application for a permit incorporating a variance request under CWA section 301(h) is submitted to a State, the appropriate State official shall either:

(1) Deny the request for the CWA section 301(h) variance (and so notify the applicant and EPA) and, if the State is

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an approved NPDES State and the permit is due for reissuance, process the permit application under normal procedures; or

(2) Forward a certification meeting the requirements of § 124.53 to the Regional Administrator.

(b) When EPA issues a tentative decision on the request for a variance under CWA section 301(h), and no certification has been received under paragraph (a) of this section, the Regional Administrator shall forward the tentative decision to the State in accordance with § 124.53(b) specifying a reasonable time for State certification and concurrence. If the State fails to deny or grant certification and concurrence under paragraph (a) of this section within such reasonable time, certification shall be waived and the State shall be deemed to have concurred in the issuance of a CWA section 301(h) variance.

(c) Any certification provided by a State under paragraph (a)(2) of this section shall constitute the State's concurrence (as required by section 301(h)) in the issuance of the permit incorporating a section 301(h) variance subject to any conditions specified therein by the State. CWA section 301(h) certification and concurrence under this section will not be forwarded to the State by EPA for recertification after the permit issuance process; States must specify any conditions required by State law, including water quality standards, in the initial certification.

**§ 124.55 Effect of State certification.**

(a) When certification is required under CWA section 401(a)(1) no final permit shall be issued:

(1) If certification is denied, or

(2) Unless the final permit incorporates the requirements specified in the certification under § 124.53(e).

(b) If there is a change in the State law or regulation upon which a certification is based, or if a court of competent jurisdiction or appropriate State board or agency stays, vacates, or remands a certification, a State which has issued a certification under § 124.53 may issue a modified certification or notice of waiver and forward it to EPA. If the modified certification

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Sec.

125.96 Criteria for permit modification or issuance under section 301(i)(2) of the Act.

125.97 Permit terms and conditions under section 301(i)(2) of the Act.

**Subpart K—Criteria and Standards for Best Management Practices Authorized Under Section 304(e) of the Act**

125.100 Purpose and scope.

125.101 Definition.

125.102 Applicability of best management practices.

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125.104 Best management practices programs.

**Subpart L—Criteria and Standards for Imposing Conditions for the Disposal of Sewage Sludge Under Section 405 of the Act—[Reserved]**

**Subpart M—Ocean Discharge Criteria**

125.120 Scope and purpose.

125.121 Definitions.

125.122 Determination of unreasonable degradation of the marine environment.

125.123 Permit requirements.

125.124 Information required to be submitted by applicant.

**AUTHORITY:** Clean Water Act, as amended by the Clean Water Act of 1977, 33 U.S.C. 1251 *et seq.*, unless otherwise noted.

**SOURCE:** 44 FR 32948, June 7, 1979, unless otherwise noted.

**Subpart A—Criteria and Standards for Imposing Technology-Based Treatment Requirements Under Sections 301(b) and 402 of the Act**

**§ 125.1 Purpose and scope.**

This subpart establishes criteria and standards for the imposition of technology-based treatment requirements in permits under section 301(b) of the Act, including the application of EPA promulgated effluent limitations and case-by-case determinations of effluent limitations under section 402(a)(1) of the Act.

**§ 125.2 Definitions.**

For the purposes of this part, any reference to "the Act" shall mean the Clean Water Act of 1977 (CWA). Unless otherwise noted, the defini-

tions in Parts 122, 123 and 124 apply to this part.

[45 FR 33512, May 19, 1980]

**§ 125.3 Technology-based treatment requirements in permits.**

(a) *General.* Technology-based treatment requirements under section 301(b) of the Act represent the minimum level of control that must be imposed in a permit issued under section 402 of the Act. (See §§ 122.41, 122.42 and 122.44 for a discussion of additional or more stringent effluent limitations and conditions.) Permits shall contain the following technology-based treatment requirements in accordance with the following statutory deadlines;

(1) For POTW's, effluent limitations based upon:

(i) Secondary treatment—from date of permit issuance; and

(ii) The best practicable waste treatment technology—not later than July 1, 1983; and

(2) For dischargers other than POTWs except as provided in § 122.29(d), effluent limitations requiring:

(i) The best practicable control technology currently available (BPT)—

(A) For effluent limitations promulgated under Section 304(b) after January 1, 1982 and requiring a level of control substantially greater or based on fundamentally different control technology than under permits for an industrial category issued before such date, compliance as expeditiously as practicable but in no case later than three years after the date such limitations are promulgated under section 304(b) and in no case later than March 31, 1989;

(B) For effluent limitations established on a case-by-case basis based on Best Professional Judgment (BPJ) under Section 402(a)(1)(B) of the Act in a permit issued after February 4, 1987, compliance as expeditiously as practicable but in no case later than three years after the date such limitations are established and in no case later than March 31, 1989;

(C) For all other BPT effluent limitations compliance is required from the date of permit issuance.

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(ii) For conventional pollutants, the best conventional pollutant control technology (BCT)—

(A) For effluent limitations promulgated under Section 304(b), as expeditiously as practicable but in no case later than three years after the date such limitations are promulgated under section 304(b), and in no case later than March 31, 1989.

(B) For effluent limitations established on a case-by-case (BPJ) basis under Section 402(a)(1)(B) of the Act in a permit issued after February 4, 1987, compliance as expeditiously as practicable but in no case later than three years after the date such limitations are established and in no case later than March 31, 1989;

(iii) For all toxic pollutants referred to in Committee Print No. 95-30, House Committee on Public Works and Transportation, the best available technology economically achievable (BAT)—

(A) For effluent limitations established under Section 304(b), as expeditiously as practicable but in no case later than three years after the date such limitations are promulgated under section 304(b), and in no case later than March 31, 1989.

(B) For permits issued on a case-by-case (BPJ) basis under section 402(a)(1)(B) of the Act after February 4, 1987 establishing BAT effluent limitations, compliance is required as expeditiously as practicable but in no case later than three years after the date such limitations are promulgated under section 304(b), and in no case later than March 31, 1989.

(iv) For all toxic pollutants other than those listed in Committee Print No. 95-30, effluent limitations based on BAT—

(A) For effluent limitations promulgated under Section 304(b) compliance is required as expeditiously as practicable, but in no case later than three years after the date such limitations are promulgated under section 304(b) and in no case later than March 31, 1989.

(B) For permits issued on a case-by-case (BPJ) basis under Section 402(a)(1)(B) of the Act after February 4, 1987 establishing BAT effluent limitations, compliance is required as ex-

peditiously as practicable but in no case later than 3 years after the date such limitations are established and in no case later than March 31, 1989.

(v) For all pollutants which are neither toxic nor conventional pollutants, effluent limitations based on BAT—

(A) For effluent limitations promulgated under section 304(b), compliance is required as expeditiously as practicable but in no case later than 3 years after the date such limitations are established and in no case later than March 31, 1989.

(B) For permits issued on a case-by-case (BPJ) basis under Section 402(a)(1)(B) of the Act after February 4, 1987 establishing BAT effluent limitations compliance is required as expeditiously as practicable but in no case later than three years after the date such limitations are established and in no case later than March 31, 1989.

(b) *Statutory variances and extensions.* (1) The following variances from technology-based treatment requirements are authorized by the Act and may be applied for under § 122.21;

(i) For POTW's, a section 301(h) marine discharge variance from secondary treatment (Subpart G);

(ii) For dischargers other than POTW's;

(A) A section 301(c) economic variance from BAT (Subpart E);

(B) A section 301(g) water quality related variance from BAT (Subpart F); and

(C) A section 316(a) thermal variance from BPT, BCT and BAT (Subpart H).

(2) The following extensions of deadlines for compliance with technology-based treatment requirements are authorized by the Act and may be applied for under § 124.53:

(i) For POTW's a section 301(i) extension of the secondary treatment deadline (Subpart J);

(ii) For dischargers other than POTW's:

(A) A section 301(i) extension of the BPT deadline (Subpart J); and

(B) A section 301(k) extension of the BAT deadline (Subpart C).

(c) *Methods of imposing technology-based treatment requirements in permits.* Technology-based treatment re-



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quirements may be imposed through one of the following three methods:

(1) Application of EPA-promulgated effluent limitations developed under section 304 of the Act to dischargers by category or subcategory. These effluent limitations are not applicable to the extent that they have been remanded or withdrawn. However, in the case of a court remand, determinations underlying effluent limitations shall be binding in permit issuance proceedings where those determinations are not required to be reexamined by a court remanding the regulations. In addition, dischargers may seek fundamentally different factors variances from these effluent limitations under § 122.21 and Subpart D of this part.

(2) On a case-by-case basis under section 402(a)(1) of the Act, to the extent that EPA-promulgated effluent limitations are inapplicable. The permit writer shall apply the appropriate factors listed in § 125.3(d) and shall consider:

(i) The appropriate technology for the category or class of point sources of which the applicant is a member, based upon all available information; and

(ii) Any unique factors relating to the applicant.

[Comment: These factors must be considered in all cases, regardless of whether the permit is being issued by EPA or an approved State.]

(3) Through a combination of the methods in paragraphs (d) (1) and (2) of this section. Where promulgated effluent limitations guidelines only apply to certain aspects of the discharger's operation, or to certain pollutants, other aspects or activities are subject to regulation on a case-by-case basis in order to carry out the provisions of the Act.

(4) Limitations developed under paragraph (d)(2) of this section may be expressed, where appropriate, in terms of toxicity (e.g., "the LC<sub>50</sub> for fat head minnow of the effluent from outfall 001 shall be greater than 25%"). *Provided*, That is shown that the limits reflect the appropriate requirements (for example, technology-based or water-quality-based standards) of the Act.

(d) In setting case-by-case limitations pursuant to § 125.3(c), the permit writer must consider the following factors:

(1) *For BPT requirements*: (i) The total cost of application of technology in relation to the effluent reduction benefits to be achieved from such application;

(ii) The age of equipment and facilities involved;

(iii) The process employed;

(iv) The engineering aspects of the application of various types of control techniques;

(v) Process changes; and

(vi) Non-water quality environmental impact (including energy requirements).

(2) *For BCT requirements*: (i) The reasonableness of the relationship between the costs of attaining a reduction in effluent and the effluent reduction benefits derived;

(ii) The comparison of the cost and level of reduction of such pollutants from the discharge from publicly owned treatment works to the cost and level of reduction of such pollutants from a class or category of industrial sources;

(iii) The age of equipment and facilities involved;

(iv) The process employed;

(v) The engineering aspects of the application of various types of control techniques;

(vi) Process changes; and

(vii) Non-water quality environmental impact (including energy requirements).

(3) *For BAT requirements*: (i) The age of equipment and facilities involved;

(ii) The process employed;

(iii) The engineering aspects of the application of various types of control techniques;

(iv) Process changes;

(v) The cost of achieving such effluent reduction; and

(vi) Non-water quality environmental impact (including energy requirements).

(e) Technology-based treatment requirements are applied prior to or at the point of discharge.

(f) Technology-based treatment requirements cannot be satisfied

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through the use of "non-treatment" techniques such as flow augmentation and in-stream mechanical aerators. However, these techniques may be considered as a method of achieving water quality standards on a case-by-case basis when:

(1) The technology-based treatment requirements applicable to the discharge are not sufficient to achieve the standards;

(2) The discharger agrees to waive any opportunity to request a variance under section 301 (c), (g) or (h) of the Act; and

(3) The discharger demonstrates that such a technique is the preferred environmental and economic method to achieve the standards after consideration of alternatives such as advanced waste treatment, recycle and reuse, land disposal, changes in operating methods, and other available methods.

(g) Technology-based effluent limitations shall be established under this subpart for solids, sludges, filter backwash, and other pollutants removed in the course of treatment or control of wastewaters in the same manner as for other pollutants.

(h)(1) The Director may set a permit limit for a conventional pollutant at a level more stringent than the best conventional pollution control technology (BCT), or a limit for a nonconventional pollutant which shall not be subject to modification under section 301 (c) or (g) of the Act where:

(i) Effluent limitations guidelines specify the pollutant as an indicator for a toxic pollutant, or

(ii)(A) The limitation reflects BAT-level control of discharges of one or more toxic pollutants which are present in the waste stream, and a specific BAT limitation upon the toxic pollutant(s) is not feasible for economic or technical reasons;

(B) The permit identifies which toxic pollutants are intended to be controlled by use of the limitation; and

(C) The fact sheet required by § 124.56 sets forth the basis for the limitation, including a finding that compliance with the limitation will result in BAT-level control of the toxic pollutant discharges identified in para-

graph (h)(1)(ii)(B) of this section, and a finding that it would be economically or technically infeasible to directly limit the toxic pollutant(s).

(2) The Director may set a permit limit for a conventional pollutant at a level more stringent than BCT when:

(i) Effluent limitations guidelines specify the pollutant as an indicator for a hazardous substance, or

(ii)(A) The limitation reflects BAT-level control of discharges (or an appropriate level determined under section 301(c) or (g) of the Act) of one or more hazardous substance(s) which are present in the waste stream, and a specific BAT (or other appropriate) limitation upon the hazardous substance(s) is not feasible for economic or technical reasons;

(B) The permit identifies which hazardous substances are intended to be controlled by use of the limitation; and

(C) The fact sheet required by § 124.56 sets forth the basis for the limitation, including a finding that compliance with the limitations will result in BAT-level (or other appropriate level) control of the hazardous substances discharges identified in paragraph (h)(2)(ii)(B) of this section, and a finding that it would be economically or technically infeasible to directly limit the hazardous substance(s).

(iii) Hazardous substances which are also toxic pollutants are subject to paragraph (h)(1) of this section.

(3) The Director may not set a more stringent limit under the preceding paragraphs if the method of treatment required to comply with the limit differs from that which would be required if the toxic pollutant(s) or hazardous substance(s) controlled by the limit were limited directly.

(4) Toxic pollutants identified under paragraph (h)(1) of this section remain subject to the requirements of § 122.42(a)(1) (notification of increased discharges of toxic pollutants above levels reported in the application form).

(Clean Water Act, Safe Drinking Water Act, Clean Air Act, Resource Conservation and Recovery Act: 42 U.S.C. 6905, 6912, 6925, 6927, 6974)

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[44 FR 32948, June 7, 1979, as amended at 45 FR 33512, May 19, 1980; 48 FR 14293, Apr. 1, 1983; 49 FR 38052, Sept. 26, 1984; 50 FR 6941, Feb. 19, 1985; 54 FR 257, Jan. 4, 1989]

**Subpart B—Criteria for Issuance of Permits to Aquaculture Projects**

**§ 125.10 Purpose and scope.**

(a) These regulations establish guidelines under sections 318 and 402 of the Act for approval of any discharge of pollutants associated with an aquaculture project.

(b) The regulations authorize, on a selective basis, controlled discharges which would otherwise be unlawful under the Act in order to determine the feasibility of using pollutants to grow aquatic organisms which can be harvested and used beneficially. EPA policy is to encourage such projects, while at the same time protecting other beneficial uses of the waters.

(c) Permits issued for discharges into aquaculture projects under this subpart are NPDES permits and are subject to the applicable requirements of Parts 122, 123 and 124. Any permit shall include such conditions (including monitoring and reporting requirements) as are necessary to comply with those parts. Technology-based effluent limitations need not be applied to discharges into the approved project except with respect to toxic pollutants.

**§ 125.11 Criteria.**

(a) No NPDES permit shall be issued to an aquaculture project unless:

(1) The Director determines that the aquaculture project:

(i) Is intended by the project operator to produce a crop which has significant direct or indirect commercial value (or is intended to be operated for research into possible production of such a crop); and

(ii) Does not occupy a designated project area which is larger than can be economically operated for the crop under cultivation or than is necessary for research purposes.

(2) The applicant has demonstrated, to the satisfaction of the Director, that the use of the pollutant to be discharged to the aquaculture project

will result in an increased harvest of organisms under culture over what would naturally occur in the area;

(3) The applicant has demonstrated, to the satisfaction of the Director, that if the species to be cultivated in the aquaculture project is not indigenous to the immediate geographical area, there will be minimal adverse effects on the flora and fauna indigenous to the area, and the total commercial value of the introduced species is at least equal to that of the displaced or affected indigenous flora and fauna;

(4) The Director determines that the crop will not have a significant potential for human health hazards resulting from its consumption;

(5) The Director determines that migration of pollutants from the designated project area to water outside of the aquaculture project will not cause or contribute to a violation of water quality standards or a violation of the applicable standards and limitations applicable to the supplier of the pollutant that would govern if the aquaculture project were itself a point source. The approval of an aquaculture project shall not result in the enlargement of a pre-existing mixing zone area beyond what had been designated by the State for the original discharge.

(b) No permit shall be issued for any aquaculture project in conflict with a plan or an amendment to a plan approved under section 208(b) of the Act.

(c) No permit shall be issued for any aquaculture project located in the territorial sea, the waters of the contiguous zone, or the oceans, except in conformity with guidelines issued under section 403(c) of the Act.

(d) Designated project areas shall not include a portion of a body of water large enough to expose a substantial portion of the indigenous biota to the conditions within the designated project area. For example, the designated project area shall not include the entire width of a watercourse, since all organisms indigenous to that watercourse might be subjected to discharges of pollutants that would, except for the provisions of section 318 of the Act, violate section 301 of the Act.



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and such facility shall be eligible to apply for a credit under § 129.6, upon a showing by the owner or operator of such facility to the Regional Administrator (or State Director, if appropriate) that the concentration of PCBs in the intake water supply of such facility does not exceed the concentration of PCBs in the receiving water body to which the plant discharges its effluent.

[42 FR 6555, Feb. 2, 1977]

## **PART 131—WATER QUALITY STANDARDS**

### **Subpart A—General Provisions**

#### **Sec.**

- 131.1 Scope.
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- 131.4 State authority.
- 131.5 EPA authority.
- 131.6 Minimum requirements for water quality standards submission.

### **Subpart B—Establishment of Water Quality Standards**

- 131.10 Designation of uses.
- 131.11 Criteria.
- 131.12 Antidegradation policy.
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### **Subpart C—Procedures for Review and Revision of Water Quality Standards**

- 131.20 State review and revision of water quality standards.
- 131.21 EPA review and approval of water quality standards.
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### **Subpart D—Federally Promulgated Water Quality Standards**

- 131.31 Arizona.
- 131.33 Mississippi.

**AUTHORITY:** Clean Water Act, P.L. 92-500, as amended: 33 U.S.C. 1251 *et seq.*

**SOURCE:** 48 FR 51405, Nov. 8, 1983, unless otherwise noted.

### **Subpart A—General Provisions**

#### **§ 131.1 Scope.**

This part describes the requirements and procedures for developing, reviewing, revising and approving water quality standards by the States as author-

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ized by section 303(c) of the Clean Water Act. The reporting or record-keeping (information) provisions in this rule were approved by the Office of Management and Budget under 3504(b) of the Paperwork Reduction Act of 1980, U.S.C. 3501 *et seq.* (Approval number 2040-0049).

#### **§ 131.2 Purpose.**

A water quality standard defines the water quality goals of a water body, or portion thereof, by designating the use or uses to be made of the water and by setting criteria necessary to protect the uses. States adopt water quality standards to protect public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act (the Act). "Serve the purposes of the Act" (as defined in sections 101(a)(2) and 303(c) of the Act) means that water quality standards should, wherever attainable, provide water quality for the protection and propagation of fish, shellfish and wildlife and for recreation in and on the water and take into consideration their use and value of public water supplies, propagation of fish, shellfish, and wildlife, recreation in and on the water, and agricultural, industrial, and other purposes including navigation.

Such standards serve the dual purposes of establishing the water quality goals for a specific water body and serve as the regulatory basis for the establishment of water-quality-based treatment controls and strategies beyond the technology-based levels of treatment required by sections 301(b) and 306 of the Act.

#### **§ 131.3 Definitions.**

(a) *The Act* means the Clean Water Act (Pub. L. 92-500, as amended, (33 U.S.C. 1251 *et seq.*)).

(b) *Criteria* are elements of State water quality standards, expressed as constituent concentrations, levels, or narrative statements, representing a quality of water that supports a particular use. When criteria are met, water quality will generally protect the designated use.

(c) *Section 304(a) criteria* are developed by EPA under authority of section 304(a) of the Act based on the

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latest scientific information on the relationship that the effect of a constituent concentration has on particular aquatic species and/or human health. This information is issued periodically to the States as guidance for use in developing criteria.

(d) *Toxic pollutants* are those pollutants listed by the Administrator under section 307(a) of the Act.

(e) *Existing uses* are those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards.

(f) *Designated uses* are those uses specified in water quality standards for each water body or segment whether or not they are being attained.

(g) *Use attainability analysis* is a structured scientific assessment of the factors affecting the attainment of the use which may include physical, chemical, biological, and economic factors as described in § 131.10(g).

(h) *Water quality limited segment* means any segment where it is known that water quality does not meet applicable water quality standards, and/or is not expected to meet applicable water quality standards, even after the application of the technology-based effluent limitations required by sections 301(b) and 306 of the Act.

(i) *Water quality standards* are provisions of State or Federal law which consist of a designated use or uses for the waters of the United States and water quality criteria for such waters based upon such uses. Water quality standards are to protect the public health or welfare, enhance the quality of water and serve the purposes of the Act.

(j) *States* include: the 50 States, the District of Columbia, Guam, the Commonwealth of Puerto Rico, Virgin Islands, American Samoa, the Trust Territory of the Pacific Islands, and the Commonwealth of the Northern Mariana Islands.

**§ 131.4 State authority.**

States are responsible for reviewing, establishing and revising water quality standards. Under section 510 of the Act, States may develop water quality

standards more stringent than required by this regulation.

**§ 131.5 EPA authority.**

Under section 303(c) of the Act, EPA is to review and to approve or disapprove State-adopted water quality standards. The review involves a determination of: (a) Whether the State has adopted water uses which are consistent with the requirements of the Clean Water Act; (b) whether the state has adopted criteria that protect the designated water uses; (c) whether the State has followed its legal procedures for revising or adopting standards; (d) whether the State standards which do not include the uses specified in section 101(a)(2) of the Act are based upon appropriate technical and scientific data and analyses, and (e) whether the State submission meets the requirements included in § 131.6 of this part. If EPA determines that State water quality standards are consistent with the factors listed in paragraphs (a) through (e) of this section, EPA approves the standards. EPA must disapprove the State water quality standards and promulgate Federal standards under section 303(c)(4) of the Act, if State adopted standards are not consistent with the factors listed in paragraphs (a) through (e) of this section. EPA may also promulgate a new or revised standard where necessary to meet the requirements of the Act.

**§ 131.6 Minimum Requirements for Water Quality Standards Submission.**

The following elements must be included in each State's water quality standards submitted to EPA for review:

(a) Use designations consistent with the provisions of sections 101(a)(2) and 303(c)(2) of the Act.

(b) Methods used and analyses conducted to support water quality standards revisions.

(c) Water quality criteria sufficient to protect the designated uses.

(d) An antidegradation policy consistent with § 131.12.

(e) Certification by the State Attorney General or other appropriate legal authority within the State that the

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Act and by implementing cost-effective and reasonable best management practices for nonpoint source control.

(i) Where existing water quality standards specify designated uses less than those which are presently being attained, the State shall revise its standards to reflect the uses actually being attained.

(j) A State must conduct a use attainability analysis as described in § 131.3(g) whenever:

(1) The State designates or has designated uses that do not include the uses specified in section 101(a)(2) of the Act, or

(2) The State wishes to remove a designated use that is specified in section 101(a)(2) of the Act or to adopt subcategories of uses specified in section 101(a)(2) of the Act which require less stringent criteria.

(k) A State is not required to conduct a use attainability analysis under this regulation whenever designating uses which include those specified in Section 101(a)(2) of the Act.

**§ 131.11 Criteria.**

(a) *Inclusion of pollutants:* (1) States must adopt those water quality criteria that protect the designated use. Such criteria must be based on sound scientific rationale and must contain sufficient parameters or constituents to protect the designated use. For waters with multiple use designations, the criteria shall support the most sensitive use.

(2) *Toxic pollutants:*—States must review water quality data and information on discharges to identify specific water bodies where toxic pollutants may be adversely affecting water quality or the attainment of the designated water use or where the levels of toxic pollutants are at a level to warrant concern and must adopt criteria for such toxic pollutants applicable to the water body sufficient to protect the designated use. Where a State adopts narrative criteria for toxic pollutants to protect designated uses, the State must provide information identifying the method by which the State intends to regulate point source discharges of toxic pollutants on water quality limited segments based on such narrative criteria. Such informa-

tion may be included as part of the standards or may be included in documents generated by the State in response to the Water Quality Planning and Management Regulations (40 CFR Part 35).

(b) Form of criteria: In establishing criteria, States should:

(1) Establish numerical values based on:

(i) 304(a) Guidance; or

(ii) 304(a) Guidance modified to reflect site-specific conditions; or

(iii) Other scientifically defensible methods;

(2) Establish narrative criteria or criteria based upon biomonitoring methods where numerical criteria cannot be established or to supplement numerical criteria.

**§ 131.12 Antidegradation policy.**

(a) The State shall develop and adopt a statewide antidegradation policy and identify the methods for implementing such policy pursuant to this subpart. The antidegradation policy and implementation methods shall, at a minimum, be consistent with the following:

(1) Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.

(2) Where the quality of the waters exceed levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the State finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the State's continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. In allowing such degradation or lower water quality, the State shall assure water quality adequate to protect existing uses fully. Further, the State shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable best manage-

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ment practices for nonpoint source control.

(3) Where high quality waters constitute an outstanding National resource, such as waters of National and State parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.

(4) In those cases where potential water quality impairment associated with a thermal discharge is involved, the antidegradation policy and implementing method shall be consistent with section 316 of the Act.

**§ 131.13 General policies.**

States may, at their discretion, include in their State standards, policies generally affecting their application and implementation, such as mixing zones, low flows and variances. Such policies are subject to EPA review and approval.

**Subpart C—Procedures for Review and Revision of Water Quality Standards****§ 131.20 State review and revision of water quality standards.**

(a) *State Review:* The State shall from time to time, but at least once every three years, hold public hearings for the purpose of reviewing applicable water quality standards and, as appropriate, modifying and adopting standards. Any water body segment with water quality standards that do not include the uses specified in section 101(a)(2) of the Act shall be re-examined every three years to determine if any new information has become available. If such new information indicates that the uses specified in section 101(a)(2) of the Act are attainable, the State shall revise its standards accordingly. Procedures States establish for identifying and reviewing water bodies for review should be incorporated into their Continuing Planning Process.

(b) *Public participation:* The State shall hold a public hearing for the purpose of reviewing water quality standards, in accordance with provisions of State law, EPA's water quality management regulation (40 CFR

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130.3(b)(6)) and public participation regulation (40 CFR Part 25). The proposed water quality standards revision and supporting analyses shall be made available to the public prior to the hearing.

(c) *Submittal to EPA:* The State shall submit the results of the review, any supporting analysis for the use attainability analysis, the methodologies used for site-specific criteria development, any general policies applicable to water quality standards and any revisions of the standards to the Regional Administrator for review and approval, within 30 days of the final State action to adopt and certify the revised standard, or if no revisions are made as a result of the review, within 30 days of the completion of the review.

**§ 131.21 EPA review and approval of water quality standards.**

(a) After the State submits its officially adopted revisions, the Regional Administrator shall either:

(1) Notify the State within 60 days that the revisions are approved, or

(2) Notify the State within 90 days that the revisions are disapproved. Such notification of disapproval shall specify the changes needed to assure compliance with the requirements of the Act and this regulation, and shall explain why the State standard is not in compliance with such requirements. Any new or revised State standard must be accompanied by some type of supporting analysis.

(b) The Regional Administrator's approval or disapproval of a State water quality standard shall be based on the requirements of the Act as described in §§ 131.5, and 131.6.

(c) A State water quality standard remains in effect, even though disapproved by EPA, until the State revises it or EPA promulgates a rule that supersedes the State water quality standard.

(d) EPA shall, at least annually, publish in the FEDERAL REGISTER a notice of approvals under this section.



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ment practices for nonpoint source control.

(3) Where high quality waters constitute an outstanding National resource, such as waters of National and State parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.

(4) In those cases where potential water quality impairment associated with a thermal discharge is involved, the antidegradation policy and implementing method shall be consistent with section 316 of the Act.

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States may, at their discretion, include in their State standards, policies generally affecting their application and implementation, such as mixing zones, low flows and variances. Such policies are subject to EPA review and approval.

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130.3(b)(6)) and public participation regulation (40 CFR Part 25). The proposed water quality standards revision and supporting analyses shall be made available to the public prior to the hearing.

(c) **Submittal to EPA:** The State shall submit the results of the review, any supporting analysis for the use attainability analysis, the methodologies used for site-specific criteria development, any general policies applicable to water quality standards and any revisions of the standards to the Regional Administrator for review and approval, within 30 days of the final State action to adopt and certify the revised standard, or if no revisions are made as a result of the review, within 30 days of the completion of the review.

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(b) The Regional Administrator's approval or disapproval of a State water quality standard shall be based on the requirements of the Act as described in §§ 131.5, and 131.6.

(c) A State water quality standard remains in effect, even though disapproved by EPA, until the State revises it or EPA promulgates a rule that supersedes the State water quality standard.

(d) EPA shall, at least annually, publish in the **FEDERAL REGISTER** a notice of approvals under this section.

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the base fluids after ten days of constant exposure.

(qq) 96-hour  $LC_{50}$  means the concentration (parts per million) or percent of the suspended particulate phase (SPP) from a sample that is lethal to 50 percent of the test organisms exposed to that concentration of the SPP after 96 hours of constant exposure.

(rr)  $C_{16}$ - $C_{18}$  internal olefin means a 65/35 blend, proportioned by mass, of hexadecene and octadecene, respectively. Hexadecene is an unsaturated hydrocarbon with a carbon chain length of 16, an internal double carbon bond, and is represented by the Chemical Abstracts Service (CAS) No. 26952-14-7. Octadecene is an unsaturated hydrocarbon with a carbon chain length of 18, an internal double carbon bond, and is represented by the Chemical Abstracts Service (CAS) No. 27070-58-2. (Properties available from the Chemical Abstracts Service, 2540 Olentangy River Road, PO Box 3012, Columbus, OH, 43210).

(ss)  $C_{16}$ - $C_{18}$  internal olefin drilling fluid means a  $C_{16}$ - $C_{18}$  internal olefin drilling fluid formulated as specified in Appendix 8 of subpart A of this part.

(tt)  $C_{12}$ - $C_{14}$  ester and  $C_8$  ester means the fatty acid/2-ethylhexyl esters with carbon chain lengths ranging from 8 to 16 and represented by the Chemical Abstracts Service (CAS) No. 135800-37-2. (Properties available from the Chemical Abstracts Service, 2540 Olentangy River Road, PO Box 3012, Columbus, OH, 43210)

[61 FR 66124, Dec. 16, 1996, as amended at 66 FR 6895, Jan. 22, 2001]

**§ 435.12 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT).**

Except as provided in 40 CFR 125.30-32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available:

## BPT EFFLUENT LIMITATIONS—OIL AND GREASE

[In milligrams per liter]

Pollutant parameter waste source	Maximum for any 1 day	Average of values for 30 consecutive days shall not exceed	Residual chlorine minimum for any 1 day
Produced water .....	72	48	NA
Deck drainage .....	( <sup>1</sup> )	( <sup>1</sup> )	NA
Water-based:			
Drilling fluids .....	( <sup>1</sup> )	( <sup>1</sup> )	NA
Drill Cuttings .....	( <sup>1</sup> )	( <sup>1</sup> )	NA
Non-aqueous:			
Drilling fluids .....	No discharge	No discharge	NA
Drill Cuttings .....	( <sup>1</sup> )	( <sup>1</sup> )	NA
Well treatment fluids .....	( <sup>1</sup> )	( <sup>1</sup> )	NA
Sanitary:			
M10 .....	NA	NA	≥ 1
M9IM <sup>3</sup> .....	NA	NA	NA
Domestic .....	NA	NA	NA

<sup>1</sup>No discharge of free oil.

<sup>2</sup>Minimum of 1 mg/l and maintained as close to this concentration as possible.

<sup>3</sup>There shall be no floating solids as a result of the discharge of these wastes.

[58 FR 12504, Apr. 13, 1979, as amended at 66 FR 6897, Jan. 22, 2001]

**§ 435.13 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT).**

Except as provided in 40 CFR 125.30-32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT):

## BAT EFFLUENT LIMITATIONS

Waste source	Pollutant parameter	BAT effluent limitation
Produced water .....	Oil & grease	The maximum for any one day shall not exceed 42 mg/l; the average of daily values for 30 consecutive days shall not exceed 29 mg/l.
Drilling fluids and drill cuttings:		
(A) For facilities located within 3 miles from shore.		No discharge. <sup>1</sup>

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## BAT EFFLUENT LIMITATIONS—Continued

Waste source	Pollutant parameter	BAT effluent limitation
(B) For facilities located beyond 3 miles from shore: Water-based drilling fluids and associated drill cuttings.	SPP Toxicity	Minimum 96-hour LC <sub>50</sub> of the SPP Toxicity Test <sup>2</sup> shall be 3% by volume.
	Free oil .....	No discharge. <sup>3</sup>
	Diesel oil .....	No discharge.
	Mercury .....	1 mg/kg dry weight maximum in the stock barite.
Non-aqueous drilling fluids (NAFs). Drill cuttings associated with non-aqueous drilling fluids: Stock Limitations (C <sub>16</sub> -C <sub>18</sub> internal olefin).	Cadmium .....	3 mg/kg dry weight maximum in the stock barite.
	.....	No discharge.
	Mercury .....	1 mg/kg dry weight maximum in the stock barite.
	Cadmium .....	3 mg/kg dry weight maximum in the stock barite.
Discharge Limitations.	Polynuclear Aromatic Hydrocarbons (PAH).	PAH mass ratio <sup>5</sup> shall not exceed 1x10 <sup>-5</sup> .
	Sediment toxicity.	Base fluid sediment toxicity ratio <sup>6</sup> shall not exceed 1.0.
	Biodegradation rate.	Biodegradation rate ratio <sup>7</sup> shall not exceed 1.0.
	Diesel oil .....	No discharge.
Discharge Limitations.	SPP Toxicity	Minimum 96-hour LC <sub>50</sub> of the SPP Toxicity Test <sup>2</sup> shall be 3% by volume.
	Sediment toxicity.	Drilling fluid sediment toxicity ratio <sup>8</sup> shall not exceed 1.0.
	Formation Oil	No discharge. <sup>9</sup>

## BAT EFFLUENT LIMITATIONS—Continued

Waste source	Pollutant parameter	BAT effluent limitation
Well treatment, completion, and work-over fluids.	Base fluid retained on cuttings.	For NAFs that meet the stock limitations (C <sub>16</sub> -C <sub>18</sub> internal olefin) in this table, the maximum weighted mass ratio averaged over all NAF well sections shall be 6.9 g-NAF base fluid/100 g-wet drill cuttings. <sup>10</sup>
	Oil and grease.	For NAFs that meet the C <sub>12</sub> -C <sub>14</sub> ester or C <sub>8</sub> ester stock limitations in footnote 11 of this table, the maximum weighted mass ratio averaged over all NAF well sections shall be 9.4 g-NAF base fluid/100 g-wet drill cuttings.
	Deck drainage .....	The maximum for any one day shall not exceed 42 mg/l; the average of daily values for 30 consecutive days shall not exceed 29 mg/l.
	Produced sand .....	No discharge. <sup>4</sup>
Domestic Waste .....	Foam .....	No discharge.

<sup>1</sup> All Alaskan facilities are subject to the drilling fluids and drill cuttings discharge limitations for facilities located beyond 3 miles offshore.

<sup>2</sup> As determined by the suspended particulate phase (SPP) toxicity test (Appendix 2 of subpart A of this part).

<sup>3</sup> As determined by the static sheen test (appendix 1).

<sup>4</sup> As determined by the presence of a film or sheen upon or a discoloration of the surface of the receiving water (visual sheen).

<sup>5</sup> PAH mass ratio = Mass (g) of PAH (as phenanthrene)/Mass (g) of stock base fluid as determined by EPA Method 1654, Revision A, (specified at § 435.11(u)) entitled "PAH Content of Oil by HPLC/UV," December 1992, which is published in *Methods for the Determination of Diesel, Mineral, and Crude Oils in Offshore Oil and Gas Industry Discharges*, EPA-821-R-92-008. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from the National Technical Information Service, Springfield, VA 22161, 703-605-6000. Copies may be inspected at the Office of the Federal Register, 800 North Capitol Street, NW., Suite 700, Washington, DC. A copy may also be inspected at EPA's Water Docket, 1200 Pennsylvania Ave., NW., Washington, DC 20460.



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<sup>6</sup> Base fluid sediment toxicity ratio = 10-day LC<sub>50</sub> of C<sub>16</sub>-C<sub>18</sub> internal olefin/10-day LC<sub>50</sub> of stock base fluid as determined by ASTM E 1367-92 [specified at § 435.11(ee)] method: "Standard Guide for Conducting 10-day Static Sediment Toxicity Tests with Marine and Estuarine Amphipods," 1992, after preparing the sediment according to the method specified in Appendix 3 of subpart A of this part. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA, 19428. Copies may be inspected at the Office of the Federal Register, 800 North Capitol Street, NW., Suite 700, Washington, DC. A copy may also be inspected at EPA's Water Docket, 1200 Pennsylvania Ave., NW., Washington, DC 20460.

<sup>7</sup> Biodegradation rate ratio = Cumulative gas production (ml) of C<sub>16</sub>-C<sub>18</sub> internal olefin/Cumulative gas production (ml) of stock base fluid, both at 275 days as determined by ISO 11734:1995 [specified at § 435.11(e)] method: "Water quality—Evaluation of the 'ultimate' anaerobic biodegradability of organic compounds in digested sludge—Method by measurement of the biogas production (1995 edition)" as modified for the marine environment (Appendix 4 of subpart A of this part). This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from the American National Standards Institute, 11 West 42nd Street, 13th Floor, New York, NY 10036. Copies may be inspected at the Office of the Federal Register, 800 North Capitol Street, NW., Suite 700, Washington, DC. A copy may also be inspected at EPA's Water Docket, 1200 Pennsylvania Ave., NW., Washington, DC 20460.

<sup>8</sup> Drilling fluid sediment toxicity ratio = 4-day LC<sub>50</sub> of C<sub>16</sub>-C<sub>18</sub> internal olefin drilling fluid/4-day LC<sub>50</sub> of drilling fluid removed from drill cuttings at the solids control equipment as determined by ASTM E 1367-92 (specified at § 435.11(eo)) method: "Standard Guide for Conducting 10-day Static Sediment Toxicity Tests with Marine and Estuarine Amphipods," 1992, after preparing the sediment according to the method specified in Appendix 3 of subpart A of this part. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA, 19428. Copies may be inspected at the Office of the Federal Register, 800 North Capitol Street, NW., Suite 700, Washington, DC. A copy may also be inspected at EPA's Water Docket, 1200 Pennsylvania Ave., NW., Washington, DC 20460.

<sup>9</sup> As determined before drilling fluids are shipped offshore by the GC/MS compliance assurance method (Appendix 5 of subpart A of this part), and as determined prior to discharge by the RPE method (Appendix 6 of subpart A of this part) applied to drilling fluid removed from drill cuttings. If the operator wishes to confirm the results of the RPE method (Appendix 6 of subpart A of this part), the operator may use the GC/MS compliance assurance method (Appendix 5 of subpart A of this part). Results from the GC/MS compliance assurance method (Appendix 5 of subpart A of this part) shall supersede the results of the RPE method (Appendix 6 of subpart A of this part).

<sup>10</sup> Maximum permissible retention of non-aqueous drilling fluid (NAF) base fluid on wet drill cuttings averaged over drilling intervals using NAFs as determined by the API retort method (Appendix 7 of subpart A of this part). This limitation is applicable for NAF base fluids that meet the base fluid sediment toxicity ratio (Footnote 6), biodegradation rate ratio (Footnote 7), PAH, mercury, and cadmium stock limitations (C<sub>16</sub>-C<sub>18</sub> internal olefin) defined above in this table.

<sup>11</sup> Maximum permissible retention of non-aqueous drilling fluid (NAF) base fluid on wet drill cuttings averaged over drilling intervals using NAFs as determined by the API retort method (Appendix 7 of subpart A of this part). This limitation is applicable for NAF base fluids that meet the ester base fluid sediment toxicity ratio and ester biodegradation rate ratio stock limitations defined as: (a) ester base fluid sediment toxicity ratio = 10-day LC<sub>50</sub> of C<sub>12</sub>-C<sub>14</sub> ester or C<sub>8</sub> ester / 10-day LC<sub>50</sub> of stock base fluid as determined by ASTM E 1367-92 (specified at § 435.11(ee)) method: "Standard Guide for Conducting 10-day Static Sediment Toxicity Tests with Marine and Estuarine Amphipods," 1992, after preparing the sediment according to the method specified in Appendix 3 of subpart A of this part. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA, 19428. Copies may be inspected at the Office of the Federal Register, 800 North Capitol Street, NW., Suite 700, Washington, DC. A copy may also be inspected at EPA's Water Docket, 1200 Pennsylvania Ave., NW., Washington, DC 20460. (b) ester biodegradation rate ratio = Cumulative gas production (ml) of C<sub>12</sub>-C<sub>14</sub> ester or C<sub>8</sub> ester/Cumulative gas production (ml) of stock base fluid, both at 275 days as determined by ISO 11734:1995 (specified at § 435.11(e)) method: "Water quality—Evaluation of the 'ultimate' anaerobic biodegradability of organic compounds in digested sludge—Method by measurement of the biogas production (1995 edition)" as modified for the marine environment (Appendix 4 of subpart A of this part). This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from the American National Standards Institute, 11 West 42nd Street, 13th Floor, New York, NY 10036. Copies may be inspected at the Office of the Federal Register, 800 North Capitol Street, NW., Suite 700, Washington, DC. A copy may also be inspected at EPA's Water Docket, 1200 Pennsylvania Ave., NW., Washington, DC 20460. (c) PAH mass ratio (Footnote 5), mercury, and cadmium stock limitations (C<sub>16</sub>-C<sub>18</sub> internal olefin) defined above in this table.

[58 FR 12504, Apr. 13, 1979, as amended at 66 FR 6898, Jan. 22, 2001]

**§ 435.14 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology (BCT).**

Except as provided in 40 CFR 125.30-32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology (BCT):

**BCT EFFLUENT LIMITATIONS**

Waste source	Pollutant parameter	BCT effluent limitation
Produced water .....	Oil & grease	The maximum for any one day shall not exceed 72 mg/l; the average of values for 30 consecutive days shall not exceed 48 mg/l.
Drilling fluids and drill cuttings: (A) For facilities located within 3 miles from shore.	.....	No discharge. <sup>1</sup>

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TABLE 1—PROPERTIES FOR REFERENCE C<sub>16</sub>–C<sub>18</sub> IOS SBF USED IN DISCHARGE SEDIMENT TOXICITY TESTING—Continued

Mud weight of SBF discharged with cuttings (pounds per gallon)	Reference C <sub>16</sub> –C <sub>18</sub> IOS SBF (pounds per gallon)	Reference C <sub>16</sub> –C <sub>18</sub> IOS SBF synthetic to water ratio (%)
11–14 .....	11.5	80/20
>14 .....	14.5	85/15
Plastic Viscosity (PV), centipoise (cP) .....	12–30	
Yield Point (YP), pounds/100 sq. ft .....	10–20	
10-second gel, pounds/100 sq. ft .....	8–15	
10-minute gel, pounds/100 sq. ft .....	12–30	
Electrical stability, V .....	>300	

[66 FR 6901, Jan. 22, 2001]

## Subpart B [Reserved]

## Subpart C—Onshore Subcategory

## § 435.30 Applicability; description of the onshore subcategory.

The provisions of this subpart are applicable to those facilities engaged in the production, field exploration, drilling, well completion and well treatment in the oil and gas extraction industry which are located landward of the inner boundary of the territorial seas as defined in 40 CFR 125.1(gg) and which are not included within subpart D, E, or F, *Provided, however*, That the applicability of this subpart to (a) facilities in existence on April 13, 1979 or thereafter engaged in the production, field exploration, drilling, well completion and well treatment in the oil and gas extraction industry which are located on land and which would have been considered “coastal” as defined under the interim final regulations for this industry (40 CFR 435.41, 41 FR 44942, October 13, 1976) or which are (b) located in the Santa Maria Basin of California is suspended.

(Secs. 301, 304(b) and 501 of the Clean Water Act as amended, 33 U.S.C. 1251 *et seq.*)

[44 FR 22075, Apr. 13, 1979, as amended at 47 FR 31555, July 21, 1982]

## § 435.31 Specialized definitions.

For the purpose of this subpart:

(a) The general definitions, abbreviations, and methods of analysis set forth in 40 CFR part 401 shall apply to this subpart.

§ 435.32 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in §§ 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT): there shall be no discharge of waste water pollutants into navigable waters from any source associated with production, field exploration, drilling, well completion, or well treatment (*i.e.*, produced water, drilling muds, drill cuttings, and produced sand).

[60 FR 33966, June 29, 1995]

## Subpart D—Coastal Subcategory

SOURCE: 61 FR 66125, Dec. 16, 1996, unless otherwise noted.

## § 435.40 Applicability; description of the coastal subcategory.

The provisions of this subpart are applicable to those facilities engaged in field exploration, drilling, well production, and well treatment in the oil and gas industry in areas defined as “coastal.” The term “coastal” shall mean:

(a) Any location in or on a water of the United States landward of the inner boundary of the territorial seas; or

(b)(1) Any location landward from the inner boundary of the territorial seas

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and bounded on the inland side by the line defined by the inner boundary of the territorial seas eastward of the point defined by 89°45' West Longitude and 29°46' North Latitude and continuing as follows west of that point:

Direction to west longitude	Direction to north latitude
West, 89°48'	North, 29°50'
West, 90°12'	North, 30°06'
West, 90°20'	South, 29°35'
West, 90°35'	South, 29°30'
West, 90°43'	South, 29°25'
West, 90°57'	North, 29°32'
West, 91°02'	North, 29°40'
West, 91°14'	South, 29°32'
West, 91°27'	North, 29°37'
West, 91°33'	North, 29°46'
West, 91°46'	North, 29°50'
West, 91°50'	North, 29°55'
West, 91°56'	South, 29°50'
West, 92°10'	South, 29°44'
West, 92°55'	North, 29°46'
West, 93°15'	North, 30°14'
West, 93°49'	South, 30°07'
West, 94°03'	South, 30°03'
West, 94°10'	South, 30°00'
West, 94°20'	South, 29°53'
West, 95°00'	South, 29°35'
West, 95°13'	South, 29°28'
East, 95°08'	South, 29°15'
West, 95°11'	South, 29°08'
West, 95°22'	South, 28°56'
West, 95°30'	South, 28°55'
West, 95°33'	South, 28°49'
West, 95°40'	South, 28°47'
West, 96°42'	South, 28°41'
East, 96°40'	South, 28°28'
West, 96°54'	South, 28°20'
West, 97°03'	South, 28°13'
West, 97°15'	South, 27°58'
West, 97°40'	South, 27°45'
West, 97°46'	South, 27°28'
West, 97°51'	South, 27°22'
East, 97°46'	South, 27°14'
East, 97°30'	South, 26°30'
East, 97°26'	South, 26°11'

(2) East to 97°19' West Longitude and Southward to the U.S.-Mexican border.

## § 435.41 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR part 401 shall apply to this subpart.

(b) *Average of daily values for 30 consecutive days* means the average of the daily values obtained during any 30 consecutive day period.

(c) *Base fluid* means the continuous phase or suspending medium of a drilling fluid formulation.

(d) *Base fluid retained on cuttings* as applied to BAT effluent limitations and NSPS refers to the American Pe-

troleum Institute Recommended Practice 13B-2 supplemented with the specifications, sampling methods, and averaging method for retention values provided in Appendix 7 of subpart A of this part.

(e) *Biodegradation rate* as applied to BAT effluent limitations and NSPS for drilling fluids and drill cuttings refers to the ISO 11734:1995 method: "Water quality—Evaluation of the 'ultimate' anaerobic biodegradability of organic compounds in digested sludge—Method by measurement of the biogas production (1995 edition)" (Available from the American National Standards Institute, 11 West 42nd Street, 13th Floor, New York, NY 10036) supplemented with modifications in Appendix 4 of subpart A of this part.

(f) *Cook Inlet* refers to coastal locations north of the line between Cape Douglas on the West and Port Chatham on the east.

(g) *Daily values* as applied to produced water effluent limitations and NSPS means the daily measurements used to assess compliance with the maximum for any one day.

(h) *Deck drainage* means any waste resulting from deck washings, spillage, rainwater, and runoff from gutters and drains including drip pans and work areas within facilities subject to this Subpart.

(i) *Development facility* means any fixed or mobile structure subject to this Subpart that is engaged in the drilling of productive wells.

(j) *Dewatering effluent* means wastewater from drilling fluids and drill cuttings dewatering activities (including but not limited to reserve pits or other tanks or vessels, and chemical or mechanical treatment occurring during the drilling solids separation/recycle/disposal process).

(k) *Diesel oil* refers to the grade of distillate fuel oil, as specified in the American Society for Testing and Materials Standard Specification for Diesel Fuel Oils D975-91, that is typically used as the continuous phase in conventional oil-based drilling fluids. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from the American Society

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for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103. Copies may be inspected at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html). A copy may also be inspected at EPA's Water Docket, 401 M Street SW., Washington, DC 20460.

(l) *Domestic waste* means the materials discharged from sinks, showers, laundries, safety showers, eye-wash stations, hand-wash stations, fish cleaning stations, and galleys located within facilities subject to this Subpart.

(m) *Drill cuttings* means the particles generated by drilling into subsurface geologic formations and carried out from the wellbore with the drilling fluid. Examples of drill cuttings include small pieces of rock varying in size and texture from fine silt to gravel. Drill cuttings are generally generated from solids control equipment and settle out and accumulate in quiescent areas in the solids control equipment or other equipment processing drilling fluid (i.e., accumulated solids).

(1) *Wet drill cuttings* means the unaltered drill cuttings and adhering drilling fluid and formation oil carried out from the wellbore with the drilling fluid.

(2) *Dry drill cuttings* means the residue remaining in the retort vessel after completing the retort procedure specified in Appendix 7 of subpart A of this part.

(n) *Drilling fluid* means the circulating fluid (mud) used in the rotary drilling of wells to clean and condition the hole and to counterbalance formation pressure. Classes of drilling fluids are:

(1) *Water-based drilling fluid* means the continuous phase and suspending medium for solids is a water-miscible fluid, regardless of the presence of oil.

(2) *Non-aqueous drilling fluid* means the continuous phase and suspending medium for solids is a water-immiscible fluid, such as oleaginous materials (e.g., mineral oil, enhanced mineral oil, paraffinic oil, C<sub>16</sub>-C<sub>18</sub> internal

olefins, and C<sub>8</sub>-C<sub>16</sub> fatty acid/2-ethylhexyl esters).

(i) *Oil-based* means the continuous phase of the drilling fluid consists of diesel oil, mineral oil, or some other oil, but contains no synthetic material or enhanced mineral oil.

(ii) *Enhanced mineral oil-based* means the continuous phase of the drilling fluid is enhanced mineral oil.

(iii) *Synthetic-based* means the continuous phase of the drilling fluid is a synthetic material or a combination of synthetic materials.

(o) *Enhanced mineral oil* as applied to enhanced mineral oil-based drilling fluid means a petroleum distillate which has been highly purified and is distinguished from diesel oil and conventional mineral oil in having a lower polycyclic aromatic hydrocarbon (PAH) content. Typically, conventional mineral oils have a PAH content on the order of 0.35 weight percent expressed as phenanthrene, whereas enhanced mineral oils typically have a PAH content of 0.001 or lower weight percent PAH expressed as phenanthrene.

(p) *Exploratory facility* means any fixed or mobile structure subject to this Subpart that is engaged in the drilling of wells to determine the nature of potential hydrocarbon reservoirs.

(q) *Formation oil* means the oil from a producing formation which is detected in the drilling fluid, as determined by the GC/MS compliance assurance method specified in Appendix 5 of subpart A of this part when the drilling fluid is analyzed before being shipped offshore, and as determined by the RPE method specified in Appendix 6 of subpart A of this part when the drilling fluid is analyzed at the offshore point of discharge. Detection of formation oil by the RPE method may be confirmed by the GC/MS compliance assurance method, and the results of the GC/MS compliance assurance method shall supercede those of the RPE method.

(r) *Garbage* means all kinds of victual, domestic, and operational waste, excluding fresh fish and parts thereof, generated during the normal operation of coastal oil and gas facility and liable to be disposed of continuously or periodically, except dishwater, graywater, and those substances that are defined



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or listed in other Annexes to MARPOL 73/78. A copy of MARPOL may be inspected at EPA's Water Docket; 1200 Pennsylvania Ave., NW., Washington, DC 20460.

(s) *M9IM* means those offshore facilities continuously manned by nine (9) or fewer persons or only intermittently manned by any number of persons.

(t) *M10* means those offshore facilities continuously manned by ten (10) or more persons.

(u) *Maximum* as applied to BAT effluent limitations and NSPS for drilling fluids and drill cuttings means the maximum concentration allowed as measured in any single sample of the barite for determination of cadmium and mercury content.

(v) *Maximum for any one day* as applied to BPT, BCT and BAT effluent limitations and NSPS for oil and grease in produced water means the maximum concentration allowed as measured by the average of four grab samples collected over a 24-hour period that are analyzed separately. Alternatively, for BAT and NSPS the maximum concentration allowed may be determined on the basis of physical composition of the four grab samples prior to a single analysis.

(w) *Minimum* as applied to BAT effluent limitations and NSPS for drilling fluids and drill cuttings means the minimum 96-hour LC<sub>50</sub> value allowed as measured in any single sample of the discharged waste stream. *Minimum* as applied to BPT and BCT effluent limitations and NSPS for sanitary wastes means the minimum concentration value allowed as measured in any single sample of the discharged waste stream.

(x)(1) *New source* means any facility or activity of this subcategory that meets the definition of "new source" under 40 CFR 122.2 and meets the criteria for determination of new sources under 40 CFR 122.29(b) applied consistently with all of the following definitions:

(i) *Water area* as used in "site" in 40 CFR 122.29 and 122.2 means the water area and water body floor beneath any exploratory, development, or production facility where such facility is conducting its exploratory, development or production activities.

(ii) *Significant site preparation work* as used in 40 CFR 122.29 means the process of surveying, clearing or preparing an area of the water body floor for the purpose of constructing or placing a development or production facility on or over the site.

(2) "New Source" does not include facilities covered by an existing NPDES permit immediately prior to the effective date of these guidelines pending EPA issuance of a new source NPDES permit.

(y) *No discharge of free oil* means that waste streams may not be discharged that contain free oil as evidenced by the monitoring method specified for that particular stream, e.g., deck drainage or miscellaneous discharges cannot be discharged when they would cause a film or sheen upon or discoloration of the surface of the receiving water; drilling fluids or cuttings may not be discharged when they fail the static sheen test defined in Appendix 1 of subpart A of this part.

(z) Parameters that are regulated in this subpart and listed with approved methods of analysis in Table 1B at 40 CFR 136.3 are defined as follows:

(1) *Cadmium* means total cadmium.

(2) *Chlorine* means total residual chlorine.

(3) *Mercury* means total mercury.

(4) *Oil and Grease* means total recoverable oil and grease.

(aa) *Produced sand* means the slurried particles used in hydraulic fracturing, the accumulated formation sands and scales particles generated during production. Produced sand also includes desander discharge from the produced water waste stream, and blowdown of the water phase from the produced water treating system.

(bb) *Produced water* means the water (brine) brought up from the hydrocarbon-bearing strata during the extraction of oil and gas, and can include formation water, injection water, and any chemicals added downhole or during the oil/water separation process.

(cc) *Production facility* means any fixed or mobile structure subject to this subpart that is either engaged in well completion or used for active recovery of hydrocarbons from producing formations. It includes facilities that

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are engaged in hydrocarbon fluids separation even if located separately from wellheads.

(dd) *Sanitary waste* means the human body waste discharged from toilets and urinals located within facilities subject to this subpart.

(ee) *SPP toxicity* as applied to BAT effluent limitations and NSPS for drilling fluids and drill cuttings refers to the bioassay test procedure presented in Appendix 2 of subpart A of this part.

(ff) *Static sheen test* means the standard test procedure that has been developed for this industrial subcategory for the purpose of demonstrating compliance with the requirement of no discharge of free oil. The methodology for performing the static sheen test is presented in Appendix 1 of subpart A of this part.

(gg) *Stock barite* means the barite that was used to formulate a drilling fluid.

(hh) *Synthetic material* as applied to synthetic-based drilling fluid means material produced by the reaction of specific purified chemical feedstock, as opposed to the traditional base fluids such as diesel and mineral oil which are derived from crude oil solely through physical separation processes. Physical separation processes include fractionation and distillation and/or minor chemical reactions such as cracking and hydro processing. Since they are synthesized by the reaction of purified compounds, synthetic materials suitable for use in drilling fluids are typically free of polycyclic aromatic hydrocarbons (PAH's) but are sometimes found to contain levels of PAH up to 0.001 weight percent PAH expressed as phenanthrene. Internal olefins and vegetable esters are two examples of synthetic materials suitable for use by the oil and gas extraction industry in formulating drilling fluids. Internal olefins are synthesized from the isomerization of purified straight-chain (linear) hydrocarbons such as C<sub>16</sub>-C<sub>18</sub> linear alpha olefins. C<sub>16</sub>-C<sub>18</sub> linear alpha olefins are unsaturated hydrocarbons with the carbon to carbon double bond in the terminal position. Internal olefins are typically formed

from heating linear alpha olefins with a catalyst. The feed material for synthetic linear alpha olefins is typically purified ethylene. Vegetable esters are synthesized from the acid-catalyzed esterification of vegetable fatty acids with various alcohols. EPA listed these two branches of synthetic fluid base materials to provide examples, and EPA does not mean to exclude other synthetic materials that are either in current use or may be used in the future. A synthetic-based drilling fluid may include a combination of synthetic materials.

(ii) *Well completion fluids* means salt solutions, weighted brines, polymers, and various additives used to prevent damage to the well bore during operations which prepare the drilled well for hydrocarbon production.

(jj) *Well treatment fluids* means any fluid used to restore or improve productivity by chemically or physically altering hydrocarbon-bearing strata after a well has been drilled.

(kk) *Workover fluids* means salt solutions, weighted brines, polymers, or other specialty additives used in a producing well to allow for maintenance, repair or abandonment procedures.

(ll) *96-hour LC<sub>50</sub>* means the concentration (parts per million) or percent of the suspended particulate phase (SPP) from a sample that is lethal to 50 percent of the test organisms exposed to that concentration of the SPP after 96 hours of constant exposure.

[61 FR 66125, Dec. 16, 1996; 62 FR 1681, Jan. 13, 1997, as amended at 66 FR 6914, Jan. 22, 2001; 69 FR 18803, Apr. 9, 2004]

**§ 435.42 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT).**

Except as provided in 40 CFR 125.30-125.32, any existing point source subject to this Subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.



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## BPT EFFLUENT LIMITATIONS—OIL AND GREASE

[In milligrams per liter]

Pollutant parameter waste source	Maximum for any 1 day	Average of values for 30 consecutive days shall not exceed	Residual chlorine minimum for any 1 day
Produced water .....	72 .....	48 .....	NA
Deck drainage .....	( <sup>1</sup> ) .....	( <sup>1</sup> ) .....	NA
Water-based:			
Drilling fluids .....	( <sup>1</sup> ) .....	( <sup>1</sup> ) .....	NA
Drill Cuttings .....	( <sup>1</sup> ) .....	( <sup>1</sup> ) .....	NA
Non-aqueous:			
Drilling fluids .....	No discharge .....	No discharge .....	NA
Drill Cuttings .....	( <sup>1</sup> ) .....	( <sup>1</sup> ) .....	NA
Well treatment, workover, and completion fluids .....	( <sup>1</sup> ) .....	( <sup>1</sup> ) .....	NA
Sanitary:			
M10 .....	NA .....	NA .....	≥ 1
M9IM <sup>3</sup> .....	NA .....	NA .....	NA
Domestic <sup>2</sup> .....	NA .....	NA .....	NA
Produced sand .....	Zero discharge .....	Zero discharge .....	NA

<sup>1</sup> No discharge of free oil.<sup>2</sup> Minimum of 1 mg/l and maintained as close to this concentration as possible.<sup>3</sup> There shall be no floating solids as a result of the discharge of these wastes.

[61 FR 66125, Dec. 16, 1996, as amended at 66 FR 6916, Jan. 22, 2001]

**§ 435.43 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT).**

Except as provided in 40 CFR 125.30-125.32, any existing point source sub-

ject to this Subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT):

## BAT EFFLUENT LIMITATIONS

Stream	Pollutant parameter	BAT effluent limitations
Produced Water:		
(A) All coastal areas except Cook Inlet		No discharge.
(B) Cook Inlet	Oil & Grease .....	The maximum for any one day shall not exceed 42 mg/l, and the 30-day average shall not exceed 29 mg/l.
Drilling Fluids, Drill Cuttings, and Dewatering Effluent: <sup>1</sup>		
(A) All coastal areas except Cook Inlet		No discharge.
(B) Cook Inlet:		
Water-based drilling fluids, drill cuttings, and dewatering effluent.	SPP Toxicity .....	Minimum 96-hour LC <sub>50</sub> of the SPP Toxicity Test <sup>4</sup> shall be 3% by volume.
	Free oil .....	No discharge. <sup>2</sup>
	Diesel oil .....	No discharge.
	Mercury .....	1 mg/kg dry weight maximum in the stock barite.
	Cadmium .....	3 mg/kg dry weight maximum in the stock barite.
Non-aqueous drilling fluids and dewatering effluent.		No discharge.
Drill cuttings associated with non-aqueous drilling fluids.		No discharge. <sup>5</sup>
Well Treatment, Workover and Completion Fluids:		
(A) All coastal areas except Cook Inlet		No discharge.
(B) Cook Inlet	Oil & Grease .....	The maximum for any one day shall not exceed 42 mg/l, and the 30-day average shall not exceed 29 mg/l.
Produced Sand .....		No discharge.
Deck Drainage .....	Free Oil <sup>3</sup> .....	No discharge.

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## BAT EFFLUENT LIMITATIONS—Continued

Stream	Pollutant parameter	BAT effluent limitations
Domestic Waste .....	Foam .....	No discharge.

<sup>1</sup> BAT limitations for dewatering effluent are applicable prospectively. BAT limitations in this rule are not applicable to discharges of dewatering effluent from reserve pits which as of the effective date of this rule no longer receive drilling fluids and drill cuttings. Limitations on such discharges shall be determined by the NPDES permit issuing authority.

<sup>2</sup> As determined by the static sheen test (see appendix 1 to 40 CFR Part 435, subpart A).

<sup>3</sup> As determined by the presence of a film or sheen upon or a discoloration of the surface of the receiving water (visual sheen).

<sup>4</sup> As determined by the suspended particulate phase (SPP) toxicity test (see Appendix 2 of Subpart A of this part).

<sup>5</sup> When Cook Inlet operators cannot comply with this no discharge requirement due to technical limitations (see Appendix 1 of Subpart D of this part), Cook Inlet operators shall meet the same stock limitations (C<sub>15</sub>-C<sub>18</sub> internal olefin) and discharge limitations for drill cuttings associated with non-aqueous drilling fluids for operators in Offshore waters (see § 435.13) in order to discharge drill cuttings associated with non-aqueous drilling fluids.

[61 FR 66125, Dec. 16, 1996; 62 FR 1681, Jan. 13, 1997, as amended at 66 FR 6917, Jan. 22, 2001]

**§ 435.44 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology (BCT).**

Except as provided in 40 CFR 125.30-125.32, any existing point source sub-

ject to this Subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology (BCT):

## BCT EFFLUENT LIMITATIONS

Stream	Pollutant parameter	BCT effluent limitations
Produced Water (all facilities) .....	Oil & Grease .....	The maximum for any one day shall not exceed 72 mg/l and the 30-day average shall not exceed 48 mg/l.
Drilling Fluids and Drill Cuttings and Dewatering Effluent: <sup>1</sup>		
All facilities except Cook Inlet .....		No discharge.
Cook Inlet:		
Water-based drilling fluids, drill cuttings, and dewatering effluent.	Free Oil .....	No discharge. <sup>2</sup>
Non-aqueous drilling fluids and dewatering effluent.		No discharge.
Drill cuttings associated with non-aqueous drilling fluids.	Free Oil .....	No discharge. <sup>2</sup>
Well Treatment, Workover and Completion Fluids.	Free Oil .....	No discharge. <sup>2</sup>
Produced Sand .....		No discharge.
Deck Drainage .....	Free Oil .....	No discharge. <sup>3</sup>
Sanitary Waste:		
Sanitary M10 .....	Residual Chlorine .....	Minimum of 1 mg/l maintained as close to this concentration as possible.
Sanitary M91M .....	Floating Solids .....	No discharge.
Domestic Waste .....	Floating Solids and garbage .....	No discharge of Floating Solids or garbage.

<sup>1</sup> BCT limitations for dewatering effluent are applicable prospectively. BCT limitations in this rule are not applicable to discharges of dewatering effluent from reserve pits which as of the effective date of this rule no longer receive drilling fluids and drill cuttings. Limitations on such discharges shall be determined by the NPDES permit issuing authority.

<sup>2</sup> As determined by the static sheen test (see appendix 1 to 40 CFR part 435, subpart A).

<sup>3</sup> As determined by the presence of a film or sheen upon or a discoloration of the surface of the receiving water (visual sheen).

[61 FR 66125, Dec. 16, 1996; 62 FR 1682, Jan. 13, 1997, as amended at 66 FR 6917, Jan. 22, 2001]

**§ 435.45 Standards of performance for new sources (NSPS).**

Any new source subject to this subpart must achieve the following new source performance standards (NSPS):

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## NSPS EFFLUENT LIMITATIONS

Stream	Pollutant parameter	NSPS effluent limitations
Produced Water: (A) All coastal areas except Cook Inlet (B) Cook Inlet .....	Oil & Grease .....	No discharge. The maximum for any one day shall not exceed 42 mg/l, and the 30-day average shall not exceed 29 mg/l.
Drilling Fluids, Drill Cuttings, and Dewatering Effluent: <sup>1</sup> (A) All coastal areas except Cook Inlet (B) Cook Inlet: Water-based drilling fluids, drill cuttings, and dewatering effluent.	SPP Toxicity .....	No discharge. Minimum 96-hour LC <sub>50</sub> of the SPP Toxicity Test <sup>4</sup> shall be 3% by volume.
	Free oil .....	No discharge. <sup>2</sup>
	Diesel oil .....	No discharge.
	Mercury .....	1 mg/kg dry weight maximum in the stock bar-ite.
	Cadmium .....	3 mg/kg dry weight maximum in the stock bar-ite.
Non-aqueous drilling fluids and dewatering effluent.	.....	No discharge.
Drill cuttings associated with non-aqueous drilling fluids.	.....	No discharge. <sup>5</sup>
Well Treatment, Workover and Completion Fluids: (A) All coastal areas except Cook Inlet (B) Cook Inlet .....	Oil & Grease .....	No discharge. The maximum for any one day shall not exceed 42 mg/l, and the 30-day average shall not exceed 29 mg/l.
Produced Sand .....	Free Oil <sup>3</sup> .....	No discharge.
Deck Drainage .....	.....	No discharge.
Sanitary Waste Sanitary M10 .....	Residual Chlorine .....	Minimum of 1 mg/l and maintained as close to this concentration as possible.
Sanitary M91M .....	Floating Solids .....	No discharge.
Domestic Waste .....	Floating Solids, Garbage and Foam.	No discharge of floating solids or garbage or foam.

<sup>1</sup> NSPS limitations for dewatering effluent are applicable prospectively. NSPS limitations in this rule are not applicable to discharges of dewatering effluent from reserve pits which as of the effective date of this rule no longer receive drilling fluids and drill cuttings. Limitations on such discharges shall be determined by the NPDES permit issuing authority.

<sup>2</sup> As determined by the static sheen test (see appendix 1 to 40 CFR Part 435, subpart A).

<sup>3</sup> As determined by the presence of a film or sheen upon or a discoloration of the surface of the receiving water (visual sheen).

<sup>4</sup> As determined by the suspended particulate phase (SPP) toxicity test (see Appendix 2 of subpart A of this part).

<sup>5</sup> When Cook Inlet operators cannot comply with this no discharge requirement due to technical limitations (see Appendix 1 of subpart D of this part), Cook Inlet operators shall meet the same stock limitations (C<sub>10</sub>-C<sub>18</sub> internal olefin) and discharge limitations for drill cuttings associated with non-aqueous drilling fluids for operators in Offshore waters (see § 435.15) in order to discharge drill cuttings associated with non-aqueous drilling fluids.

[61 FR 66125, Dec. 16, 1996; 62 FR 1682, Jan. 13, 1997, as amended at 66 FR 6918, Jan. 22, 2001]

#### § 435.46 Pretreatment standards of performance for existing sources (PSES).

Except as provided in 40 CFR 403.7 and 403.13, any existing source with discharges subject to this subpart that introduces pollutants into a publicly owned treatment works must comply with 40 CFR part 403 and achieve the following pretreatment standards for existing sources (PSES).

## PSES EFFLUENT LIMITATIONS

Stream	Pollutant parameter	PSES effluent limitations
Produced Water .....	.....	No discharge.

## PSES EFFLUENT LIMITATIONS—Continued

Stream	Pollutant parameter	PSES effluent limitations
Drilling Fluids and Drill Cuttings Well Treatment.	.....	No discharge.
Workover and Completion Fluids.	.....	No discharge.
Produced Sand .....	.....	No discharge.
Deck Drainage .....	.....	No discharge.

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**§ 435.47 Pretreatment standards of performance for new sources (PSNS).**

Except as provided in 40 CFR 403.7 and 403.13, any new source with discharges subject to this subpart that introduces pollutants into a publicly owned treatment works must comply with 40 CFR part 403 and achieve the following pretreatment standards for new sources (PSNS).

**PSNS EFFLUENT LIMITATIONS**

Stream	Pollutant parameter	PSNS effluent limitations
Produced Water (all facilities).	.....	No discharge.
Drilling fluids and Drill Cuttings.	.....	No discharge.
Well Treatment, Workover and Completion Fluids.	.....	No discharge.
Produced Sand .....	.....	No discharge.
Deck Drainage .....	.....	No discharge.

**APPENDIX 1 TO SUBPART D OF PART 435—PROCEDURE FOR DETERMINING WHEN COASTAL COOK INLET OPERATORS QUALIFY FOR AN EXEMPTION FROM THE ZERO DISCHARGE REQUIREMENT FOR EMO-CUTTINGS AND SBF-CUTTINGS IN COASTAL COOK INLET, ALASKA**

**1.0 SCOPE AND APPLICATION**

This appendix is to be used to determine whether a Cook Inlet, Alaska, operator in Coastal waters (Coastal Cook Inlet operator) qualifies for the exemption to the zero discharge requirement established by 40 CFR 435.43 and 435.45 for drill cuttings associated with the following non-aqueous drilling fluids: enhanced mineral oil based drilling fluids (EMO-cuttings) and synthetic-based drilling fluids (SBF-cuttings). Coastal Cook Inlet operators are prohibited from discharging oil-based drilling fluids. This appendix is intended to define those situations under which technical limitations preclude Coastal Cook Inlet operators from complying with the zero discharge requirement for EMO-cuttings and SBF-cuttings. Coastal Cook Inlet operators that qualify for this exemption may be authorized to discharge EMO-cuttings and SBF-cuttings subject to the limitations applicable to operators in Offshore waters (see subpart A of this part).

**2.0 METHOD**

2.1 Any Coastal Cook Inlet operator must achieve the zero discharge limit for EMO-cuttings and SBF-cuttings unless it success-

fully demonstrates that technical limitations prevent it from being able to dispose of its EMO-cuttings or SBF-cuttings through on-site annular disposal, injection into a Class II underground injection control (UIC) well, or onshore land application.

2.2 To successfully demonstrate that technical limitations prevent it from being able to dispose of its EMO-cuttings or SBF-cuttings through on-site annular disposal, a Coastal Cook Inlet operator must show that it has been unable to establish formation injection in nearby wells that were initially considered for annular or dedicated disposal of EMO-cuttings or SBF-cuttings or prove to the satisfaction of the Alaska Oil and Gas Conservation Commission (AOGCC) that the EMO-cuttings or SBF-cuttings will be confined to the formation disposal interval. This demonstration must include:

a. Documentation, including engineering analysis, that shows (1) an inability to establish formation injection (e.g., formation is too tight), (2) an inability to confine EMO-cuttings or SBF-cuttings in disposal formation (e.g., no confining zone or adequate barrier to confine wastes in formation), or (3) the occurrence of high risk emergency (e.g., mechanical failure of well, loss of ability to inject that risks loss of well which would cause significant economic harm or create a substantial risk to safety); and

b. A risk analysis of alternative disposal options, including environmental assessment, human health and safety, and economic impact, that shows discharge as the lowest risk option.

2.3 To successfully demonstrate that technical limitations prevent it from being able to dispose of its EMO-cuttings or SBF-cuttings through injection into a Class II UIC well, a Coastal Cook Inlet operator must show that it has been unable to establish injection into a Class II UIC well or prove to the satisfaction of the Alaska Oil and Gas Conservation Commission (AOGCC) that the EMO-cuttings or SBF-cuttings will be confined to the formation disposal interval. This demonstration must include:

a. Documentation, including engineering analysis, that shows the inability to confine EMO-cuttings or SBF-cuttings in a Class II UIC well (e.g., no confining zone or adequate barrier to confine wastes in formation);

b. Documentation demonstrating that no Class II UIC well is accessible (e.g., operator does not own, competitor will not allow injection); and

c. A risk analysis of alternative disposal option, including environmental assessment, human health and safety, and economic impact, that shows discharge as the lowest risk option.

2.4 To successfully demonstrate that technical limitations prevent it from being able to dispose of its EMO-cuttings or SBF-cuttings through land application, a Coastal

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CHAPTER 15. ADMINISTRATIVE PROCEDURES  
ARTICLE 2. PERMIT PROCEDURES

Current through October 2009 (Register 191)

AAC 15.060. Public hearings.

(a) The department will hold a public hearing on a permit application for a public pesticide project if, within 30 days after the second publication of notice under 18 AAC 15.050(c), a hearing is requested by

- (1) 50 residents of the affected area; or
- (2) the governing body of an affected municipality.

(b) The department will hold a public hearing on an application for a short-term variance from water quality standards, or on a permit or approval application, if it determines that good cause exists.

(c) The hearing will be held no sooner than 15 nor more than 30 days following publication of the notice under (e) of this section.

(d) The public hearing will be held at the closest practicable location to the site of the operation.

(e) Notice of the time, place, and scope of the hearing will be published in a newspaper of general circulation for the area that would be affected by the operation.

(f) The appropriate division director shall appoint a designee to preside at the hearing. Testimony will be presented in the order, and subject to time limitations, established by the presiding officer.

(g) At the close of each witness' testimony, the witness may be questioned by the presiding officer and the department staff.

(h) A hearing under this section will be tape recorded.

(Eff. 11/25/77, Register 64; am 1/7/87, Register 100; am 7/11/2002, Register 163)

AUTHORITY: AS 46.03.020, AS 46.03.090, AS 46.03.100, AS 46.03.110, AS 46.03.330, AS 46.03.720

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ARTICLE 4. CERTIFICATION

Current through October 2009 (Register 191)

AAC 15.140. Public notice.

(a) Public notice of the certification application will be published jointly with notice of the proposed action by EPA under 40 C.F.R. 124.10. The notice will include the information required by 18 AAC 15.050(b).

(b) If the certification request involves a proposed modification to an NPDES permit for which EPA does not propose to issue public notice, the department will issue public notice in conformity with 18 AAC 15.050(b) within 10 days after receipt of the certification application. However, the department will not provide public notice for proposed modifications to an NPDES permit, if the department determines that the proposed modifications will not result in a significant change in the location, volume, type, or concentration of the discharge.

(Eff. 11/25/77, Register 64; am 7/11/2002, Register 163)

AUTHORITY: AS 46.03.020, AS 46.03.110

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ARTICLE 4. CERTIFICATION

Current through October 2009 (Register 191)

AAC 15.150. Public hearings.

(a) The department will determine whether to hold a public hearing on a certification application under 18 AAC 15.060(b).

(b) If EPA holds a public hearing under 40 C.F.R. 124.12, that hearing, and the hearing under this section, will, when practicable, be held jointly.

(c) If EPA does not hold a public hearing, the hearing under this section will be held no fewer than 30 days after notice of the hearing. The hearing will be noticed and conducted under 18 AAC 15.060(d) - (h).

(Eff. 11/25/77, Register 64; am 7/11/2002, Register 163)

AUTHORITY: AS 46.03.020, AS 46.03.110

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ARTICLE 1. STATEWIDE STANDARDS

Current through October 2009 (Register 191)

AAC 70.010. General.

(a) A person may not conduct an operation that causes or contributes to a violation of the water quality standards set by this chapter.

(b) The water quality standards set by this chapter specify the degree of degradation that may not be exceeded in a waterbody as a result of human actions. The water quality standards are set by the antidegradation policy in 18 AAC 70.015, the water quality criteria in 18 AAC 70.020(b), and the limits in 18 AAC 70.030, applied in accordance with the remainder of this chapter.

(c) Except as specified in an authorization issued under 18 AAC 15, 18 AAC 60, or 18 AAC 72, the water quality standards and limits set by or under this chapter do not apply to a treatment works authorized by the department under 18 AAC 60 or 18 AAC 72, except that the water quality criteria and limits set by or under this chapter must be met in adjacent surface water and groundwater at and beyond the boundary of the treatment works.

(d) Where the department determines that the natural condition of a water of the state is of lower quality than the water quality criteria set out in 18 AAC 70.020(b), the natural condition supersedes the criteria and becomes the standard for that water. When establishing a water quality standard based on the natural conditions in a permit, certification, or other written decision, the department will follow the procedures set out in the department's Guidance for the Implementation of Natural Condition-Based Water Quality Standards, dated November 15, 2006 and adopted by reference.

(Eff. 11/1/97, Register 143; am 12/28/2006, Register 180)

AUTHORITY: AS 46.03.010, AS 46.03.020, AS 46.03.050, AS 46.03.070, AS 46.03.080, AS 46.03.100, AS 46.03.110, AS 46.03.710, AS 46.03.720

<General Materials (GM) - References, Annotations, or Tables>

EDITORS NOTES.

The department's Guidance for the Implementation of Natural Condition-Based Water Quality Standards, adopted by reference in 18 AAC 70.010(d), may be viewed at the department's Juneau, Anchorage, or Fairbanks of-

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fices or requested from the department.

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ARTICLE 1. STATEWIDE STANDARDS

Current through October 2009 (Register 191)

AAC 70.015. Antidegradation policy.

(a) It is the state's antidegradation policy that

(1) existing water uses and the level of water quality necessary to protect existing uses must be maintained and protected;

(2) if the quality of a water exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality must be maintained and protected unless the department, in its discretion, upon application, and after compliance with (b) of this section, allows the reduction of water quality for a short-term variance under 18 AAC 70.200, a zone of deposit under 18 AAC 70.210, a mixing zone under 18 AAC 70.240, or another purpose as authorized in a department permit, certification, or approval; the department will authorize a reduction in water quality only after the applicant submits evidence in support of the application and the department finds that

(A) allowing lower water quality is necessary to accommodate important economic or social development in the area where the water is located;

(B) except as allowed under this subsection, reducing water quality will not violate the applicable criteria of 18 AAC 70.020 or 18 AAC 70.025 or the whole effluent toxicity limit in 18 AAC 70.030;

(C) the resulting water quality will be adequate to fully protect existing uses of the water;

(D) the methods of pollution prevention, control, and treatment found by the department to be the most effective and reasonable will be applied to all wastes and other substances to be discharged; and

(E) all wastes and other substances discharged will be treated and controlled to achieve

(i) for new and existing point sources, the highest statutory and regulatory requirements; and

(ii) for nonpoint sources, all cost-effective and reasonable best management practices;

(3) if a high quality water constitutes an outstanding national resource, such as a water of a national or state park or wildlife refuge or a water of exceptional recreational or ecological significance, the quality of that water must be maintained and protected; and

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(4) if potential water quality impairment associated with a thermal discharge is involved, the antidegradation policy described in this section is subject to 33 U.S.C. 1326 (commonly known as sec. 316 of the Clean Water Act).

(b) An applicant for a permit, certification, or approval who seeks to reduce water quality as described in (a) of this section shall provide to the department all information reasonably necessary for a decision on the application, including the information and demonstrations required in (a) of this section and other information the department finds necessary to meet the requirements of this section.

(c) An application received under (a) of this section is subject to the public participation and intergovernmental review procedures applicable to the permit, certification, or approval sought, including procedures for applications subject to the Alaska Coastal Management Program in AS 46.40 and 6 AAC 50, and applications subject to 18 AAC 15. If the department certifies a federal permit, the public participation and intergovernmental review procedures followed by the federal agency issuing that permit will meet the requirements of this subsection.

(Eff. 11/1/97, Register 143)

AUTHORITY: AS 46.03.010, AS 46.03.020, AS 46.03.050, AS 46.03.070, AS 46.03.080, AS 46.03.090, AS 46.03.100, AS 46.03.110, AS 46.03.710, AS 46.03.720

<General Materials (GM) - References, Annotations, or Tables>

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ARTICLE 1. STATEWIDE STANDARDS

Current through October 2009 (Register 191)

AAC 70.030. Whole effluent toxicity limit.

(a) An effluent discharged to a water may not impart chronic toxicity to aquatic organisms, expressed as 1.0 chronic toxic unit, at the point of discharge, or if the department authorizes a mixing zone in a permit, approval, or certification, at or beyond the mixing zone boundary, based on the minimum effluent dilution achieved in the mixing zone. If the department determines that an effluent has reasonable potential to cause or contribute to exceedance of the whole effluent toxicity limit, the department will require whole effluent toxicity testing as a condition of a permit, approval, or certification. The permittee shall use methods and species approved by the United States Environmental Protection Agency in Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, 4th edition (2002), Technical Report No. EPA-821-R-02-013, adopted by reference, and Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms 1st edition (August 1995), Technical Report No. EPA/600/R-95/136, adopted by reference, or alternate methods and species approved by the department that provide equivalent estimates of chronic toxicity. The department will require that the testing use sensitive and biologically important life stages of indigenous species, as the department considers necessary and feasible to protect aquatic life fully. The department will reduce the frequency of, or eliminate, whole effluent toxicity testing if

- (1) the results of a sufficient database of testing conclusively demonstrate that an effluent does not have a reasonable potential to exceed the whole effluent toxicity limit;
- (2) significant changes in effluent quality are not expected over the life of the permit; and
- (3) the department determines that aquatic life will be adequately protected.

(b) In this section, "chronic toxic unit" means an expression of the chronic toxicity of an effluent, determined as (100/NOEC), where NOEC, the "No Observed Effects Concentration", is the highest tested percentage concentration of an effluent, established by direct testing of toxicity to aquatic organisms, that causes no observable adverse effects, including effects on growth, development, behavior, reproduction, or survival, over a test duration that generally is one-tenth or more of the lifespan of the test organism. Other equivalent chronic toxicity endpoints approved by the department, such as the "25 percent Inhibition Concentration (IC25)," may be used in place of NOEC, and may incorporate shorter test durations.

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(Eff. 11/1/97, Register 143; am 4/29/99, Register 150; am 6/13/2006, Register 178)

AUTHORITY: AS 46.03.020, AS 46.03.050, AS 46.03.070, AS 46.03.080

<General Materials (GM) - References, Annotations, or Tables>

#### EDITORS NOTES.

Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms and Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms, adopted by reference in 18 AAC 70.030(a), are available for viewing at the department's Anchorage, Fairbanks, and Juneau offices. Those publications may also be obtained by contacting the United States Environmental Protection Agency, National Service Center for Environmental Publications (NSCEP), P.O. Box 42419, Cincinnati, Ohio 45242; telephone: (800) 490-9198; fax: (513) 489-8695. In addition, Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms is available at the website for the United States Environmental Protection Agency, Office of Water, Internet address: <http://yosemite.epa.gov/water/owrcatalog.nsf>; Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms is available at the website for the United States Environmental Protection Agency, National Environmental Publications Information System (NEPIS), Internet address: <http://nepis.epa.gov>.

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CHAPTER 70. WATER QUALITY STANDARDS  
ARTICLE 2. EXCEPTIONS TO STATEWIDE STANDARDS

Current through October 2009 (Register 191)

AAC 70.240. Mixing zones.

(a) Upon application, the department may authorize in a discharge permit or certification, a mixing zone or multiple mixing zones in which the water quality criteria and any limit set under this chapter may be exceeded. The applicant shall provide to the department all available evidence reasonably necessary to demonstrate that a mixing zone will comply with this section. The department will approve, approve with conditions, or deny a mixing zone application.

(b) In determining whether to authorize a mixing zone under this section, the department will consider

- (1) the characteristics of the receiving water, including biological, chemical, and physical characteristics such as volume, flow rate, and flushing and mixing characteristics;
- (2) the characteristics of the effluent, including volume, flow rate, dispersion, and quality after treatment;
- (3) the effects, if any, including cumulative effects of multiple discharges and diffuse, nonpoint source inputs, that the discharge will have on the uses of the receiving water;
- (4) any additional measures that would mitigate potential adverse effects to the aquatic resources present; and
- (5) any other factors the department finds must be considered to determine whether a mixing zone will comply with this section.

(c) The department will approve a mixing zone, as proposed or with conditions, only if the department finds that available evidence reasonably demonstrates that

(1) an effluent or substance will be treated to remove, reduce, and disperse pollutants, using methods that the department finds to be the most effective, technologically and economically feasible, and at a minimum consistent with statutory and regulatory treatment requirements including

(A) any federal technology-based effluent limitation identified in 40 C.F.R. 122.29 and 40 C.F.R. 125.3, as revised as of July 1, 2005 and adopted by reference;

(B) minimum treatment standards in 18 AAC 72.050; and

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- (C) any treatment requirement imposed under another state statute or regulation that is more stringent than a requirement of this chapter;
- (2) designated and existing uses of the waterbody as a whole will be maintained and protected;
- (3) the overall biological integrity of the waterbody will not be impaired; and
- (4) the mixing zone will not
  - (A) result in an acute or chronic toxic effect in the water column, sediments, or biota outside the boundaries of the mixing zone;
  - (B) create a public health hazard that would preclude or limit existing uses of the waterbody for water supply or contact recreation;
  - (C) preclude or limit established processing activities or established commercial, sport, personal-use, or subsistence fish and shellfish harvesting;
  - (D) result in a reduction in fish or shellfish population levels;
  - (E) result in permanent or irreparable displacement of indigenous organisms;
  - (F) adversely affect threatened or endangered species except as authorized under 16 U.S.C. 1531 - 1544 (Endangered Species Act); or
  - (G) form a barrier to migratory species or fish passage.
- (d) The department will approve a mixing zone, as proposed or with conditions, only if the department finds that available evidence reasonably demonstrates that within the mixing zone the pollutants discharged will not
  - (1) bioaccumulate, bioconcentrate, or persist above natural levels in sediments, water, or biota to significantly adverse levels, based on consideration of bioaccumulation and bioconcentration factors, toxicity, and exposure;
  - (2) present an unacceptable risk to human health from carcinogenic, mutagenic, teratogenic, or other effects as determined using risk assessment methods approved by the department and consistent with 18 AAC 70.025;
  - (3) settle to form objectionable deposits, except as authorized under 18 AAC 70.210;
  - (4) produce floating debris, oil, scum and other material in concentrations that form nuisances;
  - (5) result in undesirable or nuisance aquatic life;
  - (6) produce objectionable color, taste, or odor in aquatic resources harvested from the area for human consumption;
  - (7) cause lethality to passing organisms; or
  - (8) exceed acute aquatic life criteria at and beyond the boundaries of a smaller initial mixing zone surrounding the outfall, the size of which shall be determined using methods approved by the department.

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(e) In lakes, streams, rivers, or other flowing fresh waters, a mixing zone will not be

- (1) authorized in a spawning area of any of the five species of anadromous Pacific salmon found in the state; or
- (2) allowed to adversely affect the present and future capability of an area to support spawning, incubation, or rearing of any of the five species of anadromous Pacific salmon found in the state.

(f) In lakes, streams, rivers, or other flowing fresh waters, except as provided in (g) of this section, a mixing zone will not be authorized in a spawning area for

- (1) Arctic grayling;
- (2) northern pike;
- (3) lake trout;
- (4) brook trout;
- (5) sheefish;
- (6) burbot;
- (7) landlocked coho salmon, chinook salmon, or sockeye salmon; or
- (8) anadromous or resident rainbow trout, Arctic char, Dolly Varden, whitefish, or cutthroat trout.

(g) The department may authorize a mixing zone in a spawning area of a lake, stream, river, or other flowing fresh water for the species listed in (f) of this section if

(1) after consultation with the Department of Fish and Game, the department finds that the applicant has demonstrated that the discharge

(A) does not contain pollutants at concentrations that exceed the criteria for growth and propagation of fish, shellfish, other aquatic life, and wildlife established in 18 AAC 70.020(b)(1) - (12); and

(B) will not adversely affect the capability of the area to support future spawning, incubation, and rearing activities;

(2) the applicant has submitted to the department a mitigation plan approved by the Department of Fish and Game under 5 AAC 95.900 if the spawning area is within a special area;

(3) the applicant has submitted to the department a mitigation plan approved by the Department of Fish and Game under AS 16.05.871 - 16.05.901, if the spawning area is within waters included in the Catalog of Waters Important for Spawning, Rearing or Migration of Anadromous Fishes, adopted by reference in 5 AAC 95.011; the department will incorporate the mitigation plan as part of the discharge authorization; or

(4) the applicant has submitted to the department a mitigation plan approved by the department, after consultation with the Department of Fish and Game, if the spawning area is not within waters described in (2) or (3) of

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this subsection; the mitigation plan must use measures described in the Catalog of Waters Important for Spawning, Rearing or Migration of Anadromous Fishes, adopted by reference in 5 AAC 95.011; the department will incorporate the mitigation plan as part of the discharge authorization.

(h) In a mixing zone authorization under (g) of this section, the department may require the applicant to monitor effluent, ambient water quality, and biological conditions to determine whether unanticipated adverse effects on spawning, incubation, and rearing of species identified in (f) of this section are occurring.

(i) The provisions of (e), (f), and (g) of this section do not apply to the renewal of a mixing zone authorization where spawning was not occurring at the time of the initial authorization, but successful spawning, incubation, and rearing has occurred within the mixing zone after the initial authorization of that mixing zone.

(j) When determining whether to authorize a mixing zone under (e), (f), or (g) of this section, the department will make that determination

(1) in conformance with the determination of the Department of Fish and Game, acting under AS 16.20, of the location and time of a spawning area within a special area;

(2) in conformance with the determination of the Department of Fish and Game, acting under AS 16.05.871 - 16.05.901, of the location and time of a spawning area within waters included in the Catalog of Waters Important for Spawning, Rearing or Migration of Anadromous Fishes, adopted by reference in 5 AAC 95.011; or

(3) after consultation with the Department of Fish and Game, as to what the Department of Fish and Game considers the location and time of a spawning area not within waters described in (1) or (2) of this subsection.

(k) The department will approve a mixing zone, as proposed or with conditions, only if it finds that the mixing zone is as small as practicable and will comply with the following size restrictions, unless the department finds that evidence is sufficient to reasonably demonstrate that these size restrictions can be safely increased:

(1) for estuarine and marine waters, measured at mean lower low water,

(A) the cumulative linear length of all mixing zones intersected on any given cross section of an estuary, inlet, cove, channel, or other marine water may not exceed 10 percent of the total length of that cross section; and

(B) the total horizontal area allocated to all mixing zones at any depth may not exceed 10 percent of the surface area;

(2) for lakes, the total horizontal area allocated to all mixing zones at any depth may not exceed 10 percent of the lake's surface area;

(3) for streams, rivers, or other flowing fresh waters, the length of a mixing zone may not extend beyond the computed point of complete mixing, as determined using a standard river flow mixing model or other methods accepted by the department;

(4) for streams, rivers, or other flowing fresh waters, the length of a mixing zone may not extend downstream beyond the location where the department determines that a public health hazard reasonably could be expected to occur.



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(l) For streams, rivers, or other flowing fresh waters, in calculating the maximum pollutant discharge limitation, the volume of flow available for dilution must be determined using

(1) the actual flow data collected concurrent with the discharge; or

(2) for conventional and nontoxic substances, the 10-year, 7-day low flow (7Q10) as the criteria design flow; for the protection of aquatic life, the 10-year, 7-day low flow (7Q10) as the chronic criteria design flow and the 10-year, 1-day low flow (1Q10) as the acute criteria design flow; and for the protection of human health, the 5-year, 30-day low flow (30Q5) as the noncarcinogenic criteria design flow and the harmonic mean flow as the carcinogenic criteria design flow; these low flows must be calculated using methods approved by the department.

(m) If the department finds that available evidence reasonably demonstrates that a mixing zone authorized by the department has had or is having a significant unforeseen adverse environmental effect, the department will terminate, modify, or deny renewal of the permit or certification authorizing the mixing zone.

(n) When consulting with an agency under (g) or (j) of this section, the department will give appropriate weight to any information received from the agency, considering the agency's expertise.

(o) For purposes of this section, the five species of anadromous Pacific salmon found in the state are chinook salmon, coho salmon, sockeye salmon, pink salmon, and chum salmon.

(p) In this section, "special area" means a state game refuge, a state game sanctuary, or a state fish and game critical habitat area, established under AS 16.20.

(Eff. 11/1/97, Register 143; am 3/23/2006, Register 177)

AUTHORITY: AS 46.03.010, AS 46.03.020, AS 46.03.050, AS 46.03.070, AS 46.03.080, AS 46.03.100, AS 46.03.110, AS 46.03.710, AS 46.03.720

<General Materials (GM) - References, Annotations, or Tables>

#### EDITORS NOTES.

As of Register 186 (July 2008), and acting under AS 44.62.125(b)(6), the regulations attorney made a technical change to 18 AAC 70.240(g) and (j), to reflect Executive Order 114 (2008). Executive Order 114 transferred functions related to protection of fish habitat in rivers, lakes, and streams from the Department of Natural Resources to the Department of Fish and Game.

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Current through October 2009 (Register 191)

AAC 70.990. Definitions.

Unless the context indicates otherwise, in this chapter

- (1) "acute" means of, relating to, or resulting from a level of toxicity of a substance, a substance combination, or an effluent sufficient to produce observable lethal or sublethal effects in aquatic organisms exposed for short periods of time, typically 96 hours or less;
- (2) "anadromous" with respect to fish, has the meaning given in the definition of "anadromous fish" in the definitions section of the Catalog of Waters Important for Spawning, Rearing, or Migration of Anadromous Fishes, adopted by reference in 5 AAC 95.011;
- (3) "apparent color" means the condition of water that results in the visual sensations of hue and intensity, due both to substances in solution and to suspended matter;
- (4) "aquaculture" means the cultivation of aquatic plants or animals for human use or consumption;
- (5) "available evidence" means all relevant and applicable data and information the applicant has or can obtain, and all relevant and applicable data and information available to the department from other sources; "available evidence" does not include data and information that the collection or preparation of which, in the department's determination, is not practicable.
- (6) "bioaccumulation" means the ability of a substance or chemical to be taken up by an organism either directly from exposure to a contaminated medium or by consumption of food containing the substance or chemical;
- (7) "bioconcentration" means the ability of a substance or chemical to be absorbed from water through gills or epithelial tissue and concentrate in the body of an organism;
- (8) "boundary" means a line or landmark that serves to clarify, outline, or mark a limit, border, or interface;
- (9) "carcinogenic" means a substance that is expected to cause cancer in aquatic life or, for human health purposes, that is classified as a Group A or Group B carcinogen according to the United States Environmental Protection Agency Guidelines for Carcinogen Risk Assessment, 51 Fed. Reg. 33992, 33999 - 34000(1986); Group A includes substances that have been shown to cause cancer in humans; Group B, based on epidemiologic and

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other studies, includes "probable human carcinogens" and is divided between

- (A) "B1", for which there is limited evidence of carcinogenicity in humans; and
  - (B) "B2", for which there is sufficient evidence of carcinogenicity in animals, but inadequate or no evidence of carcinogenicity in humans from epidemiologic studies;
- (10) "certification" means the certificate of reasonable assurance the department may issue under 33 U.S.C. 1341 (Clean Water Act, sec. 401), as amended through February 4, 1987;
- (11) "chronic" means of, relating to, or resulting from a level of toxicity of a substance, a substance combination, or an effluent sufficient to produce observable lethal or sublethal effects, including effects on growth, development, behavior, reproduction, or survival, in aquatic organisms exposed for a period of time that generally is one-tenth or more of their life span;
- (12) "Clean Water Act" means the Federal Water Pollution Control Act (33 U.S.C. 1251 - 1387), as amended through February 4, 1987;
- (13) "color" means the condition that results in the visual sensations of hue and intensity, as measured after turbidity is removed;
- (14) "commissioner" means the commissioner of the Department of Environmental Conservation, or the commissioner's designee;
- (15) "compensation point for photosynthetic activity" means the point at which incident light penetration allows plankton to photosynthetically produce enough oxygen to balance their respiration requirements;
- (16) "contact recreation" means activities in which there is direct and intimate contact with water; "contact recreation" includes swimming, diving, and water skiing; "contact recreation" does not include wading;
- (17) "criterion" means a set concentration or limit of a water quality parameter that, when not exceeded, will protect an organism, a population of organisms, a community of organisms, or a prescribed water use with a reasonable degree of safety; a criterion might be a narrative statement instead of a numerical concentration or limit;
- (18) "department" means the Department of Environmental Conservation;
- (19) "designated uses" means those uses specified in 18 AAC 70.020 as protected use classes for each waterbody or segment, regardless of whether those uses are being attained;
- (20) "dissolved oxygen" means the concentration of oxygen in water as determined either by the Winkler (iodometric) method and its modifications or by the membrane electrode method;
- (21) "ecosystem" means a system made up of a community of animals, plants, and bacteria, and the system's interrelated physical and chemical environment;
- (22) "effluent" means the segment of a wastewater stream that follows the final step in a treatment process and precedes discharge of the wastewater stream to the receiving environment;

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- (23) "EPA" means the United States Environmental Protection Agency;
- (24) "existing uses" means those uses actually attained in a waterbody on or after November 28, 1975;
- (25) "fecal coliform bacteria" means those bacteria that can ferment lactose at 44.58 ± 0.28 C to produce gas in a multiple tube procedure; "fecal coliform bacteria" also means all bacteria that produce blue colonies within 24 ± 1 hours of incubation at 44.58 ± 0.28 C in an M-FC broth medium;
- (26) "fish" means any of the group of cold-blooded vertebrates that live in water and have permanent gills for breathing and fins for locomotion;
- (27) "grain size accumulation graph" means a plot of sediment-sieving data showing logarithm of grain size in millimeters on the horizontal axis and percent accumulation by weight (linear scale) on the vertical axis;
- (28) "ground water" means water in the zone of saturation; in this paragraph, "zone of saturation" is the zone below the water table, where all interstices are filled with water;
- (29) "harmonic mean flow" means a long-term mean flow value calculated by dividing the number of daily flows analyzed by the sum of the reciprocals of those daily flows;
- (30) repealed 3/23/2006;
- (31) "industrial use" means use of a water supply for a manufacturing or production enterprise except food processing, and includes mining, placer mining, energy production, or development;
- (32) "irreparable displacement" means a change in aquatic organism use or presence due to a decrease in water quality that is irreversible by natural processes so that the biological system will not return to a state functionally equivalent to the original after cessation of discharge;
- (33) "lake" means an inland waterbody of substantial size that occupies a basin or hollow in the earth's surface and that might or might not have a current or a single direction of flow;
- (34) "mean" means the average of values obtained over a specified time period and, for fecal coliform analysis, is computed as a geometric mean;
- (35) "mean lower low water" means the tidal datum plane of the average of the lower of the two low waters of each day, as would be established by the National Geodetic Survey, at any place subject to tidal influence;
- (36) "micrograms per liter ( ug/l)" means the concentration at which one millionth of a gram (10<sup>-6</sup> g) is found in a volume of one liter;
- (37) "milligrams per liter (ug/l)" means the concentration at which one thousandth of a gram (10<sup>-3</sup> g) is found in a volume of one liter; it is approximately equal to the unit "parts per million (PPM)," formerly of common use;
- (38) "mixing zone" means a volume of water, adjacent to a discharge, in which wastes discharged mix with the receiving water;
- (39) "most probable number (MPN)" means the statistic that represents the number of individuals most likely present in a given sample, based on test data;

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(40) "mutagenic" means the ability of a substance or chemical to increase the frequency or extent of a significant and basic alteration in an organism's chromosomes or genetic material as determined according to the United States Environmental Protection Agency Guidelines for Mutagenicity Risk Assessment, 51 Fed. Reg. 34006 (1986), adopted by reference;

(41) "natural condition" means any physical, chemical, biological, or radiological condition existing in a waterbody before any human-caused influence on, discharge to, or addition of material to, the waterbody;

(42) "nonpoint source" means a source of pollution other than a point source;

(43) "oils and grease" means oils and grease as defined by the procedure used under 18 AAC 70.020(c)(1);

(44) "persist" means the ability of a substance or chemical not to decay, degrade, transform, volatilize, hydrolyze, or photolyze;

(45) "pH" means the negative logarithm of the hydrogen-ion concentration, expressed as moles per liter:

$\text{pH} = -\log_{10} (\text{H}^+);$

(46) "point source" means a discernible, confined, and discrete conveyance, including a pipe, ditch, channel, tunnel, conduit, well, container, rolling stock, or vessel or other floating craft, from which pollutants are or could be discharged;

(47) "pollution" has the meaning given that term in AS 46.03.900;

(48) "practicable" means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes;

(49) "residues" means floating solids, debris, sludge, deposits, foam, scum, or any other material or substance remaining in a waterbody as a result of direct or nearby human activity;

(50) "secondary recreation" means activities in which incidental water use can occur; "secondary recreation" includes boating, camping, hunting, hiking, wading and recreational fishing; in this paragraph "recreational fishing" does not include fish consumption;

(51) "sediment" means solid material of organic or mineral origin that is transported by, suspended in, or deposited from water; "sediment" includes chemical and biochemical precipitates and organic material, such as humus;

(52) "settleable solids" means solid material of organic or mineral origin that is transported by and deposited from water, as measured by the volumetric Imhoff cone method and at the method detection limits specified in method 2540(F), in any edition of Standard Methods for the Examination of Water and Wastewater, adopted by reference in 18 AAC 70.020(c)(1);

(53) "sheen" means an iridescent appearance on the water surface;

(54) "significantly adverse levels" means concentrations of pollutants that would impair the productivity or biological integrity of the overall waterbody, including reducing or eliminating the viability or sustainability of a given species or community of species in the overall waterbody;

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(55) "sodium adsorption ratio (SAR)" means the estimated degree to which sodium from a given water will be adsorbed in soil, as proposed in Diagnosis and Improvement of Saline and Alkali Soils, Agriculture Handbook No. 60, United States Salinity Laboratory Staff, United States Department of Agriculture, and is expressed as the quotient of the sodium ion concentration and the square root of half the sum of the calcium and magnesium ion concentrations:

(56) "spawning" means the process of producing, emitting, or depositing eggs, sperm, seed, germ, larvae, young, or juveniles, especially in large numbers, by aquatic life;

(57) "teratogenic" means the ability of a substance or chemical to cause developmental malformations and monstrosities, as determined according to the United States Environmental Protection Agency Guidelines for Health Assessment of Suspect Developmental Toxicants, 51 Fed. Reg. 34028 (1986), adopted by reference;

(58) "thermocline" means a zone of water between a warmer, surface zone and a colder, deep-water zone in a thermally stratified waterbody, in which water temperature decreases rapidly with depth;

(59) "total aqueous hydrocarbons (TAQH)" means those collective dissolved and water-accommodated monoaromatic and polynuclear aromatic petroleum hydrocarbons that are persistent in the water column; "total aqueous hydrocarbons" does not include floating surface oils or greases;

(60) "total aromatic hydrocarbons (TAH)" means the sum of the following volatile monoaromatic hydrocarbon compounds: benzene, ethylbenzene, toluene, and the xylene isomers, commonly called BETX;

(61) "toxic" means of, relating to, or resulting from a substance or substance combination that causes in affected organisms or their offspring

(A) death, disease, malignancy, genetic mutations;

(B) abnormalities, or malfunctions in growth, development, behavior, or reproduction; or

(C) other physical or physiological abnormalities or malfunctions;

(62) "toxic substances" means those substances or substance combinations, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation, or assimilation into an organism, either directly from the environment or indirectly by ingestion through food chains, will, on the basis of information available, cause a toxic effect in the affected organism or its offspring; "toxic substances" includes the following substances, and any other substance identified as a toxic pollutant under 33 U.S.C. 1317(a) (Clean Water Act, sec. 307(a)):

2-chlorophenol; 2,4-dichlorophenol; 2,4-dimethylphenol; acenaphthene; acrolein; acrylonitrile; Aldrin/Dieldrin; ammonia; antimony; arsenic; asbestos; benzene; benzdine; beryllium; cadmium; carbon tetrachloride; Chlordane; chlorinated benzenes; chlorinated naphthalene; chlorinated ethanes; chlorine; chloroalkyl ethers; chloroform; chlorophenols; chlorophenoxy herbicides; chromium; copper; cyanide; DDT; Demeton; dichlorobenzenes; dichlorobenzidine; dichloroethylenes; dichloropropane; dichloropropene; dinitrotoluene; diphenylhydrazine; Endosulfan; Endrin; ethylbenzene; fluoranthene; Guthion; haloethers; halomethanes; Heptachlor; hexachlorobutadiene; hexachlorocyclohexane; hexachlorocyclopentadiene; isophorone; lead; Lindane; Malathion; mercury; methoxychlor; Mirex; naphthalene; nickel; nitrobenzene; nitrophenols; nitrosamines; p-dioxin; Para-



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thion; PCBs; pentachlorophenol; phenol; phthalate esters; polynuclear aromatic hydrocarbons; selenium; silver; tetrachloroethylene; thallium; toluene; Toxaphene; trichloroethylene; vinyl chloride; and zinc;

(63) "treatment works" has the meaning given that term in AS 46.03.900;

(64) "turbidity" means an expression of the optical property that causes light to be scattered and absorbed rather than transmitted in straight lines through a water sample; turbidity in water is caused by the presence of suspended matter such as clay, silt, finely divided organic and inorganic matter, plankton, and other microscopic organisms;

(65) "water," "waterbody," and "waters" have the meaning given the term "waters" in AS 46.03.900;

(66) "water of the United States" has the meaning given that term "water of the United States" in 40 C.F.R. 122.2, as amended through August 15, 1997;

(67) "water recreation" means contact recreation or secondary recreation;

(68) "water supply" means any of the waters of the state that are designated in this chapter to be protected for fresh water or marine water uses, including waters used for drinking, culinary, food processing, agricultural, aquacultural, seafood processing, and industrial purposes; "water supply" does not necessarily mean that a waterbody, protected as a supply for the uses listed in this paragraph is safe to drink in its natural state;

(69) "wildlife" means all species of mammals, birds, reptiles, and amphibians;

(70) "milliequivalents per liter" or "meq/l" mean milligrams per liter divided by the molecular weight of a chemical species, and multiplied by the electrical charge or valence of the species;

(71) "sodium percentage" means the quotient of (sodium x 100) divided by the sum of (sodium + calcium + magnesium + potassium); in this paragraph "sodium," "calcium," "magnesium," and "potassium" mean amounts of those substances expressed as milliequivalents per liter;

(72) "shellfish" means a species of crustacean, mollusk, or other aquatic invertebrate with a shell or shell-like exoskeleton, in any stage of its life cycle.

(Eff. 11/1/97, Register 143; am 4/29/99, Register 150; am 6/22/2003, Register 166; am 3/23/2006, Register 177; am 6/13/2006, Register 178)

AUTHORITY: AS 46.03.010, AS 46.03.020, AS 46.03.050, AS 46.03.070, AS 46.03.080, AS 46.03.100, AS 46.03.110, AS 46.03.710, AS 46.03.720

<General Materials (GM) - References, Annotations, or Tables>

#### EDITORS NOTES.

As of Register 166 (July 2003), and acting under AS 44.62.125 (b)(6), the regulations attorney made a technical change to the definition of "anadromous fish" in 18 AAC 70.990, to reflect Executive Order 107 (2003). Executive order 107 transferred functions related to protection of fish habitat in rivers, lakes, and streams from the Department of Fish and Game to the Department of Natural Resources. As of Register 186 (July 2008), and acting under AS 44.62.125(b)(6), the regulations attorney made technical changes to the definition of "anadromous" in

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18 AAC 70.990, to reflect Executive Order 114 (2008). Executive Order 114 transferred functions related to protection of fish habitat in rivers, lakes, and streams from the Department of Natural Resources to the Department of Fish and Game.

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